

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**MEETING OF JANUARY 16 AND 17, 2013
Barstow, California**

- ITEM:** 8
- SUBJECT:** **REVISED WASTE DISCHARGE REQUIREMENTS FOR PACIFIC GAS AND ELECTRIC COMPANY, HINKLEY COMPRESSOR STATION, SAN BERNARDINO COUNTY**
- CHRONOLOGY:**
- | | |
|-----------------|--|
| July 11, 1974 | Waste Discharge Requirements - Adopted (Board Order No. 6-74-64) |
| July 8, 1982 | Revised Waste Discharge Requirements - Adopted (Board Order No. 6-82-79) |
| June 14, 1990 | Revised Waste Discharge Requirements - Adopted (Board Order No. 6-90-42) |
| August 12, 1993 | Amended Waste Discharge Requirements – Adopted (Board Order No. 6-90-42A1) |
| July 17, 1997 | Revised Waste Discharge Requirements – Adopted (Board Order No. 6-97-82) |
- ISSUE:** Should the Water Board certify an environmental document and adopt revised Waste Discharge Requirements (WDRs) authorizing Pacific Gas and Electric Company (PGE) to construct two additional surface impoundments at the Hinkley Compressor Station?
- DISCUSSION:** The Hinkley Compressor Station (Facility) is a natural gas compressor station that discharges cooling water blowdown to three lined surface impoundments. The Facility is located on Community Boulevard in the town of Hinkley in San Bernardino County. The Facility is operated by Pacific Gas and Electric Company (PG&E), on land owned by PG&E (Discharger).
- Three Class II surface impoundments currently exist at the site. However, the existing capacity is insufficient to perform any necessary maintenance. Construction of two additional surface impoundments is proposed to allow for operation of the Facility with sufficient capacity while performing any maintenance. The two additional surface impoundments are proposed to be constructed in the footprint of previous surface impoundments that were

decommissioned and reportedly clean-closed. However, data are not available to demonstrate that the previous surface impoundments were clean-closed. The WDRs require soil sampling of the area prior to construction of the proposed surface impoundments.

Water Board staff has solicited comments from the Discharger and interested parties. All comments received have been addressed.

In addition, as Lead Agency for the California Environmental Quality Act (CEQA), Water Board staff and its contractor, ICF International, prepared a mitigated negative declaration describing mitigation measures to reduce all potentially significant environmental impacts to less than significant levels during project construction and operation. The Final Mitigated Negative Declaration, including the draft Mitigated Negative Declaration, the Errata, a letter responding to public comments received, and a Mitigation Monitoring Plan are enclosed in this agenda item. As part of adopting the WDRs, the Board will be making findings in the WDRs certifying the environmental document including adopting the Mitigation Monitoring Plan as part of the WDRs.

RECOMMENDATION: Adoption of Order as proposed.

ENCLOSURE	ITEM	BATE NUMBER
1.	Proposed Board Order	8-5
2.	Comments from Cardno Entrix 9/25/2012	8-79
3.	Response to Comments 12/14/2012	8-81
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7.	Response to Comments and Comment Letters Received	8-247

ENCLOSURE 1

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**BOARD ORDER NO. R6V-2013-(PROPOSED)
WDID NO. 6B362031001**

REVISED WASTE DISCHARGE REQUIREMENTS

FOR

**PACIFIC GAS AND ELECTRIC COMPANY
HINKLEY COMPRESSOR STATION**

San Bernardino County

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Discharger

On June 27, 2012 and August 13, 2012, Pacific Gas and Electric Company (PG&E) submitted an addendum to the March 15, 2012, Report of Waste Discharge (RWD), which collectively constitutes a complete RWD for the proposed two additional surface impoundments at the Hinkley Compressor Station (Facility). PG&E owns the land underlying the proposed Facility. For the purpose of this Order, PG&E is referred to as the "Discharger."

2. Facility

The Discharger is proposing to construct and operate two additional surface impoundments to supplement the three existing surface impoundments at the Facility in the town of Hinkley, San Bernardino County, as shown on Attachment "A," which is attached to and made part of this Order.

For the purposes of this Order, the Facility consists of: 1) compressor station, 2) parking area, 3) five surface impoundments [three existing and two proposed], 4) office area, and 5) any related piping and appurtenances. A Facility map is presented in Attachment "B," which is attached to and made part of this Order.

3. Reason For Action

Revised Waste Discharge Requirements (WDRs) are being issued for the continued operation of three existing surface impoundments and the construction and operation of two additional surface impoundments in the footprint of former surface impoundments.

Two new surface impoundments, Ponds 6R and 7R, are proposed to be built in the footprints of former Ponds 6 and 7, which were closed in 1995. These two new surface impoundments will supplement the evaporative capacity of existing Ponds 4, 5, and 8, and will allow for maintenance of the existing surface impoundments.

The existing surface impoundments do not provide sufficient evaporative capacity for proper operation of the compressor station. During the winter months, the compressor station must reduce cooling tower boiler blowdown rates to meet surface impoundment freeboard requirements. Reduction in the blowdown rates causes higher conductivity of the discharged waste water and can result in damage to the compressor station equipment. Additionally, construction and operation of proposed Ponds 6R and 7R would allow for maintenance of the existing surface impoundments while still operating the compressor station.

4. Order History

On July 11, 1974, the Water Board adopted Board Order No. 6-74-64, which allowed the discharge of waste into five original surface impoundments, Ponds 1 through 5. On July 8, 1982, the Water Board adopted revised WDRs, Board Order No. 6-82-79, for the addition of two surface impoundments, Ponds 6 and 7. On June 14, 1990, the Water Board adopted Board Order No. 6-90-42, which allowed the construction and operation of an additional surface impoundment, Pond 8, and required the Discharger to retrofit existing surface impoundments Ponds 4 and 5 by adding an additional liner. An amendment to Board Order No. 6-90-42 was adopted for the Facility on August 12, 1993. Revised WDRs, Board Order No. 6-97-82, were adopted on July 17, 1997, for closure of five surface impoundments, Ponds 1, 2, 3, 6, and 7. Ponds 4, 5, and 8 are still in place and in service.

5. Enforcement History

On December 29, 1987, Cleanup and Abatement Order (CAO) No. 6-87-160 was issued because wastewater containing hexavalent chromium was discharged at the Facility to unlined ponds, which polluted groundwater. The Order specified dates for submitting plans for site investigation, characterization of hydrogeology, and initiation of cleanup and abatement of hexavalent chromium in the soil and groundwater. Subsequent amendments, CAO No. 6-87-160A1 adopted June 3, 1994, required the Discharger to destroy wells that could provide a conduit for migration of hexavalent chromium to an underlying aquifer and to implement a full-scale groundwater extraction system. CAO No. 6-87-160A2, adopted August 3, 1998, required the Discharger to monitor and to submit reports on the effectiveness of the corrective action activities.

6. Existing Site Conditions

The new surface impoundments are proposed to be installed in the footprint of former surface impoundments which have been closed; the proposed locations are outside of the original discharge and source areas for the hexavalent chromium contamination from the Facility. These two new proposed surface impoundments, Ponds 6R and 7R, are proposed to be installed in the footprint of former surface impoundments, Ponds 6 and 7. Ponds 6 and 7 were identified as clean closed in Board Order No. 6-97-82; however the technical report on which clean closure was

based did not provide data to demonstrate clean closure of these two surface impoundments. This Order requires a sampling plan to verify that Ponds 6 and 7 were clean closed, present no further threat to groundwater, and identify background soil concentration against which to compare when the new surface impoundments are clean closed in the future. These data must be collected prior to the construction of the new surface impoundments, Ponds 6R and 7R.

7. Facility Location

The Facility is located in the town of Hinkley, at the southeast intersection of Community Boulevard and Fairview Road, in Section 2, Township 9N, Range 3W, San Bernardino Baseline and Meridian and is shown on Attachment "B," which is made part of this Order.

8. Waste Classification

The blowdown from the cooling towers at the compressor station accounts for approximately 90% of the discharge to the surface impoundments. The remaining 10% of the discharge to the surface impoundments is comprised of intermittent waste streams from cleaning and maintenance operations.

The wastewater contains concentrations of several constituents, including arsenic, fluoride, hexavalent chromium, magnesium, nitrate, and total dissolved solids (TDS). The wastewater discharged to the surface impoundments is classified as a designated waste. Designated waste is defined in California Water Code (CWC), section 13173, subdivision (b), as "nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan." The predicted quality of wastewater to be discharged to the surface impoundments is included in Attachment "C." These data were derived by analyzing representative samples of the discharge to determine the concentration of chemical constituents.

9. Waste Management Unit Classification

The Surface Impoundments are classified as Class II waste management units, as defined in California Code of Regulations (CCR), title 27, section 20250.

10. Description of the Surface Impoundments

The cooling water blowdown and the intermittent maintenance waste streams from the Facility will be discharged into five lined Class II Surface Impoundments (see Attachment B). Three Surface Impoundments Ponds 4, 5 and 8 are currently in service. Ponds 6R and 7R will be constructed in the future. The Surface

Impoundments must also contain the volume of rain which falls onto the Surface Impoundment areas in a 1,000-year, 24-hour storm event, while maintaining two feet of freeboard.

The liner system of the Surface Impoundments is proposed to be constructed in ascending order as follows:

- a. An 8-inch recompacted native subgrade below the bottom liner, which is moisture conditioned and compacted to 90 percent of the maximum dry density per American Society for Testing and Materials (ASTM) Standard D1557.
- b. A pan lysimeter under the lower-most part of each proposed surface impoundment that consists of a 60-mil high density polyethylene (HDPE) layer and granular drainage material.
- c. A liquid collection and recovery system (LCRS) directly above the pan lysimeter under the lower-most part of each proposed surface impoundment that consists of a geosynthetic clay layer (GCL) overlain by a 60-mil HDPE smooth liner and granular drainage material.
- d. A 60-mil HDPE drain liner.

The surface impoundments will be installed, tested, and inspected in accordance with an accepted Construction Quality Assurance Plan.

Pond 6R is proposed to be constructed on 1.22 acres with a 1.68 million gallon total operating capacity and Pond 7R is proposed to be constructed on 1.26 acres with a total operating capacity of 1.26 million gallons. The Surface Impoundments are to be lined, as described above, and must have no less than 1×10^{-6} cm/sec permeability. The Surface Impoundments will each be equipped with a LCRS directly underneath the deepest portion of each Surface Impoundment. The LCRS is designed to monitor the liner of the Surface Impoundment, and to provide the earliest possible detection of a leak in the liner of the Surface Impoundments. The Surface Impoundments will be equipped with an unsaturated zone monitoring system beneath the LCRS. The Surface Impoundments, as specified in CCR, title 27, section 20320, Table 4.1, are to withstand seismic shaking from a maximum credible earthquake, as defined in CCR, title 27, section 20164.

11. Engineered Alternative to Prescriptive Standard for the Surface Impoundments

The CCR, title 27, includes prescriptive standards for waste management unit construction and allows for engineered alternatives to such standards. The Discharger has proposed engineered alternatives to the CCR, title 27 prescriptive standards for the construction of the Class II Surface Impoundments. CCR, title 27, section 20080, subdivision (b), requires that alternatives shall only be approved

where the Discharger demonstrates that: (1) the construction of prescriptive standard is not feasible because it is unreasonably and unnecessarily burdensome and will cost substantially more than alternatives, which meet the criteria, or is impractical and will not promote attainment of applicable performance standards; and (2) there is a specific engineered alternative that is consistent with the performance goal of the prescriptive standard and affords equivalent protection against water quality impairment.

The prescriptive standard for a Surface Impoundment is a single clay liner or a double-lined system with a leachate collection and removal system, and a hydraulic conductivity of 1×10^{-6} cm/sec. The Discharger proposes an engineered alternative for construction of the Surface Impoundments because construction of a prescriptive clay liner is not feasible at this Facility. Repeated wetting and drying cycles are expected to desiccate and crack the prescriptive compacted clay liner during typical operational conditions. Therefore, cracking would compromise the clay liner and not achieve the performance standard. The engineered alternative for the Surface Impoundments is a triple-layer liner system. The liner includes a layer of geosynthetic clay liner, and two layers of 60-mil HDPE, which are expected to mitigate downward migration of water from the Surface Impoundment. The geosynthetic clay liner is comprised of a powdered sodium bentonite mat with backing of geotextiles on both sides to provide a hydraulic conductivity of 5×10^{-9} cm/sec, which is three orders of magnitude more stringent than prescriptive liner requirements. Furthermore, the Surface Impoundments will be equipped with liquid collection and recovery systems (LCRS), which are lined sumps installed below the lowest portions of the Surface Impoundments. These allow for detection of the vertical migration of liquids and removal of a water sample for testing. Additionally, the Surface Impoundments will be equipped with pan lysimeters below the LCRS to allow for additional monitoring of any vertical migration of liquids below the surface impoundments.

Water Board staff has evaluated these proposed alternatives and has determined that these alternatives meet the CCR, title 27 requirements, is consistent with the performance goal of the prescriptive standards, and affords equivalent protection against water quality impairment.

12. Authorized Disposal Site

The authorized disposal locations for wastewater at the Facility are the five Surface Impoundments (Ponds 4, 5, 8, 6R and 7R).

13. Water Quality Protection Standard

The Water Quality Protection Standard (WQPS) consists of monitoring parameters, constituents of concern (COCs), concentration limits, Monitoring Points, and the Point of Compliance. The WQPS applies over the active life of the Facility, closure period, and the compliance period. The constituents of concern, Monitoring Points,

and Point of Compliance for groundwater and unsaturated zone monitoring are described in MRP No. R6V-2013-(PROPOSED). This Order includes a time schedule for the Discharger to propose concentration limits for all constituents of concern.

14. Statistical Methods

Statistical analyses of groundwater monitoring data are necessary for the earliest possible detection of measurably significant evidence of a release of waste from the Facility. CCR, title 27, section 20415, subdivision (e)(7), requires statistical data analyses to determine when there is "measurably significant" evidence of a release from the Unit. MRP No. R6V-2013-(PROPOSED) includes methods for statistical analyses. The monitoring parameters listed in MRP No. R6V-2013-(PROPOSED) are believed to be the best indicators of a release from the Facility.

15. Detection Monitoring Program

Pursuant to CCR, title 27, sections 20385 and 20420, the Discharger has proposed a detection monitoring program (DMP) for the Facility. The DMP for the Facility consists of monitoring: (1) the LCRS, (2) the pan lysimeters, and (3) groundwater monitoring wells for the presence of constituents of concern from the Facility. The program to monitor the LCRS, the pan lysimeters, and water-bearing media for evidence of a release, as well as the monitoring frequency, is specified in MRP No. R6V-2013-(PROPOSED).

16. Evaluation Monitoring Program

An evaluation monitoring program (EMP) may be required, pursuant to CCR, title 27, sections 20385 and 20425, in order to evaluate evidence of a release if detection monitoring and verification procedures indicate evidence of a release. The Discharger must monitor groundwater and the unsaturated zone to evaluate changes in water quality and/or physical parameters that indicate a release from the Facility. If the EMP confirms measurably significant evidence of a release, then the Discharger must submit an engineering feasibility study for a corrective action program within 180 days of determination pursuant to CCR, title 27, section 20425, and MRP No. R6V-2013-(PROPOSED).

17. Corrective Action Program

A corrective action program (CAP) to remediate released wastes from the Facility may be required pursuant to CCR, title 27, sections 20385 and 20430, if results of an EMP prove the presence of a measurably significant release from the Facility.

18. Surface Impoundments Closure Specifications

The Discharger plans to clean-close the Surface Impoundments, pursuant to CCR, title 27, section 21400, at closure, at which time any residual water remaining in the Surface Impoundments will be allowed to evaporate and all residual wastes, including liquids, sludges, precipitates, settled solids, and liner materials will be completely removed, transported, and disposed to a facility permitted to accept such wastes.

The Discharger has submitted a preliminary closure plan and financial estimates to clean-close the surface impoundments. This Order requires that adequate financial assurance mechanisms for closure be submitted by the Discharger to the Water Board prior to construction of the new surface impoundments at the Facility.

19. Site Geology

The soils underlying the Facility are comprised of interbedded sands, gravels, silts, and clays. The sands extend to a depth of approximately 125 to 150 feet below the Facility. Underlying the sands is the Blue Clay aquitard. Between the Blue Clay and bedrock are permeable stratum composed of calcareous sedimentary rock and highly weathered, decomposed, and fractured bedrock that exists as the transitional interface above the granitic bedrock. The thickness of the weathered rock is highly variable, generally ranging between a few feet up to 20 feet thick. The Blue Clay aquitard thins to the west and to the south towards the Mojave River. The depth to bedrock is about 175 feet below the Facility.

The nearest active fault is the northwest-southeast trending Lenwood fault located about one mile southeast of the Facility. Dextral slip is between 0.2 and 1.0 millimeters per year (mm/yr), but can occur at greater values when triggered by other seismic events.

20. Site Hydrogeology and Hydrology

The Facility is located approximately 1 mile north of the Mojave River. The Facility is not within a 100-year floodplain.

Two hydraulically-connected aquifers are within the Mojave groundwater basin, the Floodplain Aquifer and the Regional Aquifer. The Floodplain Aquifer is composed of past and current Mojave River deposits. The surrounding and underlying Regional Aquifer is generally composed of unconsolidated alluvial fan deposits from the surrounding mountains. The Facility is located above the Floodplain Aquifer. The hydrostratigraphy is generally divided into two additional depth-specific aquifers, the Upper Aquifer and the Lower Aquifer. The Upper Aquifer includes the Floodplain Aquifer and portions of the Regional Aquifer and is underlain by the Blue Clay aquitard. Below the Blue Clay aquitard is the deeper, semi-confined Lower

Aquifer. Depth to groundwater in the Upper Aquifer ranges from about 75 to 90 feet below ground surface (bgs).

21. Groundwater Quality

A water sample was collected by the Discharger from groundwater monitoring wells MW-01 and PMW-01 in July and August, 2011. Selected results are presented in Table 1, Groundwater Quality Results, below.

Table 1. Groundwater Quality Results

Constituent	Units	Monitoring Well MW-01 Sample Concentration	Monitoring Well PMW-01 Sample Concentration	MCL
Chloride	mg/L	66	50	NE
Chromium (Hexavalent)	µg/L	25.8	104	NE
Chromium (Total)	µg/L	28.9	99.9	50
Fluoride	mg/L	<0.1	<0.1	2
Magnesium	mg/L	NS	16	NE
Nitrate as Nitrogen	mg/L	2.4	1.3	10
pH	pH units	7.3	7.2	6.5-8.5
Sodium	mg/L	69	68	250
Specific Conductance	µmhos/cm	900	880	900*
Sulfate	mg/L	120	58	NE
Total Dissolved Solids (TDS)	mg/L	540	520	500*

Notes:

* = Secondary MCL

MCL = maximum contaminant level

µg/L = micrograms per liter

µmhos/cm = micromhos per centimeter

mg/L = milligrams per liter

MW = monitoring well

NE = not established

NS = not sampled

22. Water Sources

On-site production wells owned by PG&E provide the water used at the Facility. Production wells used for industrial operations include PGE-15, PGE-12, PGE-13, and PGE-6. A water sample was collected by the Discharger from supply well PGE-15 on December 30, 2011. Water quality data from supply well PGE-15 is shown in Table 2, Water Supply Quality Results, below.

Table 2. Select Water Supply Quality Results

Constituent	Units	Supply Well PGE-15 Sample Concentration	MCL
Fluoride	mg/L	0.34	2
Nitrate as Nitrogen	mg/L	<0.1	10
Arsenic	mg/L	<0.01	0.01
Boron	mg/L	0.102	NE
Magnesium	mg/L	3.30	NE
Chloride	mg/L	56	NE
Hexavalent Chromium	ug/L	<1.0	NE

Constituent	Units	Supply Well PGE-15 Sample Concentration	MCL
pH	pH units	7.62	6.5-8.5
Specific Conductance	µmhos/ cm	350	900*
Sulfate	mg/L	25	250
Total Dissolved Solids (TDS)	mg/L	153	500*

Notes:

* = Secondary MCL

MCL = maximum contaminant level

ug/L = micrograms per liter

µmhos/cm = micromhos per centimeter

mg/L = milligrams per liter

ND = not detected

NE = not established

23. Receiving Waters

The receiving waters are the groundwaters of the Middle Mojave River Valley Groundwater Basin (Department of Water Resources, Groundwater Basin Number 6-41, Basin Plan, Plate 2B, Groundwater Basins, Region 6, South Lahontan).

24. Lahontan Basin Plan

The Water Board adopted a *Water Quality Control Plan for the Lahontan Region* (Basin Plan), which became effective on March 31, 1995. This Order implements the Basin Plan.

25. Beneficial Groundwater Uses

The present and potential beneficial uses of the groundwaters of Middle Mojave River Valley Groundwater Basin (DWR Basin No. 6-41), as set forth and defined in the Basin Plan, are:

- a. (MUN) - Municipal and Domestic Supply,
- b. (AGR) - Agricultural Supply,
- c. (IND) - Industrial Service Supply,
- d. (FRSH) - Freshwater Replenishment, and
- e. (AQUA) - Aquaculture.

26. Site Topography

The topography of the site is relatively flat, and gently sloping downward to the northeast, with elevations ranging from approximately 2,197 feet above mean sea level (msl) to 2,202 feet above msl.

27. Climate

The area typically has hot summers and mild winters. The annual average precipitation in the vicinity of the Facility is less than 5 inches. The net evaporation rate for the area is approximately 78 inches annually (Western Regional Climate Center).

28. Land Uses

The majority of land surrounding the Facility is rural living and agriculture. Wells within a one-mile radius access groundwater for agricultural purposes.

29. Action Leakage Rate

The Discharger has requested that the Water Board allow an action leakage rate (ALR) of liquid through the upper liner of the surface impoundments into the leachate collection sumps. The respective ALRs are based on proposed design dimensions and design specifications of the surface impoundments and on a 1992, United States Environmental Protection Agency (U.S. EPA) guidance document, *Action Leakage Rates for Leak Detection Systems, Supplemental Background Document for the Final Double Liners and Leak Detection Systems Rule for Hazardous Waste Landfills, Waste Piles, and Surface Impoundments*. The numerical ALRs are shown in the Monitoring and Reporting Program (MRP) No. R6V-2013-PROP, and are made part of this Order. The MRP includes requirements for monitoring and reporting leakage rates from the LCRS and the type of response actions the Discharger must take if applicable ALRs are exceeded.

30. Known or Reasonably Foreseeable Release from the or Surface Impoundments

The Discharger has submitted a corrective action estimate to address a known or reasonably foreseeable release (KRFR), including a workup of the total likely maximum cost of remediation for a known or reasonably foreseeable release for the three existing surface impoundments and the two proposed surface impoundments, pursuant to CCR, title 27, section 20380, subdivision (b). The analysis includes a proposed corrective action financial assurance mechanism (to cover the estimated corrective action cost) meeting the requirements of CCR, title 27, sections 22220 through 22222 and 22225 *et seq.* This Order requires the Discharger to submit financial assurance mechanisms for a corrective action for a KRFR from the surface impoundments.

If there is measurably significant evidence of a release, the Discharger must submit an engineering feasibility study for corrective action pursuant to CCR, title 27, section 20420, subdivision (k)(6) and must conduct a COC scan meeting the requirements of CCR, title 27, section 20420, subdivision (k)(1). The Discharger must also submit an amended RWD pursuant to CCR, title 27, section 20420, subdivision (k)(5), that

proposes suitable revisions to the MRP to establish an EMP meeting CCR, title 27, section 20425. If necessary, the amended RWD must include the justification for any extension beyond the 90 days allowed prior to making the submittals required under CCR, title 27, section 20425, subdivisions (b), (c), and (d).

31. Financial Assurance

At least 7 days prior to construction of the new surface impoundments at the Facility (for the purposes of closure), and **at least 30 days** prior to discharge (for the purposes of corrective action), the Discharger is required to provide two separate sureties to cover the costs of closure and corrective action (for a reasonably foreseeable release) in accordance with CCR, title 27, sections 22207 and 22222, respectively.

This Order requires the Discharger to obtain and maintain financial instruments and to report yearly to the Water Board the amount of money available in the financial instruments. Annually, the Discharger must report that the amount of financial assurance is adequate, or increase the amount of financial assurance as required under CCR, title 27, sections 22207 and 22222.

32. Other Considerations and Requirements for Discharge

Pursuant to CWC, section 13241, the requirements of this Order take into consideration:

- a. Past, present, and probable future beneficial uses of water.

This Order identifies existing groundwater quality and past, present, and probable future beneficial uses of water, as described in finding Nos. 21, and 25, respectively. The proposed discharge will not adversely affect present or probable future beneficial uses of water including municipal and domestic supply, agricultural supply, industrial service supply, and freshwater replenishment, because the discharge is only authorized within lined surface impoundments and detection monitoring is required to ensure discharges do not reach groundwater.

- b. Environmental characteristics of the hydrographic unit under consideration including the quality of water available thereto.

Finding No. 21 describes the environmental characteristics and quality of water available.

- c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area.

The requirements of this Order will not affect groundwater quality. The Water Board will use its existing authority and these WDRs to ensure protection of water quality from these discharges.

d. Economic considerations.

Water Quality Objectives established in the Basin Plan for the Middle Mojave Valley Groundwater Basin do not subject the Discharger to economic disadvantage as compared to other similar discharges in the Region. This Order will require the Discharger to submit proposals compliant with the requirements of CCR, title 27, and is reasonable.

e. The need for developing housing within the region.

The Discharger is not responsible for developing housing within the region. This Order provides for capacity to collect, store, and evaporate wastewater in Surface Impoundments.

f. The need to develop and use recycled water.

The Discharger does not propose the use of recycled water at this Facility.

33. California Environmental Quality Act

This Project is subject to the provisions of the California Environmental Quality Act (CEQA, Public Resources Code Section 21000 et seq.) in accordance with Public Resources Code, section 21065. The Water Board is the CEQA Lead Agency for this Project under the CEQA Guidelines.

The Water Board has identified a number of potential short-term significant effects in the mitigated negative declaration (MND), and has therefore prescribed additional protective measures in this Order to ensure that any potential impacts are reduced to less than significant.

A mitigated negative declaration (MND) was circulated on November 13, 2012. The MND including its Errata and Mitigation Monitoring Plan both dated January 2013, describes the mitigation measures. In addition to circulating the MND, the Water Board provided notice of intent to adopt a MND for the Project (SCH No. 2012111038), pursuant to section 15072 of the CEQA Guidelines (14 Cal. Code Regs. § 15072.) The MND reflects the Water Board's independent judgment and analysis that the proposed project, with mitigation measures incorporated into this WDR, will not have a significant effect on the environment. A water quality Monitoring and Reporting Program with all of its associated attachments (MRP Attachments) and the CEQA Mitigation Monitoring Plan (Attachment E to the WDR) are incorporated into this Order. After consideration of comments received during the public review process, Water Board hereby adopts the MND. The documents or

other materials, which constitute the record, are located at 14440 Civic Drive, Suite 200, Victorville, California. The Water Board Executive Officer will file a Notice of Determination to the State Clearinghouse within five days from the issuance of this Order and is authorized to sign the Certificate of Fee Exemption and to transmit it to the California Department of Fish and Game (CDFG) in lieu of payment of the CDFG filing fee.

34. Technical and Monitoring Reports

The Discharger must submit technical and monitoring reports in compliance with this Order as described in Monitoring and Reporting Program (MRP) No. R6V-2013-(PROPOSED), which is attached to and made part of this Order.

35. Notification of Interested Parties

The Water Board has notified the Discharger and all known interested agencies and persons of its intent to adopt WDRs for the project.

36. Right to Petition

Any person aggrieved by this action of the Water Board may petition the State Water Board to review the action in accordance with CWC, section 13320, and CCR, title 23, sections 2050et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality, or will be provided upon request.

37. Consideration of Interested Parties

The Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Dischargers shall comply with the following:

I. RECEIVING WATER LIMITATIONS

The Discharger shall not cause the existing water quality to be degraded. Under no circumstances shall the Discharger cause the presence of the following substances or conditions in groundwaters of the Middle Mojave River Valley Groundwater Basin.

- A. Bacteria – Groundwaters designated as MUN, the medium concentration of coliform organisms, over any seven-day period, must be less than 1.1 Most Probable Number per 100 milliliters (MPN/100 mL) in groundwaters.
- B. Chemical Constituents – Groundwaters designated as MUN must not contain concentrations of chemical constituents in excess of the Maximum Contaminant Levels (MCL) or Secondary MCL (SMCL) based upon drinking water standards specified in the following provisions of CCR, title 22: Table 64431-A of section 64431 (Inorganic Chemicals), Table 64444-A of section 64444 (Organic Chemicals), Table 64449-A of section 64449 (SMCLs – Consumer Acceptance Contaminant Levels), and Table 64449-B of section 64449 (SMCLs – Consumer Acceptance Contaminant Level Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

Groundwaters designated as AGR must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses (i.e., agricultural purposes).

Groundwaters must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.

- C. Radioactivity – Groundwater designated MUN must not contain concentrations of radionuclides in excess of limits specified in CCR, title 22, section 64442, Table 64442, and section 64443, Table 64443, including future changes as the changes take effect.
- D. Taste and Odors – Groundwaters must not contain taste or odor-producing substances in concentrations that cause a nuisance or that adversely affect beneficial uses. For groundwaters designated as MUN, at a minimum, concentrations must not exceed adopted Secondary MCLs as specified in CCR, Title 22, Table 64449-A of section 64449 (Secondary MCLs – Consumer Acceptance Contaminant Level) and Table 64449-B of section 64449 (Secondary MCLs – Consumer Acceptance Contaminant Levels Ranges) including future changes as the changes take effect.
- E. Color – Groundwaters must not contain color-producing substances from tracers in concentrations that cause a nuisance or that adversely affect beneficial uses.
- F. Toxic Substances – Any presence of toxic substances in concentrations that individually, collectively, or cumulatively cause a detrimental physiological response in humans, plants, animals, or aquatic life is prohibited.

