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

ELECTRONIC SUBMISSION

October 21, 2014

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

Subject: Directives on Incomplete Elements Identified in the Pre-Final (90%) Basis of Design Report and Construction/Remedial Action Work Plan for the Groundwater Remediation Project at the Pacific Gas and Electric Company (PG&E), Topock Compressor Station.

Dear Ms. Meeks:

As a result of a preliminary evaluation of the September 2014 *Basis of Design Report/Pre-final (90%) Design Submittal for the Groundwater Remedy,* the Department of the Interior (DOI) and the Department of Toxic Substances Control (DTSC), jointly as lead agencies (the Agencies), have identified several elements that are incomplete. Although PG&E presumed that there will be an opportunity to fully develop and include the details of these elements in the 100% design for the Agencies' approval, this assumption does not take into consideration the Agencies, stakeholders and Tribes review of and input on those elements of the design. This is not acceptable. The Agencies note that in the *Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties* (EPA 540G-90/001, April 1990), EPA states that the "pre-final/final design review is the last review of the Remedial Design… The approval of the final design is acceptance that the project may proceed to the next step; i.e., community relations activities and preparation of a Remedial Action Work Plan." Based on this guidance, all primary design elements should be available for review in the 90% design.

The enclosed table lists specific elements that the Agencies have found or have been identified by PG&E to be incomplete requiring further development for review in the pre-final design stage. Since the Agencies have not completed our review of the subject basis of design document, the Agencies cannot ascertain the comprehensiveness of the

deficient element list. As discussed with PG&E on September 16, 2014 and October 8, 2014, it is the Agencies' expectation that all elements necessary for the design of the remedy be fully described in the pre-final (90% design) report. Agencies acknowledge that slight deviations from the design may be necessary during construction of the remedy; however, those deviations should be limited to changes which would not require additional infrastructure nor increase in the remedy footprint not previously identified or considered as part of the California Environmental Quality Act (CEQA) evaluation for the design approval.

The Agencies hereby direct PG&E to fully evaluate all elements of the groundwater remedy design and provide a supplemental design package that completes all information necessary for a comprehensive pre-final design review that would then be considered in completing the evaluation under CEQA. Once the Agencies receive the supplemental design package, we will, in turn, forward it to all the reviewing parties for an additional 30 days for comments. PG&E is directed to submit the supplemental design package to the Agencies for distribution by December 30, 2014.

If you have any questions on the timing or the scope of this directive, 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

Enclosure

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
ESA Distribution List

Enclosure 1
Incomplete Groundwater Remedy Pre-Final Design Elements
Pacific Gas and Electric, Topock Compressor Station

Proposal - Supplemental Design Submittal

Items	Existing Info in 90% Design (September 8, 2014)	Anticipated Supplemental Info (December 30, 2014)	Key Existing 90% Info Reviewers Should Hold Off on Review and/or Comment
1. Moabi Regional Park Facilities	• The 90% BOD and C/RAWP included figures showing the general layout of the construction headquarter (CHQ) and long term remedy support area, the soil storage and processing/staging areas, and approx. acreage of each area. Also included are general descriptions of planned functions in the CHQ and long-term remedy support area. • Appendix D2 of the 90% BOD included a placeholder for engineering drawings of these facilities (Function Code 15).	• New and/or revised figures and descriptions of the planned facilities at Moabi Regional Park. • Detailed engineering drawings, calculations, and technical specifications. • If applicable, new or additional information such as construction approaches, O&M provisions, compliance with substantive requirements associated with the planned facilities, etc., will be included.	<u>90% BOD</u> • Figure ES-4B. • Table ES-1, Category "Supporting Facilities during Remedy O&M", text in 3rd bullet from bottom of the category. • Section 3.5.3, Exhibit 3.5-2, text under the category "Moabi Regional Park." • Appendix D2, list of potential drawings under Function Code 15 (Park Moabi Facilities). <u>C/RAWP</u> • Figures 3.1-2, 4.2-1, and 4.2-2. • Text in Section 4.2.2.
2. Power Supply for Improvements at Compressor Station Evaporation Ponds	• The 90% BOD, O&M Manual, and C/RAWP included information/design for planned improvements at the evaporation ponds, with power supplied from a natural gas powered generator (with an option of a direct feed from the Compressor Station).	• If the generator were to remain as the source of power supply as presented in the 90%, details such as a battery bank/ associated controls and a more secure housing for the generator/battery (to address Compressor Station's concern about vandalism at the ponds), etc., will be added. • If the power is supplied directly from the compressor station power system, details such as electrical conductors along the right-of-way that currently contains the	<u>90% BOD</u> • Figures ES-4C and 3.4-1 - the visualization showing housing for the generator (located at bottom left corner of figure). • Appendix D2, Drawings A-09-02, C-09-03, C-09-04, E-09-01, E-09-02, E-09-06. <u>O&M Manual</u> • Volume 1, text in Sections 2.7.1.1, 3.7.1, and 3.7.2.

