

Resolution Certifying the Final Subsequent Environmental Impact Report



**CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL
RESOLUTION CERTIFYING THE
FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT
FOR THE
PACIFIC GAS AND ELECTRIC COMPANY
TOPOCK COMPRESSOR STATION
FINAL GROUNDWATER REMEDIATION PROJECT
SCH No. 2008051003**



WHEREAS, the Subsequent Environmental Impact Report (SEIR) prepared for the Pacific Gas & Electric (PG&E) Topock Compressor Station Final Groundwater Remediation Project (Final Groundwater Remedy; Project) identifies and considers the potentially significant and reasonably foreseeable adverse environmental effects of various actions associated with the construction, operation and maintenance, and decommissioning of the Final Groundwater Remedy Project. The primary purpose of the Project is to clean up the groundwater contamination related to the historical release of chemicals in and around the PG&E Topock Compressor Station (Station), in San Bernardino County, California. The Project involves in situ treatment of contaminated groundwater with freshwater flushing. In situ treatment of groundwater refers to the reduction in mass, toxicity, mobility, volume, and concentration of the chromium plume using treatment technologies that treat groundwater in place, as opposed to pumping and circulating water through a separate aboveground treatment plant. In situ treatment would be performed by placing a degradable food-grade organic compound (termed a carbon substrate or carbon amendment) in the groundwater to create reducing conditions to convert hexavalent chromium [Cr(VI)] dissolved in groundwater to relatively insoluble trivalent chromium [Cr(III)]. The reduced chromium would precipitate or become adsorbed onto soils below the water table and thereby be removed from groundwater. The organic carbon substrate would be released into the aquifer by injection after mixing on-site with a water source, such as extracted contaminated groundwater or clean water. The Final Subsequent Environmental Impact Report (Final SEIR) consists of two volumes: Volume 1 – Comment letters on the Draft SEIR, responses to comments, and associated revisions to the Draft SEIR; and Volume 2 – Revised Draft SEIR in its entirety.

WHEREAS, groundwater beneath and near the Station has been contaminated through the discharge and release of Cr(VI), and total chromium [Cr(T)] in the areas known as Bat Cave Wash and East Ravine. Other chemicals of potential concern (COPCs) that might be associated with historical releases from the Station are molybdenum, selenium, and nitrate. In 2004, the Department of Toxic Substances Control (DTSC) determined that immediate actions were necessary within the Project Area as precautionary measures to ensure that Cr(VI)-contaminated groundwater did not reach the Colorado River. Interim Measures (IMs) were therefore instituted to protect the Colorado River. IMs are cleanup actions that are

taken to protect public health and the environment while long-term solutions are being developed and evaluated. There have been three separate but related IMs at the Station since 2004 in response to the need to control the groundwater plume. IM-1, IM-2, and mostly IM-3 are collectively referred to as “the Interim Measure,” or “the IM.”

WHEREAS, investigation and remediation at the Station and the surrounding area is being conducted under the Resource Conservation and Recovery Act of 1976 (RCRA) by DTSC and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) by the U.S. Department of the Interior (DOI). RCRA corrective action activities at the Project Site were initiated in 1987 with the completion of a RCRA facility assessment conducted by the U.S. Environmental Protection Agency (USEPA).

WHEREAS, RCRA provides a framework for USEPA to remediate hazardous waste sites throughout the United States. In California, DTSC implements RCRA under such delegated authority from the USEPA through state law.

WHEREAS, DTSC has an ongoing Corrective Action Consent Agreement with PG&E, which also describes DTSC’s authority over the Project. Investigative activities at and in the vicinity of the Station date back to the late 1980s with the identification of Solid Waste Management Units (SWMUs) through a RCRA Facility Assessment (RFA). Closure activities of former hazardous waste management facilities at the Station were performed from 1988 to 1993. The RCRA Facility Investigation (RFI) began in 1996 when DTSC and PG&E executed the Corrective Action Consent Agreement to more fully investigate the nature and extent of contamination at the Station and in the surrounding area. In July 2005, PG&E entered into an Administrative Consent Agreement with the federal agencies including DOI, U.S. Bureau of Land Management (BLM), U.S. Fish & Wildlife Service (USFWS), and the U.S. Bureau of Reclamation (BOR), under CERCLA [DOI 2005]). Later, in 2013, the U.S. District Court for the Central District of California entered the *Remedial Action Remedial Design Consent Decree between the United States of America and Pacific Gas & Electric Company* (DOI Consent Decree) under CERCLA with the DOI as the federal lead agency (DOI 2013). The 2013 DOI Consent Decree governs only the remedial action addressing contaminated groundwater; the terms of the 2005 Administrative Consent Agreement remain in effect for response actions associated with releases of hazardous substances at or from the Station other than the remedial action addressing contaminated groundwater.

WHEREAS, in 2011, DTSC evaluated the potentially significant adverse environmental effects of various potentially feasible remedies associated with cleanup of groundwater contamination at the Station.

