THE COCOPAH INDIAN TRIBE
Cultural Resource Department/Topock Project
14515 S. Veterans Drive
Somerton, Arizona 85350
Telephone (928) 722-7522
Fax (928) 627-3173

Project Number: CCR-032-06-001

Via Electronic Transmittal

April 24, 2017

Mr. Aaron Yue, Project Manager
Department of Toxic Substance Control
5796 Corporate Avenue
Cypress, CA 90630

Ms. Pamela Innis, CHF Remedial Project Manager
U.S. Department of the Interior
Bureau of Land Management State Office
One North Central Avenue, Suite 800
Phoenix, Arizona 85004

Re: ***Comments and Recommendations Concerning January 9, 2017 Topock Groundwater Modeling Addendum***

Dear Mr. Yue and Ms. Innis:

The Cocopah Indian Tribe, herein referenced as 'The Tribe', acknowledges that the Department of Toxic Substance Control (DTSC) and the Department of Interior (DOI) and, collectively referred to herein as the Agencies, have provided continued opportunity to review and comment on the above-referenced report. The comments and recommendations provided herein are in line with modeling-related issues that have been consistently raised through various technical reviews, presentations, site visits and discussions. The most recent set of concerns and recommendations, issued in letter form from the Cocopah Indian Tribe, Fort Mojave Indian Tribe and Hualapai Tribe are provided as an enclosure. All concerns identified therein remain, as they were not addressed in the Addendum, and are incorporated by reference.

The following are our general and specific comments, together with recommendations. Additional calibration points added to the model as part of the addendum development, outside of the immediate plume area and in AZ, improve the overall reliability and usefulness of the model. This is especially relevant in the expanded area of the remedial

infrastructure across the river within AZ and will be helpful to evaluate pumping influences on the AZ side, in order to substantiate the viability of a remedy injection water source. It is critical to the effective and timely progress of the remedy that the source of injection water is not interrupted or lessened. A timely and effective remediation is of key importance to the Tribe.

The project schedule now permits PG&E and Arcadis to further investigate the numerous regional calibration points that were rejected as part of the Addendum development. Possibly, some of these points could be used for future calibration, for example, by filling in data gaps on pumping rates, by verifying elevations, etc. Also, calibration statistics pertaining to the regional calibration alone have not but should be developed going forward.

Tribal involvement should be maintained in periodic updates and data additions to the model. Specifically, the Modeling Subgroup should be relied upon during periodic updates to discuss and review new data and potential ways in which the model might be used to maintain remedial progress, maximize the utilization of the infrastructure, and minimize the project duration. As noted in the report:

> *"During installation and implementation of the remedial system, the additional hydrogeologic and groundwater quality data that will be generated can be utilized to update the groundwater flow and transport models and to further improve their effectiveness as tools for understanding site conditions and optimizing remedy performance."*

The data generated during the remedy construction, and again following the initial phase of operation of the system, will be critical to refining a more detailed site conceptual model, and updating the digital groundwater model. Using the updated digital model to run predictive scenarios will be important to increase the likelihood that the remedy will continue to operate as effectively as possible, which should also result in keeping the active remediation time, and therefore the total remedy duration, to a minimum.

The Tribe continues to have a strong preference for having NO additional construction or well installations as the remediation progresses. The impact of the remedial construction as currently designed – the November 2015 100% Basis of Design Report and the 2015 Errata, is huge, and any further elements (wells or other infrastructure – and especially the up to 25% increase in remedy infrastructure identified as part of the Draft SEIR Future Activities Allowance) added to this project are unacceptable. Proper use of the digital model, when augmented with the additional data which will be collected during the installation and initial operation of the remedy should provide a key, valuable tool to understanding the natural system, and ensuring efficient implementation of a remedial design that already has significant flexibility and expansion elements built in.

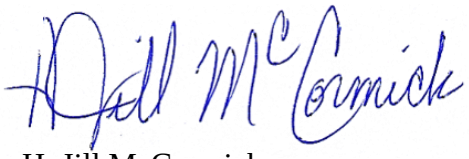
The Tribe encourages the Agencies, PG&E & the Arcadis modelers to recognize that the model and the project, along with its impacts, extend well beyond the site vicinity. Such

recognition does not appear to presently exist, based on statements in the last paragraph of Addendum Section 2.2 (Directive 2).

The Tribe thanks PG&E and Arcadis for recently making available the model input files and requests that they continue to do so, upon request from one or more Tribes, going forward.

The Tribe appreciates the opportunity to provide comments regarding this issue. If you have any questions regarding this letter or its content please feel free to contact us via email at mccormickj@cocopah.com or castilloe@cocopah.com or by phone at (928)-722-7522.

Sincerely,



H. Jill McCormick
Cocopah Indian Tribe
Cultural Resource Manager

Edgar Castillo
Cocopah Indian Tribe
Topock Project Manager

Cc: Jason West, Field Manager BLM
Renee Kolvet, BLM Archaeologist
Gloria Bullets-Benson, BLM
Karen Baker, DTSC
Mohsen Nazemi, Deputy Director, DTSC
Ana Mascarenas, EJ/Tribal Affairs, DTSC
Tribal Representatives

Encl. January 27, 2017 Letter to A. Yue (DTSC) and P. Innis (DoI) re: *Recommendations Concerning Future Topock Flow and Contaminant Transport Modeling* from N. McDowell (Fort Mojave Indian Tribe), J. McCormick (Cocopah Indian Tribe), E. Castillo (Cocopah Indian Tribe) and D. Hubbs (Hualapai Tribe)