

HYD-11 Response

HYD-11 Information Needs:

Please provide a knowledgeable expert to provide details on construction, preoperational, and operational hydrological monitoring.

Action:

Current practice for groundwater monitoring will be provided as well as the basis of future monitoring plans and will be included in the hydrogeology package.

Response:

Existing monitor wells installed to support the pre-COL application hydrologic investigation are expected to be utilized for groundwater monitoring during construction, pre-operation, and operation of CPNPP Units 3 and 4 to assess groundwater quality. Many of the existing monitor wells are expected to be properly plugged and abandoned to support construction activities and may be replaced to support post construction/operational hydrological monitoring for Units 3 and 4. If any groundwater monitoring wells are plugged and abandoned or replaced due to construction, the proposed groundwater monitoring program will be re-assessed.

Luminant currently maintains a written Groundwater Protection Program (Procedure No. STA-654) for the CPNPP Units 1 and 2 site. The purpose of the Groundwater Protection Program is to document compliance with the Industry Groundwater Protection Initiative (NEI 07-07) by defining the actions and management of events involving inadvertent radiological releases and communicating to external stakeholders. The program only applies to licensed radioactive materials that are, or were, generated as a result of plant operations. The program is maintained by the Radiation Protection Manager and provides instructions for the following:

- Documentation of changes in groundwater pathways due to construction or disturbance of soil, changes in on-site or nearby off-site use of water; and changes in on-site or nearby off-site pumping rates of groundwater
- Site risk assessments including Groundwater Protection Program self-assessments where a review of current site work practices may identify credible mechanisms for licensed material to reach groundwater
- On-site groundwater monitoring of perched groundwater zones and includes monitoring for leaks, spills, and overflows of regulated materials
- On-site groundwater monitoring of the drinking water aquifer (Twin Mountains Formation)
- Notification to the appropriate State/Local officials and NRC for positive groundwater samples
- Response actions to radioactive leaks and spills identified through sampling including:
 - Source investigations
 - Posting of the affected area boundaries
 - Isolation of the affected area to prevent further contamination
 - Site characterization to determine the extent and impact of the contamination
 - Adjustment of boundaries based on site characterization results
- Development of a remediation plan
- Site excavations
- Notifications and reporting to appropriate State/Local officials and NRC

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- Inclusion of groundwater sampling results and description of spills in groundwater into Luminant's Annual Radioactive Effluent Report
- Documentation of releases to ensure compliance with 10CFR50.75(g)
- Program oversight including Quality Assurance reviews and self assessment schedules

Additional hydrological monitoring expected for CPNPP Units 3 and 4 is to be incorporated into the existing CPNPP Groundwater Protection Program.

Stacy H. Burgess

4/22/2009

Signature

Date