II. REQUIREMENTS AND PROHIBITIONS

A. General

1. The discharge must not cause or threaten to cause a condition of pollution or nuisance as defined in CWC, section 13050.
2. There must be no discharge, bypass, or diversion of wastewater from the collection, conveyance, or disposal facilities to adjacent land areas or surface waters.
3. Surface drainage within the Surface Impoundments must be contained within the Surface Impoundments. No water contained within the Surface Impoundments is to be discharged outside the Surface Impoundments, unless it is to a location approved by the Water Board Executive Officer. The Discharger must either maintain a zero discharge Facility or must maintain a Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program and Reporting Requirements in accordance with State Water Resources Control Board Order No. 97-03-DWQ, and future promulgated general stormwater permits.
4. All facilities used for the collection, conveyance, or disposal of waste must be adequately protected against overflow, washout, inundation, structural damage, or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 1,000 years (CCR, title 27, section 20320, Table 4.1).
5. The discharge of hazardous waste to the Surface Impoundments or generation of hazardous waste due to evaporation in the Surface Impoundments is prohibited.
6. The discharge of solid wastes, leachate, wastewater, or any other deleterious materials to the groundwaters of the Middle Mojave River Valley Groundwater Basin is prohibited.
7. The discharge of waste, except to the authorized Surface Impoundments, is prohibited.
8. The discharge of waste, as defined in CWC, section 13050, subdivision (d), that causes a violation of any narrative Water Quality Objective (WQO) contained in the Basin Plan, including the Nondegradation Objective, is prohibited.

9. Where any numeric or narrative WQO contained in the Basin Plan is already being violated, the discharge of waste that causes further degradation or pollution is prohibited.
10. The discharge must not cause any increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, or other geologic materials outside of the Surface Impoundments if such waste constituents could migrate to waters of the State – in either liquid or gaseous phase – and cause a condition of nuisance, degradation, contamination, or pollution.
11. The discharge of waste in a manner that does not maintain a five-foot separation between the waste and the seasonal high groundwater table is prohibited, pursuant to CCR, title 27, section 20240, subdivision (c).
12. The integrity of the active and proposed Surface Impoundments must be maintained throughout the life of the waste management units and must not be diminished as a result of any maintenance operation.
13. The Discharger must maintain in good working order any facility, control system, or monitoring device installed to achieve compliance with these WDRs.
14. At closure, the Facility must be closed in accordance with a Final Closure Plan approved by the Water Board.
15. The Discharger must at all times maintain adequate and viable financial assurances acceptable to the Water Board Executive Officer for costs associated with closure and corrective action for all known or reasonably foreseeable releases.

B. Surface Impoundments

1. Proposed Ponds 6R and 7R must be constructed to contain the waste and the volume of rain which falls onto the surface impoundment areas in a 1,000-year, 24-hour storm event, while maintaining two feet of freeboard. The liner system must be constructed as described in ascending order, as described in Finding 10, as follows:
 - a. An 8-inch recompacted native subgrade below the bottom liner, which is moisture conditioned and compacted to 90 percent of the maximum dry density per ASTM Standard D1557.

- b. A pan lysimeter under the lower-most part of each proposed surface impoundment that consists of a 60-mil HDPE layer and granular drainage material.
- c. A LCRS directly above the pan lysimeter under the lower-most part of each proposed surface impoundment that consists of a geosynthetic clay layer overlain by a 60-mil HDPE smooth liner and granular drainage material.
- d. A 60-mil HDPE drain liner.

The proposed surface impoundments must be constructed to withstand the seismic shaking from a maximum credible earthquake, as defined in CCR, title 27, section 20164.

2. The Surface Impoundment freeboard, the vertical distance between the liquid surface elevation and the lowest part of the pond dike or the invert of an overflow structure, must be a minimum of two feet at all times, as specified in CCR, title 27, section 20375.
3. All lined facilities must be effectively sealed to prevent the exfiltration of liquids. For this project, "effectively sealed" facilities are Class II waste management units that are designed and constructed to meet the requirements of CCR, title 27, sections 20310, 20320, and 20330.

C. Leachate Collection and Recovery Systems

1. If a quantity of leachate is detected in a LCRS of the Surface Impoundments above the ALR, which is set forth in the MRP, the Discharger must immediately take steps to locate and repair leak(s) in the liner system and comply with the notice requirements presented in MRP No. R6V-2013-(PROPOSED), Section IV.G., "Unscheduled Reports to be Filed With the Water Board." If repairs do not result in a leakage rate less than the required ALR, the Discharger must immediately cease the discharge of waste, including leachate, to the Surface Impoundment(s) and notify the Water Board. The notification shall include a timetable for remedial action to repair the liner of the Surface Impoundment(s).
2. The LCRS must be operated to function without clogging throughout the life of the project.
3. Any leachate collected in the LCRS must either be returned to the Surface Impoundments or disposed at a Class II Waste Management Unit.

D. Detection Monitoring Program

The Discharger must maintain a detection monitoring program as required in CCR, title 27, section 20420.

E. Evaluation Monitoring Program

The Discharger must perform an evaluation monitoring program when there is a measurably significant evidence of release as required in CCR, title 27, section 20385, subdivision (a)(2) or (3). The Discharger must maintain the EMP as long as there is measurably significant evidence of a release from the Surface Impoundment(s) as required in CCR, title 27, section 20425. The EMP must be utilized to delineate within 90 days of initiating an EMP the nature and extent of the release, as well as to develop, propose, and support corrective action measures to be implemented in a CAP.

F. Corrective Action Program (CAP)

The Discharger must institute a corrective action program as required in CCR, title 27, section 20430, following completion of the EMP, in response to measurably significant evidence of a release.

G. Electronic Submittal of Information

Pursuant to CCR, title 23, section 3890, the Discharger must submit reports, including soil, vapor, and water data, prepared for the purpose of subsurface investigation or remediation of a discharge of waste to land subject to Division 2 of title 27 electronically over the internet to the State Water Board's Geotracker system. This requirement is in addition to, and not superseded by, any other applicable reporting requirement.

III. WATER QUALITY MONITORING AND RESPONSE PROGRAMS

A. Water Quality Protection Standard

1. The Discharger must submit a RWD to the Water Board at least 140 days before initiating discharge of any new constituents of concern to the Surface Impoundments. Before a new discharge commences, the Discharger must estimate the concentration for such constituents within the wastewater stream and submit written statistical method(s) in order to detect a release of such constituents.

2. At any given time, the concentration limit for each monitoring parameter and constituent of concern must be equal to the background data set of that constituent. The background data set for each monitoring point/constituent pair should be comprised of at least eight data points, collected quarterly.
3. If the Discharger or Water Board Executive Officer determines that concentration limits were or are exceeded, the Discharger may immediately institute verification procedures upon such determination as specified below or submit an amended RWD within 90 days of such determination in order to establish an evaluation monitoring program. In the event of a release, unless the amended RWD (proposing an EMP) proposes and substantiates a longer period, the Discharger will only have 90 days, once the Water Board authorizes the initiation of the EMP, to complete the delineation, develop a suite of proposed corrective action measures, and submit a proposed corrective action program (CAP) for adoption by the Water Board.
4. Monitoring Wells and/or unsaturated zone samples must be used to obtain background data and to detect a release from the Facility.

B. Statistical Methods

1. The Discharger must use approved statistical data analysis methods to evaluate Point of Compliance groundwater data in order to determine measurably significant evidence of a release from the Surface Impoundments, as required by CCR, title 27, section 20415, subdivision (e). Analysis must be conducted in accordance with the statistical methods described in MRP No. R6V-2013-(PROPOSED).
2. The Discharger must determine, within 45 days after completion of sampling, whether there is measurably significant evidence of a release from the Surface Impoundments at each Monitoring Point. The analysis must consider all monitoring parameters and constituents of concern. The Executive Officer may also make an independent finding that there is measurably significant evidence of a release or physical evidence of a release.
3. If there is measurably significant evidence of a release, the Discharger must immediately notify the Water Board by certified mail (see notification procedures contained in MRP No. R6V-2013-PROP.) Subsequently, the Discharger may immediately initiate verification procedures as specified below in Section III.D., "Verification Procedures," whenever there is a determination by the Discharger or Executive Officer that there is measurably significant evidence of a release.

4. If the Discharger does not use verification procedures to evaluate evidence of a release, and there is confirmation that there is measurably significant evidence of a release, then the Discharger is required to submit, within 90 days of such a confirmation, an amended RWD in order to establish evaluation monitoring pursuant to subsection II.C., "Evaluation Monitoring Program," or make a demonstration to the Water Board that there is a source other than the Surface Impoundments that caused evidence of a release (see notification procedures contained in MRP No. R6V-2013-(PROPOSED), section IV.G., "Unscheduled Reports to be Filed With the Water Board").

C. Physical Evidence of a Release

The Discharger must determine whether there is significant physical evidence of a release from the Surface Impoundments. Significant physical evidence may include unexplained volumetric changes in the Surface Impoundments, unexplained stress in biological communities, unexplained changes in soil characteristics, unexplained changes in soil moisture content, visible signs of leachate migration, unexplained water table mounding beneath or adjacent to the Facility, and/or any other change in the environment that could reasonably be expected to be the result of a release from the Facility (see Section IV.G., "Unscheduled Reports to be Filed With the Water Board," of MRP No. R6V-2013-(PROPOSED)).

D. Verification Procedures

1. The Discharger must immediately initiate verification procedures as specified below, whenever there is a determination by the Discharger or Executive Officer that there is evidence of a release. If the Discharger declines the opportunity to conduct verification procedures, the Discharger must submit a technical report, as described in Section III.E., below, under the heading "Technical Report Without Verification Procedures."
2. The verification procedure must only be performed for the constituent(s) that has shown a measurably significant evidence of a release and must be performed for those Monitoring Points at which a release is indicated.
3. The Discharger must either conduct a composite retest using data from the initial sampling event with all data obtained from the resampling event or must conduct a discrete retest in which only data obtained from the resampling event must be analyzed to verify evidence of a release, or must propose a pass 1-of-3 retesting approach using quarterly samples, as an engineered alternative.

4. The Discharger must report to the Water Board, by certified mail, the results of the verification procedure, as well as all concentration data collected for use in the retest, within seven days of the last laboratory analysis.
5. If the Discharger or Executive Officer verify evidence of a release, the Discharger is required to submit a technical report to the Water Board, pursuant to Water Code, section 13267, subdivision (b), within 90 days of such a determination that there is, or was, a release. The report must propose an evaluation monitoring program (see subsection, II.E., entitled, "Evaluation Monitoring Program"), or, make a demonstration to the Water Board that there is a source other than the Facility that caused evidence of a release (see notification procedures contained in MRP No. R6V-2013-(PROPOSED)).

E. Technical Report without Verification Procedures

If the Discharger chooses not to initiate verification procedures after there has been a determination made for evidence of a release, the Discharger is required to submit, within 90 days of such confirmation, an amended RWD in order to establish an Evaluation Monitoring Program or demonstrate to the Water Board that there is a source other than the Surface Impoundment that caused evidence of a release (see Section IV.G., "Unscheduled Reports to be Filed With the Water Board," of MRP No. R6V-2013-(PROPOSED)).

F. Monitoring and Reporting

1. Pursuant to Water Code, section 13267, subdivision (b), the Discharger must comply with the MRP as established in the attached MRP No. R6V-2013-(PROPOSED) (Attachment F), and as specified by the Executive Officer. The MRP may be modified by the Water Board Executive Officer.
2. The Discharger must comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of MRP No. R6V-2013-(PROPOSED).

IV. PROVISIONS

A. Rescission of WDRs

Board Order No. 6-97-82 is hereby rescinded.

B. CEQA Compliance

The Discharger must conduct the project in accordance with its project application submittals and in accordance with the Mitigation Monitoring Plan in Attachment "E", which is made a part of this Order. The Discharger must submit all required reports as specified in the Mitigation Monitoring Plan to the Water Board.

C. Standard Provisions

The Discharger must comply with the "Standard Provisions for Waste Discharge Requirements," dated September 1, 1994, in Attachment "D," which is made part of this Order.

D. Claim of Copyright of Other Protection

Any and all reports and other documents submitted to the Lahontan Water Board pursuant to this request will need to be copied for some or all of the following reasons: 1) normal internal use of the document, including staff copies, record copies, copies for Board members and agenda packets, 2) any further proceedings of the Lahontan Water Board and the State Water Board, 3) any court proceeding that may involve the document, and 4) any copies requested by members of the public pursuant to the Public Records Act or other legal proceeding.

If the Discharger or its contractor(s) claims any copyright or other protection, the submittal must include a notice, and the notice will accompany all documents copied for the reasons stated above. If copyright protection for a submitted document is claimed, failure to expressly grant permission for the copying stated above will render the document unusable for the Lahontan Water Board's purposes and will result in the document being returned to the Discharger as if the task had not been completed.

E. Closure Plan

The preliminary closure plans must be updated if there is a substantial change in operations or costs for closure. A report must be submitted annually indicating conformance with existing operations. This report may be included in the annual monitoring report as required in MRP No. R6V-2013-(PROPOSED). Pursuant to CCR, title 27, section 21780, final plans must be submitted at least 140 days prior to beginning any partial or final closure activities, or prior to discontinuing the use of the Facility for waste treatment, storage, or disposal. The final plans must be prepared by or under the supervision of either a California registered civil engineer or a certified engineering geologist and be in compliance with CCR, title 27, sections 21400 and 21410.

F. Modifications to the Facility

If the Discharger intends to expand the Facility or the capacity of the Surface Impoundments, a report must be filed **no later than 140 days prior** to the anticipated change, containing a detailed plan for Facility expansion. This plan must include, but is not limited to, a time schedule for studies, design, and other steps needed to provide additional capacity, and must be done in accordance with an accepted construction quality control plan.

V. TIME SCHEDULE

A. Sampling and Analysis Plan

At least 90 days prior to construction of new surface impoundments, Ponds 6R and 7R, the Discharger must submit a Sampling and Analysis Plan (SAP) to confirm that Ponds 6 and 7 were clean-closed and present no threat to water quality. The SAP must include procedures for sampling and analyses of the existing conditions in the footprint of former surface impoundments, Ponds 6 and 7.

D. Soils Report

At least 30 days prior to construction of proposed surface impoundments Ponds 6R and 7R, the Discharger must submit a Background Native Soils Report that characterizes the soil at the proposed new surface impoundments for the constituents of concern listed in Table 1 (Attachment A of MRP No. R6V-2013-PROPOSED).

C. Financial Assurance Documents

An instrument of Financial Assurance to cover the costs of closure must be submitted **at least 7 days prior** to construction. A separate instrument of Financial Assurance to cover the costs of corrective action for a reasonably foreseeable release from the Facility must be submitted **at least 30 days prior to** discharge to the Surface Impoundments. Yearly thereafter, the Discharger must submit two separate Instruments of Financial Assurance acceptable to the Water Board and adequate to cover the costs of closure and corrective action for a reasonably foreseeable release from the Facility, respectively. An increase may be necessary due to inflation, a change in regulatory requirements, a change in the approved closure plan, or other unforeseen events.

B. Final Construction Quality Assurance Report

No later than 180 days following the completion of construction of the Facility, and **at least 60 days** prior to discharge onto the newly constructed Surface Impoundments, a Final Construction Quality Assurance Report, required in CCR, title 27, section 20324, subdivision (d)(1)(C), must be submitted to the Water Board for review and acceptance. The report must be certified by a registered civil engineer or a certified engineering geologist. It must contain sufficient information and test results to verify that construction was in accordance with the submitted design plans and specifications and with the accepted engineered alternative to the prescriptive standards and performance goals of CCR, title 27.

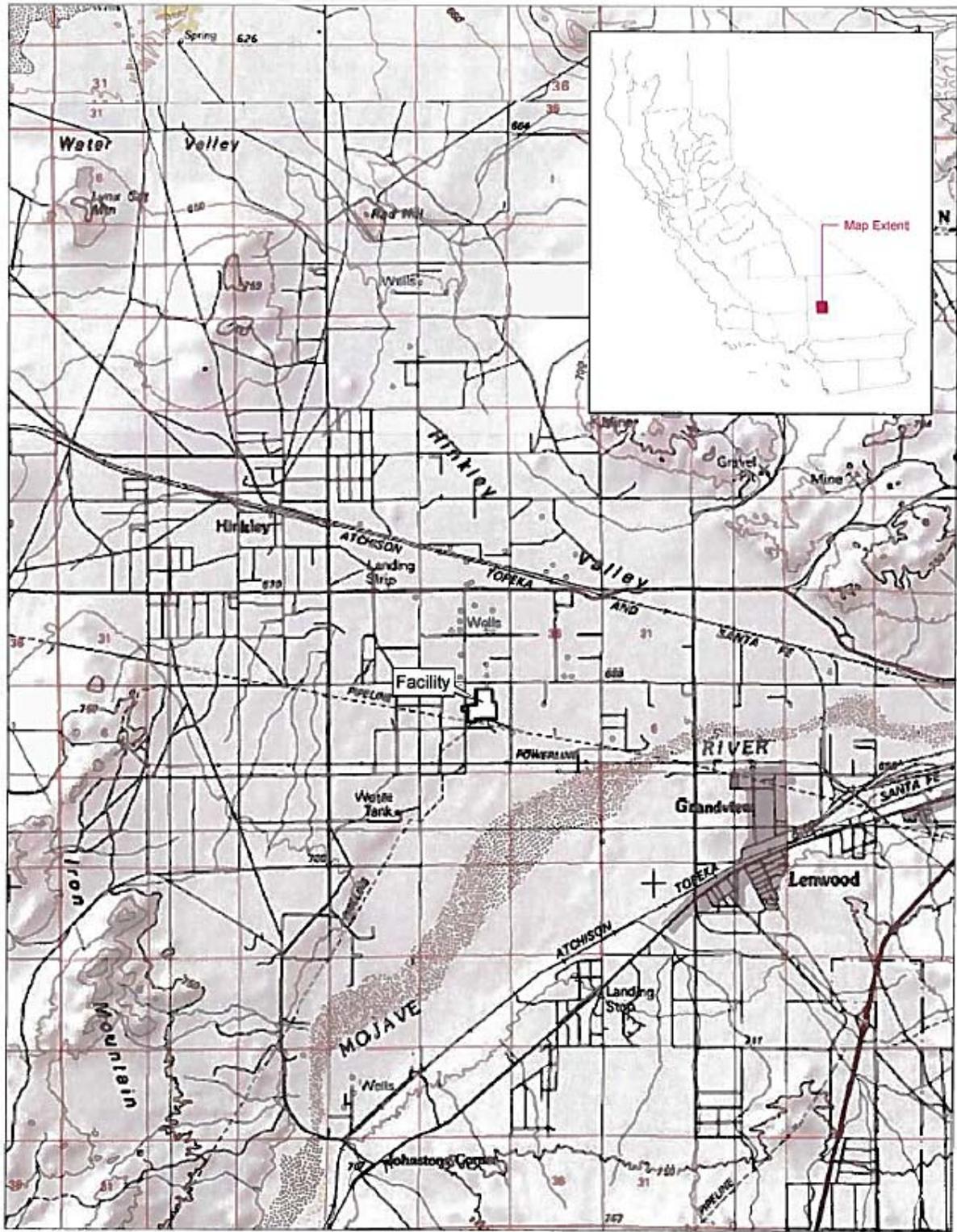
C. Water Quality Protection Standard

No later than 760 days following construction (8 quarters of monitoring, plus 30 days to generate the Water Quality Protection Standard), the Discharger must propose for acceptance by the Water Board a Water Quality Protection Standard, which includes concentrations limits that define background water quality for all constituents of concern and for each Point of Compliance and for the additional monitoring points for which a Water Quality Protection Standard has not yet been developed. The report must be certified by a California registered civil engineer or a California registered professional geologist.

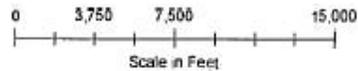
I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Board, Lahontan Region, on January 16, 2013.

PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

- Attachments:
- A. Vicinity Map
 - B. Location Map
 - C. Wastewater Discharge Sample Results, Dec. 30, 2011
 - D. Standard Provisions for Waste Discharge Requirements
 - E. CEQA Mitigation Monitoring Program
 - F. Monitoring and Reporting Program No. R6V-2013-(PROPOSED)



Source: USGS, 1982



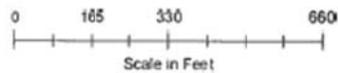
Pacific Gas & Electric

FIGURE 2-1

Facility Location
 Hinkley Compressor Station
 Hinkley, CA



Source: NAIP, 2011



Pacific Gas & Electric

FIGURE 2-2

Aerial View of Facility
Hinkley Compressor Station
Hinkley, CA

**Waste Characterization
Sample Results
December 30, 2011**

Constituent	Discharge Concentrations	Units
Antimony	<0.015	mg/L
Arsenic	0.041	mg/L
Barium	0.531	mg/L
Beryllium	<0.01	mg/L
Boron	2.02	mg/L
Bromoform	14	ug/L
Cadmium	<0.01	mg/L
Calcium	241	mg/L
Chloride	300	mg/L
Chromium	0.0102	mg/L
Chromium, Hexavalent	3.1	ug/L
Cobalt	<0.01	mg/L
Copper	0.0253	mg/L
Fish Bioassay	25.7	mg/L
Fluoride	2.7	mg/L
Iron	0.605	mg/L
Lead	<0.01	mg/L
Magnesium	42.9	mg/L
Manganese	0.0102	mg/L
Mercury	<0.0005	mg/L
Molybdenum	0.16	mg/L
Nickel	<0.01	mg/L
Nitrate - as Nitrogen	18	mg/L
Nitrite - as Nitrogen	<0.1	mg/L
Organic Lead	<0.3	mg/L
pH	8.51	pH Units
o-Phosphate as P	1.8	mg/L
Potassium	18.4	mg/L
SC	2600	umhos/cm
Selenium	<0.015	mg/L
Silver	<0.005	mg/L
Sodium	389	mg/L
Sulfate	970	mg/L
TDS	2270	mg/L
Thallium	<0.015	mg/L
Total Alkalinity	140	mg/L
Total Anions	32.88	Meq/L
Total Cations	32.98	Meq/L
Total Chromium	<0.01	mg/L
Vanadium	0.123	mg/L
Zinc	0.169	mg/L

Meq/L = Milliequivalents of solute per liter of solution
mg/L = Milligrams per liter
ND = Not detected above reported concentration
NA = Constituent not reported or not analyzed
SC = Specific Conductance
TDS = Total Dissolved Solids
ug/L = Micrograms per liter
umhos/cm = Micromhos per centimeter

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

STANDARD PROVISIONS
FOR WASTE DISCHARGE REQUIREMENTS

1. Inspection and Entry

The Discharger shall permit Regional Board staff:

- a. to enter upon premises in which an effluent source is located or in which any required records are kept;
- b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements (WDRs);
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260 (c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.
- c. The Owners/Discharger of property subject to WDRs shall be considered to have a continuing responsibility for ensuring compliance with applicable WDRs in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the WDRs shall be reported to the Regional Board. Notification of applicable WDRs shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.
- d. If a Discharger becomes aware that any information submitted to the Regional Board is incorrect, the Discharger shall immediately notify the Regional Board, in writing, and correct that information.

- e. Reports required by the WDRs, and other information requested by the Regional Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.
- f. If the Discharger becomes aware that their WDRs (or permit) are no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Regional Board in writing and request that their WDRs (or permit) be rescinded.

3. Right to Revise WDRs

The Regional Board reserves the privilege of changing all or any portion of the WDRs upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the WDRs may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the WDRs which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the WDRs. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the WDRs.

7. Waste Discharge Requirement Actions

The WDRs may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the WDRs conditions.

8. Property Rights

The WDRs do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the WDRs including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the WDRs shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the WDRs are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from treatment and disposal facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operation. The owner/operator must request the transfer in writing and receive written approval from the Regional Board's Executive Officer.

14. Definitions

- a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.
- b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.

MITIGATION MONITORING PLAN

**CLASS II SURFACE IMPOUNDMENTS 6R AND 7R
PG&E HINKLEY COMPRESSOR STATION, HINKLEY, CA
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

January 2013

ICF International. 2013. Mitigation Monitoring Plan. Class II Surface Impoundments 6R and 7R PG&E Hinkley Compressor Station Hinkley, California Initial Study/Mitigated Negative Declaration. January. (ICF 00569.12) San Francisco, CA. Prepared for Lahontan Regional Water Quality Control Board, Victorville, CA.

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Mitigation Monitoring Plan

Introduction

The Lahontan Regional Water Quality Control Board, as Lead Agency under the California Environmental Quality Act (CEQA) and State CEQA Guidelines, has prepared a Initial Study/Mitigated Negative Declaration for PG&E Hinkley Compressor Station Hinkley, California. When a lead agency makes findings on significant effects identified in an Initial Study/Mitigated Negative Declaration, it must also adopt a program for reporting or monitoring mitigation measures that were adopted or made conditions of project approval (Public Resources Code [PRC] Section 21081.6[a]; State CEQA Guidelines Sections 15091[d], 15097).

This document represents the mitigation monitoring plan (MMP) prepared by the Lahontan Regional Water Quality Control Board for the Project. This MMP includes all measures required to reduce potentially significant environmental impacts to a less-than-significant level. It also identifies the timing of implementation and the entities responsible for implementing the mitigation and monitoring the mitigation. The mitigation measures, timing, and responsibility are summarized in Table 1, and the full text of the mitigation measures follows.

This MMP has been prepared by the Lahontan Regional Water Quality Control Board, with technical assistance from ICF International, an environmental consulting firm. Questions should be directed to Lisa Dernbach at the Lahontan Regional Water Quality Control Board.

Contact Information:

Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Table 1. Mitigation Monitoring Plan – Summary of Mitigation Measures

Mitigation Measure	Implementation Timing	Implementation Responsibility	Monitoring Responsibility¹	Monitoring Notes
BIO-MM-1: Implement desert tortoise protection measures before and during construction.	Prior to and During Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
BIO-MM-2: Implement burrowing owl protection measures before and during construction.	Prior to and During Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
BIO-MM-3: Implement American badger and desert kit fox protection measure prior to and during construction.	Prior to and During Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
BIO-MM-4: Implement loggerhead shrike and other breeding bird protection measures during construction.	Prior to and During Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
BIO-MM-5: Prepare and conduct a sensitive species worker awareness program.	Prior to and During Construction	Project Applicant with qualified biologist or construction monitor	Lahontan Regional Water Quality Control Board	
BIO-MM-6: Maintain a log for biological resources mitigation measures.	Prior to, During and After Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
CUL-MM-1: Stop work if cultural resources are encountered during ground-disturbing activities.	During Construction	Project Applicant with Construction Contractor	Lahontan Regional Water Quality Control Board	
GHG-MM-1: Implement San Bernardino County GHG construction standards during construction.	Prior to and During Construction	Project Applicant with Construction contractor	Lahontan Regional Water Quality Control Board	
NOI-MM-1: Restrict construction activities to day time hours and weekdays.	During Construction	Project Applicant with Construction contractor	Lahontan Regional Water Quality Control Board	

Mitigation Measure	Implementation Timing	Implementation Responsibility	Monitoring Responsibility¹	Monitoring Notes
TRA-MM-1: Implement traffic control measures during construction.	During Construction	Project Applicant with Construction contractor	Lahontan Regional Water Quality Control Board	

¹ The Lahontan Water Board may hire a qualified contractor to conduct mitigation monitoring.

Mitigation Measures

Biological Resources

Mitigation Measure BIO-1: Implement desert tortoise protection measures before and during construction. The project applicant will ensure the following measures are implemented and included in construction specifications.

- Protocol surveys for desert tortoise were conducted in October 2011. Because protocol surveys are only valid for one year if no presence was found, a biologist will conduct USFWS protocol-surveys for desert tortoise based on the 2010 United States Fish and Wildlife Service survey protocol. These surveys will be conducted during the desert tortoise's most active periods [April through May or September through October when air temperatures are below 40° C (104° F)].
- Prior to surface disturbance and construction activities, a qualified biologist will conduct a preconstruction clearance survey for desert tortoise within the Project area to ensure that all tortoise are absent, or that any tortoises that are present move passively off site and out of harm's way. The protocol (U.S. Fish and Wildlife Service 2010) states that two consecutive surveys will be conducted immediately prior to surface disturbance within the Project area.
- Following the pre-construction survey and prior to surface disturbance, the construction contractor in coordination with a qualified biologist will place desert tortoise exclusion fencing along the perimeter of the proposed work areas to prevent encounters with desert tortoise during construction activities. The specifications of the desert tortoise exclusion fencing will follow USFWS (Desert Tortoise Field Manual: Chapter 8. Desert Tortoise Exclusion Fence) (U.S. Fish and Wildlife Service 2009).
- If desert tortoises are found to occupy the project area during the protocol survey, preconstruction clearance survey, or active construction phase, all work will be halted and consultation with USFWS and CDFG will be required to determine how the project will proceed. If there is a potential for "take" of tortoise (as defined by federal and state endangered species acts) then an Incidental Take Permit (ITP) will be required from FWS and/or CDFG. The authorized biologist in consultation with FWS/CDFG will then determine whether additional surveys or fencing are needed. Tortoises will not be moved without an ITP.
- A Translocation Plan will be prepared and submitted to CDFG and USWFS as part of the ITP application. Unless otherwise directed by CDFG and USFWS, any desert tortoises found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat within 500 m of their original location. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Desert tortoise translocation will follow Guidelines for Handling Desert Tortoise (Desert Tortoise Field Manual: Chapter 7; USFWS 2009) at all times if handling tortoises is required.

- A qualified biologist will conduct biological monitoring during work hours and conduct daily pre-construction clearance surveys in areas to be disturbed until temporary tortoise-proof fencing has been installed to exclude desert tortoises from entering the work area. The qualified biologist will also inspect the condition of tortoise-proof fencing. If desert tortoises are found within the construction areas, a qualified biologist will ensure it moves away passively.
- Once desert tortoise-proof fence is in place, daily biological monitoring will be conducted. The biological monitor will have the authority to stop all activities until appropriate corrective measures have been completed.
- Work shall be restricted to daylight hours, except during an emergency. Traffic speed shall be maintained at 15 mph or less in the work area.
- Until tortoise-proof fencing is in place around the Project area, no open trenches, excavations or other potential trap hazards will be left unfenced or uncovered overnight. These hazards will be removed each day prior to the work crew and biologist leaving the Project area as long as it is not fully enclosed by tortoise-proof fencing.
- Until tortoise-proof fencing is in place around the Project area, parked vehicles and equipment within the Project area will be inspected by workers (as instructed through the project environmental awareness training) prior to being moved each day. If a tortoise is found beneath vehicles or equipment, it will be monitored until it moves out of the area. Under no circumstances should the tortoise be moved or touched.
- All construction activities, vehicle parking, equipment and material storage areas will be contained within the area surrounded by tortoise-proof fencing.
- Prior to and during construction, all desert tortoises sighted within the Project area will be immediately reported to the qualified biologist and project foreman, and any construction activity that could potentially jeopardize the tortoise will be halted immediately until the desert tortoise moves passively (on its own) from harm's way. Desert tortoises observed in the Project area will be monitored and allowed to move out of the project area passively.
- If a desert tortoise is injured or killed, the authorized biologist will be notified, the injury or death documented, and the animal taken to a qualified veterinarian or the carcass removed by the biologist. If an injured desert tortoise is identified that may have been affected by Project-related activities, a qualified biologist will immediately transport the animal to a veterinary clinic approved by CDFG. PG&E will be responsible for payment of any veterinarian bills for injured tortoises. CDFG and USFWS will be notified in writing within five calendar days, with photographs and a written description of any injury/mortality, circumstances, probable cause and recommendations for avoidance of future incidents. The agencies will assess the final condition of the animal if it recovers.
- To minimize attractiveness to desert tortoise predators (e.g., common ravens and feral dogs), trash and food items will be contained in closed containers and will be removed from the Project site at the end of each work day. No pets or firearms will be permitted in the Project area.
- Following completion of the construction phase of the Project, the applicant will improve the existing chain link fence around the Compressor Station facility, which includes the

surface impoundments, to eliminate large gaps between the fence and the ground surface to prevent desert tortoise from entering the Project area. The applicant will maintain the fence to ensure there are no gaps, which will reduce the likelihood that desert tortoise or other wildlife move into the Project area, thus minimizing entrapment or negative interactions with tortoises during Project operation.