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		discharge pipeline that carries water from the compressor station to the ponds, a small control building or panel would be installed to house the pond controls and communications equipment, etc., will be added. • If applicable, new or additional information such as construction approaches, O&M provisions, compliance with substantive requirements associated with the planned facilities, etc., will be included.	C/RAWP • Figure 3.1-4, the visualization showing housing for the generator (located at bottom left corner of figure).
3. Alternative Northern Bat Cave Wash Crossing	• The 90% design included a detailed design of a pipe bridge that crosses Bat Cave Wash in the uplands (also known as the northern BCW aerial crossing or Pipeline A Bridge). • 90% BOD, Section 3.3.3.1 text discussed alternatives to the pipe bridge that were evaluated, and an alt. design to be carried forward.	• New figures and descriptions of the alternative design, along with detailed engineering drawings, calculations, and technical specifications. • If applicable, new or additional information such as construction approaches, O&M provisions, compliance with substantive requirements associated with the planned facilities, etc., will be included.	90% BOD • Appendix C, Attachment B, Structural Calculations for Pipeline A Bridge. • Appendix D2, portion of the drawings E-00-07, C-07-08 (Detail 4), C-07-22, S-07-01 through 08, that are related to Pipeline A Bridge.
4. Air Compressor Building	• The 90% BOD and C/RAWP included a new air compressor building as part of the remedy in error. The new air compressor building is being designed as a Station project.	• Revised figures to indicate that the new air compressor building is not part of the remedy.	90% BOD • Figure ES-4A, the visualization showing the air compressor building as part of the remedy (located at bottom right corner of figure). • Figures ES-5, ES-6, ES-10, 2.4-4, 3.5-1, and 3.5-2 -- call outs for the new air compressor building as part of the remedy. • Section 3.5.3, Exhibit 3.5-2, text in 5th bullet under the category "Compressor Station."

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			C/RAWP • Figures 3.1-1 and 4.1-2, the visualization showing the air compressor building as part of the remedy (located at bottom right corner of figures).
5. Node 5 Equipment Layout Optimization	• 90% design layout would require a retaining wall.	• A revised layout to avoid a retaining wall and reduce the amount of earthwork. • Updated engineering drawings to reflect the revised layout.	• 90% BOD, Appendix D2, Drawings C-05-03, C-05-06, C-07-21, E-00-08, and E-00-09.
6. Select Arsenic Monitoring Well Locations/ Access and Status (MW-CC, MW-DD, and MW-EE)	• 90% design included proposed locations and status of arsenic monitoring wells that were based on discussions between PG&E, the agencies, stakeholders, and Tribes since the February 11, 2014 TWG.	• Based on agencies' direction after the October 30, 2014 TWG site walk (anticipated on November 17, 2014), PG&E will proposed specific arsenic monitoring well locations, access routes, and other information, if appropriate.	• The pink arches for specific IRL-2 and IRL-3 Arsenic monitoring wells (MW-CC, DD, and EE) depicted in various figures throughout the 90% BOD, O&M Manual, and C/RAWP. • Information related to the locations of MW-CC, DD, and EE in various tables throughout the 90% BOD, O&M Manual, and C/RAWP.
7. Select Monitoring Wells Locations/ Access (MW-U, V, X, Y, and Z)	• 90% design depicted some well locations as a general area, instead of a specific location (per discussion with the agencies).	• Per agencies' direction on October 8, 2014, PG&E will propose specific locations and access routes to these wells, and include revised figures in the supplemental design for review and comment. • In addition, per the Refuge's request, the supplemental design will include revised figures to depict a means to collect water samples from MW-Y (which is located on Refuge lands) during remedy O&M that minimizes vehicle traffic from the road to the well head.	• The general areas where these select wells may be located, as depicted in various figures throughout the 90% BOD, O&M Manual, and C/RAWP.