

**Comments Regarding Rule Listing
Commissioner Gilmore**

Under #11 PRE-DRILLING SURVEY REPORT should include the following reports to NCDENR:

- A hydrologic assessment should be completed by the operator to determine the adequate buffer zones from potential sources of contamination. Surface waters including ponds, lakes, rivers, streams and springs should be evaluated within a prescribed distance of the drill site.
- A hydrogeologic assessment should be completed by the operator to determine the suitability of a confining zone to block the vertical migration of any contaminants to groundwater resources. Faults, fractures and any seismic issues should be considered. Determine distance to nearest potable wells by conducting a well survey, establish appropriate setbacks based on the assessment.

Somewhere there needs to be a # heading to address SITE SELECTION & CHARACTERIZATION for the well pad and total facility footprint. There have been problems in other states when the well pad site chosen by the driller is unstable and did not undergo a through geotechnical review for slope stability and suitability of soils for pit construction.

Under # 92 PIT PERMITTING/REPORTING REQUIREMENTS should include:

- Leak detection and monitoring plan. We should require at least one monitoring well down gradient from the lined pit. I would prefer no pits to onsite containment vessels, but if not practical, a leak detection and monitoring plan is necessary as an early warning system to protect groundwater and surface water from leaking pits.

Under #100 SPILLS AND RELEASES should include:

- Spill prevention and control plan – should describe how operator is prepared for detecting leaks, preventing spills and a contingency plan to address them should they occur. This should also address transport of materials to and from the site.
- Onsite control, handling and storage of fluids and materials – should address how materials will be used in an environmentally safe manner. Storage tanks should have secondary containment. The need for surface impoundments should be reviewed and must have adequate freeboard, be lined and monitored. Pipelines should be considered part of this review process.

I agree #31 should be listed as background testing rather than baseline sampling as Chairman Womack pointed out.