Mitigation Measure BIO-2: Implement burrowing owl protection measures before and during construction. The project applicant will ensure the following measures are implemented and included in construction specifications.

- Protocol-level surveys for burrowing owls will be conducted according to current CDFG protocols (currently CDFG 2012c), or any CDFG approved variation. The nesting season survey window will begin as early as February 15 and no later than April 15, and continue through August 31.
- Prior to construction, a qualified biologist will conduct a preconstruction survey for burrowing owls no greater than 30 days prior to commencing ground disturbing or construction activities, with a second preconstruction survey within 24 hours prior to commencing ground disturbing or construction activities. The limits of this preconstruction survey will include the disturbance area and a 400-foot buffer.
- If during the protocol-level surveys or the preconstruction survey burrowing owl are observed, the following mitigation measures will be applied:
 - As compensation for the direct loss of burrowing owl nesting and foraging habitat, habitat will be acquired and permanently protected at a ratio determined through consultation with CDFG. The minimum ratio will be 6.5 acres per pair or single bird.
 - A non-wasting endowment account for the long-term management of the preservation site for burrowing owls will be established. The site will be managed for the benefit of burrowing owls. The preservation site, site management, and endowment will be approved by the Lead Agency after consultation with CDFG.
 - All owls associated with occupied burrows that will be directly impacted (temporarily or permanently) by the project will be relocated and the following measures will be implemented to avoid take of owls:
 - Occupied burrows will not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
 - Owls will be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows will be excavated using hand tools and refilled to prevent reoccupation.
 - All relocation will be approved by the Lahontan Water Board after consultation with CDFG. The permitted biologist will monitor the relocated owls a minimum

of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring will be submitted to the Lead Agency and CDFG within 30 days following completion of the relocation and monitoring of the owls.

- A Burrowing Owl Mitigation and Monitoring Plan will be submitted to the Lahontan Water Board and the CDFG for review and approval prior to relocation of owls. The Burrowing Owl Mitigation and Monitoring Plan will describe proposed relocation and monitoring plans. The plan will include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location, and type of burrows) will also be included in the plan. The Plan will also describe proposed off-site areas to preserve to compensate for impacts to burrowing owls/occupied burrows at the project site.
- If burrowing owls take occupancy in the Project area before or during construction, the construction contractor will ensure that work-exclusion buffers are maintained. Work will not occur within 160 feet of occupied burrows during the non-breeding season (September 1 through January 31) or within 250 feet during the breeding season (February 1 through August 31), unless otherwise approved by the monitoring biologist and CDFG. A qualified biologist and CDFG will determine if burrowing owls and their habitat can be protected in place on or adjacent to a Project area with the use of buffer zones, visual screens (such as hay bales) or other feasible measures while Project activities are occurring to minimize disturbance impacts.
- If owls are identified during construction, on-site passive relocation will be avoided to the greatest extent practicable, and only implemented if avoidance cannot be met. Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows. Any passive relocation plan will need to be approved by the CDFG.

Mitigation Measure BIO-MM-3: Implement American badger and desert kit fox protection measure prior to and during construction. The project applicant will ensure the following measures are implemented and included in construction specifications to avoid and minimize impacts to the American badger and desert kit fox.

- If there is evidence that a burrow may be occupied by a badger or a kit fox during preconstruction surveys (see BIO-1) and if construction will occur during the natal season, all construction activities will cease within a 100-foot buffer of the burrow during the natal season (February–July) unless otherwise authorized by CDFG. Removal of an occupied American badger or desert kit fox burrow at anytime of the year will require coordination with CDFG.

Mitigation Measure BIO-4: Implement loggerhead shrike and other breeding bird protection measures during construction. The project applicant will ensure the following measures are implemented and included in construction specifications to avoid and minimize impacts to nesting birds.

- The construction contractor will schedule ground-disturbing activities, as well as any other work that generates elevated human activity, noise and vibration above background

operation levels, between February 1 and August 31 to avoid the breeding season between September 1 and January 31, to the greatest extent feasible.

- If nests are encountered during construction, qualified biologists will attempt to re-locate to a nearby and undisturbed location away from equipment.
- If any ground-disturbing activities, or any other work that generates elevated human activity, noise and vibration above background operation levels, will take place during the bird nesting season between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for nesting birds (including raptors) 7 days before these activities are initiated. If any active nests are identified in the Project area or within 300 feet of the Project area, the following buffer(s) a 300-feet of the Project area, the following buffer (s) will be established in the field with staking and flagging:
 - 100 feet for loggerhead shrike,
 - 250 feet for burrowing owl,
 - 300 feet for raptors, and
 - 50 feet for other nesting birds.

The specified buffer size may be reduced on a case-by-case basis with CDFG approval if, based on compelling biological or ecological reasoning (e.g. the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, and level of project activity) and as determined by qualified wildlife biologist, that implementation of a specified smaller buffer distance will still avoid Project-related "take" (as defined by Fish and Game Code Section 86) of adults, juveniles, chicks, or eggs associated with a particular nest.

- If other birds are present on site during Project operation, PG&E staff will continue current practices of maintaining distances from birds and avoiding nests when present.

Mitigation Measure BIO-5: Prepare and conduct a sensitive species worker awareness program. Prior to the initiation of construction activities, the qualified biologist and/or Environmental Monitor will prepare a worker awareness program to educate workers about the sensitive species that could be present in the Project area (including desert tortoise, Mohave ground squirrel, burrowing owl, and nesting birds) and the mitigation measures to protect them (Mitigation Measures BIO-1, BIO-2, and BIO-3). At a minimum, the awareness program will emphasize the following information relative to these species: (a) distribution on the job site; (b) general behavior and ecology; (c) sensitivity to human activities; (d) legal protection; (e) penalties for violating State or federal laws; (f) reporting requirements; and (g) project protective mitigation measures. PG&E and the construction contractor will ensure all workers have received the awareness program and understand the various components. Interpretation will be provided for non-English speaking construction workers.

Mitigation Measure BIO-6: Maintain a log for biological resources mitigation measures. The qualified Biologist will maintain a daily log of all biological mitigation measures implemented before, during, and after construction to protect biological resources (including Mitigation Measures BIO-1, BIO-2, BIO-3 and BIO-4).

Cultural Resources

Mitigation Measure CUL-MM-1: Stop work if cultural resources are encountered during ground-disturbing activities. The applicant will ensure the construction specifications include a stop work order if cultural resources or artifacts are discovered during construction. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil (“midden”) containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Paleontological resources (i.e., fossils) and human remains might include bones.

If potential cultural resources as described above are found, all work within 50 feet of the find will be stopped until qualified cultural resources staff is notified and determines and notifies appropriate qualified professional (e.g., archaeologist, architectural historian, paleontologist) and Native American representative to assess the significance of the find. If the find is determined to be potentially significant, the qualified professional(s), in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, preservation in place, capping, excavation, documentation, and curation. Any recommendations will be reviewed by PG&E and appropriate agencies.

If any human remains are discovered the County Coroner will be notified immediately according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) will be followed.

Greenhouse Gas Emissions

Mitigation Measure GHG-MM-1: Implement San Bernardino County GHG construction standards during construction. PG&E or its contractor will include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance in the project completion report to the Lead Agency. PG&E or its contractor will do the following, in compliance with the San Bernardino County Greenhouse Gas Emissions Reduction Plan (December 2011).

- Select construction equipment based on low GHG emissions factors and high-energy efficiency. Where feasible, diesel-/gasoline-powered construction equipment will be replaced, with equivalent electric or compressed natural gas (CNG) equipment.
- Because it may not be feasible to use electric or CNG equipment per the County performance standard, the Project will use biodiesel fuel if the following applies:
 - Biodiesel fuel becomes available within 20 miles of the Project area.
 - The California Air Resources Board has certified that the locally available biodiesel results in reduction of GHG emissions.

- Biodiesel fuel is approved by the manufacturer for use in diesel trucks or equipment used for remedial activities, including farm equipment and construction equipment.
- The cost of biodiesel is not more than 125% above the price of regular diesel fuel, then
- As biodiesel comes in blended amounts (B5 = 5% biodiesel; B20 = 20% biodiesel; B100 = 100% biodiesel), PG&E will use the highest biodiesel blend that is approved for use in site trucks or equipment, available, and within the price limitation noted above.
- Grading contractor will implement the following when possible:
 - Training operators to use equipment more efficiently.
 - Identifying the proper size equipment for a task can also provide fuel savings and associated reductions in GHG emissions.
 - Replacing older, less fuel-efficient equipment with newer models.
 - Using global positioning system (GPS) for grading to maximize efficiency.
- Grading plans will include the following statements:
 - “All construction equipment engines will be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration.”
 - “All construction equipment (including electric generators) will be shut off by work crews when not in use and will not idle for more than 5 minutes.”
- Recycle and reuse construction and demolition waste (e.g., soil, vegetation, concrete, lumber, metal, and cardboard) per County Solid Waste procedures.
- Educate all construction workers about the required waste reduction and the availability of recycling services.
- The project manager will ensure that the contract specifications related to GHG are followed by the contractor and will include in the project completion report to the Water Board a summary of mitigation measures implemented before, during, and after construction activities.

Noise

Mitigation Measure NOI-MM-1: Restrict construction activities to day time hours and weekdays. The construction contractor or project manager will ensure that construction activities involving the use of tractor trailers, heavy equipment, and/or pneumatic tools will be performed between 7:00 a.m. and 7:00 p.m. on Monday through Saturday, and no work at noise levels above 45db at the nearest occupied residence will be performed on Sundays or federal holidays. Additionally, this equipment will not be allowed to idle longer than 5 minutes.

Transportation and Traffic

Mitigation Measure TRA-MM-1: Implement traffic control measures during construction. To minimize impacts on local surface streets in the project area, PG&E will ensure that construction contractors implement the following traffic control measures during project construction:

- On days with large truck traffic, use personnel as necessary to direct traffic and prevent vehicles from lining up on county roads and highways during construction.
- Vehicles will not be allowed to block the roadway, resulting in an inadvertent temporary lane closure, while waiting to enter the Project area for longer than five minutes.
- Emergency vehicle access will be maintained at all times, and there will be no road closures.
- Maintain log entries whenever the above mitigation measure is implemented.

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**MONITORING AND REPORTING PROGRAM NO. R6V-2013-(PROPOSED)
WDID NO. 6B362031001**

FOR

**PACIFIC GAS AND ELECTRIC COMPANY
HINKLEY COMPRESSOR STATION**

San Bernardino County

I. WATER QUALITY PROTECTION STANDARD

A Water Quality Protection Standard (WQPS) is required by California Code of Regulations (CCR), title 27, section 20390 through 20410, to ensure the earliest possible detection of a release from the Surface Impoundments to the underlying soil, groundwater, and/or surface water. The WQPS shall consist of all constituents of concern, the concentration limit for each constituent of concern, the point of compliance, and all water quality monitoring points.

The Executive Officer shall review and approve the WQPS, or any modification thereto, for each monitored medium.

The WQPS shall:

- a. Identify all distinct bodies of groundwater that could be affected in the event of a release from the Surface Impoundments. This list shall include all groundwater bearing zones.
- b. Include a map showing the monitoring points and background monitoring points for the detection monitoring program. The map shall show the surface trace of each waste management unit's point of compliance (along the downgradient boundary of the Unit), in accordance with CCR, title 27, section 20405.
- c. Evaluate the perennial direction(s) of groundwater movement within the groundwater bearing zones.

If subsequent sampling of the background monitoring point(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to waste management activities at the site, the Discharger may request modification of the WQPS's concentration limits to provide season-specific concentration limits (background data sets) for each constituent of concern at each monitoring point.

1. Constituents of Concern

The Constituents of Concern include all the waste constituents, their reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the Surface Impoundments. The Constituents of Concern are listed in Table 1 (Attachment A), which are made part of this MRP.

Monitoring parameters are Constituents of Concern that provide a reliable indication of a release from the Surface Impoundments. The monitoring parameters are listed in Table 1 (Attachment A).

2. Concentration Limits

For naturally occurring Constituents of Concern or non-naturally occurring Constituents of Concern whose background data set (concentration limit) exceeds its Practical Quantitation Limit (PQL), the concentration threshold for each constituent of concern shall be determined as follows:

- a. By calculation in accordance with a statistical method applied to the concentration limit (suite of background data) pursuant to CCR , title 27, section 20415; or
- b. By an alternate statistical method acceptable to the Water Board Executive Officer in accordance with CCR, title 27, section 20415.

For non-naturally occurring Constituents of Concern that do not have background values, the concentration threshold for each constituent of concern shall be taken as the PQL of the analytical method used (e.g., US-EPA Methods 8260 and 8270) in accordance with the Detection Monitoring Program. Concentration limits shall be updated by the Discharger every year and reported in the Annual Monitoring Summary Report for the respective reporting period.

3. Point of Compliance

The point of compliance for the water standard is a vertical surface located at the hydraulically downgradient limit of the Facility that extends through the groundwater bearing zones underlying the Facility.

II. MONITORING

The Discharger must comply with the Detection Monitoring Program (DMP) monitoring provisions contained in California Code of Regulations (CCR), title 27, section 20385 through 20430. The Discharger must monitor the wastewater effluent quality, Surface Impoundment wastewater, and the Surface Impoundments. All monitoring and inspecting activities must be documented. Groundwater detection monitoring wells for the surface impoundments must be installed, be operational, and have one year of quarterly monitoring data collected prior to the discharge of wastes. All samples, with the exception of field parameters, are to be analyzed by a California state-certified laboratory. In addition to satisfying the monitoring requirements of CCR, title 27, sections 20385 through 20430, the Discharger must also perform the following monitoring in accordance with the Sampling and Analysis Plan, which includes quality assurance/quality control standards:

A. Surface Impoundment Monitoring

All wastewater samples collected under this Monitoring and Reporting Program (MRP) must be analyzed to determine the concentrations of constituents listed in Table 1 (Attachment A). All samples, with the exception of field parameters, are to be analyzed by a California state-certified laboratory.

1. Wastewater Flow

The Discharger must:

- a. Collect and analyze one sample of wastewater from the point of discharge to the surface impoundments and analyze for the constituents listed and at the frequency specified in Table 1 (Attachment A).
- b. Record the maximum daily flow rate in gallons per day to the Surface Impoundments;
- c. Record the volume of flow, in gallons per day, of wastewater flow to the Surface Impoundments;
- d. Record the cumulative total of wastewater flow to the Surface Impoundments in gallons per month; and
- e. Yearly, calibrate the wastewater flow meters.

2. Wastewater

A liquid grab sample from each of the Surface Impoundments must be collected from opposite the inlet, at a depth of one foot, in a quiescent surface area. A sample must be collected for each Surface Impoundment. If the Surface Impoundment is dry, then indicate that it is dry in the monitoring report. The samples must be analyzed to determine the concentrations of constituents described and at the frequency specified in Table 1 (Attachment A).

3. Dikes and Liners

- a. Daily, each of the Surface Impoundment dikes and liners must be visually inspected to determine if there are any indications of loss of integrity. Should the inspection indicate that any unauthorized discharge has occurred, or may occur, the Water Board must be notified within 24 hours, followed by confirmation in writing within 7 days.
- b. Daily, measure and record the freeboard, as measured from the top of the lowest part of the dike to the wastewater surface in each Surface Impoundment. Observations and measurements must be recorded in a permanent log book kept onsite. If the Surface Impoundment is dry, then indicate that it is dry in the log book and monitoring report.

4. Leachate Collection and Recovery Sumps

The Discharger must conduct the following inspections and testing of the Leachate Collection and Recovery Sumps (LCRS):

- a. Weekly, inspect the LCRS for the presence of liquids. The result of these inspections must be recorded in a permanent log book kept onsite.
 - i. The Discharger must record in the LCRS inspection log book the volume pumped, pumping rate, date, and discharge location of any liquid pumped from the LCRS.
 - ii. Upon detection of leachate in a previously dry LCRS that was dry during the prior week inspection (defined herein as an event), the Discharger shall immediately collect a grab sample of the leachate and shall analyze the grab samples of leachate for all of the parameters identified in Table 1 (Attachment A). Quarterly thereafter, samples of the leachate in the LCRS must be sampled and analyzed for the constituents described and at the frequency specified in Table 1 (Attachment A).

- b. The factors set by the Water Board and used to calculate the Action Leakage Rates for the Surface Impoundments are shown in Table 1, LCRS Action Leakage Rates, below.

TABLE 1. LCRS Action Leakage Rates

Surface Impoundment	Surface Area (Acres)	Action Leakage Rate (gpd)	Rapid and Large Leakage Rate (gpd)
Pond 4	1.06	21	250
Pond 5	1.06	21	250
Pond 6R	1.22	25	250
Pond 7R	1.26	25	250
Pond 8	2.41	48	276

gpd = gallons per day

- c. If liquids are detected in the LCRS, the Discharger must respond as described in Table 2, Action and Response Levels for LCRS, below.

TABLE 2. Action and Response Levels for LCRS

Unit Flow Rate	Action/Response
Less than Action Leakage Rate	No action required. Record weekly flow rate and submit recorded flow rates with the next Quarterly Report.
Greater than or equal to the Action Leakage Rate	Notify the Water Board immediately (within 24 hours). Cease discharge to the affected surface impoundment and repair the liner.
Greater than or equal to the Rapid and Large Leakage Rate.	Notify the Water Board immediately (within 24 hours). Cease discharge to the affected surface impoundment, repair the liner, and remove the contents of the surface impoundment and LCRS. A sample must be collected and analyzed for the constituents of concern and the monitoring parameters identified in Table 1 (Attachment A).

5. Sludge Monitoring

Annually, in the last quarter of each year, collect a representative grab sample of the bottom sludge (if present) of each Surface Impoundment, and analyze each sample for the following constituents:

<u>Parameter</u>	<u>Units</u>	<u>Method</u>
Title 22 Metals	mg/L	CCR, title 22, section 66261.24 subdivision (a)(2)(A), Table II, list of inorganic persistent and bioaccumulative toxic substances and their soluble threshold limit concentrations (STLC) and total threshold limit concentration (TTLC) values.

6. Unsaturated Zone Monitoring

- a. Quarterly, the Discharger must monitor the unsaturated zone beneath the Surface Impoundments. The Discharger must check for moisture using pan lysimeters (or equivalent monitoring device) installed beneath the LCRS collection sumps.
- b. If liquid is detected in the lysimeters, field verification testing must be performed and the Discharger must notify the Water Board and report a preliminary physical evidence of a release (see notification procedures below). Verification testing must include laboratory analyses of liquids drawn from the lysimeter. Liquid quality must be compared to the wastewater monitoring parameters in the Surface Impoundment and/or the liquid collected from the LCRS, if present. The results of this comparison must be part of a release evaluation report submitted to the Water Board.
- c. Annually, the Discharger must submit documentation of unsaturated zone monitoring instrument maintenance and performance checks, including quality assurance/quality controls.

B. Operation and Maintenance

A brief summary of any operational problems and maintenance activities must be submitted to the Water Board with each monitoring report for the Hinkley Generating Station operations. This summary must discuss:

1. Any modifications, additions, or major maintenance to the wastewater conveyance system or disposal facilities.
2. Any major problems occurring in the wastewater conveyance system or disposal facilities.
3. The calibration of any wastewater flow measuring devices.

C. Detection Monitoring

Monitoring of the groundwater and unsaturated zone must be conducted in accordance with the Detection Monitoring Program (DMP) to provide the best assurance of the early detection of any new releases from the Surface Impoundments. All samples, with the exception of field parameters, must be analyzed by a California state-certified laboratory.

1. Unsaturated Zone Monitoring

The unsaturated zone beneath the surface impoundments must be monitored in accordance with Section II.A.6 of this MRP. If moisture is detected by the sensors in the lysimeters, field verification testing must be performed, and the Discharger must notify the Water Board and report physical evidence of a release (see notification procedures in Section IV.G., "Unscheduled Reports to be Filed with the Water Board").

a. Monitoring Points

The unsaturated zone monitoring program will consist of pan lysimeters located directly beneath the LCRS in each surface impoundment.

b. Monitoring Parameters and Constituents of Concern

The monitoring parameters and constituents of concern (COCs) for unsaturated zone monitoring are those listed in this MRP, Table 1 (Attachment A).

c. Concentration Limits

The concentration limits for all non-naturally occurring constituents is the method detection limit. The Discharger must, in the WQPS, establish concentration limits that define background concentrations for all monitoring parameters and constituents of concern.

d. Calibration Documentation

Annually, the Discharger must submit documentation of instrument calibration and performance checks. Performance checks must be a comparison of quarterly results of the unsaturated zone monitoring network testing with earlier tests made under comparable conditions to verify proper operation of the equipment.

2. Groundwater Monitoring

a. Monitoring Points and Point of Compliance

The Point of Compliance, as defined in CCR, title 27, section 20405, subdivision (a), is “a vertical surface located at the hydraulically downgradient limit of the Unit that extends through the uppermost aquifer underlying the Unit.” Groundwater monitoring wells must be installed at monitoring points upgradient of the Facility and along the Point of Compliance as part of the DMP. The groundwater monitoring program consists of a system of wells to adequately monitor groundwater beneath the Facility, per CCR, title 27, section 20415. The Discharger must collect background water quality data for the monitoring parameters and constituents of concern listed in Table 1 (Attachment A). The Discharger must collect at least eight quarters of groundwater quality data to determine background concentration limits for the monitoring parameters and COCs. The Discharger must submit a complete WQPS, which includes concentration limits that define background water quality for all COCs, and the Point of Compliance monitoring points. These data must be reported to the Water Board within 30 days following eight consecutive quarters of monitoring in the required Water Quality Protection Standard.

For any constituent that is naturally occurring at this site, its concentration threshold at a given monitoring point is the fourth standard deviation of the suite of at least eight background monitoring points collected pursuant to this subsection.

The concentration threshold for each non-naturally occurring organic constituent that is not proven to have originated from a source other than the Facility is the laboratory PQL for that constituent.

b. Monitoring Parameters and Constituents of Concern

The monitoring parameters and constituents of concern for the groundwater are those listed in this MRP, Table 1 (Attachment A). Additional groundwater samples must be collected and submitted for laboratory analyses at all monitoring points once every five years for all monitoring parameters and COCs listed in Appendix I and II of 40 CFR, Part 258.

c. Depth to Groundwater

Quarterly, prior to sampling and purging, the Discharger must measure and record the depth below the ground surface and elevation above mean sea level (msl) of the static groundwater surface in all groundwater monitoring wells. The Discharger shall use these measurements, which shall be accurate to the nearest 0.01 foot, to determine the groundwater surface map, pursuant to section II.C.2.e, "Aquifer Characteristics," below, and the groundwater flow direction, pursuant to section II.C.2.f below, each quarter.

d. Groundwater Sampling and Purging

Quarterly, the Discharger must collect samples from each groundwater monitoring well. The wells must be purged of at least three well volumes until temperature, electrical conductivity, and pH of extracted well water have stabilized to within +/- five (5) percent. Samples must be collected and analyzed using U.S. EPA methods. The samples must be analyzed to determine the concentrations of parameters described in Table 1 (Attachment A). Groundwater must also be measured for:

- i. Electrical conductivity in micromhos per centimeter (umhos/cm),
- ii. pH (in pH units),
- iii. Temperature (in either degrees Fahrenheit or degrees Centigrade), and
- iv. Turbidity (in nephelometric turbidity units [NTUs]).

e. Aquifer Characteristics

Quarterly, the most recent groundwater surface contours must be illustrated on an 8.5" x 11" or an 11" x 17" copy of a Facility plan, showing the locations of the Surface Impoundments and monitoring wells, as well as the parameters listed below in the Table – Aquifer Characteristics.

Table – Aquifer Characteristics

Parameter	Units
Depth to Groundwater	Feet below ground surface
Static Water Level	Feet above mean sea level
Slope of Groundwater Gradient	Feet/Feet
Direction of Groundwater Flow	Degrees from true North
Velocity of Groundwater Flow	Feet/Year

- f. Quarterly, the Discharger must calculate, record, and report the groundwater gradient, the direction of the gradient, and the velocity of groundwater flow.
- g. Quarterly, the Discharger must graph time-series plots of the analytical results from the groundwater monitoring at each monitoring point to show any trends in constituent concentrations through time. Time-series plots must also include, as horizontal lines, the constituents' maximum contaminant level (MCL) (if an MCL has been established), and the concentration threshold derived from the constituent's background data set (concentration limit) at that monitoring point.
- h. Annually, water quality in monitoring wells utilized for groundwater monitoring of the Facility must be reported in the annual report in tabular and graphical form. Each table must summarize the historical and most recently detected constituent concentrations for all wells sampled, and compare these data to both the applicable concentration threshold and the Maximum Contaminant Level (MCL) established for each monitoring parameter/constituent of concern. Each such graph must be plotted using raw data, and at a scale appropriate to show trends or variations in water quality. For graphs showing the trends of similar constituents (e.g., volatile organic compounds), the scale must be the same.

III. DATA ANALYSES

All data analyses methods (statistical and non-statistical) must meet the requirements of the California Code of Regulations, title 27, sections 20415, subdivisions (e)(8) and (9).

A. Statistical Data Analysis Method

In order to determine if any new releases have occurred from the Facility, evaluation of data will be conducted using statistical methods. For Detection Monitoring, the Discharger shall use statistical methods to analyze COCs and monitoring parameters that exhibit concentrations that equal or exceed their respective method detection limit in at least ten percent of applicable historical samples. The Discharger may propose and use any data analyses that meets the requirements of California Code of Regulations, title 27, section 20415, subdivision (e)(7). The report titled "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance" (USEPA, 2009) or subsequent versions may also be

used to select the statistical test to use for comparing detection monitoring data to background monitoring data.

The Discharger has been utilizing Shewhart-CUSUM Control Chart methods for the groundwater monitoring wells used to monitor the existing surface impoundments, Ponds 4, 5, and 8. The Discharger must incorporate existing groundwater monitoring wells into the monitoring network for the purposes of monitoring the new surface impoundments, Ponds 6R and 7R, and will incorporate the data from the additional wells into the existing Shewhart-CUSUM Control Chart system.

B. General Non-Statistical Data Analysis Method

In order to determine if any new releases have occurred from the Facility, evaluation of data will also be conducted using non-statistical methods. Non-statistical analyses shall be as follows:

1. Physical Evidence

Physical evidence can include unexplained stress in biological communities such as vegetation loss, soil discoloration, or groundwater mounding. Each quarterly report must comment on such physical elements.

2. Time-Series Plots

Quarterly, the Discharger shall graph time-series plots of the historical and most recent analytical results from unsaturated zone and groundwater monitoring to show trends in constituent concentrations through time. Time-series plots must include the applicable MCL and both the mean and median of the WQPS for each respective constituent, or monitoring parameter. Time series plots are not required for parameters that have never been detected above their method detection limit (as specified by the applicable USEPA method) or if there are less than four quarters of data. Evidence of a release may include trends of increasing concentrations of one or more constituents over time.

IV. REPORTING REQUIREMENTS

The Discharger must comply with the following reporting requirements:

A. General Provisions

The Discharger must comply with Attachment B, "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made a part of this MRP.

B. Failure to Furnish Reports

Any person failing or refusing to furnish technical or monitoring reports or falsifying any information provided therein is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation pursuant to California Water Code, section 13268.

C. Violations

If monitoring data indicate violation of WDRs, the Discharger must identify the violation and provide information indicating the cause of violation(s) and action taken or planned to bring the discharge into compliance.

D. Monitoring Reports

Quarterly, monitoring data must be submitted electronically to the Water Board and uploaded to the State Water Board's Geotracker system, no later than the **30th day of the month following each quarter**, per the following schedule:

Sampling and Reporting Frequency	Quarterly Period	Report Date Due
Quarterly	January 1 – March 31	April 30
Quarterly	April 1 – June 30	July 30
Quarterly	July 1 – September 30	October 30
Quarterly	October 1 – December 31	January 30

Semi-annually, monitoring reports, including the preceding information, must be submitted to the Water Board on the **30th day of the month following each quarter**, per the following schedule:

Sampling and Reporting Frequency	Quarterly Period	Report Date Due
Semi-Annual	January 1 – June 30	July 30
Semi-Annual	July 1 – December 31	January 30

Each semi-annual report must include the following:

1. Results of sampling and laboratory analyses for each groundwater monitoring point, including statistical limits for each monitoring parameter and an identification of each sample that exceeds its respective statistical limit at any given monitoring point;

2. A description and graphical presentation of the velocity and direction of groundwater flow under/around the Facility, based upon water-level elevations taken during the collection of the water quality data submitted in the report;
3. A map and/or aerial photograph showing the locations of observation stations, monitoring points, and background monitoring points, and the Point of Compliance along the downgradient boundary of the Facility;
4. Surface Impoundments monitoring, flow monitoring, effluent monitoring, and an evaluation of the effectiveness of the leachate monitoring and control facilities;
5. Data collected in accordance with the approved Monitoring and Reporting Plan and Sampling and Analysis Plan for the Surface Impoundments' unsaturated zone monitoring system and groundwater monitoring wells;
6. A letter transmitting the essential points of each report, including a discussion of any violations found since the last report was submitted and describing actions taken or planned for correcting those violations; and,
7. If the Discharger has previously submitted a detailed time schedule for correcting violations, a reference to the correspondence transmitting this schedule will be satisfactory. If no violations have occurred since the last submittal, this must be stated in the letter of transmittal.
8. Quarterly data must be submitted electronically to GeoTracker. Semi-annually, hard copies of the reports must be submitted to the Water Board.

