KDHE UIC CLASS I DISPOSAL WELL
ELECTRONIC MONITORING SPECIFICATIONS

Narrative:

Due to the numerous problems associated with mechanical continuous chart recorders such as: pens drying up, ink blots; paper jams, wind vibration, rain and moisture issues, etc., KDHE will be requiring all Class I well operators to convert from mechanical chart recorders to electronic continuous chart recorders. The electronic chart recorders have many advantages over the mechanical recorders such as: the ability to trend and graph data allowing operators early detection of well problems or potential failures, electronic data storage, alarm capabilities for notification of well problems, and the elimination of the above mentioned issues with mechanical chart recorders. This document provides KDHE specifications for an electronic continuous monitoring system.

1. The continuous recorder must be able to collect and record annulus and injection pressure readings, for each well as required by regulations and the permit, a minimum of every 30 seconds. However, KDHE would prefer readings be collected and recorded on a more frequent time interval. (most units are capable of collecting and recording readings every 5 seconds).

2. The continuous recorder must have alarm capabilities to notify the operator of any violation of annulus and/or injection pressure limits.

3. The recorder must have a battery back-up or alternative power supply to ensure continued collection of data during power failures.

4. The electronic data from the continuous recorder must be stored on multiple sources of data storage media for redundancy. The data must be backed up to a computer server, zip drive, compact disk, or other electronic media storage device.

5. Multiple sources of data storage maybe necessary to ensure compliance with the 3-year record retention requirement.