



Yana Garcia
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
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Governor

SENT VIA ELECTRONIC MAIL

June 7, 2024

Mr. Iain Baker
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ACCEPTANCE OF SOIL RCRA FACILITY INVESTIGATION/REMEDIAL INVESTIGATION (RFI/RI) REPORT (VOLUME 3), AT PACIFIC GAS AND ELECTRIC COMPANY (PG&E) TOPOCK COMPRESSOR STATION, NEEDLES, CALIFORNIA (EPA I.D.CAT080011729/(Site Code: 540015))

Dear Mr. Baker:

The Department of Toxic Substances Control (DTSC) has completed the review of the September 2023 Final RFI/RI Report (Report), Volume 3 – Results of Soil and Sediment Investigation at the PG&E Topock site. The final Report was submitted to DTSC on October 2, 2023, after comments and response to comments were gathered and considered from the September 30, 2022 draft final Report. Minor edits were noted by DTSC and communicated to PG&E during a teleconference meeting and subsequently via e-mail on February 14, 2024. DTSC notes that the revisions requested were completed on February 14, 2024. DTSC hereby approves the September 2023 Report with modifications noted on February 14, 2024.

The Report summarizes analytical data collected during the implementation of the Soil RFI/RI Work Plan of 2013, and historical sampling data from 2008 and 2012 that meet the project's Data Quality Objectives. The Report includes conceptual site models for the fate and transport of contaminants at Solid Waste Management Units (SWMUs), Areas of Concerns (AOCs) and Unidentified Areas (UAs) both inside and outside of PG&E's land ownership. A total of 42 units were identified as areas that potentially may have been or known to have been used for waste management by PG&E. Fifteen of the 42 identified

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units are located on lands not owned by PG&E. These units are grouped as Part A Investigation Areas.

Additionally, the Geological Services Branch (GSB) has also reviewed the Report and offered several findings and recommendations in the attached memorandum which should be considered and incorporated in future project decisions. In particular, the GSB has noted a historical impoundment which likely would be classified as a new AOC. Pursuant to Section IV, A(4) of the 1996 Corrective Action Consent Agreement, PG&E shall submit an Interim Measure Workplan to DTSC within 90 days of receipt of the written notification for the discovery. DTSC understands that additional investigative work associated with the new AOC may necessitate an Addendum to the current RFI report. Furthermore, DTSC recognizes that there are additional consultations and coordination needed with Federal agencies, and Tribes; therefore, DTSC recommends a timely discussion with respect to the potential new AOC within the next 30 days.

Aside from these noted conditions, DTSC finds that the September 2023 Report to be detailed, thorough in its evaluation and presented the data in a systematic manner. If you have any questions regarding this approval letter, please feel free to contact the Project Manager, Mr. Christopher Ioan via email at: christopher.ioan@dtsc.ca.gov, or at (714) 484-5365; or the Unit Chief, Mr. Nick Ta via email at: nicholas.ta@dtsc.ca.gov, or at (714) 484-5381.

Sincerely,



Eileen Mananian, M.S.
Acting Branch Chief
Site Mitigation and Restoration Program

Attachment: Geological Services Unit comment memorandum

cc: Mr. Christopher Ioan
Hazardous Substances Engineer
Site Mitigation and Restoration Program
christopher.ioan@dtsc.ca.gov

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 Contact List



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Department of Toxic Substances Control

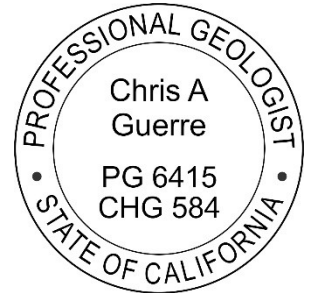
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Governor

TO: Aaron Yue
Senior Hazardous Substances Engineer
Project Manager
Site Mitigation and Restoration Program

FROM: Chris Guerre, CHG
Senior Engineering Geologist
Geological Services Unit (GSU)



