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Subject: PG&E: Incomplete pre-final groundwater remedy design elements

Greetings,

The US Department of the Interior and the Department of Toxic Substances Control, jointly referred to as Agencies, noted through our preliminary review of the September 2014 Pre-final design submittal that there are elements within the report that are deferred or inadequate for a final remedy evaluation. These noted elements are listed in the attached table, which was also attached to the direction letter to PG&E. Although the elements listed must be provided as part of the final remedy design, the Agencies believe that the PG&E has provided a thorough evaluation of the majority of the final design in the September 2014 submittal, and that stakeholders and Tribes should continue your review and comment on that document. The attached table outlines the information that PG&E

anticipates will be submitted by December 30, 2014 and key sections of the existing design document that those elements would impact. Please note that element 6 in the table will require timely direction from the Agencies on the arsenic monitoring well locations. The goal for the Agencies is to gather final input during the upcoming October 2014 TWG meeting prior to direction to PG&E.

As a result of the deficiencies noted, the agencies will extend the document review period so that there will be an additional 30 days to review the supplemental design after receipt. At present, it is anticipated that the comment period for the 90% design will terminate early February 2015. As stated in the email to PG&E, a revised schedule on the comment due date will be shared with all stakeholders during the upcoming October 29, CWG meeting.

Sincerely,

Aaron Yue Project Manager Department of Toxic Substances Control (714) 484-5439

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. 	 90% BOD 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). 					
			 C/RAWP 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.	 90% BOD 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. 					
		 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 discharge pipeline that carries water from the compressor station to the ponds, a 	O&M Manual Volume 1, text in Sections 2.7.1.1, 3.7.1, and 3.7.2. C/RAWP Figure 3.1-4, the visualization					

		 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. 	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." C/RAWP Figures 3.1-1 and 4.1-2, the visualization showing the air

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.	•	compressor building as part of the remedy (located at bottom right corner of figures). 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.