



# United States Department of the Interior

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



## ELECTRONIC SUBMISSION

November 09, 2016

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

Subject: Topock Soil RFI/RI - Plan to Address Data Gaps Identified During Work Plan Implementation, DG-WP-03, September 21, 2016, for the Pacific Gas and Electric Company, Topock Compressor Station, Needles, California

Dear Ms. Meeks:

The United States Department of the Interior (DOI), on behalf of the Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service, and the Bureau of Reclamation (collectively referred to as “DOI”), has completed the review of the “*Topock Soil RFI/RI – Plan to Address Data Gaps Identified During Work Plan Implementation, DG-WP-03*” (DG-WP-03), for the Pacific Gas & Electric (PG&E) Topock Compressor Station Project. The data gap workplan was prepared by CH2M for PG&E and is dated September 21, 2016.

The DG-WP-03 was provided to the Consultative Work Group members on September 21, 2016. Separately, the work plan was provided by BLM to the Tribes on September 27, 2016 as required by 36 CFR 800, 43 CFR 10, and other applicable regulations, and as stipulated in the Programmatic Agreement. To provide the Tribes and stakeholders the opportunity to perform early and independent evaluations, the existing soil data set and sample location map were previously transmitted by PG&E in June and September 2016 via electronic mail. As part of our evaluation, DOI reviewed and considered comments received on October 27, 2016 separately from the Fort Mojave Indian Tribe, the Hualapai

Indian Tribe, and the Cocopah Indian Tribe. Below are DOI's responses to comments received from the Tribes.

The Tribes commented that DG-WP-03 lacks sufficient detail and rationale for the proposed sample locations, and that the soil screening level used in the evaluation of the data should be provided. The description/rationale for each of the proposed sample location is identified in the workplan and is similar in format to the description/rationale in the previous data gap workplans and in the larger soil RFI/RI workplan (referenced in the first paragraph of DG-WP-03). Additional information was also provided during the October 5, 2016 meeting and October 20, 2016 site walk. The screening levels have previously been identified in both the soil RFI/RI workplan and in the provided soil data set. Sample data from the previous soil investigations (including Data Gap Workplans 1 and 2) with contaminant concentrations detected above background levels and exceeding their respective human or ecological screening levels were flagged as potential data gaps locations and then carried through the data quality objective process. The screening value used is contaminant and area specific. For example, the background value for lead is 8.39 mg/kg while the ecological comparison value is 0.0166 mg/kg. In areas outside the compressor station where ecological receptors are considered, the background value for lead would then be used for comparison. This screening approach, utilizing background as the lowest practicable screening value, has been a mainstay of the soils evaluation program since the work plan development stages as far back as 2011.

The Fort Mojave Indian Tribe commented that reasonable alternatives to the proposed sampling should be considered, such as using risk assessment tools, modeling, mapping concentration trends, and deferring to confirmation sampling during potential future soil cleanup actions. The methodology implemented in this data gap evaluation is consistent with previous evaluations. As with previous sampling events, DOI, PG&E and the Department of Toxic Substance Control (DTSC) have taken great effort in minimizing the impacts to an area considered sacred to the Tribe by reducing the number of sampling locations to the minimum necessary to address uncertainties in understanding the nature and extent of contamination and potential alternatives for cleanup, if required. It is DOI's position that a clear understanding of the nature and extent of contamination, consistent with the data quality objectives, reduces the uncertainty and provides the best opportunity to make management decisions in future having the potential to affect cleanup.

The Fort Mojave Indian Tribe provided specific comments on proposed sample location for areas outside the Topock Compressor Station. DOI believes that the sample locations specified for SWMU1/AOC1 are the minimum number to adequately address the nature and extent of dioxin and furan contamination, particularly with respect to areas within the Havasu National Wildlife Refuge. With respect to AOC4, pre-removal contaminant concentrations were significant enough to make water and airborne distribution a concern. The sample locations identified for AOC4 are the minimum necessary to determine the potential lateral extent of contamination. Concentrations of contaminants, including PCBs, mercury and dioxins/furans, found at AOC 9-15, AOC10a-3, and AOC10-15, lead DOI and DTSC to require additional sampling to define the nature and extent of contamination. For previous sample locations where contaminant

concentrations were either increasing with depth or significantly exceeded screening levels, DOI and DTSC determined that additional deeper samples were required.