DATE: March 12, 2024

**SUBJECT: RCRA FACILITY INVESTIGATION AND REMEDIAL INVESTIGATION REPORT
PG&E TOPOCK COMPRESSOR STATION, NEEDLES, CALIFORNIA
(EPA ID NO. CAT080011729)**

PCA 22120 SITE CODE 540015 WP 48 MPC RC

DOCUMENT REVIEWED

The GSU with the Department of Toxic Substances Control (DTSC) reviewed the revised September 30, 2023 document titled, *RCRA Facility Investigation and Remedial Investigation Report, PG&E Topock Compressor Station, Needles, California, Volume 3 – Results of Soil and Sediment Investigation* (Report). The Report was prepared by Jacobs Engineering Group Inc. (Jacobs) for Pacific Gas and Electric Company (PG&E) and was revised by PG&E/Jacob based on agency and stakeholder comments on the previous September 30, 2022 version.

The Report is a large document that took years to prepare and used an iterative review and comment process. The Report presents the soil characterization results for all areas of the site including:

- Areas outside the compressor station fence line (Part A investigation areas)
- Areas inside the compressor station fence line (Part B investigation areas)
- Perimeter areas adjacent to the compressor station fence line
- Storm drains leading from the compressor station to areas outside the fence line

The GSU's review focused on the latest Response to Comments (RTC) contained in Appendix L of the Report to evaluate the latest changes made to the Report.

The GSU identified a few minor edits that were needed to clarify and finalize the Appendix L RTC table but they were addressed separately outside this GSU memorandum. PG&E's revisions to address those comments were received by email on February 14, 2024.

GSU FINDINGS

The GSU review found that the Report sufficiently characterized those identified areas that were available and accessible for sampling and has no further revision requests for the document. The GSU does wish to highlight a few items including the discovery of a potentially new investigation area as discussed below.

GSU COMMENTS

1. Exhibits ES-1, ES-2, 4-1 and 4-2 of the Report list several Areas of Concern (AOC) not to be considered for further action or additional consideration in the Corrective Measures Study/Feasibility Study (CMS/FS) even though data gaps or uncertainty may exist with the AOC. For AOC 12 (Fill Areas), AOC 28 (Pipeline Drip Legs), AOC 31 (Former Teapot Dome Oil Pit), AOC 24 (Stained Area and Former API Oil/Water Separator), and AOC 33 (Potential Former Burn Area near AOC 17), there is uncertainty whether the proper location was sampled and characterized since the location of the AOC was not precisely known (specifically the historic permanent drip tanks with regards to AOC 28). Therefore, these AOCs might be encountered in the future during future earthwork at the site and should be considered as potential sources of contamination even though existing sampling has not identified significant environmental impacts. If the AOCs are located in the future, they should be properly characterized and evaluated for associated potential risk. This is somewhat akin to searching for PG&E's lost historic groundwater wells. Even though a well search might be conducted which does not locate the well, that well should still be acknowledged as lost. While there may be no immediate plans to continue the well search, a possibility exists that future earthwork could encounter the well, and if found, the well should be properly decommissioned at that time.
2. The approach described in GSU Comment 1 above could even apply to Undesignated Area (UA-1 - Pipeline Disposal Area) in the future. For example, if disturbance of the general area by PG&E operations or another entity encounters pipes and or waste, opportunistic samples could be collected by PG&E to assess and document if significant environmental impacts are present. At UA-2 (Former 300B Pipeline Drip Tank), elevated arsenic was encountered, but it might be related to native bedrock. Additional background bedrock samples would need to be collected to confirm this hypothesis. Should additional PG&E construction occur in the future within bedrock similar to that present at UA-2, then it is

recommended that opportunistic samples be collected by PG&E to determine if the native bedrock also contains elevated arsenic.