As a result, DTSC certified the Topock Compressor Station Groundwater Remediation Project Final EIR (Groundwater FEIR), adopted the CEQA Findings of Fact and Statement of Overriding Considerations, and adopted the Mitigation Monitoring and Reporting Program (MMRP) (DTSC 2011). Based on these documents, as well as all other information obtained through the administrative process, DTSC approved a groundwater remedy design that consists of in situ treatment with freshwater flushing (referred to as “Alternative E” in the Groundwater FEIR) (DTSC 2011). In 2013, DTSC adopted an Addendum to the Groundwater FEIR, which expanded the Project Area and considered the potential environmental effects associated with the investigation of potential well locations for a freshwater source located in Arizona (DTSC 2013).

WHEREAS, following certification of the Groundwater FEIR, PG&E initiated an iterative design process by preparing the preliminary (30%), interim (60%), pre-final (90%), and supplemental pre-final 90% designs for the Final Groundwater Remedy, to implement the method which was selected and approved in 2011, in accordance with the Consent Decree and the Corrective Action Consent Agreement process. DTSC provided Interested Tribes with a public review and comment period at each design phase. Over a 4-year period, PG&E worked with DTSC, as well as the DOI, Interested Tribes, landowners, and other stakeholders to address comments and questions, collect new data, and develop the *Basis of Design Report/Final (100%) Design Submittal for the Final Groundwater Remedy, PG&E Topock Compressor Station, Needles, California, November* (Final Remedy Design; CH2M Hill 2015a). After DTSC and DOI issued final design directives (i.e., directives for proceeding with the final design) to PG&E, on November 18, 2015, PG&E submitted the Final 100% BOD, referred to as the Final Remedy Design (which includes the Operation & Maintenance Manual), and the *Construction/Remedial Action Work Plan for the Final Groundwater Remedy, PG&E Topock Compressor Station, Needles, California* (C/RAWP; CH2M Hill 2015b) to DTSC and DOI for consideration. Supplemental and Errata Information for the Final Groundwater Remedy was provided to DTSC in November 2016, which corrected minor inconsistencies and clarifications to the Final Design.

WHEREAS, PG&E prepared and completed the Final Remedy Design pursuant to the requirements of the Corrective Action Consent Agreement entered into by PG&E and DTSC in 1996 and the Remedial Design/Remedial Action Consent Decree, executed by PG&E and the United States, on behalf of the DOI, which was approved by the U.S. District Court for the Central District of California in November 2013. PG&E designed the proposed groundwater remedy to comply with the Groundwater FEIR mitigation measures and applicable regulations, and throughout the design period PG&E submitted quarterly mitigation measure compliance reports documenting actions taken to comply with these mitigation measures. The Draft SEIR for the Project is based on the Final Remedy Design and the C/RAWP, which

reflect modifications and clarifications by PG&E as a result of the collaborative and iterative design process. Tribal comments and input were received and considered throughout the design development process.

WHEREAS, in addition to certain contingencies that are specifically set forth in the Final Remedy Design and C/RAWP, the Project evaluated as part of the Final SEIR also includes a general contingency or allowance for future activities that may be carried out as part of the Project (the "Future Activity Allowance"). The Future Activity Allowance is included in the Project Description and the Final SEIR to ensure that a comprehensive environmental analysis is included should additional activities be warranted over the decades long project implementation.

WHEREAS, the Project components include an estimated total of up to 96 boreholes would be drilled for monitoring well construction and an estimated total of up to 95 boreholes would be drilled for remediation well construction, for a total of 191 boreholes. In addition to these estimated totals, and as part of the Future Activity Allowance which preserves DTSC's ability to make project revisions based on new information not known at the time of the SEIR preparation, the Draft SEIR included an analysis of an additional allowance of 25 percent overage for each of the monitoring and remediation boreholes. The Project also contemplates, as part of the Future Activity Allowance, the potential need for up to 10 additional monitoring well boreholes to be installed in Arizona as part of the monitoring program to assess groundwater conditions to protect existing and future groundwater users by measuring water levels and chemical constituents changes as a result of the groundwater remediation project.

WHEREAS, in addition to the remediation and monitoring well network, the proposed Project also includes supporting infrastructure such as roads, pipelines, utility connections, freshwater supply and conveyance infrastructure, storage areas, buildings, and other necessary support structures to ensure long-term effectiveness. These infrastructure components were considered at a general level with anticipated maximum build estimates in the 2011 Groundwater FEIR (exact locations were not known with precision) and are now known with a higher level of detail (both quantities and locations), as described in the Final Remedy Design and Final SEIR.

