

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



ELECTRONIC SUBMISSION

December 22, 2015

Mr. Max Auyeung Encroachment Permits California Department of Transportation (Caltrans) – District 8 464 W 4th Street San Bernardino, California 92401

Subject: Support of monitoring well MW-U installation in Interstate 40 median for the Pacific Gas and Electric Company, Topock Compressor Station environmental groundwater remediation project, Needles, California.

Dear Mr.Auyeung:

Pacific Gas and Electric Company has operated its Topock Compressor Station (PG&E Topock) since 1951. PG&E Topock is located approximately 12 miles southeast of Needles, California. A significant hexavalent chromium groundwater plume resulted from its past operation. A Hollywood motion picture, Erin Brockovich, was made of the contamination at a similar site in Hinkley, California. The United States Department of the Interior (DOI) and the California Department of Toxic Substances Control (DTSC) ("the Agencies") are co-regulatory agencies overseeing the investigation and groundwater cleanup of the PG&E Topock site.

In 2010, PG&E evaluated different technologies and recommended the use of in-situ treatment with freshwater flushing as the preferred groundwater cleanup method. In December 2010, DOI selected this remedy in a Record of Decision in accordance with the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"). In January 2011, the DTSC approved and adopted the recommended technology after completing and certifying a programmatic Environmental Impact Report (EIR) for the cleanup proposal. The Agencies are currently reviewing the final cleanup remedy design. DTSC anticipates the release of a draft Subsequent Environmental Impact Report (SEIR) during the summer of 2016 to evaluate the changes of the final design from the 2011 conceptual cleanup plan.

The Agencies' mandate for this project is to clean up the hexavalent chromium plume without further degradation of the existing groundwater aquifer. A vital mechanism of this cleanup remedy is to enhance the mobility of the hexavalent chromium toward the treatment zone located adjacent to the Colorado River by injecting imported clean groundwater behind (west) of the chromium plume. The Agencies must carefully monitor the chemistry and hydraulic movement of the groundwater to confirm the functionality of the remedy which includes the assurance that the groundwater plume does not expand beyond its current boundaries. As illustrated in the attached Figure 3.1-1 (from PG&E's final design document), the proposed monitoring well, designated MW-U is situated on Federal property within the Caltrans easement in the median of Interstate 40. The proposed well is west of the known western edge of the groundwater plume. It is also located between north and south imported water injection wells. This location will allow for monitoring and correcting, if necessary, the potential undesirable effect of mobilizing and spreading of the hexavalent chromium towards the west during the cleanup process. Monitoring well MW-U will also confirm the hydraulic movement and flow direction when evaluated in conjunction with other monitoring wells in the network.

As you may be aware, the project area is situated in a larger area considered sacred and culturally significant to several Native American Tribes. This area has been designated by the Bureau of Land Management as a Native American Traditional Cultural Property. Although there is Federal land off the interstate highway that may be suitable for the proposed monitoring well when improved by significant grading; these areas include many natural, historic and cultural resources that could be impacted by such grading. Further activities in these areas would result in additional impacts and are highly discouraged if alternative actions can be taken.

In short, the chromium groundwater plume has migrated under the freeway and groundwater flow changes induced by the injection of imported water could push contamination to the west in the wrong direction away from the treatment system located to the east, next to the Colorado River; therefore, it is vital that the groundwater at the western edge of the plume be monitored. Alternative locations are not viable based on cultural/archeological designations combined with the nearby steep terrain that is not amenable for drill rig access and well installation.

The Agencies are aware of the safety implications of having monitoring wells in the median of a major interstate highway. Safety of the work crew and interstate drivers is also of paramount concern to the Agencies and PG&E. If installed, every effort will be made to minimize the duration and frequency of work to be done at the location.

DOI and DTSC appreciate your considerations in granting an encroachment exception for the installation and periodic monitoring of the MW-U well. If you need any additional information to assist your expedient approval, please feel free to contact either of the undersigned project managers. The phone number for Pamela Innis is (602) 417-9578 and for Aaron Yue is (714) 484-5439.

Sincerely,

Pamela A. Annis

Pamela S. Innis DOI Topock Remedial Project Manager

Aaron Yue DTSC Project Manager Office of Geology

Attached – Figure 3.1-1

cc: PG&E Topock Consultative Workgroup Members PG&E Topock Geo/Hydro Technical Workgroup Members Tribal Representatives in PG&E Project Contact List Technical Review Committee



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