3. Section 1.3.2 and Exhibit 1-1 of the Report list the AOCs that were deferred from characterization and require additional sampling in the future. The units include AOC 5 and AOC 6 (Cooling Towers A and B), AOC 19 (Former Cooling Liquid Mixing and Hotwell Area), AOC 20 (Industrial Floor Drains), AOC 25 (Compressor and Generator Engine Basements), AOC 26 (Former Scrubber Oil Sump), AOC 29 (Interim Measure Number [No.] 3 Treatment Plant), AOC 30 (MW-20 Bench) and AOC 32 (Oil Storage Tanks and Waste Oil Sump). With regard to AOC 26, the full extent of contamination should first be determined before making final conclusions regarding potential risk including existing and future potential threats to groundwater. Dedicated groundwater monitoring wells might be needed in the AOC 26 area depending on what the results of future investigations find. The wells might need to be installed before further soil characterization if the soil investigation is significantly delayed into the future. This is requested to ascertain if volatile organic compounds have impacted groundwater and if they are migrating away from a source area.
4. Section 3.1.1 of the Report states, *“Only soil and sediment samples are considered in the statistical summary tables. Samples from other matrices, such as wood, debris, tar, and white powder, are included in the Sample Results tables but are not part of the comparison analyses because they are not necessarily representative of underlying soil conditions.”* This is of concern where waste samples were collected, but minimal or no soil data was collected due to efforts to minimize the total number of sampling locations as related to site cultural concerns. Waste materials could act as a continuing source for continued soil impacts especially where exposed to erosion. In particular, waste materials in AOC 13 on the surface of the slope between the Lower Yard and west of Cooling Tower B should be removed. This general conclusion for handling waste items is also stated in Report section 4.2.10.4 - Debris and Waste Samples.
5. In reviewing RTC comment 48 regarding AOC 28 Pipeline Drip Legs, reference was made to Figure A-12, an October 6, 1966 aerial photograph. The resolution of this photograph was exceptional, and details could be seen such as the dams across AOC 11e and AOC11c as shown in Photograph 1 below. Note that the infilled portion behind the AOC 11e dam closely matches the extent of the contaminated material removed during the Non-Time-Critical Removal Action (NTCRA) in 2022. Photograph 2 below shows an impoundment “downstream” of dark staining that emanates from the former API oil/water separator (AOC 24). Dark stained drainages lead downslope and terminate in the liquid filled impoundment. There might even be a dark discoloration in the fluids on the northern portion of the circular pond. This impoundment has not been identified previously with such detail. The GSU recommends that this circular impoundment be further investigated according to Section 6.4 of the Report that discusses new or previously unidentified releases that are discovered at the Site. The pond

should be accurately plotted on current aerals. It appears to occur in the vicinity of sample SD-14 where elevated dioxins/furans, polychlorinated biphenyls, and polycyclic aromatic hydrocarbons were identified. Two or three trenches to characterize this area are anticipated to ensure significant contamination does not reside in this former impoundment area. It is recommended that the investigation of this newly identified area be conducted as part of the upcoming CMS/FS or perhaps through another process.



Photograph 1. October 6, 1966 Aerial Photograph showing AOC 11e and 11c dams and associated sedimentation behind the dams.



Photograph 2. October 6, 1966 Aerial Photograph showing a circular impoundment (large red oval) adjacent to Bat Cave Wash apparently being fed along dark stained drainages emanating from AOC 24 stained areas. Note the smaller red circle where two drainages appear to coalesce and form a circular dark stained ponding area intermediate to the impoundment adjacent to Bat Cave Wash.

RECOMMENDATIONS

The GSU requests that Jacobs/PG&E officially document the newly identified impoundment/AOC discussed in GSU Comment 5 above and formulate a path forward to have it properly characterized in the future including addressing anticipated administrative tasks. GSU Comments 1 through 4 are provided as recommendations for future work in general and some might be addressed as part of the upcoming CMS/FS.

The GSU notes that the recommendations presented in this memorandum are site specific and should not be applied to other projects without consultation with the project geologist. If you have any questions or comments, please contact Chris Guerre at (714) 484-5422 or christopher.guerre@dtsc.ca.gov.

Peer reviewed by Greg Neal, PG