



CLASS III SALT SOLUTION MINING WELLS

GUIDANCE FOR DEVELOPING A GROUND SUBSIDENCE MONITORING PLAN

UICIII-G4 (5/11)

Narrative:

KDHE regulation K.A.R. 28-46-30a (m), which became effective August 6, 2010, requires a ground subsidence monitoring plan to be submitted to KDHE on or before August 6, 2012, for review and consideration of approval by KDHE.

The salt solution mining facilities are currently required to conduct an annual elevation survey of the salt solution mining wells and to submit the result to KDHE within 45 days of completing the elevation survey.

The intent of regulation K.A.R. 28-46-30a (m) is for the salt solution mining facilities to review their current elevation survey plan, processes and procedures and to then develop and implement an elevation survey plan that is updated and accurate and appropriate results are obtained.

The plan must be developed by someone with the expertise and experience in developing this type of plan.

Plan Requirements:

The following shall be addressed in the plan:

1. A description of the method for conducting the elevation survey.
2. The criteria for establishing monuments, benchmarks and wellhead survey points.
3. The plan shall meet 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 KDHE.
 - C. No established benchmark shall be changed, unless the permittee submits justification that the change is protective of the public health, safety and the environment.
 - D. If the 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 those results in a change in the survey point at the wellhead.
- F. The elevation survey shall be conducted by a licensed professional land surveyor.
- G. All annual elevation survey results shall be submitted to KDHE within 45 days after completion of the survey.
- H. All certified and stamped field notes shall be made available by the permittee upon request by KDHE.

In addition, the plan must address the following:

1. The elevation survey results must include a comparison to previous elevation survey results.
2. The plan must also include methods that will be used to track and evaluate the elevation survey data over time. Methods can include, but are not limited to elevation comparison maps and graphs of elevation versus time, including an interpretation of these by someone with the technical expertise and experience to evaluate the elevation survey data.
3. Procedure for continuing the wellhead elevation surveys after a well is plugged.