August 20, 2017

Ms. Pamela S. Innis Topock Remedial Project Manager Office of Environmental Policy and Compliance U.S. DEPARTMENT OF THE INTERIOR Bureau of Land Management - Arizona State Office One North Central Avenue, Suite 800 Phoenix, AZ 85004-4427

Re: Fort Mojave Indian Tribe Comments on Dioxin/Furan Background Technical Memorandum

On July 20, 2017, PG&E distributed their draft Technical Memorandum (TM) titled *Ambient/Background Study of Dioxins and Furans at the Pacific Gas and Electric Company Compressor Station, Needles, California.* As their technical consultant, I have been asked to provide these comments on the TM on behalf of the Fort Mojave Indian Tribe (Tribe). The comments are not presented in any particular order.

- 1. This work was initiated by the U.S. Department of Interior (DOI). The Department of Toxic Substances Control, while having representatives in the field during sample collection, did not provide comment on the details of the work plan. If the DTSC had any issues with the sampling, they should have shared those prior to sample collection. The Tribe is concerned over every single field activity where the site is disturbed through soil sampling. Therefore, when samples are collected the Tribe expects that the analytical results from those samples will be used for their intended purpose, in this case to determine background. The Tribe requests that the DTSC accept these background data and commit to using the data in both the risk assessment and in determining the need for and extent of any soil remedial action.
- 2. On the first page there is a comment about the background study for metals investigating the potential differences between different lithologic soil units and concluding that no differences existed. I do not see the same evaluation or conclusion for the dioxins/furans. It seems this would be an equally-important conclusion for this current background study.
- 3. During the development of the work plan for this study the Tribe provided comments on adjusting some of the locations to include drainages downgradient of I-40. The Tribe acknowledges that the recommended sample locations were included in this study.
- 4. The *Results* section of the TM provides three different procedures for addressing samples with reported non-detect (ND) results. The Tribe requests that the same method as adapted in the calculations of Exposure Point Concentrations (EPCs) (i.e., use of one-half the reported detection limit) be used in the background evaluation to calculate the Toxicity Equivalents (TEQs) for the various receptors.

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- 5. The evaluation of outliers in the two datasets (dioxin/furan and Polynuclear Aromatic Hydrocarbons, PAHs) is an interesting statistical exercise but should not be included in the background evaluation. The definition of 'ambient/background' has been based on the selected sampling locations in this study. These locations were distant from the Topock Compressor Station (TCS) operations or impacts. These locations were visited by PG&E, Tribal and agency representatives and 'approved and selected' based on their locations. Therefore, whatever the findings at these locations they are indeed 'ambient/background'. While the high concentrations 'outliners' identified may be part of a different 'population', that does not disqualify these as legitimate 'ambient/background' concentration estimates (i.e., 95% UCL/UTL). At a minimum, these "all-data" estimates should be provided so that they can be considered in both the risk assessment and any potential proposed soil remediation activities.
- 6. The purpose of this study was to determine 'ambient' concentrations of dioxin and furan compounds in soil. To achieve this purpose the sample locations selected were in the proximity of non-TCS source areas. This is an appropriate procedure to determine soil concentrations in the area of the TCS but not impacted by the TCS. The DTSC's own 'policy' on background concentrations at hazardous waste sites recognizes this definition of 'ambient' as being related to both natural background and anthropogenic activities. The Tribe supports the designation of the results as ambient background concentrations.
- 7. The complete background dataset represents the area around the TCS and is appropriate for use in both risk assessment and remediation decisions. While some sample locations were closer, and some further from potential anthropogenic sources (e.g., I-40), all locations were concluded to be not impacted by the TCS. To attempt to divide the background dataset into sub-groups, either based on location or concentration, represents a level of evaluation which was neither anticipated by the work plan nor is defensible. It is not possible to know which samples have been, could have been, or have not been impacted by anthropogenic activities. The purpose of collecting samples from many different areas around the TCS was to provide sufficient samples to understand what is 'ambient' in the TCS area. The Tribe supports the use of the full dataset in calculating a single ambient background concentration for the dioxin and furan compounds.
- 8. The soil samples collected in this study were surficial samples from 0" to 6". There are many areas of the TCS project site where soil movement and mixing are ongoing. This is evidenced by the inclusion of sediment scouring scenarios in the risk assessments. Furthermore, many AOCs have debris and/or debris removal areas which further indicate soil mixing. Therefore, the Tribe supports the use of these dioxin/furan ambient background concentrations to all soil areas and samples collected at the site

The Tribe appreciates the opportunity to comment on this TM. We request a conference call during which we can discuss these comments with the agencies. In addition, FMIT representatives and I are available to discuss the issues raised in this review and look forward to opportunities to participate in the finalization of the background data set for the TCS.

Sincerely,

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Michael J. Sullivan, Ph.D., CIH, REHS Consultant to the Fort Mojave Indian Tribe

cc: Nora McDowell/FMIT Leo Leonhart/Hargis Linda Otero, Director ACS Tribal Representatives, CRIT, Cocopah, Chemehuevi and Hualapai Tribes TRC Representatives Aaron Yue, DTSC