



**United States Department of the Interior
California Department of Toxic Substances Control**



ELECTRONIC SUBMISSION

December 23, 2014

Subject: Directives on Outstanding Issues on the Basis of Design Report/ Pre-Final Design (90% Design) Supplemental Package for PG&E Topock Compressor Station Remediation Site.

Dear Ms. Meeks:

The Department of the Interior (DOI) and the Department of Toxic Substances Control (DTSC) jointly as lead agencies (the Agencies) have deliberated on input from Tribes¹ and stakeholders, information provide during the October 29 & 30 and December 10, 2014 Technical Working Group (TWG) Meetings, correspondence received from the Tribes on December 1 & 2, 2014, and on information provided in the Basis of Design Report and Pre-Final (90%) Groundwater Remedy Design submittal in providing our direction to Pacific Gas and Electric Company (PG&E) concerning elements requiring further development in the pre-final design stage. These elements are to be addressed in the supplemental design package under development by PG&E. This letter provides the Agencies' preliminary directives for proceeding with the 90% groundwater remedy supplemental design document. Final direction will be based on the Agencies review of comments from Tribes and stakeholders and information gained during DOI and the Bureau of Land Management (BLM) consultation meetings with Tribal Councils and with the Topock Project Tribal Representatives. This direction will be provided by the Agencies during the comment and response to comments periods of the 90% design package.

¹ The Topock project area is culturally and spiritually significant to nine federally-recognized tribes. Of the nine tribes in the area, the Chemehuevi Indian Tribe, Cocopah Indian Tribe, Colorado River Indian Tribes ("CRIT"), Fort Mojave Indian Tribe ("FMIT") and Hualapai Tribal Nation (hereafter collectively referred to as "the Tribes") have taken the most interest in the project and regularly participate in meetings and provide detailed comments on issues pertaining to site cleanup.

Remedy Monitoring

I. Arsenic Monitoring Wells

PG&E originally proposed a location for MW-EE during the February 11, 2014 TWG Meeting. Tribal input received during subsequent discussion was that the Tribes were opposed to that location. On November 18 and subsequently discussed in the November 19th TWG meeting, the Tribes proposed a Tribal Alternative MW-EE location on a .pdf map. In the final input matrix received from the Tribes on December 1, 2014, the Tribes proposed that Tribal Alternative well MW-EE should be considered a “future provisional” well depending on groundwater monitoring data from other wells due to the disturbance that would be required with respect to cultural values. The Agencies agree that installation of MW-EE can be considered a provisional well and installation will be evaluated further based on data received during construction of the IRL wells and remedy monitoring. MW-EE will be installed if data from any arsenic monitoring wells 150 feet from their respective injection point indicate an exceedance of the water quality criterion (MCL of 10 mcg/liter). Based on review of monitoring data, the Agencies will either direct PG&E to install the well at the predetermined Tribal Alternative MW-EE location or, working with PG&E and the Tribes, determine an alternative location that better matches the desired outcome. For the purpose of the supplemental design, PG&E should consider the Tribal input tabulated in the December 1 matrix and specify all locations of proposed arsenic monitoring wells in the supplemental design package. As stated, further discussion will be held with the Tribes during consultation meetings and the agencies will provide final direction to PG&E during our comment and response to comments period of the 90% design package.

II. Groundwater Plume Boundary Monitoring

In order to delineate the western most edge of the groundwater plume, additional monitoring wells MW-U and MW-V were proposed and discussed at the June 18 and 19, 2014 Technical Working Group meeting. A second site walk was also held during the October 16 Technical Working Group meeting to confirm the location of MW-V. Although the Tribes final well location matrix of December 1 identified a changed location for MW-V, the Agencies request that PG&E retain the field location identified during the October 16 meeting in the supplemental design based on the known plume boundary. The Agencies will further consider the timing of installation and location of this well after additional discussions with Tribes and PG&E. Agencies anticipate MW-V to be installed only if necessary based on monitoring well data collected during remedy construction.

III. Groundwater Capture Zone Monitoring

The capture zone monitoring in the 60% Design was inadequate. Capture zone monitoring must provide definitive criteria and sufficient data that would allow DTSC to meet the plume control determination as specified in Exhibit A5a of the DTSC 2012 settlement with FMIT and to enable DTSC to reach findings required under Exhibit A1 and A2 for decommissioning of IM-3. As stated in Exhibit A5a of the settlement agreement, PG&E must demonstrate consistency of model projections of the groundwater flow with transport model and field data.