E. Annual Monitoring Reports

Annual Monitoring Reports must be submitted to the Water Board no later than **April 30** of each year. The annual report can be combined with the monitoring report for the last reporting period of that year. The reports must include the items described in the General Provisions for Monitoring and Reporting (Attachment B), the information under Section IV.D., and the following information:

1. A list of all monitoring point/monitoring parameter (MPt/MPar) pairs, by medium, that have exhibited a verified measurably significant increase, together with the respective date (for each) when that increase occurred. Any MPt/MPar pairs that have shown an increase within that (prior) year shall be bolded-and-underlined. In

addition, by medium, list any non-monitoring parameter COCs that, during testing that year (tested every five years), have exceeded their respective statistical limit and, as a result, have become monitoring parameters, together with the date when the transition occurred;

2. Time-series data plots of groundwater and unsaturated zone analysis. Time-series plots must also include appropriate MCL or concentration threshold established for each respective constituent that has not shown a verified release. For a pair that has a verified release indication, these plots must also include the cleanup goal;
3. Four maps, one for each quarter of the last reporting year, showing the groundwater elevation isocontours determined for that quarter, and showing the Surface Impoundments perimeters and the groundwater monitoring point and background monitoring point locations for each waste management unit, and including the surface trace of the Facility's point of compliance;
4. Graphical and tabular data for the monitoring data obtained for the previous calendar year (January – December). Each table must summarize the historical and most recently detected constituents concentrations for all locations sampled, and compare these data to both the given monitoring point/COC pair's respective statistical concentration limit and (if applicable) MCL, and be labeled appropriately. Each such graph must be plotted using raw data, and at a scale appropriate to show trends or variations in water quality. For graphs showing trends of similar constituents (e.g., volatile organic compounds), the scale must be the same;
5. Calibration methods and any discrepancies of any meters used for field parameter evaluations after calibration is performed;
6. The compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the discharge requirements;
7. Evidence that adequate financial assurance for closure and corrective action for all known or reasonably foreseeable releases is still in effect. Evidence may include a copy of the renewed financial instrument or a copy of the receipt for payment of the financial instrument. Evidence of adequate financial assurance must be signed by the Corporate Officer;
8. Evidence that the financial assurance amount is adequate or increase the amount of financial assurance by an appropriate amount if necessary, due to inflation, a change in the approved closure plan, or other unforeseen events; and,

9. The Discharger must review the preliminary closure plan and corrective action plan for all known or reasonably foreseeable releases annually to determine if significant changes in the operation of the Facility warrant an update to any of these plans. Changes to these plans must be submitted to the Water Board in the annual report.

F. Five-Year Non-Monitoring Parameter Constituent of Concern Monitoring Program

Pursuant to CCR, title 27, section 20420, subdivision (g), every five years the Discharger must sample for non-monitoring parameter COCs. Groundwater samples must be collected and submitted for laboratory analyses at all monitoring points once every five years for all monitoring parameters and COCs listed in Appendix I and II of 40 CFR, Part 258. Successive monitoring efforts must be carried out alternatively during January 1 through June 30 of one five-year sampling event and July 1 through December 31 of the next five-year sampling event, and every fifth year, thereafter. The five-year non-monitoring parameter COC sampling event must be reported no later than 45 days following the monitoring period.

G. Unscheduled Reports to be Filed With the Water Board

The following reports must be submitted to the Water Board as specified below:

1. Release from the Surface Impoundments

The Discharger must perform the procedures contained in this subsection whenever there is evidence of a release from the Facility.

a. Physical or Measurably Significant Evidence of a Release from the Surface Impoundments

The Discharger must immediately notify the Water Board verbally whenever a determination is made that there is physical or "measurably significant" evidence of a release from the Surface Impoundments. This verbal notification must be followed by written notification via certified mail within seven days of such determination. Upon such notification, the Discharger may initiate verification procedures or demonstrate that another source other than the Surface Impoundments caused evidence of a release (see below).

The notification must include the following information:

- i. Surface Impoundment(s) that may be the source of the release;
 - ii. General information including the date, time, location, and cause of the release;
 - iii. An estimate of the flow rate and volume of waste involved;
 - iv. A procedure for collecting samples and description of laboratory tests to be conducted;
 - v. Identification of any water body or water-bearing media affected or threatened;
 - vi. A summary of proposed actions; and,
 - vii. For a measurably significant evidence of a release – the monitoring parameters and/or COCs that are involved in the measurably significant evidence of a release from the Surface Impoundment(s); or
 - viii. For a physical evidence of a release – physical factors that indicate evidence of a release.
- b. Other Source That May Cause Evidence of a Release From the Surface Impoundments

The Discharger may make a demonstration that a source other than the Surface Impoundments caused evidence of a release. For this case, the Discharger must notify the Water Board of the intention to make this demonstration. The notification must be sent to the Water Board by certified mail within seven days of determining physical or measurably significant evidence of a release.

2. Exceeding the Leakage Rate

Exceeding the Action Leakage Rate is an Adverse Condition. The Discharger must immediately notify the Water Board verbally within 24 hours whenever a determination is made that leakage into the LCRS exceeds the Action Leakage Rate. This verbal notification must be followed by written notification via certified mail within 7 days of such determination. This written notification must be followed by a technical report via certified mail within 30 days of such determination. The technical report must describe the actions taken to abate the Adverse Condition and must describe any proposed future actions to abate the Adverse Condition.

Exceeding the Rapid and Large Leakage Rate is also an Adverse Condition. In addition to the requirements above for exceeding the Action Leakage Rate, the technical report must include sampling results and a comparison of the wastewater in the surface impoundment and the leachate in the LCRS, as described in Table 2 of this MRP.

3. Evaluation Monitoring

The Discharger must, within 90 days of verifying a “measurably significant” release, submit a technical report pursuant to California Water Code section 13267, subdivision (b), proposing an Evaluation Monitoring Program (EMP). If the Discharger decides not to conduct verification procedures, or decides not to make a demonstration that a source other than the surface impoundment is responsible for the release, the release will be considered verified.

The Discharger must, within 90 days of determining a “measurably significant” evidence of a release, submit to the Water Board an amended report of waste discharge to establish an evaluation monitoring program meeting the provisions of CCR, title 27, section 20420, subdivision (k)(5). The report must include the following information:

- a. COC Concentrations – the maximum concentration of each COC at each Monitoring Point as determined during the most recent COC sampling event (i.e., under CCR, title 27, section 20420, subdivision (g) or (k)[1]). Any COC that exceeds its background limit is to be retested at that monitoring point. Should the results of the retest verify that the COC is above the background limit, then that COC will become a monitoring parameter at all monitoring points;
- b. Proposed Monitoring System Changes – any proposed changes to the water quality monitoring systems at the Surface Impoundments necessary to meet the provisions of CCR, title 27, section 20425;
- c. Proposed Monitoring Changes – any proposed additions or changes to the monitoring frequency, sampling and analytical procedures or methods, or statistical methods used at the Facility necessary to meet the provisions of CCR, title 27, section 20425; and,
- d. Proposed Delineation Approach – a detailed description of the measures to be taken by the Discharger to assess the nature and extent of the release from the Surface Impoundments.

4. Engineering Feasibility Study Report

Within 180 days of verifying the existence of a release, the Discharger must submit an Initial Engineering Feasibility Study report meeting CCR, title 27, section 20420, subdivision (k)(6), proposing corrective action measures that could be taken to achieve background concentrations for all constituents of concern involved in the release. This report will be the basis for a later expanded Engineering Feasibility Study, submitted under the Evaluation Monitoring Program, per CCR, title 27, section 20425, subdivision (b).

H. Water Quality Protection Standard

No later than 760 days following beginning of operations, pursuant to California Water Code, section 13267, subdivision (b), the Discharger must submit for acceptance by the Water Board a proposed data analysis method and a proposed concentration limit (background data set) consisting of at least eight data points from an appropriate groundwater background data source for each COC at each monitoring point. The report must be certified by a registered civil engineer or a registered professional geologist.

Ordered by: _____ Dated: January 16, 2013
PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Attachments: A. Table 1, Surface Impoundment Monitoring Parameters and
Constituents of Concern
B. General Provisions for Monitoring and Reporting, September 1,
1994

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**Table 1
Monitoring Parameters and Constituents of Concern**

Parameter	Units	Monitoring and Reporting Frequency
Constituents of Concern		
Boron	mg/L	Quarterly
Chloride	mg/L	Quarterly
Fluoride	mg/L	Quarterly
Nitrate	mg/L	Quarterly
Sodium	mg/L	Quarterly
Sulfate	mg/L	Quarterly
Total Dissolved Solids (TDS)	mg/L	Quarterly
Monitoring Parameters		
Arsenic	mg/L	Annually
Barium	mg/L	Annually
Cadmium	mg/L	Annually
Calcium	mg/L	Annually
Carbonate	mg/L	Annually
Chloride	mg/L	Annually
Chromium, Total	mg/L	Annually
Copper	mg/L	Annually
Hexavalent Chromium	mg/L	Annually
Iron	mg/L	Annually
Lead	mg/L	Annually
Magnesium	mg/L	Annually
Manganese	mg/L	Annually
Molybdenum	mg/L	Annually
Nickel	mg/L	Annually
Oil and Grease	mg/L	Annually
Potassium	mg/L	Annually
VOCs	ug/L	Annually
Zinc	ug/L	Annually

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. SAMPLING AND ANALYSIS

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
 - i. Standard Methods for the Examination of Water and Wastewater
 - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

- a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.
- d. Monitoring reports shall be signed by:
 - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
 - ii. In the case of a partnership, by a general partner;
 - iii. In the case of a sole proprietorship, by the proprietor; or

- iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
 - i. Name and telephone number of individual who can answer questions about the report.
 - ii. The Monitoring and Reporting Program Number.
 - iii. WDID Number.
- f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation under Section 13268 of the Water Code.

x:PROVISIONS WDRS

file: general pro mrp

ENCLOSURE 2

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September 25, 2012

Ms. Lauri Kemper, Assistant Executive Officer
Ms. Lisa Dernbach, Senior Engineering Geologist
California Regional Water Quality Control Board, Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

**Subject: Comments on Tentative Waste Discharge Requirements R6V-2012-TENT
Hinkley Compressor Station
Hinkley, California**

Dear Ms. Kemper and Ms. Dernbach:

On behalf of Pacific Gas and Electric Company (PG&E), Cardno ENTRIX submits this letter to provide comments on the Tentative Waste Discharge Requirements (WDRs) R6V-2012-TENT (WDID No. 6B362031001) for the Hinkley Compressor Station (HCS) in San Bernardino County, California. In general, we concur with the Tentative WDRs, but request minor changes and clarifications.

1. Definition of Facility. Page 1.

We do not agree with the Facility definition. As written, the Facility is defined as the entire compressor station rather than just the surface impoundments. The current WDRs describe the facility as Ponds 4, 5 and 8 (only). While we understand your inclusion of the two additional impoundments, 6R and 7R, and related piping and appurtenances, we do not believe it necessary to include the compressor station, the parking area or the office area.

Throughout the Tentative Order, the Facility is referred to as the surface impoundments only, not the entire HCS. Examples of these references are summarized below:

- Page 2. Order History – past orders referred only to the waste management units as the Facility.
- Page 7. Surface Impoundment Closure Specifications – financial assurances are for closure of the surface impoundments (Facility) not the entire HCS.
- Page 12. (31.a) Beneficial uses of water – refers to the lined Facility (not the entire compressor station)

- Page 16. (II.A. 12.) Refers to the "life of the Facility". The use of the term Facility is inconsistent with potential future changes in technology. Future station upgrades may eliminate the need for the surface impoundments.

Also, an existing Order is in place to address the rest of the property (CAO No. 6-87-160 as amended in 1994 and 1998).

PG&E requests that the definition of Facility be revised to include only the Class II waste management units (Units) and associated piping and appurtenances OR, the references to "Facility" should be changed to "Units" or "Waste Management Units" where appropriate.

2. Page 2. First Paragraph. The following sentence should be revised for accuracy as shown:

One surface impoundment, Pond 4, was retrofitted by ~~transferring the contents into the other surface impoundments, Ponds 5 and 8~~ removing the contents and hauling to a permitted Class II landfill facility.

3. Page 9. Water Sources. Please re-name the table "Selected Water Supply Quality Results"
4. Page 23. Final Construction Quality Assurance Report. While we understand that the 60 day waiting period for discharge onto the newly constructed surface impoundments is to allow time for Water Board review of the report, PG&E anticipates having to discharge fresh water into the ponds during this time to protect the new liner from sun-exposure. A timely review of the document is requested.
5. Monitoring and Reporting Program (MRP). Page 4.a.ii. Leachate Collection and Recovery Sumps. Please revise the following sentence for clarity:

Upon detection of leachate in a previously dry LCRS that was dry during the prior week inspection (defined herein as an event), the discharger shall immediately collect a grab sample of the leachate and shall analyze the grab samples of leachate for ~~all of the parameters~~ Constituents of Concern identified in Table 1 (Attachment A).

6. MRP Page 6.a. Unsaturated Zone Monitoring. Please revise the second sentence for clarity as proposed below:

The Discharger must check for moisture using pan lysimeters (or equivalent monitoring device) installed beneath the proposed LCRS collection sumps.

Thank you for the opportunity to provide the comments on the Tentative WDRs for the Class II surface impoundments at the HCS. If you have any questions or concerns, please contact Ms. Valeri Hirst of PG&E at (760) 577-4642.

California Regional Water Quality Control Board, Lahontan Region
September 25, 2012



Sincerely,

A handwritten signature in black ink that reads 'Sally Schoemann'.

Sarah F. Schoemann, P.E.
Senior Project Manager
for Cardno ENTRIX
Direct Line 925.988.1252
Email: sally.schoemann@cardno.com

cc: Valeri Hirst/PG&E
Suresh Kamdar/PG&E
Heather Crawford/PG&E
Carmen Fewless/PG&E
Howard Barlow/AMEC
Warren Chamberlain/AMEC

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ENCLOSURE 3

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Lahontan Regional Water Quality Control Board

December 14, 2012

WDID No. 6B362031001

Valeri Hirst
Pacific Gas & Electric Company
35863 Fairview Road
Hinkley, CA 92347

RESPONSE TO COMMENTS ON DRAFT TENTATIVE WASTE DISCHARGE REQUIREMENTS FOR HINKLEY COMPRESSOR STATION, PACIFIC GAS AND ELECTRIC COMPANY, HINKLEY, SAN BERNARDINO COUNTY

California Regional Water Quality Control Board, Lahontan Region (Water Board), staff received comments by Cardno Entrix on behalf of Pacific Gas and Electric Company (PGE) on September 25, 2012, on the Tentative Waste Discharge Requirements for the Hinkley Compressor Station (HCS). The comments are repeated below with Water Board staff responses following each comment.

1. **Definition of Facility. Page 1.** We do not agree with the Facility definition. As written, the Facility is defined as the entire compressor station rather than just the surface impoundments. The current WDRs describe the facility as Ponds 4, 5 and 8 (only). While we understand your inclusion of the two additional impoundments, 6R and 7R, and related piping and appurtenances, we do not feel it necessary to include the compressor station, the parking area or the office area.

Throughout the Tentative Order, the Facility is referred to as the surface impoundments only, not the entire HCS. Examples of these references are summarized below:

- Page 2. Order History – past orders referred only to the waste management units as the Facility.
- Page 7. Surface Impoundment Closure Specifications – financial assurances are for closure of the surface impoundments (Facility) and not the entire HCS.
- Page 12. (31.a) Beneficial uses of water – refers to the lined Facility (not the entire compressor station)
- Page 16. (II.A. 12.) Refers to the “life of the Facility”. The use of the term Facility is inconsistent with potential future changes in technology. Future station upgrades may eliminate the need for the surface impoundments.

Also, an existing Order is in place to address the rest of the property (CAO No. 6-87-160 as amended in 1994 and 1998).

PGE requests that the definition of Facility be revised to include only the Class II waste management units (Units) and associated piping and appurtenances OR, the references to "Facility" should be changed to "Units" or "Waste Management Units" where appropriate.

Response: The wastewater to be discharged to the surface impoundments originate from the compressor station. As such, the compressor station is an extension of the piping and appurtenances. Additionally, it is Water Board practice to include the office and parking areas in the description of the entire Facility, whereas the Surface Impoundments are the Waste Management Units that are permitted to accept the wastewater. The referenced sections will be clarified.

2. Page 2. First Paragraph. The following sentence should be revised for accuracy as shown:

One surface impoundment, Pond 4, was retrofitted by ~~transferring the contents into the other surface impoundments, Ponds 5 and 8~~ removing the contents and hauling to a permitted Class II landfill facility.

Response: The sentence has been modified as follows and is consistent with what is in the ROWD:

One surface impoundment, Pond 4, was retrofitted by transferring the water into the other two surface impoundments, Ponds 5 and 8, removing the solids contents and hauling to a permitted Class II facility, repairing the primary HDPE liner, and placing an additional 60-mil HDPE liner on top of the repaired surface.

3. Page 9. Water Sources. Please re-name the table "Selected Water Supply Quality Results"

Response: The table name has been modified.

4. Page 23. Final Construction Quality Assurance Report. While we understand that the 60 day waiting period for discharge onto the newly constructed surface impoundments is to allow time for Water Board review of the report, PG&E anticipates having to discharge fresh water into the ponds during this time to protect the new liner from sun-exposure. A timely review of the document is requested.

Response: Water Board staff strive for expedient review of documents.

5. Monitoring and Reporting Program (MRP) Page 4.a.ii. Leachate Collection and Recovery Sumps. Please revise the following sentence for clarity:

Upon detection of leachate in a previously dry LCRS that was dry during the prior week inspection (defined herein as an event), the discharger shall immediately collect a grab

sample of the leachate and shall analyze the grab samples of leachate for all-of-the parameters Constituents of Concern identified in Table 1 (Attachment A).

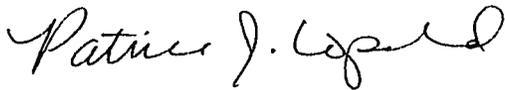
Response: The language has not been changed. Upon detection of leachate in a previously dry LCRS, a sample must be collected and analyzed for all of the parameters so that a baseline can be established for the leachate for all of the parameters, not just the constituents of concern.

6. MRP Page 6.a. Unsaturated Zone Monitoring. Please revise the second sentence for clarity as proposed below:

The Discharger must check for moisture using pan lysimeters (or equivalent monitoring device) installed beneath the proposed LCRS collection sumps.

Response: The change has not been made. The Discharger must check for moisture beneath all of the surface impoundments, not just the two additional proposed surface impoundments.

We look forward to working with you in a manner that protects water quality. If you have any questions, please contact me at (760) 241-7305 or via email at bbergen@waterboards.ca.gov.



For: Brianna Bergen, P.G.
Engineering Geologist
South Basin Land Disposal Unit

Enc: PGE comment letter dated September 25, 2012

S:\Board Orders 2013\PGE\Tentative\RTCdraftPGEComments2.docx

ENCLOSURE 4

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DRAFT

**CLASS II SURFACE IMPOUNDMENTS 6R AND 7R PG&E
HINKLEY COMPRESSOR STATION, HINKLEY, CA
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

PREPARED FOR:

Lahontan Regional Water Quality Control Board
14440 Civic Drive, Suite 200
Victorville, CA 92392

PREPARED BY:

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2300 Clayton Road, Suite 200
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November 2012

ICF International. 2012. Class II Surface Impoundments 6R and 7R PG&E Hinkley Compressor Station Hinkley, California Initial Study/Mitigated Negative Declaration. Draft. November. (ICF 00569.12) San Francisco, CA. Prepared for Lahontan Regional Water Quality Control Board, Victorville, CA.

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Appendix A Air Quality Emissions Calculations

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Acronyms and Abbreviations

µg/m ₃	micrograms per cubic meter
AADT	average annual daily traffic
AB 32	Assembly Bill 32
ADT	average daily traffic
AQMPs	air quality management plans
Basin Plans	Water Quality Control Plans
bgs	below ground surface
BLM	U.S. Bureau of Land Management
BMPs	best management practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCAs	community choice aggregators
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CGP	Construction General Permit
CNDDB	California Natural Diversity Database
CNG	compressed natural gas
CNPS	California Native Plant Society
CO	carbon monoxide
COCs	Constituents of Concern
Cr[VI]	hexavalent chromium
dB	decibel
DPM	Diesel particulate matter
ECSZ	Eastern California Shear Zone
EPA	U.S. Environmental Protection Agency
ESPs	energy service providers
FMMP	Farmland Mapping and Monitoring Program
GCL	geosynthetic clay liner
GHGs	greenhouse gases
gpd	gallons per day
GPS	global positioning system
HCP	habitat conservation plan

HDPE	high density polyethylene
HDPE	high-density polyethylene
HMBP	Hazardous Materials Business Plan
HRA	Health Risk Assessment
I-15	Interstate 15
IOUs	investor-owned utilities
Lahontan Water Board	California Regional Water Quality Control Board—Lahontan Region
LCFS	Low Carbon Fuel Standard
LCRS	leachate collection and removal system
LOS	level of service
MBTA	Migratory Bird Treaty Act
MCE	maximum credible earthquake
MCL	maximum contaminant level
MDAQMD	Mojave Desert Air Quality Management District
mg/L	milligram per liter
mpg	miles per gallon
MRP	Monitoring and Reporting Program
MRZs	Mineral Resource Zones
MTCO _{2e}	metric tons of carbon dioxide equivalent
MWA	Mojave Water Agency
NAAQS	National Ambient Air Quality Standards
NO ₂	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
O ₃	ozone
Pb	lead
PG&E	Pacific Gas and Electric Company
PGA	peak ground acceleration
PM10 and PM2.5	particulate matter
ppm	parts per million
ppmv	parts per million by volume
Regional Water Boards	Regional Water Quality Control Boards
RWD	Report of Waste Discharge
SCAQMD,	South Coast Air Quality Management District
SMCLs	secondary maximum contaminant levels
SO ₂	sulfur dioxide
SPT	standard penetration test
State Water Board	State Water Resources Control Board

SWPPP	Storm Water Pollution Prevention Plan
TACs	toxic air contaminants
TDS	Total Dissolved Solids
UCMP	University of California Museum of Paleontology
WDRs	Waste Discharge Requirements
WQPS	Water Quality Protection Standard

1.1 Project Location and Background

The Pacific Gas and Electric Company (PG&E) Hinkley Compressor Station is located in San Bernardino County, California, approximately 9 miles west of Barstow and 3 miles southeast of the community of Hinkley, California (Figure 2-1). As part of its natural gas compression operation at the Compressor Station, PG&E currently maintains and operates three double-lined surface impoundments for the evaporation of wastewater generated from facility operation and maintenance activities (Ponds 4, 5 and 8 on Figure 2-2).

The existing surface impoundments (Ponds 4, 5, and 8) do not provide sufficient evaporative capacity for proper operation of the Compressor Station. The average design wastewater flow rate for optimal Compressor Station operation is 30,000 gallons per day (gpd). If the impoundments are near capacity, the station must reduce cooling tower boiler blowdown¹ rates to approximately 15,000 gpd to ensure the freeboard requirements (2 feet) are met. To reduce blowdown rates, cooling water must be used longer, creating higher levels of brine. This reduction has resulted in damage and reduced life of equipment, and could cause future impacts to the continued transmission of gas along Line 300.

To allow for optimum blowdown rates and return to the design flow rate of 30,000 gpd, two new surface impoundments, Ponds 6R and 7R, are proposed (Project). These surface impoundments would be constructed in the footprints of the former Ponds 6 and 7, which were clean-closed in 1996 by removing all contents and liners (Cardno ENTRIX 2012a; Lahontan Water Board 1996). The former footprints of Ponds 6 and 7 were not backfilled.

Additionally, the existing facilities do not provide sufficient capacity to remove a surface impoundment from service for maintenance or in the event of a leak. With the addition of Ponds 6R and 7R, the existing impoundments may be maintained; and, in the unlikely event of a leak, the water may be transferred to the other surface impoundments while repairs are performed.

PG&E has submitted a Report of Waste Discharge (RWD), dated March 15, 2012, and an Addendum to the RWD, dated June 27, 2012, in accordance with the requirements of CCR Title 27 of the California Code of Regulations (CCR), Environmental Protection--Division 2, Solid Waste, to the California Regional Water Quality Control Board—Lahontan Region (Lahontan Water Board). The RWD was submitted to request Revised Waste Discharge Requirements (WDRs) that include construction and operation of two additional Class II surface impoundments for evaporation of wastewater generated at the PG&E Hinkley Compressor Station in Hinkley, California. Revised WDRs are still being developed and, thus, past WDRs (Board Order 6-97-82) are still in place by the Lahontan Water Board for the operation of three existing surface impoundments. The Project includes the addition of two surface impoundments in the footprint of former surface

¹ Blowdown is a term used to describe the water released from cooling towers. The compression of natural gas increases its temperature, and thus the cooling towers use water to reduce the temperature before transmission. When the cooling supply water becomes briny, the towers are “blown down” and the cooling water is replaced with a fresh supply.

impoundments. The proposed Project is designed to allow for maintenance of the existing surface impoundments and to improve operation of the Compressor Station.

1.2 CEQA Requirements

The California Environmental Quality Act (CEQA) applies to all discretionary activities proposed to be implemented or approved by a California public agency, in this case, the Lahontan Water Board is Lead Agency who would approve and issue the WDR for the proposed two additional impoundments at the Compressor Station. CEQA requires an agency to review the effects of its actions on numerous environmental resources. The State CEQA Guidelines are the primary rules and source of interpretation of CEQA (Pub. Res. Code sec. 21083).

An initial study is used to determine whether the action may have a significant environmental effect. It is a preliminary analysis prepared by the Lead Agency. The Initial Study may use a checklist format but fact-based explanations must be used to support the checklist. If the initial study concludes that the project may have a significant effect on the environment, an EIR should be prepared; otherwise, the Lead Agency may prepare a Negative Declaration or Mitigated Negative Declaration (Guidelines sec. 15063).

CEQA requires Initial Studies to include the project, environmental setting, potential environmental impacts, and mitigation measures for any significant effects. When describing potential environmental effects in an Initial Study, the Lead Agency may use a checklist, matrix or other form as long as the entries are briefly explained to support the entries. The checklist includes four possible levels of environmental effects: potentially significant, less than significant with mitigation incorporated, less than significant, and no impact. (Guidelines sec. 15063[d][3], [f]).

2.1 Proposed Project

The proposed project (Project) consists of the construction of two additional Class II surface impoundments, Ponds 6R and 7R. The Project area (Figures 2-1 and 2-2) is the Compressor Station facility, which is approximately 55 acres and consists of the Compressor Station, parking area, five surface impoundments (three existing ponds and two proposed ponds), office area, and associated related piping and appurtenances. The two new surface impoundments would increase the existing surface impoundment area (4.53 acres) by an additional 2.48 acres (1.22 acres for Pond 6R and 1.26 acres for Pond 7R) for a total surface impoundment area of approximately 7.00 acres. With the completion of the Project, the five surface impoundments would be able to manage design rate blowdown water from the Compressor Station without possible exceedance of freeboard requirements, and there would be sufficient capacity to perform surface impoundment maintenance in the future.

New Ponds 6R and 7R would be designed to meet all requirements for Class II surface impoundments with an engineered alternative liner system to the prescriptive standards that are appropriate in the arid desert environment of the Hinkley Valley. The new surface impoundments would employ an engineered alternative liner system that would include two layers of 60-mil high density polyethylene (HDPE) geomembrane with an integral drainage layer overlying a low permeability geosynthetic clay liner (GCL) to provide protection against leakage. A drainage layer and leak detection system is proposed between the two liners with a leachate collection and removal system (LCRS). As required by CCR Title 27, Division 2, Subdivision 1, Article 1 requirements for Class II Surface Impoundments, the new impoundments are designed to contain the additional volume of water from the 1,000-year, 24-hour storm event while maintaining 2 feet of freeboard; to withstand the seismic shaking from the maximum credible earthquake; and to be installed, tested, and inspected in accordance with an approved Construction Quality Assurance plan.

Project Construction

Construction activities would include excavation for sumps, pan lysimeters, and trenches to connect pipelines and electrical lines from the existing facilities to new Ponds 6R and 7R. A sump is an underground drain or pan that collects any leaked liquids such as water or chemicals. The LCRS sump will be equipped with perforated pipe and a pump connected to a solid riser to extract accumulated fluid (Cardno ENTRIX 2012a). A pan lysimeter (pore water sampler) is a device for taking samples in conditions of partial soil saturation and subsequent drainage conditions. The pan lysimeter would monitor for the presence of fluid that may have leaked from the LCRS sump (Cardno ENTRIX 2012a). The former surface impoundments (Ponds 6 and 7) were not backfilled; therefore, only minor earthwork would be required. Construction is expected to remove approximately 3,000 cubic yards of soil which would be spread across the facility. The excavated soil would be spread over approximately two acres (less than one foot deep) in the area east of the existing surface impoundments near former Ponds 1, 2, and 3 (Figure 2-2) (Schoemann pers.

comm.). All soil disturbance activities, including preparation of subgrade, would be performed in accordance with geotechnical specifications and local grading codes, and the soil would be compacted and graded to facilitate site drainage and prevent soil erosion. All cleared vegetation would be hauled offsite and disposed at an appropriate permitted landfill facility.

Construction activities would be conducted in accordance with the State Water Resources Control Board General Permit for Discharges of Storm Water Associated with Construction Activities (CGP Order 2009-0009-DWQ), which requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), and in accordance with the Mojave Desert Air Quality Management District's requirements for dust control. The SWPPP and construction specifications would include, but not be limited to, the following best management practices (BMPs) to minimize dust and protect stormwater runoff.

- During excavation and grading activities, spray water shall be used to control fugitive dust.
- Non-essential earthmoving operations shall be reduced or suspended when wind speed is 25 miles per hour or greater.
- Dust control measures shall be documented as required under CGP Order 2009-0009-DWQ.
- A chemical monitoring program for any "non-visible" pollutants shall be implemented if there is a failure of BMPs.

Construction of new Ponds 6R and 7R would occur in the fall or spring due to temperature requirements for constructing the liner. The construction would be conducted over a six to eight week period. Approximately six to ten additional site workers would be present during the construction period. Workers would be from the local community, with the exception of the specialized geomembrane installation crew (approximately 4 people) from outside the area. See Table 2-1 for the schedule breakdown. Equipment staging would occur within the 55-acre Project area (see Figure 2-2).