DOI has identified data gaps specific to Federally-managed land, in addition to those specified in DG-WP-03, which must be addressed to ensure that a complete assessment of dioxin and furan contamination can be completed. Below are DOI's additional directions to PG&E.

Ambient or background concentrations of inorganic chemicals in soils were estimated in several earlier (prior to 2006) studies for various portions of the property around the Topock Compressor Station. A formal background investigation was conducted in accordance with the 2006 RCRA Facility Investigation/Remedial Investigation Soil Investigation Work Plan, Part A, to augment the existing background data set and to establish background concentrations of inorganic constituents and polycyclic aromatic hydrocarbons (PAHs). Samples were collected from various lithologic and geomorphic settings and soil types in the vicinity of the compressor station but in areas not expected to be impacted by compressor station activities. These background values were used as soil screening levels. Dioxin and furan samples were not taken during these events. This lack of a background evaluation was noted in the comments by the Fort Mojave Tribe as well. DOI believes that the information developed from this activity may clarify future risk assessment/risk management decision making, particularly with respect to ecological impacts in the refuge areas. Accordingly, PG&E shall establish background for dioxins and furans on Federal land through a limited sampling event. Sampling locations shall be based on the previous soil background sampling plan to the extent possible although the addition of new locations may be necessary. While previous background sampling efforts focused on geologic variations to assess inorganic concentrations, this effort should focus on areas unimpacted by PG&E operations to assess background dioxin/furan concentrations due to outside sources. Additionally, the sampling should focus on surface to near surface sample depths (less than one foot). Access to sample locations shall utilize areas already disturbed by previous grading and other mechanized activities to the extent practicable and access beyond disturbed areas, as determined necessary, should be limited to foot access only. The performance of all field activities shall be executed in such a way as to avoid and/or minimize adverse effects to biological, cultural and historic properties to the maximum extent practicable, and be consistent with the Programmatic Agreement and Programmatic Biological Assessment.

Dioxin and furans toxic equivalency (TEQ) avian and mammal exceeded the Ecological Comparison Value in depositional areas near the mouth of Bat Cave Wash. The dioxin and furans TEQ human also exceeded the Residential and Commercial Screening Level of 50 ng/kg in several locations near the mouth of Bat Cave Wash. Potential sources of dioxins and furans have been described in prior reports and in the January 2013 work plan. Historical sediment samples were collected from 18 sample locations in the mouth of Bat Cave Wash and along the banks of the Colorado River upstream and downstream of the mouth of Bat Cave Wash. These samples did not include analysis of dioxin/furans. Due to the proximity of the exceedances described above to the mouth of Bat Cave Wash

and the Colorado River, DOI requires two additional sediment sample locations near the confluence of the wash with the river (See attached figure).

In summary, DOI approves the proposed work described in the DG-WP-03 with the condition that a separate work plan for determining background for dioxins and furans is developed, as described above. DOI also believes that two additional samples should be taken in the downstream portion of Bat Cave Wash. DOI considers the timely implementation of the both DG-WP-03 and the determination of dioxin/furan background concentrations as critical elements. The field sampling activities must be completed within a narrow time frame, avoiding potential biological-related impacts while maintaining a schedule to complete the risk assessment, allowing DTSC and DOI to make the critical decisions on displaced soils resulting from the groundwater remedy construction.

If you have any questions, please contact me at (602) 417-9578.

Sincerely,

Handwritten signature of Pamela S. Innis in black ink.

Pamela S. Innis  
DOI Topock Remedial Project Manager

Cc: PG&E Topock Consultative Workgroup (CWG) Members

Attachment 1. Map Showing Additional BCW Sample Locations