To reiterate the Agencies position described in the April 4, 2014 directive letter, the capture zone must be clearly defined and illustrated in three dimensions. Well gradient pairs must be established that will provide sufficient information to determine whether groundwater extraction is providing the hydraulic influence and capture. Our April 4 letter suggested the use of slant wells under the river for use in hydraulic assessment. The agencies have re-evaluated this position when considering technical input received during the July and October TWG meetings and direct PG&E to include monitoring wells MW-X and MW-Y, located along the access road adjacent to the Colorado River, in the supplemental design package. Further discussion will be held with the Tribes during consultation meetings and the agencies will provide final direction to PG&E during the comment and response to comment periods of the 90% design package.

Injection Wells

The Fort Mojave, Cocopah and Hualapai Indian Tribes provided short descriptions of alternative locations for inner recirculation loop injection well IRL-1 and freshwater well FW-1 in letters and tables provided on December 1 & 2, 2014. The Agencies would like PG&E to evaluate these alternative locations, determine if they are feasible, and provide a write-up in the supplemental design package regarding this evaluation and the preferred locations for these wells.

Construction Staging Areas

With respect to construction staging areas, the Agencies acknowledge the need for PG&E to have sufficient staging and material storage within close proximity to areas of construction. After considering all proposed areas near the areas of construction, the Agencies provided direction to PG&E to identify the minimum number of locations necessary in the 90% design when considering input from the Tribes found in the January 2014 version of the soil staging and storage area matrix. The Fort Mojave, Cocopah and Hualapai Indian Tribes provided written input on these locations in letters and tables provided on December 1 & 2, 2014. The Agencies direct PG&E to further examine and consider the Tribal input provided in the attached tables (Attachments 1 – 3 from FMIT, Cocopah and Hualapai Indian Tribes respectively) and provide clarification on the construction/staging/soil storage terminology and to provide detailed descriptions of the proposed use of the areas opposed by the Tribes as well as justification for the necessity of using these areas during construction and remedy implementation. Based on this information and further consultation with the Tribes, the agencies will provide final direction to PG&E as part of the comment and response to comments period of the design.

Bat Cave Wash Crossing

The current design package includes aboveground pipe bridges for aerial crossing of Bat Cave Wash—one pipe bridge crosses the southern portion of the wash near the TCS and the other pipe bridge crosses the northern portion of the wash in the uplands. During the October 29 & 30 TWG meetings, PG&E provide information regarding installation of pipes and conduits through box culverts located in the IM-3 access road, an alternative for the northern crossing. The Hualapai Tribe provided additional options for the

Ms. Yvonne Meeks
December 23, 2014

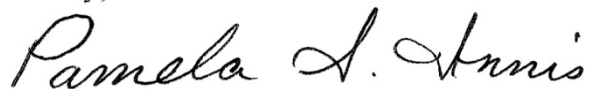
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northern crossing of Bat Cave Wash in their December 3, 2014 transmittal (Attachment 4) but defer to the Fort Mojave Indian Tribe, as the land owner in that area. To date, the Agencies have not received any input on this matter from the Fort Mojave Indian Tribe; therefore, PG&E is directed to proceed with their preferred design for the Bat Cave Wash crossing, considering all input received to date.

The Agencies hereby direct PG&E to provide the complete supplemental design package for review by the Agencies, Tribes and stakeholder. Once received, DTSC will forward the package to all reviewing parties for an additional 30 day review prior to concluding the 90% design comment period. BLM will concurrently provide the supplemental design package to the nine federally-recognized Tribes for Section 106 consultation for 30 days. PG&E is directed to submit the supplemental design package to the Agencies for distribution by February 2, 2015.

If you have any questions, please contact Pamela Innis at (303) 445-2502 or Aaron Yue at (714) 484-5439.

Sincerely,



Pamela S. Innis
DOI Topock Remedial Project Manager



Aaron Yue
Project Manager
Department of Toxic Substances Control

Attachments

cc: PG&E Topock Consultative Work Group
PG&E Topock Geo/Hydro Technical Work Group
Tribal Representatives in PG&E Project Contact List
Technical Review Committee
DOI Topock Administrative Record