Table 2-1. Approximate Construction Schedule

Phase	Equipment	Duration	Daily Working Hours
Materials and Mobilization	Tractor trailer(s)	5 days	8
Excavation	Backhoe, Motor Grader, Smooth Drum Roller	10 days	8
Installation	End Dump, Backhoe, portable generators	5 days	8
Integration	Backhoe	10 days	8
Vegetation	Backhoe	3 days	8

The Compressor Station fencing currently has gaps that would be repaired, as part of the Project, prior to the completion of Project construction.

Project Operation and Maintenance

Once constructed and in operation, no additional facility staff would be required for operation and maintenance. Operation of the facility involves pumping water from onsite PG&E supply wells to the

cooling towers to cool hot compressed natural gas and compressor engine lube oil, and an induced draft cooling tower to cool the combustion air on the compressor turbocharger aftercoolers. Small quantities of acid, biocides and corrosion inhibitors are added to the water to prevent biological growth, scale build-up, and corrosion of the heat exchangers in the cooling water systems. The blowdown from cooling towers is then pumped to a wastewater holding tank, where it is combined with other wastewater sources within the facility that are processed through an oil-water separator, tank before being discharged to the surface impoundments. Intermittent waste streams include wastewater from degreasing, descaling, and closed cooling system operations. The collected waste oil that comes from the oil sump skimmer and oil-water separator is collected for disposal or recycling at an offsite facility. The generated wastewater is subjected to evaporation within the surface impoundments, resulting in an accumulation of sludge. The chemical constituents in wastewater and pond sludge and any leaks through the liner systems are monitored as part of the operation and maintenance procedures. An Operation, Maintenance, and Contingency Plan for day to day operation of the Compressor Station is included in the RWD (Cardno ENTRIX 2012a).

2.2 Monitoring and Reporting Program

A Monitoring and Reporting Program (MRP) is in place under Board Order 6-97-82 for the surface impoundments currently in operation (Ponds 4, 5 and 8). Reports of the MRP are submitted semi-annually to the Lahontan Water Board.

A revised MRP is proposed to include the two new surface impoundments. The revised MRP (proposed as MRP No. R6V-2012-TENT) is designed to document the chemical constituents in wastewater and pond sludge and to provide early warning of any leaks through the liner systems. A Water Quality Protection Standard (WQPS) is presented in the Tentative WDRs and includes Monitoring Parameters, Constituents of Concern (COCs), concentration limits, Monitoring Points and the Point of Compliance, defined as required by CCR Title 27, Section 20405, to ensure the earliest possible detection of a release from the surface impoundments to the underlying soil, groundwater, and/or surface water.

The monitoring system for the uppermost sheet of the liner is the LCRS, a drainage layer between the high-density polyethylene (HDPE) liners that is sloped to a collection sump. Each sump will be inspected weekly to monitor for leaks. Below the surface impoundments, unsaturated (vadose) zone monitoring systems would continue to be monitored at Ponds 4, 5, and 8; and the unsaturated zone pan lysimeters proposed at Ponds 6R and 7R would be added to the program. Lastly, 15 existing wells are proposed to be monitored quarterly for depth to groundwater, and 12 of these wells also would be sampled quarterly for groundwater quality. Semi-annual monitoring reports would continue to be prepared and include all inspections, maintenance logs, field and laboratory data, as well as calculations of groundwater flow rate and direction and graphical and statistical analysis of data to determine compliance with the WQPS. Data packages would be posted quarterly on GeoTracker.

If a leak is suspected, the Discharger (PG&E) would implement an Evaluation Monitoring Program and, if necessary, a Corrective Action Program to cease and correct any potential leaks in the pond liners. A Corrective Action Plan is presented in the RWD (Cardno ENTRIX 2012a, 2012b).

Chapter 3

Environmental Checklist and Discussion

- 1. Project Title:** Class II Surface Impoundments 6R and 7R, PG&E Hinkley Compressor Station
- 2. Lead Agency Name and Address:** Lahontan Regional Water Quality Control Board
14440 Civic Drive, Suite 200
Victorville, CA 92392
- 3. Contact Person and Phone Number:** Lisa Dernbach
(530) 542-5424
- 4. Project Location:** 35863 Fairview Road
Hinkley, CA 92347
- 5. Project Sponsor's Name and Address:** Pacific Gas and Electric Company (PG&E)
3401 Crow Canyon Road
San Ramon, CA 94583
- 6. General Plan Designation:** Public Facilities
- 7. Zoning:** Industrial

8. Description of Project:

The Project consists of adding two new Class II surface impoundments (Ponds 6R and 7R) at the PG&E natural gas Compressor Station next to the three existing surface impoundments (Ponds 4, 5, and 8) because the existing impoundments do not provide sufficient evaporative capacity for proper operation of the Compressor Station. The additional surface impoundments would enable better management of design rate blowdown water from the Compressor Station without possible exceedance of freeboard requirements and provide sufficient capacity to perform surface impoundment maintenance in the future. Refer to Chapter 2, Project Description.

9. Surrounding Land Uses and Setting:

The predominant surrounding land uses are undeveloped open space and rural residential. Refer to Section 3.10 Land Use/Planning.

10. Other Public Agencies Whose Approval is Required:

Agency	Permit	Activity Requiring Permit
Regional Water Quality Control Board – Lahontan Region	Waste Discharge Requirements	Construction, operation and maintenance of surface impoundments
San Bernardino County Planning Department	Temporary Use Permit	Temporary trailers, if any, placed onsite during construction or for periods less than 2 years
State Water Resources Control Board	Coverage under the General Permit for Discharges of Storm Water Associated with Construction Activities	Construction disturbance of 1 acre or more

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this Project (i.e., the Project would involve at least one impact that is a “Potentially Significant Impact”), as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural and Forestry | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology/Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have an impact on the environment that is “potentially significant” or “potentially significant unless mitigated” but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature

Date

Printed Name

For

I. Aesthetics	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.1 Aesthetics

The Project area is an existing industrial facility, Hinkley Compressor Station, located north of the Mojave River and southwest of Mount General off of Highway 58 (Figure 3-1). The surrounding parcels are 5 to 20 acres with single family dwellings on agricultural land. There are no scenic vistas or designated scenic resources or scenic highways in or adjacent to the Project area, and the Project area is not within the view of any such scenic resources (San Bernardino County 2007). The only public views would be from the surrounding roadways, Community Boulevard and Fairway Road.

The new Project features include two additional surface impoundments within the Compressor Station and would not be visible to the public. Highway 58 is approximately 1 mile north of the Compressor Station and approximately 20 feet in elevation below the facility. Community Boulevard and Fairway Road (which extend north and west of the Project area, respectively) provide the closest view of the existing facility. Due to the gentle slope and the Title 27 freeboard requirement (2-foot minimum), the water surfaces of the existing impoundments (Ponds 4, 5 and 8 on Figure 2-2) are not visible from nearby roadways. Similarly, the proposed surface impoundments (Ponds 6R and 7R) would be below grade with at least 2-foot freeboard and, therefore, would not be visible from surrounding public roadways.

- a. **No Impact.** The Project is not located within, or in the vicinity of a scenic vista or any designated scenic resources (San Bernardino County 2007). The two additional surface impoundments would not be visible from any scenic vistas.
- b. **No Impact.** The Highway 58 corridor north of the facility is not a designated scenic highway. The Project is not located within or in the vicinity of a scenic highway or any designated scenic resources as described in the San Bernardino County General Plan (San Bernardino County 2007).

- c. **No Impact.** The Project is located within an industrial facility, and the proposed surface impoundments would be located within the footprint of two former surface impoundments. Changes to the existing facility would visually blend in and would not be noticeable. The Project would not alter the existing character or quality of the site or its surroundings.
- d. **Less than Significant Impact.** Construction of the new surface impoundments would result in approximately 2.2 additional acres of water surface that could be a potential source for glare. However, the surface impoundments would be below grade and have at least a 2-foot freeboard, would not be visible from motorists on surrounding roadways (which are not considered sensitive viewers). Therefore, potential glare from the additional water surface is considered less than significant.

II. Agricultural and Forestry Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<p>In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board.</p> <p>Would the project:</p>				
<p>a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>d. Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.2 Agricultural and Forestry Resources

The Project area is an existing industrial facility with a County zoning designation of Public Facilities (Figures 2-2 and 3-2). The Project area does not include any agricultural land, land under Williamson Act contract, or forest land (San Bernardino County 2007). Surrounding land uses are rural with the following County zoning designations: RL (Rural Living), RL-5 (Rural Living 5-acre minimum), and RL-10-AP (Rural Living 10-acre minimum, Agricultural Preserve) (San Bernardino County 2007). The surrounding area has historically been limited to single family houses on 5 to 10 acre lots with one mercantile gas station north of the facility (Figure 3-2).

The Project area is located in Hinkley Valley, which was dominated by agricultural uses from the 1930s to the early 1990s. The agricultural types have varied, but consisted primarily of dairy farming and fodder crops such as alfalfa and barley. Some parcels have included orchard crops, such as a pistachio orchard location less than one mile west of the Project area (Cardno ENTRIX 2012a). The number of parcels under active crop cultivation has declined over the last two decades. As shown in Figures 3-1 and 3-2, land uses adjacent to the Project area are no longer used agriculturally and can be classified as undeveloped (Cardno ENTRIX 2012a). Agriculture continues to play a major role in land use management for the Hinkley area and is an important economic element for its residents. The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) has designated prime farmlands and farmlands of statewide importance to agricultural lands located north of SR 58 and east of the Compressor Station. Williamson Act lands are associated with agricultural areas directly north of SR 58, located north of the Project Area.

- a. **No Impact.** No farmland would be converted as a result of project implementation. The Project area is within the existing industrial facility and does not include any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.
- b. **No Impact.** The Project would not conflict with existing zoning for agricultural use because the Project area is zoned Public Facilities. The Project would not affect Williamson Act contracts because there are no Williamson Act farmlands in the Project area.
- c. **No Impact.** The Project would not conflict with existing zoning or cause rezoning of forest land or timberland because there is no forest land, timberland, or timberland-zoned lands within or adjacent to the Project area.
- d. **No Impact.** The Project would not result in the loss of forest land or conversion of forest land to non-forest use because there is no forest land within or adjacent to the Project area.
- e. **Less than Significant.** The Project would not result in changes to the existing environment that could result in the conversion of forest land to non-forest use because there is no forest land in the vicinity that could be affected by the Project. Potential effects of vegetation removal are addressed in Section 3.4, Biological Resources.

The Project would not result in changes to the existing environment that would directly result in the future conversion of farmland to non-agricultural use. The proposed surface impoundments are designed to manage non-hazardous (designated) wastewater and would be built with state-of-the-art multiply-redundant containment systems that minimize the risk of releases to groundwater supplies. Not only are the surface impoundments engineered with double liners and a LCRS, but also, as part of the Project, a revised Monitoring and Reporting Program would be established to document the chemical constituents in wastewater and pond sludge and would provide early

warning of any leaks through the liner systems. With early detection, any leaks from the new surface impoundments would result in immediate remedial actions. Within a one-mile radius of the Project area, groundwater is used for agricultural purposes. If groundwater drawdown were to affect agricultural wells, it could substantially disrupt existing agricultural activities. Since the Project would not increase pumping from the groundwater aquifer over historic pumping rates, groundwater drawdown is not expected to occur, and therefore additional pumping would not affect agricultural uses. Therefore, the potential for conversion of farmland to non-agricultural use is considered to be a less than significant impact.

III. Air Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.3 Air Quality

Regulatory Setting

The Clean Air Act (CAA), enacted in 1963 and amended several times thereafter (including the 1990 amendments), establishes the framework for modern air pollution control. The CAA directs the U.S. Environmental Protection Agency (EPA) to establish ambient air standards for six pollutants: carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), ozone (O₃), and lead (Pb). The California Air Resources Board (CARB) administers the CAA, administers the California Clean Air Act (CCAA), and establishes the California Ambient Air Quality Standards (CAAQS), which in most cases are stricter than the National Ambient Air Quality Standards (NAAQS).

The Project area is located in San Bernardino County and is within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). As such, according to the state and federal CAA's, the MDAQMD, in concert with the county, is required to develop plans and rules for attaining NAAQS and CAAQS, shown in Table 3-1 (California Air Resources Board 2012; U.S. Environmental Protection Agency 2011a). Further, the MDAQMD is responsible for developing and implementing rules and regulations to attain the NAAQS and CAAQS, as well as permitting new or modified stationary sources and developing of air quality management plans.

Table 3-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards		National Standards	
		ppmv	$\mu\text{g}/\text{m}^3$	ppmv	$\mu\text{g}/\text{m}^3$
Ozone (O_3)	1-hour	0.09	177	—	—
	8-hour	0.07	137	0.075	147
Nitrogen Dioxide (NO_2)	1-hour	0.18	338	0.100	188
	Annual	0.03	56	0.053	100
Sulfur Dioxide (SO_2)	1-hour	0.25	655	0.075	196
	3-hour (secondary)	—	—	0.50	1,309
	24-hour	0.04	105	—	—
	Annual	—	—	0.03	79
Carbon Monoxide (CO)	1-hour	20	22,898	35	40,071
	8-hour	9	10,304	9	10,304
	Lake Tahoe (8-hr)	6	6,869	—	—
Particulates (as PM ₁₀)	24-hour	—	50	—	150
	Annual	—	20	—	—
Particulates (as PM _{2.5})	24-hour	—	—	—	35
	Annual	—	12	—	15
Lead (Pb)	30-day	—	1.5	—	—
	3-month (rolling)*	—	—	—	0.15
Sulfates (as SO_4)	24-hour	—	25	—	—
Hydrogen Sulfide (H_2S)	1-hour	0.03	42	—	—
Vinyl Chloride ($\text{C}_2\text{H}_3\text{Cl}$)	24-hour	0.01	26	—	—
Visibility Reducing Particles	8-hour	Extinction coefficient of 0.23 per km; visibility of 10 miles or more (0.07 to 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70%.		—	—

Sources: California Air Resources Board 2012; U.S. Environmental Protection Agency 2011a

Standard Temperature: 25°C

Standard Molar Volume: 24.465 liter/g-mole

Notes:

ppmv = parts per million by volume

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

*The 1.5 $\mu\text{g}/\text{m}^3$ federal quarterly lead standard applied until 2008; 0.15 $\mu\text{g}/\text{m}^3$ rolling 3-month average thereafter

For gases, $\mu\text{g}/\text{m}^3$ calculated from ppmv based on molecular weight and standard conditions

Local monitoring data is used to designate areas as nonattainment, maintenance, attainment, or unclassified for the NAAQS and CAAQS. The San Bernardino County portion of the Mojave Desert is a State “moderate” nonattainment area for O_3 and a State nonattainment area for PM₁₀ and PM_{2.5}. For

all other CAAQS, San Bernardino County is in attainment or unclassified. San Bernardino County is a Federal “moderate” nonattainment area for ozone, a Federal “moderate” nonattainment area for PM₁₀, and a federal “maintenance” area for CO. For all other NAAQS, San Bernardino County is unclassified. The MDAQMD receives data from ambient air monitoring stations at Barstow (O₃, NO₂, CO), Hesperia (O₃), Lancaster (O₃, NO₂, CO, PM₁₀), Phelan (O₃), Trona (O₃, NO₂, SO₂, PM₁₀), Twenty-nine Palms (O₃, NO₂, SO₂, CO, PM₁₀), and Victorville (O₃, NO₂, SO₂, CO, PM₁₀). (California Air Resources Board 2011; U.S. Environmental Protection Agency 2012a; Mojave Desert Air Quality Management District 2011, 2012b).

The conservation/air quality element of the San Bernardino County General Plan (San Bernardino County 2007) contains control measures aimed at avoiding and reducing emissions of air contaminants into the local environment. At the District level, air quality plan development requirements vary dependent upon the type of plan and the underlying Federal or State planning guidelines. The MDAQMD has developed the following state- and federally-approved air quality management plans (AQMPs) which address the air quality issues of ozone and particulate matter: 1995 Mojave Desert Planning Area Federal PM₁₀ Attainment Plan; 2004 MDAQMD Ozone Attainment Plan; 2005 List and Implementation Schedule for District Measures to Reduce PM; and 2008 MDAQMD Federal 8-Hour Ozone Attainment Plan. District rule development is generally governed by Chapter 6.5 of Part 3 of Division 26 of the California Health & Safety Code, Sections 40725-40731. All Rules and Regulations adopted by the MDAQMD are required to undergo a public notice of no less than 30 days (§40725), a public hearing (§40726), and require certain findings to be made prior to adoption (§40727). Special analysis are required in certain situations (§40727.2–40728.5) (Mojave Desert Air Quality Management District 2012a). The project may be subject to various MDAQMD rules, including but not limited to, the following.

- **MDAQMD Rule 402—Nuisance:** Forbids the discharge of such quantities of air contaminants or other material that cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health or safety of any such persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property.
- **MDAQMD Rule 403.2—Fugitive Dust Control for the Mojave Desert Planning Area:** Restricts fugitive dust from construction/demolition and other activities in the Mojave Desert Planning Area (which includes the Project area). Specifies numerous restrictions to operators of construction/demolition for all projects greater than a half-acre in size (e.g., periodic watering, covering loaded haul vehicles, stabilize graded surfaces, cleanup project dust/debris on paved surfaces, reduce non-essential earth moving), and specifies additional rules for projects disturbing more than 100 acres per day (e.g., dust control plan, stabilized access routes). The project area would not disturb more than 100 acres per day, but would be nonetheless required to implement fugitive dust control.
- **MDAQMD Rule 404—Particulate Matter Concentration:** A person shall not discharge into the atmosphere from any source particulate matter, except liquid sulfur compounds, in excess of the concentration at standard conditions.

The MDAQMD also regulates a large variety of stationary sources of air pollution through the permitting process. The Project would not require a permit from the MDAQMD because it does not involve construction or installation of equipment. The Hinkley facility is a Federal Operating Permit (Title V of the Federal Clean Air Act 42 U.S.C. §§7661-7661f) source subject to MDAQMD Regulation

XII, including Rule 1201—Definitions, Rule 1211—Greenhouse Gas Provisions, and Rule 1205—Modifications.

The Project would occur at the facility which Rule 1201 defines as any permit unit, group of permit units, non-permitted equipment, or any combination thereof which emits or may emit an air pollutant [including greenhouse gases as defined in Rule 1211]; and belongs to a single major industrial group in the Standard Industrial Classification Manual; and is located on a single parcel of land or on contiguous property within the District; and which is owned or operated by the same person or by persons under common control. However, the Project would not involve changes to any equipment which is required to have a permit to operate under District Rule 203. Therefore, no Title V permit modification would be required pursuant to Rule 1205 for the Project to proceed.

Pursuant to District Rule 1104, any repair-related solvent cleaning of construction equipment by contractors would entail the use of exempt consumer products such as aerosol cans or small containers (1 quart or smaller) unless the total accumulative use is greater than 160 ounces (5 quarts) of solvent per day.

Sensitive Receptors

Certain population groups are considered more sensitive to air pollution and odors than others. In particular, these population groups include children and elderly, acutely ill and chronically ill persons, especially those with cardio respiratory diseases such as asthma and bronchitis. Sensitive receptors (land uses) indicate locations where such individuals are typically found, and thus include schools, daycare centers, hospitals, convalescent homes, residences of sensitive persons, and parks with active recreational uses, such as youth sports.

A project with the potential to expose sensitive receptors (including residential areas) or the general public to substantial levels of toxic air contaminants, as designated by CARB under 17 CCR Subchapter 7, Sections 93000 and 93001, would be deemed to have a significant impact. The MDAQMD indicates that the following project types and specified distances must be evaluated to identify pollutant concentrations for nearby receptors:

- Any industrial project within 1000 feet.
- A distribution center (40 or more trucks per day) within 1000 feet.
- A major transportation project (50,000 or more vehicles per day) within 1000 feet.
- A dry cleaner using perchloroethylene within 500 feet.
- A gasoline dispensing facility within 300 feet.

Receptors near the Project area include sporadic residential receptors west of the Project area, with the closest residence approximately 1,000 feet away. In addition, a senior center with a children's playground is located less than one mile to the west.

Significance Criteria

Appendix G in the CEQA Guidelines states that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to determine the Project's level of impact.

The MDAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions, as shown in Table 3-2. The MDAQMD considers direct impacts to be those that result directly from a proposed project. In this case, the direct impacts would be construction emissions from both on- and off-road vehicle and equipment sources during construction activities. Indirect impacts would be impacts that result from changes that would occur as a result of the project. An example would be new roadway infrastructure to support a new subdivision. Cumulative impacts are the combination of direct and indirect impacts. Therefore, the same thresholds are used to determine a project-level impact and a “cumulatively considerable” net increase in criteria pollutants (Mojave Desert Air Quality Management District 2011). Pursuant to MDAQMD guidelines, the project’s construction and operational criteria pollutant emissions are summed daily and compared to the daily thresholds in Table 3-2. Additionally, for purposes of disclosure, total emissions are summed and compared to the annual thresholds in Table 3-2.

Table 3-2. Mojave Desert Air Quality Management District Significance Thresholds for Construction and Operations

Threshold	ROG	NO _x	CO	SO _x	PM10	PM2.5	CO _{2e} *
Daily Threshold (pounds)	137	137	548	137	82	82	548,000
Annual Threshold (tons)	25	25	100	25	15	15	100,000

Source: Mojave Desert Air Quality Management District 2011.

Notes:

The MDAQMD also includes thresholds for H₂S and lead, but those are not included in this analysis, as none of the project alternatives would result in H₂S or lead emissions.

CO_{2e} = Carbon dioxide equivalent

MTCO_{2e} = Metric tons of carbon dioxide equivalent

*Although MDAQMD has adopted this CO_{2e} threshold, the analysis herein uses San Bernardino County’s 3,000 MTCO_{2e} threshold. See Section 3.7 for a discussion of GHG emissions.

With respects to pollutant concentrations at nearby sensitive receptors, the MDAQMD recommends using the following thresholds: total cancer risk of 10 in a million and a noncancerous hazard index greater than or equal to 1. Diesel particulate matter (DPM) is considered a toxic (carcinogenic) air contaminant in California (Section 93000). A screening-level Health Risk Assessment (HRA) for DPM was performed using conservative methodology for maximum and average activity levels and timeframes.

- a. **Less than Significant.** The Project would not conflict with or obstruct implementation of applicable air quality plans as described under *Regulatory Setting*. The MDAQMD attainment and maintenance plans were crafted to bring the MDAB into attainment status for all criteria pollutants. Pursuant to MDAQMD guidelines, a project is considered to be consistent with applicable air quality plans if it complies with all applicable rules and regulations, complies with proposed control measures of the plan to be adopted, and is consistent with growth forecasts in the applicable air quality plan or plan that was used as the basis of growth forecasts (i.e., relevant land use plans or general plans). The Project would not result in population or employment growth that exceeds the projections in the most recent ozone or PM10 plans described above. As such, Project-related emissions are accounted for in the applicable air

quality plans as general construction emissions. The Project would not create a permanent stationary source of emissions and would comply with MDAQMD rules and regulations. Further, temporary construction-related emissions of criteria pollutants would not exceed MDAQMD significance thresholds, as discussed for “b” below and as shown in Table 3-3.

- b. **Less than Significant.** The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Operation and maintenance activities associated with the two additional surface impoundments would not result in stationary source emissions or long-term source emissions, as no additional facility staff would be required. However, construction activities would result in short-term emissions.

Construction activities would result in fugitive dust from site disturbance, emissions from off-road equipment, and dust and exhaust emissions from on-road and off-road vehicle travel (heavy duty haul trucks, material delivery trucks, and construction employee commutes). Table 3-3 summarizes the equipment that would be used during Project construction. Emissions were estimated consistent with the methodology described in Appendix A. As shown in Table 3-4, Project-related construction emissions would not exceed daily or annual MDAQMD thresholds. Incremental impacts would be small, temporary, and would permanently cease upon Project completion.

Table 3-3. Planned Construction Equipment for Project

Phase—Activity	Equipment Needed	Category	Planned Quantity
Phase 1—Earthwork & Contouring	Backhoe/Loader (CAT 450)	Off-road	1
	Motor Grader (CAT 140)	Off-road	1
	Roller (CAT CB34)	Off-road	1
	Pickup Truck/SUV	On-road LD	4
	Semi Truck w/Flatbed Trailer (equipment)	On-road HHD	3
	Water Truck	On-road HHD	1
Phase 2—Liner & Membrane Installation	Backhoe/Loader (CAT 450)	Off-road	1
	Generator (10 kW)	Off-road	2
	Pickup Truck/SUV	On-road LD	8
	Dump Truck (rock)	On-road HHD	1
	Semi Truck w/Flatbed Trailer (GCL)	On-road HHD	5
	Semi Truck w/Flatbed Trailer (HDPE)	On-road HHD	4
	Semi Truck w/Flatbed Trailer (equipment)	On-road HHD	1
Water Truck	On-road HHD	1	
Phase 3—Miscellaneous Piping & Electrical Installation	Backhoe/Loader (CAT 450)	Off-road	1
	Pickup Truck/SUV	On-road LD	4
	Haul Truck (waste materials)	On-road HHD	1
	Semi Truck w/Box Trailer (piping)	On-road HHD	1
	Semi Truck w/Flatbed Trailer (equipment)	On-road HHD	1
	Water Truck	On-road HHD	1

Source: Applicant (PG&E)

Notes:

LD = light duty, MD = medium duty, HHD = heavy heavy duty

Table 3-4. Estimated Construction Criteria Emissions—CEQA Thresholds

Criteria Emissions	Maximum lbs/day	Threshold lbs/day	Daily Significance	Total Project tons	Threshold tons/yr	Annual Significance
Volatile Organic Compounds (VOC)	8.5	137	Less	0.030	25	Less
Carbon Monoxide (CO)	41.6	548	Less	0.163	100	Less
Oxides of Nitrogen (NO _x)	134.4	137	Less	0.316	25	Less
Sulfur Dioxide (SO ₂)	0.2	137	Less	0.000	25	Less
Respirable Particulates (PM ₁₀)	19.6	82	Less	0.111	15	Less
<i>Combustion Particulates (C- PM₁₀)</i>	7.9	--	--	0.020	--	--
<i>Fugitive Dust (F-PM₁₀)</i>	11.7	--	--	0.091	--	--
Fine Particulates (PM _{2.5})	8.3	82	Less	0.030	15	Less
<i>Combustion Particulates (C- PM_{2.5})</i>	6.6	--	--	0.017	--	--
<i>Fugitive Dust (F-PM_{2.5})</i>	1.7	--	--	0.013	--	--

Sources: U.S. Environmental Protection Agency 2011b; National Oceanic and Atmospheric Administration 2008; Mohave Desert Air Quality Management District 2011; EMFAC2011 web-tool.

Note: The calculations are shown in Appendix A (as revised by ICF).

The Project is required to comply with dust control requirements of MDAQMD Rule 403.2, but a dust control plan is not required because the Project area is less than 100 acres. As stated under *Project Construction* in Section 2.1 Proposed Project, construction activities would be conducted in accordance with CGP Order 2009-0009-DWQ, which requires development and implementation of a SWPPP, and with MDAQMD requirements for dust control. The SWPPP and construction specifications would include, but not be limited to, the following BMPs to minimize dust.

- During excavation and grading activities, spray water shall be used to control fugitive dust.
 - Non-essential earthmoving operations shall be reduced or suspended when wind speed is 25 miles per hour or greater.
 - Dust control measures shall be documented as required under CGP Order 2009-0009-DWQ.
 - A chemical monitoring program for any "non-visible" pollutants shall be implemented if there is a failure of BMPs.
- c. **Less than Significant.** The MDAB is currently in nonattainment for ozone under NAAQS as well as ozone, PM₁₀, and PM_{2.5} under CAAQS, which is a result of past and present projects and will be further impeded by reasonably foreseeable future projects. In addressing cumulative effects for air quality, the MDAQMD's attainment and maintenance plans set forth comprehensive programs to bring the MDAB into compliance with state and federal air quality standards for ozone, PM₁₀, and PM_{2.5} and uses control measures and related emission reduction estimates based on emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. As

discussed above, the Project is in conformance with the AQMPs, Project-related construction emissions would be below MDAQMD thresholds and operations would be minimal and not result in long-term sources of emissions. Therefore, the Project's incremental contribution to criteria pollutant emissions is not cumulatively considerable, and this impact would be less than significant.

- d. **Less than Significant.** The Project would not expose sensitive receptors to substantial pollutant concentration during construction or operation.

Operation and maintenance activities associated with the three existing impoundments (i.e., holding ponds for the evaporation of wastewater generated from the facility) do not create air pollutant concentrations, except a minor amount associated with employee vehicle emissions commuting to the facility. The two additional impoundments would not require additional facility staff so there would be no increase in these air pollutants. Further, as described above, the nearest sensitive receptors to the Project area include sporadic residential receptors and a senior center with a children's playground west of the Project area.

Construction activities would result in short-term emissions from the use of diesel-powered equipment and vehicles. Diesel exhaust, particularly DPM, is considered a toxic air contaminant by CARB; and exposure of sensitive receptors (e.g., residences, schools) to toxic air contaminants should be limited. Potential health risk associated with diesel exhaust was estimated using EPA's AERSCREEN model. As shown in Table 3-5, emissions of DPM during construction would not be sufficient to pose a significant risk to the nearest sensitive receptors from construction equipment operations (U.S. Environmental Protection Agency 1992; U.S. Environmental Protection Agency 2011c; National Oceanic and Atmospheric Administration 2008; California Environmental Protection Agency 2009; World Climate 2012).

Table 3-5. Screening Health Risk Assessment for Construction Period—Onsite

DPM Screen Parameter	Units	Maximum	Average
Onsite Total PM10 Exhaust	pounds	1.2	17
Onsite Emission Rate	g/sec	6.24E-03	3.57E-03
Receptor Distance	meters	425	425
Annual Concentration	µg/m ³	0.4651	0.2661
Unit Risk Value (70-year MEI)	(µg/m ³) ⁻¹	3.00E-04	3.00E-04
Activity Duration	days	5	25
Annual MEI Correction	fraction	0.0002	0.0010
Cancer Risk	probability	2.7E-08	7.8E-08
	per million	0.03	0.08
CEQA Threshold	per million	10	10
	significance	Less	Less

Sources: NOAA 2008, EPA 1992, EPA 2011c, OEHHA 2009, WC 2012, MDAQMD 2011

Notes:

DPM = diesel particulate matter (PM₁₀)

Maximum is for most intensive activity (Phase 1); Average is for entire project

70-year Maximally Exposed Individual = 25,550 days = 613,200 hours

(Cardno ENTRIX screening-level analysis)

- e. **Less than Significant.** The Project could create a small amount of odor from vehicle exhaust and dust during construction, but it would not be noticeable to the nearest residents with implementation of mitigation measures, nor affect a substantial number of people due to the sparsely populated area and distance of the work site from sensitive receptors. Further, during construction, all diesel-powered equipment would use California ultra-low sulfur diesel fuel with a maximum sulfur content of 15 parts per million (ppm) by weight, minimizing emissions of sulfurous gases (sulfur dioxide, hydrogen sulfide, carbon disulfide, and carbonyl sulfide).

