## **United States Department of the Interior**



## BUREAU OF LAND MANAGEMENT FISH AND WILDLIFE SERVICE BUREAU OF RECLAMATION



## **ELECTRONIC SUBMISSION**

February 24, 2010

Ms. Yvonne Meeks Manager – Environmental Remediation Pacific Gas and Electric Company 4325 South Higuera Street San Luis Obispo, CA 93401

Dear Ms. Meeks:

Subject: PG&E Topock Compressor Station Remediation Site – Groundwater

Characterization Requirements for the East Ravine and Compressor

**Station Areas** 

The Department of the Interior, on behalf of itself and the Bureau of Land Management, the U.S. Fish and Wildlife Service, and the Bureau of Reclamation (collectively referred to as "DOI") and the California Department of Toxic Substances Control (DTSC) are providing direction to Pacific Gas and Electric (PG&E) regarding initial groundwater characterization at the Compressor Station area and further investigation into the groundwater contamination detected at the East Ravine area. As we have stated earlier, DOI and DTSC believe the information regarding groundwater contamination in the East Ravine area is incomplete. We also believe, however, that this information can be obtained through ongoing investigations and further development of the conceptual model of the flow system and refinement of the source(s), nature, and extent of contamination in the East Ravine groundwater regime. PG&E had proposed groundwater characterization activities for the Compressor Station area in its December 2007 Draft Part B Soil Investigation Work Plan (PG&E, 2007). DOI and DTSC believe combining the groundwater characterization activities for the East Ravine and Compressor Station areas are now warranted.

DOI and DTSC propose focused groundwater characterization in the East Ravine and Topock Compressor Station areas. This additional characterization is necessary to

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determine whether contamination poses an unacceptable risk to human health and/or the environment or fails to comply with applicable or relevant and appropriate requirements (ARARs). The information gathered will also assist in refining remedial actions that are effective while limiting impacts to natural and cultural resources, to the extent practical.

East Ravine Area Bedrock Characterization

Additional characterization of the groundwater contamination in bedrock in the East Ravine area through installation of a limited number of focused wells is necessary to:

- Define the nature and extent of groundwater contamination within the bedrock and/or alluvium in the East Ravine area. The detection of contamination in bedrock in the southernmost wells bordering the Chemehuevi Mountains was unexpected and not consistent with the previous conceptual model of only northward flow and contaminant migration. Understanding the extent of the groundwater contamination is a fundamental data need necessary to refine an East Ravine area bedrock groundwater remedy that is focused on cleaning up groundwater with the least amount of additional impacts from wells and infrastructure.
- Identify the source(s) of the bedrock groundwater contamination observed in the East Ravine area. Knowledge of the source(s) of contamination is beneficial in understanding the potential for ongoing releases to groundwater, migration pathways within bedrock, and remedial actions necessary to protect groundwater resources and prevent discharge of contaminated groundwater to the Colorado River. We believe that this information can be obtained through installation of additional wells need to refine the source of contamination in the East Ravine groundwater regime. Collection of the additional data is intended to reduce the risk of additional impacts to groundwater, and to better define an East Ravine area bedrock groundwater remedy that is focused on clean up with the least amount of additional impacts from wells and infrastructure.

Currently DOI and DTSC estimate at least two to four additional bedrock well locations may be required for East Ravine bedrock characterization. This is consistent with the total number of wells discussed during previous meetings with PG&E's and shared with the tribes in the November 2009 letter from BLM.

Topock Compressor Station Area

Installation of a limited number of monitoring wells within the Topock Compressor Station area is necessary to:

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- Define the nature and extent of any bedrock and alluvial groundwater contamination within the Compressor Station area. No wells currently exist in this area where potential exists for former operational units to have impacted groundwater (PG&E, 2007). Determining the nature and extent of the groundwater contamination in this area will, among other things, assist in refining the groundwater remedy, if necessary; interpreting groundwater data during the course of remedial activities; and ensuring that all parts of the plume meet clean up objectives.
- Characterize hydrogeologic conditions within bedrock and alluvium below the station area.
- Determine whether groundwater contaminant sources are present within the compressor station boundary that could affect the immediate area or surrounding land, including the East Ravine area. The Compressor Station lies on a ridge with potential groundwater flow pathways away from the ridge. Existing site data do not address the potential for groundwater sources within the Compressor Station. Collection of these additional data is intended to reduce the risk of additional impacts to groundwater including surrounding lands.

Currently DOI and DTSC estimates that five to six wells would be required for characterization of groundwater potentially affected by the sources within the Topock Compressor Station.

In November 2009, as part of the ongoing consultation process, BLM provided an informational letter to the nine Native American Tribes regarding the DOI interest in further characterization of the East Ravine and Compressor Station areas. No correspondence was received from the tribes in regards to this matter.

It is the expectation of DOI and DTSC that an addendum to the *Revised Work Plan for* the East Ravine Groundwater Investigation be submitted for review and approval to address the data needs for both the East Ravine and Compressor Station areas. Prior to submittal of the addendum, it is our expectation that the agencies will meet with PG&E, interested tribes and other involved stakeholders regarding the proposed activities.

We look forward to meeting with you soon regarding East Ravine.

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Sincerely,
Pamela S. Annis

Pamela S. Innis

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