WHEREAS, Section IX(2) of the Corrective Action Consent Agreement signed by PG&E and DTSC in 1996 provides that PG&E "shall use its best efforts to obtain access agreements necessary to complete work required by this Consent Agreement from the present owners of such property [beyond the Facility property boundary] within thirty (30) days of approval of any workplan for which access is required." DTSC agrees with PG&E to modify that timeframe as a result of the phased construction

approach for the groundwater remedy. DTSC finds it reasonable to defer the requirement to obtain access agreements to “at least sixty (60) days prior to the project initiation meetings for Phase 1 and Phase 2 of construction, for access to properties encompassed within the scope of the respective phase of construction, as these terms are described in the Construction/Remedial Action Work Plan (CRAWP).” See CRAWP Section 4.2.1 at 4-5 (project initiation meeting), Section 3.3.1.3 at 3-55 (Phase 1 and Phase 2). In the event that an agreement for access is not obtained at least sixty (60) days prior to the project initiation meetings for Phase 1 and Phase 2 of construction, respectively, or within thirty (30) days of the date that the need for access becomes known to PG&E, PG&E shall notify DTSC in writing within fourteen (14) days thereafter regarding both the efforts undertaken to obtain access and its failure to obtain such agreements. Aside from this change, all other provisions of Section IX(2) remain in effect without modification.

WHEREAS, the BLM as the federal lead agency has prepared a draft *Cultural and Historic Properties Treatment Plan for Groundwater Remediation, Topock Compressor Station Remediation Project, San Bernardino County, California and Mohave County, Arizona* (Treatment Plan; Hanes and Price *in progress*) in compliance with federal requirements and in accordance with Mitigation Measure CUL-1b/c-3 of the Final Groundwater EIR (DTSC 2011) and the *Programmatic Agreement Among the Bureau of Land Management, Arizona State Historic Preservation Officer, California State Historic Preservation Officer and the Advisory Council on Historic Preservation for the Topock Remediation Project in San Bernardino County, California, and Mohave County, Arizona* (PA; BLM 2017). After review by Interested Tribes and the Section 106 consultation process as lead by the BLM is complete, the final Treatment Plan will be implemented in accordance with Mitigation Measure CUL-1a-19 of the Final SEIR. The measures identified in the draft Treatment Plan are imposed as conditions of the Project, herein. However, when the final Treatment Plan has been approved by the BLM, in consultation with Interested Tribes, new or revised measures identified in that final Treatment Plan would also apply and/or supplement those identified herein, to the Topock Compressor Station Final Groundwater Remediation Project.

WHEREAS, DTSC prepared, in consultation with Environmental Science Associates (ESA), a SEIR for the Project in full compliance with CEQA.

WHEREAS, DTSC finds the Final SEIR complies with the terms and the spirit of the Settlement Agreements entered into between the Fort Mojave Indian Tribe and DTSC, executed by the parties in January 2006 to settle the matter of *Fort Mojave Indian Tribe v. DTSC* (Sacramento Superior Court Case No. 05CS00437), and in 2013 to settle the matter of *Fort Mojave Indian Tribe v. DTSC* (Sacramento Superior Court Case No. 34-2011-80000802).

WHEREAS, DTSC has reviewed and considered the information contained in the Final SEIR (Volumes 1-2), and all supporting documents, including maps, exhibits, testimony, and written documents contained in the file for this Project, including its environmental analysis on record with the environmental consulting firm Environmental Science Associates (ESA). All references to the Final SEIR hereafter shall include all documents cited above.

WHEREAS, the DTSC, is the lead agency under the California Environmental Quality Act (Pub. Resources Code, § 21000, et seq.) (CEQA) for the Final Groundwater Remedy Project, now finds that:

1. Notice has been given in the time and in the manner required by State Law.
2. The Final SEIR for the Topock Compressor Station Final Groundwater Remediation Project, incorporated herein by reference, was presented to DTSC. The Final SEIR includes Volumes 1 and 2, as well as Errata and Revisions to the Final SEIR: Volume 1 – Comment letters on the Draft SEIR (Draft SEIR) including all comments and recommendations received on the Draft SEIR; a list of all persons, organizations, Native American tribal governments, and public agencies commenting on the Draft SEIR; the responses to comments made regarding significant environmental points on the Draft SEIR; Volume 2 – all revisions to the Draft SEIR (collectively the Final SEIR), and; Errata and Revisions to the Final SEIR addressing changes made between the Final SEIR and this Resolution. DTSC has independently reviewed and considered the information contained in the Final SEIR, including comments received from agencies, the public, and Native American Tribes.
3. The Final SEIR was completed in compliance with CEQA.
4. The Final SEIR reflects the DTSC's independent judgment and analysis.

BE IT RESOLVED and CERTIFIED by the Deputy Director of DTSC, Mohsen Nazemi, and on behalf of DTSC that:

1. The Final SEIR was completed in compliance with the California Environmental Quality Act of 1970 (Pub. Resources Code section 21000 et seq.), as amended, and the State Guidelines thereto (Cal. Code Regs., tit. 14, section 15000 et seq.).
2. The Final SEIR was presented to DTSC, and was independently reviewed and considered by the DTSC.

3. The Final SEIR reflects the DTSC's independent judgment and analysis with respect to the analysis of the potential effects on the environment from implementation of the Final Remedy Design and C/RAWP.

PASSED AND ADOPTED by the DTSC on April 23, 2018.

CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES
CONTROL

By



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