IV. Biological Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.4 Biological Resources

Several biological surveys have been conducted at the Compressor Station (McClenahan & Hopkins Associates 1990; Pacific Gas and Electric 1990; Kiva Biological Consulting 1992; Transcon Environmental 2011; Phoenix Biological Consulting 2012). Following the closure of the former surface impoundments (Ponds 6 and 7) in the mid-1990s, vegetation re-established, as shown on Figure 3-3. The sloped sides of the former surface impoundments are sparsely covered with non-native Russian thistle (*Salsola tragus*). Saltbush shrub species (*Atriplex*) and non-native grasses

dominate the bottom of the former surface impoundments, and small mammal burrows are present (Transcon Environmental 2011; Phoenix Biological Consulting 2012).



Figure 3-3. Photograph of Current Biological Habitat in Pond 6/7 Area

Although the Project area is fenced, gaps at the base of the chain link fencing have allowed wildlife to move within and across the Project area (Transcon Environmental 2011). The Project area is surrounded by a mosaic of habitat types. A mix of low density development and native habitat is located north/northwest, and agricultural land is present east of the Project area. Saltbush scrub habitat occurs immediately outside of the Compressor Station, and is connected with additional native shrub habitat extending north of the facility and south to the Mojave River.

A search of the California Natural Diversity Database (CNDDDB) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants, conducted by Cardno ENTRIX in 2012, indicates that eight listed or sensitive species have been recorded within 5 miles of the Project area (Table 3-6). Additionally, the desert kit fox is known to occur in the desert area. Most of these plant and wildlife species are not expected to occur in the Project area given the lack of high quality habitat at the Compressor Station. However, suitable habitat is present for the following five wildlife species:

- Desert tortoise (federally listed Threatened, state-listed Threatened),
- Mohave ground squirrel (state-listed Threatened),
- Burrowing owl (California Species of Special Concern),
- American Badger (California Species of Special Concern), and
- Desert Kit Fox (protected by Mammal Hunting Regulations 2011–2012).

Table 3-6. Special Status Species Documented in the Project Vicinity

Species	Habitat Requirements
Plants^a	
Beaver Dam breadroot, <i>Pediomelum castoreum</i>	Joshua Tree Woodland, Mojavean Desert Scrub
Mojave monkeyflower, <i>Mimulus mohavensis</i>	Joshua Tree Woodland, Mojavean Desert Scrub
Chaparral sand-verbena, <i>Abronia villosa</i> var. <i>aurita</i>	Chaparral, Coastal Scrub
Wildlife	
Desert tortoise ^{b,c} , <i>Gopherus agassizii</i>	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat.
Mojave fringe-toed lizard ^d , <i>Uma scoparia</i>	Fine, loose, wind-blown sand in sand dunes, dry lakebeds, riverbanks, desert washes, sparse alkali scrub and desert scrub.
Burrowing owl ^d , <i>Athene cunicularia</i>	Open, dry annual or perennial grasslands deserts and scrublands characterized by low-growing vegetation.
Mohave ground squirrel ^c , <i>Xerospermophilus mohavensis</i>	Open desert scrub, alkali scrub and Joshua tree woodland. Also feeds in annual grasslands. Restricted to the Mojave Desert.
American badger ^d , <i>Taxidea taxus</i>	Drier open stages of most shrub and herbaceous habitats, with friable soils
Desert kit fox ^e , <i>Vulpes macrotis arsipus</i>	Desert areas with annual grasslands or grassy open stages of vegetation dominated by scattered brush, shrubs, and scrub
<p>a. CDFG Rare Plant Rank Species (California Department of Fish and Game 2012b)</p> <p>b. Federally listed as Threatened</p> <p>c. State-listed as Threatened</p> <p>d. California Species of Special Concern (California Department of Fish and Game 2008)</p> <p>e. The Mammal Hunting Regulations 2011–2012, Subdivision 2. Game and Furbearers, Chapter 5. Furbearing Mammals, §460 states that fisher, marten, river otter, desert kit fox and red fox may not be taken at any time.</p>	
Source: California Department of Fish and Game 2012a; California Native Plant Society 2012	

Desert Tortoise. The Project area is not designated as critical habitat for the desert tortoise, and desert tortoise have not been recorded in the Project area during previous biological surveys. However, desert tortoise is known to occur in the vicinity of the project site. Critical habitat for the state and federally-listed desert tortoise is located within 2.5 miles northeast and 5.5 miles west of the Project area, and both locations are contained within the Superior-Cronese Desert Wildlife Management Area (U.S. Fish and Wildlife Service 2011). Nine records of desert tortoise sign (e.g., scat, burrows) have been documented within five miles north and west of the Compressor Station (California Department of Fish and Game 2012a). Specific locations of live desert tortoise are suppressed due to sensitivity, but areas within one mile north and one mile south of the Project area are potentially occupied habitat (California Department of Fish and Game 2012a). Desert tortoise is known to transit areas outside of the Compressor Station boundary (W. Rhodehamel, PG&E biologist, personal communication, May 16, 2012). However a survey performed in October 2011 by Transcon Environmental, Inc. reported no sign of desert tortoise or desert tortoise burrows (Transcon Environmental 2011). Phoenix Biological Consulting (2012) reports that during six days

of trapping for Mohave ground squirrel within the Project area, there were 12 plant species and 24 animals identified, and desert tortoise was not reported. Although there are the known locations for desert tortoise in the vicinity of the Project, it is considered to have a low potential to occur within the Project area footprint due to low quality habitat conditions.

Mohave Ground Squirrel. The Project area is within the range of Mohave ground squirrel. Two possible recorded observations are located within 3.5 miles of the Compressor Station to the east and southeast (California Department of Fish and Game 2012a). Phoenix Biological Consulting conducted protocol presence/absence trapping surveys for Mohave ground squirrel at the Project area between April and June 2012 in accordance with the survey guideline requirements of the California Department of Fish and Game (California Department of Fish and Game 2003; Phoenix Biological Consulting 2012). A summary of the survey results is presented in Appendix B. Based on the surveys, Mohave ground squirrel is considered to be absent from the Compressor Station (Young pers. comm.). Additional protocol surveys are ongoing throughout the Hinkley area, between North Mountain General Road to the North and the Mojave River to the South; the results of the 2012 trapping sessions in this area were also negative for Mohave ground squirrel (Rhodamel pers. comm.).

Burrowing Owl. Numerous records of burrowing owl have been documented in the Project vicinity (California Department of Fish and Game 2012a), and suitable foraging habitat and small mammal burrows are present (Phoenix Biological Consulting 2012) on the Project area. However, burrowing owl has not been previously recorded at the Project area (Transcon Environmental 2011; Phoenix Biological Consulting 2012). Therefore, this species is considered to have a low potential for occurrence on the Project area and surroundings.

American Badger and Desert Kit Fox. The literature search provided two observation records for American badger in the Project vicinity (California Department of Fish and Game 2012a); however in the area of the proposed impoundments, low quality foraging habitat is present. Due to the lack of any noted large suitable burrows within the two new surface impoundments (Transcon Environmental 2011; Phoenix Biological Consulting 2012), the species is considered to have a low potential for occurrence.

Kit fox are known to inhabit desert scrub and the Project area supports low quality foraging habitat. Due to the lack of any large suitable burrow complexes within the two new surface impoundments (Transcon Environmental 2011; Phoenix Biological Consulting 2012), the species is considered to have a low potential for occurrence.

Other Species. In addition to the species documented by CNDDDB, the Project area supports limited foraging habitat for three other California species of special concern known from the region: ferruginous hawk (*Buteo regalis*) (only present as transient migrant or winter resident), loggerhead shrike (*Lanius ludovicianus*), and prairie falcon (*Falco mexicanus*). Existing trees associated with developments in the Project vicinity provide suitable roosting habitat for these special-status species. No suitable nesting habitat (almost exclusively rock ledges) occurs on the Project area for prairie falcon. Suitable nesting habitat may be present in the Project area and vicinity for loggerhead shrike. In California, loggerhead shrike typically nests in large shrubs or trees (Humble 2008) but can also use weedy plant species (e.g., Russian thistle) and man-made structures.

Other bird species could also nest within the Project area, within the vegetation in the former Pond 6 and 7 footprints, or even on bare ground. All bird nests are protected during the breeding season

under the federal Migratory Bird Treaty Act (MBTA) and CDFG Code Sections 3503, 3503.5, 3511, 3513.

- a. **Less than Significant with Mitigation Incorporated.** The project could adversely affect species identified as a candidate, sensitive, or special-status species in local and regional plans and by the California Department of Fish and Game and U.S. Fish and Wildlife Service.

Desert Tortoise. As stated in Section 2.1 above, the two new impoundments would comprise 2.48 acres. Therefore, the Project would result in the removal of approximately 2.48 acres of low quality habitat for desert tortoise, which could result in direct impact to the species if it is present or utilizes the 2.48-acre impoundment area. In addition, desert tortoise may be subject to indirect impacts from ground vibration that is expected to occur for a 2 week period during construction. There could be increased risk of desert tortoise mortality due to collision with construction-related vehicles. The Compressor Station fencing currently has gaps that allow wildlife to access the Project area, including the surface impoundment area. As stated under *Project Construction* in Section 2.1 Proposed Project, the fencing would be repaired, which would minimize long-term indirect impacts to desert tortoise due to collision and entrapment. The existing ponds have established a baseline of available surface water to desert tortoise predators such as common raven, which would only minimally increase with the implementation of this project. Implementing **Mitigation Measures BIO-1, BIO-5 and BIO-6** would reduce potential direct and indirect impacts to a less than significant level because it requires several protection measures be implemented that would avoid and minimize potential impacts during construction and once the project is operating.

Mohave Ground Squirrel. As described above, protocol presence/absence trapping surveys for Mohave ground squirrel were constructed in the Project area between April and June 2012, and the Mohave ground squirrel has been determined as absent from the Project area (**Appendix B**, Phoenix Biological Consulting 2012). Therefore, no impacts would occur to Mohave ground squirrel as a result of the Project.

Burrowing Owl. The Project would result in the removal of approximately 2.48 acres of low quality foraging and potential nesting habitat for burrowing owl, which could result in direct impact to the species if it is present or utilizes the Project area. In addition, burrowing owl may be subject to indirect impacts during construction of the Project from increased noise levels (up to 66 dB at 500 feet-see Table 3-8) and increased ground vibration that is expected to occur for a 2 week period during construction. Increased noise and vibration could result in a reduction of burrowing owl nesting success in the vicinity of the Project. Implementing **Mitigation Measures BIO-2, BIO-5 and BIO-6** would reduce impacts to a less than significant level because it includes avoidance, impact minimization and protection measures be implemented during construction.

American Badger and Desert Kit Fox. The Project would result in the removal of approximately 2.48 acres of potentially foraging habitat for American badger and desert kit fox, which could result in direct impact to the species if it is present or utilizes the two new surface impoundments. No suitable dens or burrow complexes were reported during recent biological surveys (Transcon Environmental 2011; Phoenix Biological Consulting 2012).

In addition, American badger and desert kit fox may be subject to indirect impacts during construction, such as elevated levels of human activity that would likely cause animals to avoid the project site. This may also include increased ground vibration that is expected to occur for a

2 week period during construction. Increased vibration could result in an abandonment of a natal American badger and/or desert kit fox den. **Mitigation Measures BIO-3, BIO-4 and BIO-6** would reduce impacts to significance less than significant level because it includes protection measures if the species are identified during preconstruction surveys.

Loggerhead Shrike and Other Nesting Bird Species. The Project area does not include suitable nesting habitat for loggerhead shrike, but it does include suitable nesting habitat for other species afforded protection by the Migratory Bird Treaty Act and California Fish and Game Code. If construction-related clearing, grubbing, or soil disturbance occurs on the Project area between February 1 and August 31, the Project could result in the direct impact of disturbing nesting bird species and their nests, which is a violation of the Migratory Bird Treaty Act and Fish and Game Code. In addition, nesting bird species may be subject to indirect impacts from increased noise levels (up to 66 dB at 500 feet-see Table 3-8) and increased ground vibration that is expected to occur for a 2 week period during construction. Increased noise and vibration could result in nest abandonment. **Mitigation Measures BIO-4, BIO-5 and BIO-6** would reduce impacts to a less than significant level because it includes avoidance, impact minimization and protection measures be implemented during construction.

The following mitigation measures will be incorporated into the Project to avoid and minimize potential impacts to listed species, and other species considered to have special status.

Mitigation Measure BIO-1: Implement desert tortoise protection measures during construction. The project applicant will ensure the following measures are implemented and included in construction specifications.

- Prior to surface disturbance and construction activities, a qualified biologist will conduct a preconstruction clearance survey for desert tortoise within the Project area to ensure that all tortoise are absent, or that any tortoises that present move passively off site and out of harm's way. The protocol (U.S. Fish and Wildlife Service 2009) states that two consecutive surveys will be conducted immediately prior to surface disturbance within the Project area.
- Following the pre-construction survey and prior to surface disturbance, the construction contractor in coordination with a qualified biologist will place desert tortoise exclusion fencing along the perimeter of the proposed work areas to prevent encounters with desert tortoise during construction activities. The specifications of the desert tortoise exclusion fencing will follow USFWS (Desert Tortoise Field Manual: Chapter 8. Desert Tortoise Exclusion Fence) (U.S. Fish and Wildlife Service 2009).
- A qualified biologist will remain at the site during work hours and conduct daily pre-construction clearance surveys in areas to be disturbed until temporary tortoise-proof fencing has been installed to exclude desert tortoises from entering the work area. The qualified biologist will also inspect the condition of tortoise-proof fencing. If desert tortoises are found within the construction areas, a qualified biologist will ensure it moves away passively.
- Until tortoise-proof fencing is in place around the Project area, no open trenches, excavations or other potential trap hazards will be left unfenced or uncovered overnight. These hazards will be removed each day prior to the work crew and biologist leaving the Project area as long as it is not fully enclosed by tortoise-proof fencing.

- Until tortoise-proof fencing is in place around the Project area, parked vehicles and equipment within the Project area will be inspected by workers (as instructed through the project environmental awareness training) prior to being moved each day. If a tortoise is found beneath vehicles or equipment, it will be monitored until it moves out of the area. Under no circumstances should the tortoise be moved or touched.
- All construction activities, vehicle parking, equipment and material storage areas will be contained within the area surrounded by tortoise-proof fencing.
- Prior to and during construction, all desert tortoises sighted within the Project area will be immediately reported to the qualified biologist and project foreman, and any construction activity that could potentially jeopardize the tortoise will be halted immediately until the desert tortoise moves passively (on its own) from harm's way. Desert tortoises observed in the Project area will be monitored and allowed to move out of the project area passively.
- If a desert tortoise is injured or killed, the authorized biologist will be notified, the injury or death documented, and the animal taken to a qualified veterinarian or the carcass removed by the biologist. If an injured desert tortoise is identified that may have been affected by Project-related activities, a qualified biologist will immediately transport the animal to a veterinary clinic approved by CDFG. PG&E will be responsible for payment of any veterinarian bills for injured tortoises. CDFG and USFWS will be notified in writing within five calendar days, with photographs and a written description of any injury/mortality, circumstances, probable cause and recommendations for avoidance of future incidents. The agencies will assess the final condition of the animal if it recovers.
- To minimize attractiveness to desert tortoise predators (e.g., common ravens and feral dogs), trash and food items will be contained in closed containers and will be removed from the Project site at the end of each work day. No pets or firearms will be permitted in the Project area.
- Following completion of the construction phase of the Project, the applicant will improve the existing chain link fence around the Compressor Station facility, which includes the surface impoundments, to eliminate large gaps between the fence and the ground surface to prevent desert tortoise from entering the Project area. The applicant will maintain the fence to ensure there are no gaps, which will reduce the likelihood that desert tortoise or other wildlife move into the Project area, thus minimizing entrapment or negative interactions with tortoises during Project operation.

Mitigation Measure BIO-2: Implement burrowing owl protection measures during construction. The project applicant will ensure the following measures are implemented and included in construction specifications.

- Prior to construction, a qualified biologist will conduct a preconstruction survey for burrowing owls no greater than 30 days prior to commencing ground disturbing or construction activities, with a second preconstruction survey within 24 hours prior to commencing ground disturbing or construction activities. The limits of this preconstruction survey will include the disturbance area and a 400-foot buffer.
- If burrowing owls take occupancy in the Project area before or during construction, the construction contractor will ensure that work-exclusion buffers are maintained. Work will not occur within 160 feet of occupied burrows during the non-breeding season (September

1 through January 31) or within 250 feet during the breeding season (February 1 through August 31), unless otherwise approved by the monitoring biologist and CDFG. A qualified biologist and CDFG will determine if burrowing owls and their habitat can be protected in place on or adjacent to a Project area with the use of buffer zones, visual screens (such as hay bales) or other feasible measures while Project activities are occurring to minimize disturbance impacts.

- If owls are identified during construction, on-site passive relocation will be avoided to the greatest extent practicable, and only implemented if avoidance cannot be met. Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows. Any passive relocation plan will need to be approved by the CDFG.
- CDFG consultation will be required to determine if compensatory mitigation will be needed to fully mitigate Project impacts on burrowing owl if they are determined to be nesting within the new surface impoundment area.

Mitigation Measure BIO-3: Implement American badger and desert kit fox protection measure prior to and during construction. The project applicant will ensure the following measures are implemented and included in construction specifications to avoid and minimize impacts to the American badger and desert kit fox.

- If there is evidence that a burrow may be occupied by a badger or a kit fox during preconstruction surveys (see BIO-1) and if construction will occur during the natal season, all construction activities will cease within a 100-foot buffer of the burrow during the natal season (February–July) unless otherwise authorized by CDFG. Removal of an occupied American badger or desert kit fox burrow at anytime of the year will require coordination with CDFG.

Mitigation Measure BIO-4: Implement loggerhead shrike and other breeding bird protection measures during construction. The project applicant will ensure the following measures are implemented and included in construction specifications to avoid and minimize impacts to nesting birds.

- The construction contractor will schedule ground-disturbing activities, as well as any other work that generates elevated human activity, noise and vibration above background operation levels, between February 1 and August 31 to avoid the breeding season between September 1 and January 31, to the greatest extent feasible.
- If any ground-disturbing activities, or any other work that generates elevated human activity, noise and vibration above background operation levels, will take place during the bird nesting season between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for nesting birds (including raptors) 7 days before these activities are initiated. If any active nests are identified in the Project area or within 300 feet of the Project area, the following buffer(s) a 300-feet of the Project area, the following buffer (s) will be established in the field with staking and flagging:
 - 100 feet for loggerhead shrike,
 - 250 feet for burrowing owl,
 - 300 feet for raptors, and

- o 50 feet for other nesting birds.

The specified buffer size may be reduced on a case-by-case basis with CDFG approval if, based on compelling biological or ecological reasoning (e.g. the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, and level of project activity) and as determined by qualified wildlife biologist, that implementation of a specified smaller buffer distance will still avoid Project-related "take" (as defined by Fish and Game Code Section 86) of adults, juveniles, chicks, or eggs associated with a particular nest.

Mitigation Measure BIO-5: Prepare and conduct a sensitive species worker awareness program. Prior to the initiation of construction activities, the qualified biologist and/or Environmental Monitor will prepare a worker awareness program to educate workers about the sensitive species that could be present in the Project area (including desert tortoise, Mohave ground squirrel, burrowing owl, and nesting birds) and the mitigation measures to protect them (Mitigation Measures BIO-1, BIO-2, and BIO-3). At a minimum, the awareness program will emphasize the following information relative to these species: (a) distribution on the job site; (b) general behavior and ecology; (c) sensitivity to human activities; (d) legal protection; (e) penalties for violating State or federal laws; (f) reporting requirements; and (g) project protective mitigation measures. PG&E and the construction contractor will ensure all workers have received the awareness program and understand the various components. Interpretation will be provided for non-English speaking construction workers.

Mitigation Measure BIO-6: Maintain a log for biological resources mitigation measures. The qualified Biologist will maintain a daily log of all biological mitigation measures implemented before, during, and after construction to protect biological resources (including Mitigation Measures BIO-1, BIO-2, BIO-3 and BIO-4).

- b. **No Impact.** The Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS because the Project area does not support any riparian habitat or other sensitive natural communities. The Project area, where surface disturbance would occur, consists of ruderal habitat mostly lacking vegetation, with the exception of disturbed patches of saltbush scrub, which would be removed from the footprints of former Ponds 6 and 7.
- c. **No Impact.** The Project would not have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act, because the Project area does not support any wetlands including, but not limited to, marshes, vernal pools, coastal wetlands, etc.
- d. **No Impact.** The Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species because the Project area does not contain any perennial streams, lakes, or other potential corridors for migration of aquatic species, nor does it support suitable nursery sites. The Project would not interfere with movement of any native or migratory fish. No suitable corridors for movement of terrestrial wildlife species have been identified in the Project area. The Mojave River, which is dry for the majority of the year, is located approximately two miles south of the Project area. Because the Project would occur within the disturbed area of the existing Compressor Station facilities, it is not expected to have negative effects on migration of terrestrial wildlife species in the vicinity. As described above, the sensitive species with potential to occur in the Project area (desert tortoise, Mohave ground squirrel, burrowing owl) have not been identified within and have low potential to occur within the Project area footprint due to the disturbed nature of the area and low quality habitat conditions.

- e. **No Impact.** The Project would not conflict with local policies or ordinances protecting sensitive biological resources. Chapter 88.01 (Plant Protection and Management) of the San Bernardino County Plant Protection and Management chapter regulates the removal or harvesting of specified desert native plants and the removal of vegetation within 200 feet of the bank of a stream. None of desert native plants covered under in this ordinance have been reported from the Project. In addition, no streams occur on the Project. Therefore, the Project will not conflict with requirements of the ordinance.
- f. **No Impact.** The Project would not conflict with the provisions of an adopted habitat conservation plan (HCP), natural community conservation plan, or other approved local, regional, or state habitat conservation plan. The West Mojave Plan and Final Environmental Impact Report and Statement for the West Mojave Plan were adopted as a federal land management plan that applies only to federal lands under the jurisdiction of the U.S. Bureau of Land Management (BLM) (2005). The Project area falls outside the designated habitat conservation areas and federal lands, and there are no proposed impacts to habitats covered by the plan.

V. Cultural Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.5 Cultural Resources

Archaeological and historical investigations for the Project included a records search at the Archaeological Information Center, San Bernardino County Museum Redlands, University of California Museum of Paleontology (UCMP) database for San Bernardino County, and a review of plans for the Project. The investigations did not identify any historical or paleontological resources within or near the area that potentially could be impacted by the Project. The records search did identify site P-36-006767/CA-SBR-6767H, which is a sparse scatter of historic trash, near the southwest corner of the Project area. This site is outside the boundaries of the Project area and is not near the location of the proposed two new surface impoundments, which would be near the three existing impoundments adjacent to other Compressor Station facilities. Trenching to connect the piping and electrical to Ponds 6R and 7R also would be within the footprint of the existing facilities.

- a. **Less than Significant with Mitigation Incorporated.** Implementation of the Project likely would not cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, because no historical resources were identified within or near the Project area, based on the historical investigations conducted. Although no historic resources were identified either through the background investigations or during the Project site survey, the potential always exists for previously undiscovered prehistoric or historic resources underground which could be encountered during excavation for the ponds and pipelines. Implementation of **Mitigation Measure CUL-1** would reduce this impact because it requires a stop work order and investigation if historical resources are inadvertently discovered during construction.

Mitigation Measure CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities. The applicant will ensure the construction specifications include a stop work order if cultural resources or artifacts are discovered during construction. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points,

knives, scrapers) or tool making debris; culturally darkened soil (“midden”) containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Paleontological resources (i.e., fossils) and human remains might include bones.

If potential cultural resources as described above are found, all work within 50 feet of the find will be stopped until qualified cultural resources staff is notified and determines and notifies appropriate qualified professional (e.g., archaeologist, architectural historian, paleontologist) and Native American representative to assess the significance of the find. If the find is determined to be potentially significant, the qualified professional(s), in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, preservation in place, capping, excavation, documentation, and curation. Any recommendations will be reviewed by PG&E and appropriate agencies.

If any human remains are discovered the County Coroner will be notified immediately according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) will be followed.

- b. **Less than Significant with Mitigation Incorporated.** Project construction could disrupt unknown or undiscovered archaeological resources, which potentially could cause a substantial adverse change in the significance of the resource. Although no archaeological resources were identified either through the background investigation or during the Project survey, the potential always exists for previously undiscovered archaeological resources underground which could be encountered during excavation for the ponds and pipelines. Implementation of **Mitigation Measure CUL-1** would reduce this impact to a less than significant level because it requires a stop work order and investigation if archaeological resources are inadvertently discovered during construction.
- c. **Less than Significant with Mitigation Incorporated.** Implementation of the Project would not likely directly or indirectly destroy a unique paleontological resource or site or unique geologic feature because none were identified during the investigations conducted for the Project. The Project location is within the previously excavated footprints of the former Ponds 6 and 7 within an existing gas compression station. It does not appear that the Project area is sensitive for the presence of paleontological resources. However, a potential exists to inadvertently discover paleontological resources during excavation activities associated with the Project. Implementation of **Mitigation Measure CUL-1** would reduce this impact to a less than significant level because it requires a stop work order and investigation if paleontological resources are inadvertently discovered during construction.
- d. **Less than Significant with Mitigation Incorporated.** Implementation of the Project would not likely disturb any human remains, including those interred outside of formal cemeteries, because investigations conducted for the Project did not identify any human remains or cemeteries associated with Native American and/or Euroamerican occupation within or near the Project area. Although it is not anticipated that Project related ground disturbing activities would inadvertently uncover human remains because the site of the Project is within previously disturbed soil, potential exists to inadvertently discover human remains during excavation

activities associated with the Project. Implementation of **Mitigation Measure CUL-1** would reduce this impact to a less than significant level because it requires a stop work order and investigation if human remains are inadvertently discovered during construction

VI. Geology and Soils	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.6 Geology, Soils and Seismicity

Geology and Soils

The Hinkley Valley is comprised predominantly of alluvial fill deposits including clay, silt, sand, and gravel transported by the Mojave River, lacustrine deposits, Aeolian fine sands, and alluvial fan deposits derived from the surrounding hills and mountains. Fluvial deposits derived from the Mojave River dominate the basin-fill sediment (Figure 3-4). A conceptual model of the units beneath the Project area is shown on Figure 3-5.

Regionally, the lithology is highly variable. It consists of interbedded sands and silty sands, varying from course to fine over short distances both laterally and vertically. The coarse-grained sediments contain varying degrees of fine sand, silt, and clay, with minor amounts of gravel in some locations. The fine-grained sediments contain varying amounts of fine sand and clay, which results in heterogeneous and locally complex hydrogeologic conditions. Sediments near the surface and within the upper aquifer consist primarily of sand and silt mixed with gravel and clay.

Beneath the Project area, soils are comprised of interbedded sands, gravels, silts, and clays. The soils encountered in the borings consist of clayey sands extending to a depth of approximately 8 feet below ground surface (bgs) overlying poorly graded sands and silty sands that extend to the bottom of the boreholes at a depth of approximately 19.5 feet bgs (Cardno ENTRIX 2012b).

The National Resource Conservation Service (NRCS) web soil survey identifies soils in the Project area as Cajon Series with minor components of Norob or Halloran Series soils. These soils are typically described as excessively drained to well-drained sandy loams (National Resource Conservation Service 2012) and are not identified as typical expansive soils, which are composed of a high clay content.

Seismicity

Faults. The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was drafted to avoid or reduce damage to structures from earthquakes. It prohibits development within 50 feet of an active fault zone. The Project area is not located within an Alquist-Priolo Earthquake Fault Zone and no mapped active fault traces are known to traverse the site (Figure 3-6). The nearest faults (shown on Figure 3-4 and 3-6) are the Lenwood-Lockhart Fault, located less than 2,000 feet southwest of the Project, and the Mount General Fault, located more than three miles northeast of the Project area (U.S. Geological Survey 1968). These faults are primarily right-lateral strike-slip faults of the Eastern California Shear Zone (ECSZ). The ECSZ is located east of the San Andreas fault and comprise northwest-southeast trending faults that cross the Mojave Block. The Lockhart fault is from the Holocene-Late Quaternary era, which suggests displacement within the last 0.7 million years or sooner. The fault has two sections: Lenwood and Lockhart. However, because there is insufficient data to differentiate the segments, the Lockhart and Lenwood faults are termed the Lenwood-Lockhart Fault Zone (Bryant 2000). The zone is an extension of the greater Lenwood-Lockhart-Old Woman Springs Fault Zone. An Alquist-Priolo Act map for the Project area has not yet been completed by California Geologic Survey; however, referenced material describes the southeastern portion of the Lenwood-Lockhart Fault Zone as being active (California Geological Survey 2010; Southern California Earthquake Data Center 2012). In addition, portions of the Lenwood Fault (outside the project area) are mapped as an Alquist-Priolo Earthquake Fault Zone.

Section 21750 of Title 27 requires that stability analyses for Class II surface impoundments be conducted using peak ground acceleration expected at the site based on the maximum credible earthquake (MCE). The MCE represents the largest median the peak ground acceleration (PGA) expected at the site based on the known geologic framework of the region. The MCE PGA is therefore identified as the largest PGA from consideration of the expected maximum magnitude and distance to seismic sources within 100 km (62 mi) of the site. The Lenwood-Lockhart Fault is the controlling fault for the site with an MCE of magnitude 7.5 on the Richter scale with a PGA of 0.51g (Cardno ENTRIX 2012a, 2012b; California Department of Water Resources 2012). The Mount General fault is Holocene in the middle, but otherwise Quaternary; little else is known about the fault because it is

not listed by California Geologic Survey as being an active fault (Southern California Earthquake Data Center 2012).

Liquefaction. Liquefaction is a seismic phenomenon in which loose, saturated, fine-grained granular soils behave similar to a fluid when subjected to high-intensity ground shaking. An increase in pore pressure occurs as the soil attempts to compact in response to the shaking, resulting in less grain-to-grain soil contact, and therefore, loss of strength. Liquefaction occurs when three general conditions exist: shallow groundwater (50 feet below ground surface or less); low density, fine-grained sandy soils; and high-intensity ground motion. The Project area has reported groundwater depths of 75 feet and greater and generally dense subsurface granular soils, as defined by standard penetration test (SPT) blow counts.

Subsidence. Subsidence caused by groundwater withdrawal has occurred in the alluvial valley area in southwestern San Bernardino County. Historical agricultural pumping in the Hinkley Valley caused groundwater elevations to decline by as much as 90 feet or more feet bgs from between 1930 and the late 1980s (Stamos et al. 2001). Thus, the vicinity of the Project area experienced substantial groundwater drawdown prior to the early 1990s when the Mojave River groundwater adjudication took force and started to allow groundwater levels to recover by reducing agricultural pumping (see the Hydrology and Water Quality Section for more information on Mojave River groundwater adjudication). It would be expected that land settling from subsidence would have had the opportunity to occur during this historical period. Based on literature reviews, no evidence of historical significant land subsidence was identified in the Hinkley Valley. It is possible that localized land subsidence may have occurred due to prior agricultural pumping, but it has not been noted in literature on groundwater use (such as Stamos et al. 2001). This lack of reporting may be due to the rural setting and openness of the area, settling not being observed in agricultural areas, and the local population either being unaware of settling that did occur or indifference to it. Despite the lack of evidence for widespread subsidence in the Mojave Desert, with increased groundwater pumping in the Hinkley Valley, subsidence is recognized as a potential problem in parts of the Mojave Desert (Sneed et al. 2003).

a. **Less than Significant.**

1. The Lenwood Lockhart Fault is located less than 2,000 feet from the site, while the Mount General is located more than three miles distant from the site. The Lenwood-Lockhart fault zone has a low slip rate and a long interval between major ruptures (i.e., 3,000 to 5,000 years). The Mount General fault is not considered to be an active fault. Thus, there is no known risk of exposure of people or structures from direct fault rupture as there is no evidence of a fault zone directly within the project site.
2. The surface impoundments would be designed to be able to withstand the seismic shaking from the MCE of magnitude 7.5 on the Richter scale with a PGA of 0.51g (Cardno ENTRIX 2012a). The surface impoundments would also be designed to conform to applicable requirements of the California Building Code and San Bernardino County General Plan Safety Element goals and policies, which specify design parameters to reduce seismic and other potential hazards to acceptable levels. Therefore, potential exposure of people and structures to strong seismic ground shaking would be less than significant with compliance with required applicable design standards and building codes.
3. Liquefaction requires saturated sandy soils less than 40 ft below ground surface at the time of a seismic event. While soils onsite are sandy loams, saturated soils are greater than 70

feet below ground surface. Since the groundwater levels are generally deep (75 feet and greater) and the subsurface soils are relatively dense, the potential for liquefaction does not exist. In addition, the Project area was not identified as being susceptible to liquefaction on the Geologic Hazard Overlaps map of Hinkley (San Bernardino County 2012a). Therefore, there would be no impacts from seismic-related ground failure, including liquefaction.

4. The Project area is located within the Hinkley Valley floor, several miles from any slopes. No new slopes would be created by the Project; therefore, no impacts related to seismically induced landslides would occur.
 - a. **Less than Significant.** The Project would result in the loss of topsoil from excavation and grading to create the two new impoundments that could result in soil erosion. To minimize the amount of earthwork during construction, the existing basins (former Ponds 6 and 7) would be utilized for the new surface impoundments (new Ponds 6R and 7R). Blanket drain rock would be removed from the basins, side slopes would be cut to an inclination of 3:1 (horizontal to vertical), and the soils at the bottoms of the basins would be graded. The soils at the bottom of the basins would be excavated to a depth of 8 inches (Cardno ENTRIX 2012a). Select fill could be used to backfill excavations, raise the site grades, or flatten the existing slopes. Construction would remove approximately 3,000 cubic yards of soil which would be spread across the facility within the Project area. Once the soil foundation for the liner system has been graded and compacted, the liner system components would be installed.

Overall, there would be minimal grading because the bottoms of the existing basins would be recontoured to slope toward a LCRS sump, and the side slopes would be cut to 3:1 in areas where they are currently flatter (Cardno ENTRIX 2012b). All soil disturbance activities, including preparation of subgrade, would be performed in accordance with geotechnical specifications and local grading codes (Cardno ENTRIX 2012b). The soil would be compacted and graded to facilitate site drainage and prevent soil erosion (Cardno ENTRIX 2012a). Where soils are disturbed, BMPs would be implemented to reduce erosion as part of the required Project SWPPP (as described in Section 2.2, Project Construction).

- b. **No Impact.** The Project would not be located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project and potentially result in an onsite or offsite landslide, lateral spreading, liquefaction, or collapse.

With the Project, PG&E would be able to maintain wastewater flow rates at the average design rate of 30,000 gpd on a year-round basis rather than reducing rates to 15,000 gpd during the winter. With an increase from 15,000 gpd to 30,000 gpd in the winter months, a maximum of 17.1 additional acre-feet of water will be pumped from the aquifer per year. The additional 17.1 acre-feet cited above is well within the PG&E allowance from the Mohave Groundwater Basin, and is less than 1% of the Annual Production Allowance, and less than 0.5% of the Total 2010-2011 Production Allowance. As discussed in the Hydrology and Water Quality section, compliance with the free production allowance provides for water table stability in the water basin overall and thus the minor increase in water withdrawal is not expected to result in groundwater drawdown and thus no potential for subsidence would occur as a result of this project.

The facility is located on Pleistocene non-marine, alluvial deposits within the Hinkley Valley floor. The soils present at the site are described as excessively drained to well-drained sandy loams on at less than 2 percent slope (National Resource Conservation Service 2012). The

relatively flat topography and type of soil found onsite is not prone to landslides or other types of ground failure.

- c. **No Impact.** The Project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), because the Cajon Series is not typified as an expansive soil and poses no risk or threat to life or property (Natural Resources Conservation Service 2012).
- d. **No Impact.** The Project area does not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. The Project area supports several septic tanks in operation. The proposed Ponds 6R and 7R would not require additional septic systems, nor would they impact the existing septic tanks used by the facility.

VII. Greenhouse Gas Emissions	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.7 Greenhouse Gas Emissions

Regulatory Setting

Although there is currently no federal overarching law specifically related to climate change or the reduction of greenhouse gases (GHGs), EPA is presently regulating GHG emissions from large stationary sources under the federal Clean Air Act. Although periodically debated in Congress, no comprehensive federal legislation concerning greenhouse gas limitations is likely until at least 2013, if then.

A variety of legislation has been enacted in California relating to climate change, much of which sets aggressive goals for GHG reductions in the state.

The following is a summary of key state regulations concerning GHG emissions:

- Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006 requires the state to reduce GHG emissions to 1990 levels by 2020.
- The AB 32 Scoping Plan (2008) contains the main strategies California will use to implement AB 32. As part of the scoping plan, CARB has been adopting regulations including for the low carbon fuel standard and for the cap and trade system, among others, for reducing GHG emissions to achieve the emissions cap by 2020.
- Senate Bill 1078/107 obligated investor-owned utilities (IOUs), energy service providers (ESPs) and community choice aggregators (CCAs) to obtain 20% of their electricity from qualified renewable sources by 2010. SB 2 X1 sets forth a longer range target of procuring 33% of retail sales from qualified renewable sources by 2020.
- AB 1493 (2002 and 2009 amendments, "Pavley" Rules) and Advanced Clean Cars (2011) together are expected to increase average fuel economy to roughly 43 miles per gallon (mpg) by 2020 and reduce GHG emissions from the transportation sector in California by approximately 14%. EPA and CARB adopted standards for 2017 to 2025 in 2012.
- EO S-01-07 mandates that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020, which is referred to as the Low Carbon Fuel Standard (LCFS).

- The State CEQA Guidelines, as amended in 2010, require lead agencies to analyze a project's GHG emissions. The adopted guidelines recommend quantification of GHG emissions, assessment of their significance, and adoption of feasible mitigation of GHG emissions when significant impacts are identified. The state has not adopted any uniform statewide numerical significance thresholds for use in CEQA to date.

CARB's AB 32 Scoping Plan (Scoping Plan) states that local governments are "essential partners" in the effort to reduce GHG emissions. The Scoping Plan also acknowledges that local governments have "broad influence and, in some cases, exclusive jurisdiction" over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. The Scoping Plan encourages local governments to reduce GHG emissions by approximately 15% from current levels by 2020.

San Bernardino County adopted a GHG Reduction Plan in December 2011 to accomplish the following specific objectives to:

- Reduce emissions from activities over which the County has jurisdictional and operational control consistent with the target reductions of the AB32 Scoping Plan;
- Provide estimated GHG reductions associated with the County's existing sustainability efforts and integrate the County's sustainability efforts into the discrete actions of this Plan;
- Provide a list of discrete actions that will reduce GHG emissions; and
- Approve a GHG Plan that satisfies the requirements of Section 15183.5 of the CEQA Guidelines, so that compliance with the GHG Plan can be used in appropriate situations to determine the significance of a project's effects relating to GHG emissions, thus providing streamlined CEQA analysis of future projects that are consistent with the approved GHG Plan.

The County GHG Reduction Plan, along with state reduction measures, would reduce GHG emissions by 15% compared to 2007 levels in the County. The Plan requires discretionary land-use projects in the County to comply with certain requirements. If a discretionary project has more than 3,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) emissions per year, then it is required to reduce its emissions by 31% and may use a screening table provided in the Plan to help identify its reduction measures. If a discretionary project has less than 3,000 MTCO_{2e} emissions, the project is required to meet mandatory GHG reducing performance standards to improve the energy efficiency, water conservation, vehicle trip reduction potential, and other areas. The performance standards also apply to ministerial and categorically exempt projects. Since the County's GHG plan meets all the requirements of Section 15183.5 of the CEQA Guidelines, a project that is consistent with the County's Plan can be determined to have less than significant GHG emissions because it is part of a plan overall that will reduce emissions consistent with AB 32 (San Bernardino County Land Use Services Division 2011).

The Project is located in the jurisdiction of the MDAQMD. MDAQMD Rule 1211 (Greenhouse Gas Provisions of Federal Operating Permits) sets forth emission reporting requirements for stationary source facilities subject to Title V of the Clean Air Act Amendments of 1990 which emit or have the potential to emit 100,000 short tons of CO_{2e} during any 12-month period. MDAQMD's CEQA guidance recommends use of a significance threshold for GHG emissions of 100,000 short tons CO_{2e}/year (90,718 MTCO_{2e}) and 548,000 pounds/day (249 MTCO_{2e}). The Project is located at a Title V facility, as discussed in Section 3.3, and is therefore subject to District Rule 1211. However, since the Project does not involve a permit unit requiring a Permit to Construct (see Section 3.3), the

Federal Operating Permit does not need to be modified. Therefore, this project is in compliance with Rule 1211.

Significance Criteria

Based on the CEQA Guidelines Appendix G, an impact pertaining to GHGs and climate change is considered significant if it would:

- generate a significant amount of GHG emissions, either directly or indirectly; or
- conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHGs

As described above, San Bernardino County has adopted the San Bernardino County Greenhouse Gas Emissions Reduction Plan (December 2011), which meets CEQA Guidelines Section 15183.5 for a qualified plan which allows projects that are consistent with the Plan to be determined to have a less than significant impact if they comply with all of the Plan requirements. As part of the Plan, the County established screening criteria for new residential and commercial projects. For projects that would emit below a 3,000 MTCO_{2e} threshold per year, including those projects exempt from CEQA, the County developed a set of performance standards that all projects must implement as Conditions of Approval. For projects that exceed the 3,000 MTCO_{2e} threshold per year, the County established screening tables and a point-based GHG reduction measure system are used to mitigate impacts. Projects that implement enough GHG reduction using the screening tables are considered to have provided their “fair share” contribution of reductions and are considered consistent with the GHG Plan.

Although the MDAQMD has a significance threshold of 100,000 short tons of CO_{2e}, the analysis herein utilizes consistency with the San Bernardino GHG Reduction Plan as the measure of significance instead as a more conservative approach to evaluation of GHG emissions and climate change for the Project.

- a. **Less than Significant with Mitigation Incorporated.** Project-related GHG emissions could make an incremental contribution to global climate change and the adverse global environmental effects thereof, as would most development projects occurring worldwide. Construction and operation of the Project would generate GHG emissions through the use of equipment shown in Table 3-3. Construction-related GHG emissions were estimated using OFFROAD 2007 emission factors obtained through the South Coast Air Quality Management District (SCAQMD), EMFAC2011 emission rates for on-road worker and heavy duty truck travel, and activity data obtained from the Project applicant. All emission rates assume construction would take place within calendar year 2013.

As shown in Table 3-7, estimated construction-related GHG emissions would be approximately 19,160 pounds of CO_{2e} on the maximum day and 42 MTCO_{2e} in total over the 25 day construction period. Construction of the Project would have one-time emissions that are far below MDAQMD’s daily and annual GHG threshold and the County’s 3,000 MTCO_{2e} screening criteria. The 3,000 MTCO_{2e} trigger for mandating specific reduction amounts is for annual emissions over time.

When averaging the construction emissions over an assumed 30 year lifetime of the Project, construction emissions would be approximately 1.4 MTCO_{2e} per year, well below the County’s threshold for mandating specific annual emission reductions. Regardless, the Project must comply with the San Bernardino County Greenhouse Gas Emissions Reduction Plan (December 2011) minimum requirements for all new projects which require implementation of GHG performance

standards to ensure the individual and cumulative impacts for GHG emissions are less than significant. As such, the Project requires implementation of **Mitigation Measure GHG-1** (GHG construction standards from the County GHG Emissions Reduction Plan) to reduce potential impacts to a less-than-significant level for construction.

Table 3-7. Estimated Construction Greenhouse Gas Emissions

Greenhouse Gas Emissions	Maximum lbs/day	Threshold lbs/day	Total Project		Threshold tonnes/yr	Significance
			tons	tonnes		
Carbon Dioxide - CO2	18,995	—	45.7	41.5	—	—
Methane - CH4	0.7	—	0.003	0.002	—	—
Nitrous Oxide - N2O	0.6	—	0.002	0.002	—	—
		548,000 (MDAQM D)			90,719 (MDAQM) 3,000 (County)	Less Less
CO2 equivalents	19,160	D)	46.4	42.1		

Sources: South Coast Air Quality Management District 2008; U.S. Environmental Protection Agency 2012b; California Climate Action Registry 2009; Mojave Desert Air Quality Management District 2011.

Notes:

Maximum daily and total project emissions are onsite + offsite (includes trucking of materials)

MDAQM annual GHG threshold = 100,000 tons/yr = 90,719 tonnes/yr.

San Bernardino County Screening Criteria is 3,000 MTCO_{2e}

1 short ton = 2,000 lbs

1 metric tonne = 1,000 kg or 2,204.6 lbs

(ICF revisions)

Mitigation Measure GHG-1: Implement San Bernardino County GHG construction standards during construction. PG&E or its contractor will include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance in the project completion report to the Lead Agency. PG&E or its contractor will do the following, in compliance with the San Bernardino County Greenhouse Gas Emissions Reduction Plan (December 2011).

- Select construction equipment based on low GHG emissions factors and high-energy efficiency. Where feasible, diesel-/gasoline-powered construction equipment will be replaced, with equivalent electric or compressed natural gas (CNG) equipment.
- Because it may not be feasible to use electric or CNG equipment per the County performance standard, the Project will use biodiesel fuel if the following applies:
 - Biodiesel fuel becomes available within 20 miles of the Project area.
 - The California Air Resources Board has certified that the locally available biodiesel results in reduction of GHG emissions.
 - Biodiesel fuel is approved by the manufacturer for use in diesel trucks or equipment used for remedial activities, including farm equipment and construction equipment.
 - The cost of biodiesel is not more than 125% above the price of regular diesel fuel, then

- As biodiesel comes in blended amounts (B5 = 5% biodiesel; B20 = 20% biodiesel; B100 = 100% biodiesel), PG&E will use the highest biodiesel blend that is approved for use in site trucks or equipment, available, and within the price limitation noted above.
 - Grading contractor will implement the following when possible:
 - Training operators to use equipment more efficiently.
 - Identifying the proper size equipment for a task can also provide fuel savings and associated reductions in GHG emissions.
 - Replacing older, less fuel-efficient equipment with newer models.
 - Using global positioning system (GPS) for grading to maximize efficiency.
 - Grading plans will include the following statements:
 - “All construction equipment engines will be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration.”
 - “All construction equipment (including electric generators) will be shut off by work crews when not in use and will not idle for more than 5 minutes.”
 - Recycle and reuse construction and demolition waste (e.g., soil, vegetation, concrete, lumber, metal, and cardboard) per County Solid Waste procedures.
 - Educate all construction workers about the required waste reduction and the availability of recycling services.
 - The project manager will ensure that the contract specifications related to GHG are followed by the contractor and will include in the project completion report to the Water Board a summary of mitigation measures implemented before, during, and after construction activities.
- b. **Less than Significant.** The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Because the Project would not result in additional facility staff for operation and maintenance nor construct a new permanent stationary source of greenhouse gas emissions, it would not result in a long-term source of emissions and would be in compliance with AB 32 and County’s Greenhouse Gas Emissions Reduction Plan. Further, vehicles would not idle more than five minutes in compliance with the MDAQMD requirements.

Notwithstanding applicability as described under “a” above, the County has determined that 3,000 MTCO₂e screening criteria would help the County achieve the emission reductions necessary by 2020 to meet the goals of AB32. As discussed in under “a” above, the Project would be consistent with the County’s GHG Reduction Plan by resulting in emissions below the County’s 3,000 MTCO₂e screening level and implementing GHG construction standards during construction. Since the County’s GHG Reduction Plan meets all the requirements consistent with the reduction goals of AB32, a project that is consistent with the County’s GHG Reduction Plan can also be determined to be consistent with AB32. Given the Project’s compliance with the County’s Plan, the Project is also considered to be in compliance the statewide reduction goals of AB32.

VIII. Hazards and Hazardous Materials	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.8 Hazards and Hazardous Materials

The wastewater generated at the Hinkley Compressor Station is nonhazardous under Title 23 of the California Code of Regulations and is classified as a designated waste. The wastewater and accumulated pond sludge is not classified as hazardous waste. Designated waste means either of the following:

- (a) Hazardous waste that has been granted a variance from hazardous waste management requirements pursuant to Section 25143 of the Health and Safety Code.
- (b) Nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan (California Water Code 13173).

Designated wastes do not contain hazardous materials but have the potential to affect the designated use of a water resource (see Section 3.9, Hydrology and Water Quality, for more information). Blowdown water is combined with other wastewater sources within the facility and processed through an oil-water separator before discharge to the holding tank, and is subsequently transported to an offsite hazardous waste facility for proper disposal. In the case of this facility the wastewater is a designated waste because the designated use of the groundwater beneath the facility is drinking water which potentially could be impacted by the salts contained in the blowdown water (Cardno ENTRIX 2012a). A wastewater sample was collected in December 2011 and tested; the laboratory results confirmed that no constituents were present above the hazardous waste limits established by federal or California regulations (Cardno ENTRIX 2012a).

Former Ponds 6 and 7 were permitted to operate between 1982 and 1993, and closed in 1995. During closure all residual wastes were removed. The Regional Board and PG&E collected split samples of the soil underlying the removed wastes to verify that all wastes were removed. Laboratory analysis was performed on the split samples and the results were comparable. The Water Board approved the clean closure by letter dated June 28, 1996 (Lahontan Water Board 1996).

The natural or background soil chemistry in the vicinity of the surface impoundments was evaluated as part of the 1995 closure work, and the results are summarized in the closure documentation report (Trident 1996) and the Addendum to the RWD (Cardno ENTRIX 2012b).

- a. **No Impact.** The Project would not create a significant hazard to the public or the environment because the facility would not generate, transport, use or dispose hazardous waste as defined above (the facility is classified as designated waste which is not hazardous).
- b. **Less than Significant.** During operation, no foreseeable upset and accidental conditions involving the release of hazardous materials are expected. The wastewater and accumulated solids in the units are non-hazardous (designated) waste as defined by California regulations. This designation was confirmed through sampling and testing of the wastewater and is reported in semi-annual reports on GeoTracker.

Because of the past history of chromium contamination in soils in the Project area, there could be a concern that hazardous materials exist in subsurface soils below the new impoundments (Ponds 6R and 7R) could migrate to groundwater in the event of a leak from the impoundments. However, the soils beneath the Project area reflect natural “clean” conditions, and soils potentially impacted by past releases of hazardous materials (e.g., hexavalent chromium) are not beneath proposed Ponds 6R and 7R (Cardno ENTRIX 2012b). Therefore if the proposed surface impoundments were to fail (meaning an action leakage rate of greater than 25 gallons per day), no mobilization of additional hazardous materials would occur.

The Project design considers the potential for non-hazardous wastewater leaks and/or overtopping of the surface impoundments. Potential non-hazardous wastewater leaks would be

identified by the Monitoring and Reporting Program (Cardno ENTRIX 2012b) and mitigated, if necessary, through implementation of the Corrective Action Plan (Cardno ENTRIX 2012a; Appendix I). To ensure overtopping would not occur, the impoundment design was in part based on a water balance model that demonstrates the units are of sufficient capacity to handle the additional volume of water from the 1,000-year, 24-hour storm event, handle seasonal fluctuations in water level, and the loss of storage volume due to the accumulation of sludge over the life of a surface impoundment (approximately 20-years) while maintaining 2 feet of freeboard.

Hazardous materials used during construction (fuels, lube oils, etc.) have a potential for spill or leak. However, the required Project SWPPP would include spill prevention and emergency response measures and spill notification requirements (refer to Section 2.2 Project Construction). Any spill or leak will be documented in a log by the project manager. Therefore, this impact would be less than significant.

- c. **No Impact.** The Project would not emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school because there is no existing or proposed school within a 1 quarter-mile radius of the Project area. The Hinkley School is over three miles away to the north.
- d. **No Impact.** The Project area is not presently listed on the state's list of hazardous materials sites compiled pursuant to Government code section 65962.5.
- e. **No Impact.** The Project area is not be located within an airport land use plan area and is not within 2 miles of an existing or proposed public airstrip. The closest airport or airfield is Barstow Daggett Airport, located approximately 20 miles southeast of the Project area..
- f. **No Impact.** The Project area is not located in the vicinity of a private airstrip (San Bernardino County 2007). The closest private airstrip is located 6 miles to the west.
- g. **No Impact.** The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The two new impoundments would be located within the existing Compressor Station facility, and there would be no new employees. A limited number of vehicles would be utilizing the roads by workers, equipment, and materials delivery during the 6 to 8 week construction period (See Section 2.16 Transportation/Traffic section for more information). These vehicles would represent a negligible increase to current usage and would not impede emergency vehicle traffic in any way.
- h. **No Impact.** The Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The Fire Hazard Severity Zone Map for northwestern San Bernardino County has the Project vicinity listed as moderate. However, neither fire nor welding would be needed during Project construction. HDPE membrane seam welding would be performed by either hot wedge fusion welding or extrusion welding. These processes use electrical generators to heat HDPE to temperatures sufficient to thermally bond sheets of the material together. No open flames would be used or permitted in the work area. Therefore, the Project would not introduce people or residences to an increased risk of exposure to wildland fires.

IX. Hydrology and Water Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Contribute to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.9 Hydrology and Water Quality

Regulatory Setting

Clean Water Act

The Clean Water Act establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the Clean Water Act was enacted in 1948 but was significantly amended in 1972.

Under the CWA, EPA has implemented pollution control programs such as setting wastewater standards for and water quality standards for many potential contaminants in drinking water supplies.

EPA has also implemented pollution control programs such as setting wastewater standards for industry and water quality standards for potential contaminants in drinking water.

The Clean Water Act authorizes the National Pollutant Discharge Elimination System (NPDES) permit program which controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources include construction sites covered under the State Water Resources Control Board Construction General Permit (CGP) as described in Order No. 2009-009-DWQ. The CGP is administered by the Regional Water Quality Control Board.

The Clean Water Act requires each state to identify waters for which existing required pollution controls are insufficient to achieve that state's water quality standards and establish total maximum daily loads in accordance with a priority ranking.

Porter-Cologne Act

In 1967, California's Porter-Cologne Water Quality Control Act established the State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (Regional Water Boards) as the primary state agencies with regulatory authority over water quality. The Porter-Cologne Act provides authority to establish Water Quality Control Plans (Basin Plans) which designate beneficial uses for specific surface water and groundwater resources, and establish water quality objectives and implementation programs to meet the stated objectives and to protect the beneficial uses of water.

The Regional Water Boards issue WDRs in compliance with the applicable basin plans for point-source dischargers, such as municipal wastewater treatment plants and industrial facilities. The Hinkley Compressor Station is located within the jurisdiction of the Lahontan Water Board and operates the Compressor Station under WDRs in Board Order 6-97-82.

Construction General Permit

The State Water Resources Control Board General Permit for Discharges of Storm Water Associated with Construction Activities (CGP Order 2009-0009-DWQ) requires the development and implementation of a SWPPP for construction projects disturbing more than 1 acre of land. The SWPPP would contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the Project. The SWPPP must

include BMPs the discharger will use to protect stormwater runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

Mojave River Basin Adjudication

The Mojave River Basin Adjudication is based on the stipulated judgment in *City of Barstow, et al vs. City of Adelanto, et al* and related complaints (Case No. 2008568). The stipulated judgment, issued in 1996, addresses water shortages in the Mojave Basin Area through a designation of five subareas, all of which were found to be in overdraft, and each having an amount of groundwater that can be extracted by all parties based on a court-determined Production Safe Yield to maintain proper water balances within each subarea. The Mojave Water Agency (MWA) is the designated water master, and is responsible for administering the judgment, which involves measuring and tracking aquifer conditions and water use information in the Mojave River Basin. Parties to the Judgment are assigned a variable Free Production Allowance, which is the amount of water that may be produced (pumped or diverted) from a subarea.

The Project area is located within the Centro subarea of Mojave Basin Area adjudicated boundary. PG&E is a designated water user, owns water rights totaling approximately 2,429 afy and, based on the 2010–2011 Watermaster Annual Report, has a current base annual allowance of 1,944 afy (Mojave Water Agency 2012).

Existing Conditions

Climate and Hydrology

Average precipitation in the Project vicinity varies from 4 to 11 inches with the average near 6 inches per year (California Department of Water Resources 2003).

The Mojave River is located 1 mile south of the Compressor Station, but this stretch of the river flows only during major storms. Existing drainage patterns in the Project area flow to the east, based on topography of the vicinity of former Ponds 6 and 7 was surveyed in 2011 (Schoemann pers. comm.).

Groundwater Basin

The Project vicinity is located in South Lahontan Hydrologic Region within the Centro Subarea of the Middle Mojave River Groundwater Basin. The immediate Project area is located within the Hinkley Valley aquifer west of Barstow and north of the Mojave River. Water levels in the Centro Subarea have been relatively stable with seasonal fluctuations and declines during dry years followed by recovery during wet periods.

Groundwater movement through the Hinkley Valley alluvial channel is controlled by the aquifer geology, hydraulic conductivity and groundwater elevation. Because the Mojave River is located along the southern end of the Hinkley Valley, a majority of this recharge water flows to the north and increases groundwater elevations throughout the Hinkley Valley. Groundwater in the upper and lower aquifers generally flows in a north-northwesterly direction, from the Compressor Station to the northern end of the Hinkley Valley (Pacific Gas and Electric 2012b). However, in the immediate vicinity of the Compressor Station, groundwater flow is generally more to the north or northeast

with a gradient of 0.01 ft/ft (Cardno ENTRIX 2012a). The most recent monitoring report reports that the groundwater flow velocity in the vicinity of the facility was calculated to range from 2 to 27 feet per day (Cardno ENTRIX 2012a), based on historic evaluation of aquifer parameters. The lower end of the range is representative of ambient flow conditions.

This Lenwood-Lockhart fault zone is believed to act as a small step, causing groundwater to drop at a steeper gradient than normal when flowing towards the northeast direction.

Regionally, the lithology is highly variable. It consists of interbedded sands and silty sands, varying from course to fine over short distances both laterally and vertically. Sediments near the surface and upper aquifer consist primarily of sand and silt mixed with gravel and clay with the “brown clay” layer separating the upper and lower zones of the upper aquifer. Sediments underlying the “blue clay” layer (or aquitard) in the lower aquifer consist primarily of sand and gravel. Between the blue clay layer and consolidated bedrock at the bottom of the aquifer are permeable stratum composed of calcareous sedimentary rock and highly weathered, decomposed, and fractured bedrock. The bedrock unit outcrops in the area of the Desert View Dairy.

The thickness the shallow zone of the upper aquifer is controlled by the groundwater elevation and the top of the brown clay layer, and is about 20 feet in the vicinity of the Compressor Station, and increases to about 40 feet toward the north. The brown clay separating the shallow and deep portion of the upper aquifer is shown to have a thickness of about 20 feet at the station. The lower zone of the upper aquifer is shown to have the same thickness contours as the brown clay layer. The blue clay layer is shown to be continuous, fully separating the upper and lower aquifers in the Hinkley Valley north of the river. The blue clay layer is about 30 feet thick under the Compressor Station, but is reduced to 10 feet in the vicinity of Hinkley and to the north and 40 feet in the vicinity of the Mojave River in the south. The lower aquifer is shown to have a thickness of 100 feet at the Compressor Station. It is shown to increase to over 250 feet below the Mojave River channel and to reduce to about 20 feet below Hinkley. Below the Lower Aquifer is a granitic bedrock unit that is encountered at a maximum depth of 300 feet below the Compressor Station (Lahontan Water Board 2008a). Supply wells providing water to the Compressor Station are screened across both the upper and lower aquifers.

Groundwater Quality

The geochemistry of the Hinkley Valley aquifer has not been fully characterized. Potential constituents in the Hinkley aquifer include arsenic, iron, manganese, nitrate, Total Dissolved Solids (TDS), and chromium. Maximum contaminant levels (MCLs) are enforceable limits for contaminants in drinking water and Secondary Maximum Contaminant Levels (SMCLs) are established to protect the public welfare (i.e., adversely affect its odor, taste or appearance). Federal MCLs are established under the Federal Safe Drinking Water Act and State MCLs are established by California Department of Public Health and must be at least as stringent as the federal MCL, if one exists. Potential constituents in the Hinkley aquifer are compared to Federal and State MCLs to characterize its water quality.

Water quality sampling for pH, arsenic, iron, manganese, nitrate, salinity (i.e., TDS), and chromium had been conducted during previous monitoring efforts, including PG&E's 2006 sampling conducted for the 2007 Background Study Report (Pacific Gas and Electric 2007).

- High arsenic concentrations are believed to be naturally occurring. Based on results from a USGS study on wells in the Mojave Water Agency management area from 1991 to 1997,

naturally-occurring arsenic concentrations in water from wells in the western Mojave Desert commonly exceed 10 ppb and a few exceed 100 ppb (Christensen 2001).

- PG&E's 2007 Background study found arsenic in wells (up to 200 feet in depth) ranging from less than 1 ppb to 12 ppb with most concentrations under 10 ppb along the Mojave River upgradient of the Compressor Station. The MCL for arsenic is 10 ppb. PG&E's 2007 Background Study Report (Pacific Gas and Electric 2007) presented dissolved iron levels in forty-seven wells at less than 500 ppb (the method detection level was 500 ppb). The SMCL for Iron is 300 ppb.
- The 2007 Background Study Report also described dissolved manganese levels in background areas to range from less than 1 ppb (method detection level of 1 ppb) up to 48 ppb. Five out of forty-seven wells sampled had one or more detections of manganese greater than 10 ppb. The SMCL for manganese is 50 ppb.
- The nitrate concentrations in groundwater in the Hinkley Valley are generally less than a few parts per million (Pacific Gas and Electric 2007). The 2007 Background Study Report found nitrate levels in background areas to range from less than 0.5 ppm (equal to the method detection level) up to 21 ppm. The federal MCL is 45 ppm (as NO₃) and the State MCL is 10 ppm (as N).
- Concentrations of TDS generally increase to the north with distance from the Mojave River (Lahontan Water Board 2008b). The source of salts and dissolved solids may originate naturally from alluvial sediments and from human activities, such as agriculture. The 2007 Background Study Report found TDS levels in the areas sampled range from 90 ppm near the Mojave River up to 2,390 ppm near a former dairy or confined-animal property but are generally less than 1,000 ppm in most areas (Pacific Gas and Electric 2007). The MCL for TDS is 500 ppm.

Chromium levels have been heavily affected by historical discharges of chromium-contaminated water from the PG&E facility in the 1950s and 1960s which has resulted in a large area of contaminated groundwater in the Hinkley Valley. The Compressor Station is the source area for hexavalent chromium (Cr[VI]) contamination in groundwater caused by percolation of untreated cooling water from unlined surface impoundments operating from 1952-1965. Chromium-contaminated soil since has been excavated from shallow depths in the area of the former unlined surface impoundments, pipelines, and beneath tanks (Lahontan Water Board 2008b). The highest concentrations of Cr[VI] in groundwater are still almost directly below the former unlined surface impoundments at the Compressor Station, with concentrations reported up to 4,200 µg/L in second quarter 2012. However, just south of the Compressor Station (i.e., up-gradient of the chromium plume) groundwater is considered outside of the Cr[VI] plume and is used for freshwater supply for Compressor Station operations and remedial activities (from PGE-14, FW-01, and FW-02).

Groundwater quality results in July and August, 2011 from monitoring wells (MW-01 and PMW-01) in the vicinity of Ponds 6R and 7R show high levels of TDS (540 and 520 milligram per liter [mg/L], respectively) and Cr[VI] (25.8 µg/L and 104 µg/L, respectively), along with other constituents (Lahontan Water Board 2012). Water quality results from one of the production wells used for industrial processes at the Compressor Station (PGE-15) on December 30, 2011 show no detection of Cr[VI] and 153 mg/L of TDS (Lahontan Water Board 2012). Other 2011 data results show that VOCs and pesticides were not detected and metals were detected at levels less than the MCL in the

supply wells. Arsenic was the only chemical exceeding the MCL of 0.01 mg/L at 0.017 mg/L in April 2011 (Cardno ENTRIX 2012a).

Local Water Usage

All of the existing water supplies in the Hinkley Valley and nearby Barstow are pumped groundwater. There are an estimated 500 domestic wells in the Hinkley Valley, but the volume of water used for residential properties is generally small in comparison to agricultural use. After groundwater was reported to be contaminated with hexavalent chromium in 1987, a number of drinking water wells were abandoned following property purchase by PG&E. The standard practice has been to seal these domestic wells, although a few were left to serve as monitoring wells. As part of the PG&E Hinkley Groundwater Remediation Project, PG&E is currently working to expand their existing remediation activities to expedite the groundwater clean-up.

Wells within a 1-mile radius of the Project area pump groundwater for agriculture (including stock watering), domestic, and industrial uses (Figure 3-7). Agricultural wells are primarily for feed cultivation (alfalfa) and stock watering for the adjacent dairy and horse ranches. Approximately 60 water supply wells are within a 1-mile radius and comprise the domestic usage. This estimation is based on a local well record search and aerial images on Google Earth and may not indicate actual occupancy of residences or use of these wells. The closest domestic well shown on Figure 3-7 is located approximately 700 feet due east of Pond 4 (Well 01-02). With respect to groundwater, this well is cross gradient to the surface impoundments. The closest active domestic well to the west (Well 02-25) is located at a distance of approximately 1,350 feet, and to the south (Well 02-05), approximately 800 feet from the Project area. These wells are primarily used for domestic purposes as they contain freshwater and are located outside of the existing Cr[VI] plume boundary. There are no domestic supply wells in use directly downgradient (north or northeast) of the surface impoundments.

PGE's primary groundwater supply consumption within the Project area is for domestic (i.e., sinks, toilets) and industrial supply (i.e., operation of cooling towers) for the Compressor Station. The pump flow meters do not distinguish between water used as domestic water supply and water used in the industrial process. On-site production wells owned by PG&E provide the water used at the Compressor Station. Production wells used for industrial operations include PGE-6, PGE-12, PGE-13, and PGE-15, (Lahontan Water Board 2012). The permitted annual average flowrate to the surface impoundments of 30,000 gpd. The current annual average pumping rate is less than 50 percent of historic rates. In the WDR Board Order 6-90-42 discharge rates are reported as approximately 50,000 gpd, with a capacity over seven surface impoundments for 60,000 gpd (Lahontan Water Board 1990). Operational changes and facility improvements reduced the average rate of pumping and facilitated the clean-closure of four surface impoundments in 1996.

The water supply for the community center is the same as for the Compressor Station. All wells are operated intermittently to supply the station and the community center. Well PGE-14, located to the south of the Compressor Station, is exclusively used to supply the groundwater remediation systems.

Over the last 20 years, groundwater levels have risen over 15 to 20 feet in the shallow aquifer below the Compressor Station due to regional efforts to reduce drafting of the aquifer by the MWA, and in part, due to PG&E cutbacks in supply well pumping for industrial use (Cardno ENTRIX 2012a).

Shown on Figure 3-8 is a chart of measured groundwater level from monitoring wells located upgradient and downgradient of the current surface impoundments that illustrates the general rise of the water table (Pacific Gas and Electric 2012a).

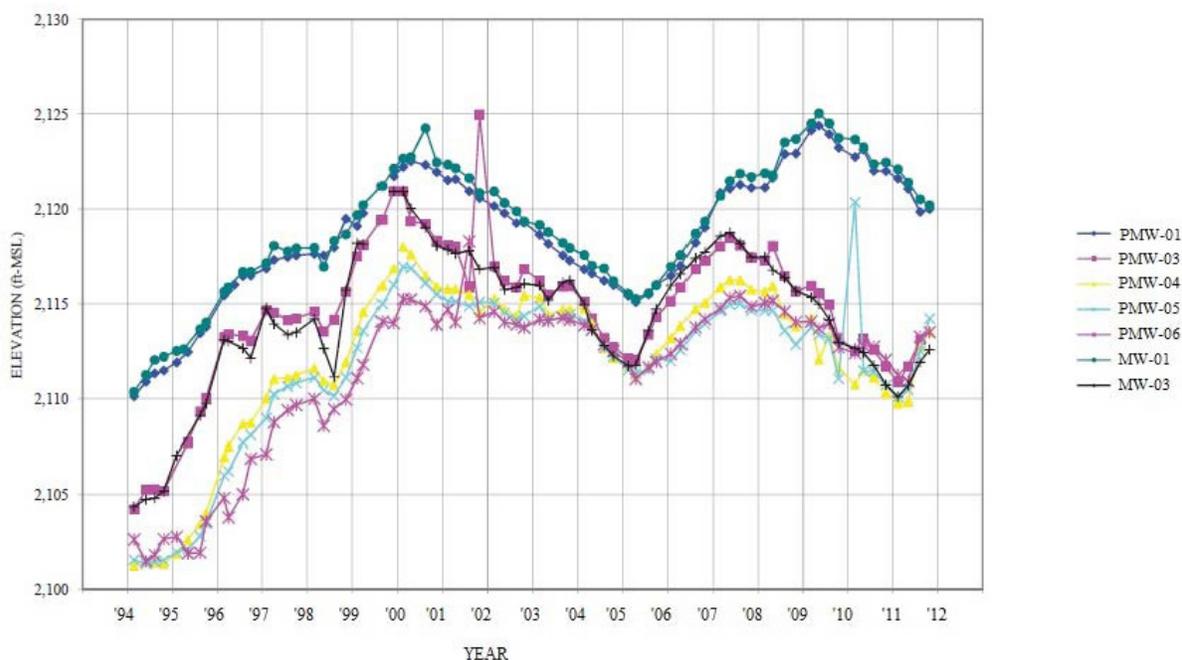


Figure 3-8. Groundwater Elevations in the Project Area from 1994–2012

A water balance analysis was performed as part of the RWD to ensure sufficient capacity of the surface impoundments, taking into account the seasonal fluctuation in blowdown flowrates, the accumulation of solids in the impoundments, and the precipitation and evaporation rates for the Hinkley Region (Cardno ENTRIX 2012a, 2012b). Inputs to the facility were determined based on a daily design flow from the compressor cooling operations of 30,000 gallons per day plus the average monthly precipitation in inches. Output was represented as the average monthly evaporation in inches per month over the surface area of the surface impoundments and converted to equivalent gallons of water. Although the water balance analysis assumes 30,000 gpd annually, flow rates must presently be reduced to 15,000 gpd during the winter to meet freeboard requirements.

- a. **Less than Significant.** The blowdown from the cooling towers at the compressor station accounts for approximately 90% of the discharge to the surface impoundments (Lahontan Water Board 2012). The remaining 10% of the discharge to the surface impoundments is comprised of intermittent waste streams from cleaning and maintenance operations (Lahontan Water Board 2012). Wastewater in the surface impoundments would contain constituents including arsenic, fluoride, hexavalent chromium, magnesium, nitrate and TDS. Protection of water quality standards and compliance with WDRs would be accomplished through the multiply-redundant containment and monitoring systems incorporated into the surface impoundment design. The new surface impoundments would be installed in the footprint of former surface impoundments which have been identified as being clean-closed and are outside of the original chromium discharge and source areas for the Cr[VI] contamination from the

Facility (Lahontan Water Board 2012). In addition, the surface impoundments would be lined with HDPE, and would have no less than 1×10^{-6} cm/sec permeability to prevent wastewater from leaching into the underlying groundwater aquifer. Therefore, it is not expected that this Project would contribute to degradation of groundwater quality due to Cr[VI] or other constituents in the wastewater.

To ensure that groundwater would not be affected by the Project, PG&E would follow an approved Operation, Maintenance, and Contingency Plan, perform a Monitoring and Reporting Program (Cardno ENTRIX 2012a, 2012b), and meet all requirements within the revised WDRs issued by the Regional Board.

- b. **Less than Significant.** The two new surface impoundments would allow the station greater flexibility in wet years to operate during the winter months at an annual average rate of 30,000 gpd. When the existing surface impoundments are close to capacity, the Compressor station currently has to reduce blowdown in the cooling towers and discharge to the impoundments. The proposed increase in flowrate to the impoundments during the winter would result in an increase in annual groundwater pumping. With the Project, PG&E would be able to maintain wastewater flow rates at the average design rate of 30,000 gpd on a year-round basis rather than reducing rates to 15,000 gpd during the winter. With an increase from 15,000 gpd to 30,000 gpd in the winter months, a maximum of 17.1 additional acre-feet of water would be pumped from the aquifer per year. The additional 17.1 acre-feet cited above is well within the PG&E allowance from the Mohave Groundwater Basin, and is less than 1% of the Annual Production Allowance, and less than 0.5% of the Total 2010-2011 Production Allowance. The adjudicated production allowances provide for maintenance of the water table and avoidance of regional drawdown. Given that the water table has actually been rising as a result in the adjudication and the additional water use is within PG&E's allowance, the additional water use is not expected to result in aquifer drawdown that would substantially affect other water users or uses.

A calculation of specific well drawdown was estimated using this equation and the following assumptions: storage coefficient (S) of 0.20; transmissivity of 3,750 ft²/day (based on assumed aquifer thickness of 75 feet and hydraulic conductivity of 50 feet/day); time of 100 years (assuming additional pumping 6 months each year); and additional pumping of 15,000 gpd.² The resultant drawdown for a well 1,000 feet from the source well would be 1.5 feet over 100 years if no aquifer recharge occurs from annual precipitation. This is not expected to substantially affect other well uses or users.

- c. **Less than Significant.** Construction of Ponds 6R and 7R would not alter local drainage patterns or result in substantial on- or off-site erosion in the Project area. The Project area has no surface drainage features other than small drainage channels built as part of the facility. In addition, the Project is located in a geographically flat area where most of the drainage would likely accumulate as localized pools and ultimately evaporate or infiltrate into surface soils, rather than being transported as sheet flow. Stormwater that falls in secondary containment areas

² Source for assumptions: Storage coefficient for unconfined aquifers is approximately the same as specific yield. Specific yield identified in the Groundwater Remediation EIR (Lahontan RWQCB 2012) for sand and silt is 20 to 25%. Transmissivity calculated based on assumed hydraulic conductivity of 50 feet/day and assumed saturated thickness of 75 feet (from Appendix A of Groundwater Remediation EIR, ICF 2012). Time assumed to be net of 50 years (100 years with additional pumping 6 months/year). Additional pumping assumed to be 15,000 gpd. This equation solved by using calculator at <http://www.icalcul8.com/theis.php>.

around sumps, valves, and other outdoor equipment is routed to the oil-water separator, and then to the surface impoundments; by adding Ponds 6R and 7R the facility capacity for stormwater management is increased. Once the impoundments are constructed, the soil would be compacted and graded to facilitate site drainage and prevent soil erosion (Cardno ENTRIX 2012a). The presence of additional surface impoundments would not increase on or offsite erosion.

Soil disturbance during construction could have the potential impact of increasing erosion in the Project area. However, as described in Section 2.2 Project Construction, the Project would be constructed in compliance with Coverage under the State Water Resources Control Board Construction General Permit (Order No. 2009-009-DWQ) SWPPP which identifies BMPs that would be implemented during construction.

- d. **Less than Significant.** Construction of Ponds 6R and 7R would not alter regional drainage patterns and would not result in on- or off-site flooding. Some onsite stormwater is routed to the surface impoundments; by adding Ponds 6R and 7R the facility capacity for flood management is increased and would be beneficial in further preventing flooding on or offsite.
- e. **No Impact.** The Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Ponds 6R and 7R would be constructed below grade with a two-foot freeboard. Due to the surface impoundment design, operational controls, and comprehensive monitoring systems, the impoundments would not be anticipated to overflow. If needed, wastewater flow rates are adjusted to ensure overflow does not occur at the surface impoundments. In addition, no new impervious area would be created and therefore no substantive change between pre- and post- construction runoff conditions or flow rates is anticipated because the existing levees would not be modified and the surface impoundments would be built within the footprint of former Ponds 6 and 7. Therefore, the Project would have no impact on contributing runoff water which would provide substantial additional sources of polluted runoff.
- f. **Less than Significant.** The Project would not substantially degrade water quality. The Discharger (PG&E) has proposed engineered alternatives to the CCR, title 27 prescriptive standards for the construction of the Class II Surface Impoundments. Lahontan Water Board staff has evaluated these proposed alternatives and has determined that these alternatives (1) meet the CCR, title 27 requirements; (2) are consistent with the performance goal of the prescriptive standards, and (3) afford equivalent protection against water quality impairment. In the unlikely event that a release does occur from the alternative liner, the Monitoring and Reporting Program requires PG&E to submit a technical report describing actions taken to abate the release and any proposed future actions to abate the adverse impacts to the environment. In addition, the existing facility has both a Hazardous Materials Business Plan (HMBP) and SPCC Plan which would be updated in the future with any changes to the facility. The facility Corrective Action Plan addresses the actions required in the event of a reasonably foreseeable release from the facility, including potential leaks from the surface impoundments and associated piping and appurtenances. In the event of discovery of water quality impacts PG&E has increased financial assurances as outlined in the RWD and Addendum (Cardno ENTRIX 2012a,b). Therefore, the potential for the Project to otherwise substantially degrade water quality is less than significant.

- g. **No Impact.** The Project does not include housing and, therefore, would not place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map. In addition, the surface impoundments would contain the volume of rain which falls onto the surface impoundment areas in a 1,000-year, 24-hour storm event, while maintaining two feet of freeboard.
- h. **No Impact.** According to the Federal Emergency Management Agency, the Project area is in Zone D, which is defined as “Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted.”
- i. **No Impact.** The Flood Control District of San Bernardino County had historically prepared their own maps (Pacific Gas and Electric 1989) based on the most severe flood of the Mojave River in the area which occurred in 1969. The Project area was not within this flood area and was historically classified outside the Mojave River 100-year flood plain.

In addition, the proposed surface impoundments, when completed, would be below grade to comply with the Title 27 freeboard requirement (2 feet), and they would not impede or redirect flood flows. Therefore, there would be no impact of the Project on flood flows.

- j. **No Impact.** No levees or dams are present within the vicinity of the Project area. Nor are any proposed during Project implementation; therefore, implementation would not expose people or structures to flooding as a result of a levee or dam failure. Therefore, there would be no impact.
- k. **No Impact.** The Project would not contribute to inundation by seiche, tsunami or mudflow. Tsunamis are waves in oceans or seas usually generated by seismic events that displace a large volume of water. The Project area is not located near ocean or sea waters. Seiches are waves generated in closed water bodies (lakes) generally in response to oscillations caused by the propagation of seismic waves. Even though the Project is located within a seismically active region, there are no water bodies in the vicinity of the Project capable of generating seiches or tsunamis that could result in inundation at the Project area. Mudflows require super-saturated slope conditions. The topography at and adjacent to the Project area is relatively level. Slopes capable of generating mudflows are not present and would not be created by Project implementation. Therefore, there would be no impact.

X. Land Use and Planning	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.10 Land Use and Planning

- a. **No Impact.** The Project would not physically divide an established community. The surrounding and nearby community of Hinkley has historically been limited to single family houses on large agricultural acreage lots, as well as single family homes on smaller lots (San Bernardino County 2007). The Project would be contained within the existing Compressor Station boundaries and would not extend into the established community. Therefore, there is no potential to physically divide the community.
- b. **No Impact.** The Project would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project. The Project is entirely within the existing Compressor Station facility, which has a land use designation of Public Facilities. Therefore, the Project would not conflict with any future land use developed in compliance with the County General Plan and zoning ordinances. San Bernardino County General Plan (San Bernardino County 2007) identifies the land use designations for the surrounding areas as RL (Rural Living), RL-5 (Rural Living 5-acre minimum), and RL-10-AP (Rural Living 10-acre minimum, Agricultural Preserve).
- c. **No Impact.** The Project area is within a HCP, as shown on Map 45 of the West Mojave Plan (March 2006). However, the Project area falls outside the designated habitat conservation areas, and there are no proposed impacts to habitats covered by the plan. Also refer to Section 3.4 Biological Resources.

XI. Mineral Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.11 Mineral Resources

- a. **No Impact.** The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. The Project area is not located in one of the California Geological Survey's Mineral Resource Zones, where access to important mineral resources may be threatened, according to provisions of the California Surface Mining and Reclamation Act of 1975. The Project area is not within a designated MRZ.
- c. **No Impact.** The Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan or of a known locally important mineral resource recover site. The Project area is not located within a mineral resource zone identified in the San Bernardino County Mineral Resource Overlay. Therefore, no loss of or interference with mineral resource operations would result from implementation of the Project.

XII. Noise	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.12 Noise

Noise is generally defined as unwanted or unpleasant sound and as such response to noise is subjective and can vary greatly from person to person. Factors that can influence individual response include: intensity, frequency, and time pattern of the noise; the amount of background noise present prior to the intruding noise; and the nature of work or human activity that is exposed to the noise. The adverse effects of noise include interference with concentration, communication, stress, and sleep. At the highest levels, noise can induce hearing damage.

The unit of measurement of environmental noise is the decibel (dB). To better approximate the range of sensitivity of the human ear to sounds of different frequencies, the A-weighted decibel scale was devised. Because the human ear is less sensitive to low-frequency sounds, the A-scale de-emphasizes these frequencies by incorporating frequency weighting of the sound signal. When the A-scale is used, the decibel levels are shown as dBA.

According to San Bernardino County Ordinance 83.01.080, noise levels in residential areas are not to exceed 55-dBA L_{eq}^3 from 7:00 a.m. to 10:00 p.m. or 45-dBA L_{eq} from 10:00 p.m. to 7:00 a.m. However, Section 83.01.080(g)(3) exempts the following sources of noise from the regulation: 1) Motor vehicles not under the control of the commercial or industrial use; 2) Emergency equipment, vehicles, and devices; and 3) temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., from Monday through Saturday (there is no exemption for Sundays and federal holidays).

Construction of the proposed surface impoundments would require several pieces of large equipment. Typical noise levels associated with the equipment for the Project at the equipment site and 500 feet away are listed in Table 3-8 below. The closest residents are located approximately 1,000 feet east of Pond 4 in the Project area (refer to well labeled 01-02 on Figure 3-7, as well as Figure 2-2 for pond locations).

Table 3-8. Typical Construction Noise Levels

Equipment	Noise at 50 feet L_{max} (dBA)	Noise at 500 feet L_{max} (dBA)	Noise at 1,000 feet L_{max} (dBA)
Tractor Trailer	84	65	59
Back hoe	80	61	55
Roller	85	66	60
Grader	85	66	60
End Dump	84	65	59
Generator	82	63	57
Compressor	80	61	55
Pneumatic tools	85	66	60

The closest airport or airfield is Barstow Daggett Airport, located approximately 20 miles southeast of the Project area, and the closest private airstrip is located approximately six miles to the west.

- a. **Less than Significant with Mitigation Incorporated.** The project could expose persons to or generate noise levels in excess of standards established in the San Bernardino County noise ordinance during project construction. Noise levels of tractor trailers, heavy equipment, and/or pneumatic tools could slightly exceed 55 dBA at the nearest residence (Table 3-8). **Mitigation Measure NOI-1** would reduce this impact to less than significant by restricting construction to daytime hours and limiting time equipment is allowed to idle.

Mitigation Measure NOI-1. Restrict construction activities to day time hours and weekdays. The construction contractor or project manager will ensure that construction activities involving the use of tractor trailers, heavy equipment, and/or pneumatic tools will be performed between 7:00 a.m. and 7:00 p.m. on Monday through Saturday, and no work at noise levels above 45db at the nearest occupied residence will be performed on Sundays or federal holidays. Additionally, this equipment will not be allowed to idle longer than 5 minutes.

- b. **Less than Significant with Mitigation Incorporated.** The Project could expose persons to or generate excessive groundborne vibration during excavation and grading for the proposed

³ L_{eq} is the equivalent steady-state sound level which, in a stated period, would contain the same acoustic energy as the actual time-varying sound level during the same period.

surface impoundments for a limited time (approximately 2 weeks) during construction. Worker exposure would be limited with implementation of hearing protection under the Project Health and Safety Plan. Implementation of **Mitigation Measure NOI-1** would reduce this impact to less than significant by restricting construction to daytime hours. Excessive vibrations, whenever present, will be documented in a log by the construction contractor or project manager.

- c. **Less than Significant.** Operation and maintenance of the proposed surface impoundments would generate little or no noise and would be similar to the existing surface impoundments since surface impoundments are operated individually. Any noise increase would be negligible and not likely noticeable to nearby residents. Therefore, the Project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- d. **Less than Significant with Mitigation Incorporated.** Project construction activities (excavation, grading, and trenching) would temporarily increase noise levels at the Project area, as described in the discussion under "a". **Mitigation Measure NOI-1** would reduce this impact to less than significant by restricting construction to daytime hours and limiting time equipment is allowed to idle.
- e. **No Impact.** The Project would not be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels. The closest airport or airfield is Barstow Daggett Airport, located approximately 20 miles southeast of the Project area approximately six miles to the west
- f. **No Impact.** The Project would not be located in the vicinity of a private airstrip and expose people residing or working in the Project area to excessive noise levels. The closest private airstrip is located approximately six miles to the west (Lahontan Water Board 2008a).

XIII. Population and Housing	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.13 Population and Housing

- a. **No Impact.** The Project would not induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure).

During construction, the Project would employ six to ten construction workers. These construction workers would be hired from the local labor force, except for skilled labor for geomembrane installation that would stay in hotels, likely near Barstow. Due to the small number of construction workers and the short duration of the construction time frame (6-8 weeks), no impact on population and housing would occur.

Project implementation would result in continuing operation of an existing industrial facility. It does not involve the construction of new residential or commercial development or infrastructure that could result in additional population growth in the Project area. Project implementation would not displace existing housing or residents as all new construction is contained within the existing facility.

- d. **No Impact.** The Project would not displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere for the reasons described above.
- e. **No Impact.** The Project would not displace a substantial number of people, necessitating the construction of replacement housing elsewhere for the reasons described above.

XIV. Public Services	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.14 Public Services

- a. **No Impact.** Project construction and operation activities have the potential for accidents involving personal injury, fire, and spills/releases of materials stored onsite. In the event of such an emergency, local emergency service providers (fire and police protection) would be required to respond. Due to the short duration of construction, the Project would not result in the need for additional fire, police, or emergency services providers. (The potential for construction vehicles blocking roadways during construction is addressed in Section 3.16, Transportation/Traffic). During and after construction, the operation at the facility would not deviate from its existing operations. The two additional impoundments would not require additional employees and, therefore, would not result in an increased need for services of public facilities. Therefore, implementation of the Project would not require expansion of the existing local emergency services and would not impact response times as they are already prepared to respond to the existing facility.

XV. Recreation	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.15 Recreation

- a. **No Impact.** The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities. No population growth, either direct or indirect, is associated with implementation of the Project. The Project would not increase demand for recreational amenities, nor would it interfere with existing recreational uses.
- b. **No Impact.** The Project would not include recreational facilities or require the construction or expansion of recreational facilities. Implementation of the Project includes improvements to an existing industrial facility and does not include the construction, expansion or removal of a recreational facility.

XVI. Transportation/Traffic	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.16 Transportation/Traffic

Local Setting

The Project vicinity is within an unincorporated rural area of San Bernardino County. Local roadways to the facility include Fairview Road and Community Boulevard. Highway 58 is the closest major roadway.

SR 58 (also called the Mojave-Barstow Highway and the Barstow/Bakersfield Highway) is the primary regional roadway in the project area. It originates east of the project area in Barstow at Interstate 15 (I-15) and extends west to Mojave and Bakersfield. Regionally, SR 58 provides a connection between Barstow, Mojave and Bakersfield. Locally, SR 58 is the main access route to the community of Hinkley

from both the east and west. In the vicinity of the project area, SR 58 is a two-lane highway with 11- to 12-foot lanes and 6- to 8-foot-wide shoulders. It also has several driveways and intersecting cross streets. The speed limit for the portion of the highway that runs through the project area is 60 miles per hour (San Bernardino County 2007). Within the project area, the only SR 58 intersection that is signalized is at Lenwood Road; other locations are stop-sign controlled. Table 3-9 shows average annual daily traffic (AADT) on SR 58 in the vicinity of the project area.

Table 3-9. Annual Average Daily Traffic on SR 58 in the Project Vicinity

Highway	Cross Street	Back AADT	Ahead AADT
SR 58	Harper Lake Road	9,700	10,000
SR 58	Lenwood Road	10,000	11,300

Source: Caltrans 2011.

AADT = annual average daily traffic (total traffic volume for the year divided by 365 days).

Back AADT = traffic south or west of the count location.

Ahead AADT = traffic north or east of the count location.

In 2009, CPUC (California Public Utilities Commission 2010) estimated that the level of service (LOS) at the intersections of SR 58/Harper Lake Road was LOS of B/C (~12,100 AADT) and at SR 58/Lenwood Road was LOS A (12,100 AADT). Traffic levels in 2011 were lower than those studied by CPUC in 2009. These levels of service are better than the County and Caltrans standard of LOS D.

As shown in Table 3-10, the existing roadways are not highly congested because of the rural nature of the project area.

Table 3-10. Average Daily Traffic on Local Access Roads

Road	Count Site	ADT
Hinkley Road	South of SR 58	282
Community Boulevard	East of Hinkley Road	321
	East of Lenwood Road	976

Source: San Bernardino County 2012b.

ADT = average daily traffic.

- a. **Less than Significant with Incorporated Mitigation.** The two additional impoundments do not require additional workers, so there would be no permanent increases in traffic from Project operation. There would be short-term construction related traffic including large vehicles on local roads to and from the Project area, and up to ten construction workers would commute to and from the site. Due to the rural nature of the Project area, the small number of vehicle trips associated with the Project, and the short duration of construction activities, construction related traffic would not result in a significant increase in traffic. However, the temporary increase in large vehicles on small local roadways could result in occasional delays or blocked roadways as trucks await access to the site.

This could be considered a conflict with County policies related to providing a safe and effective transportation system that provides adequate traffic movement (Goal D/CI 1 of the Desert Regional goals and policies of the County's circulation and Infrastructure Element). **Mitigation**

Measure TRA-1 would ensure this impact is less than significant by requiring a traffic control plan during construction.

Mitigation Measure TRA-1: Implement traffic control measures during construction. To minimize impacts on local surface streets in the project area, PG&E will ensure that construction contractors implement the following traffic control measures during project construction:

- On days with large truck traffic, use personnel as necessary to direct traffic and prevent vehicles from lining up on county roads and highways during construction.
 - Vehicles will not be allowed to block the roadway, resulting in an inadvertent temporary lane closure, while waiting to enter the Project area for longer than five minutes.
 - Emergency vehicle access will be maintained at all times, and there will be no road closures.
 - Maintain log entries whenever the above mitigation measure is implemented.
- b. **Less than Significant.** The Project would not conflict with the County's congestion management program because the Project would not result in a permanent traffic increase because no additional workers or other traffic would be required to operate the additional impoundments. Congestion associated with construction-related traffic is addressed under "a".
- c. **No Impact.** The Project would not result in a change in air traffic patterns because it would have no impact on any airports or airstrips or flight paths of overhead air craft.
- d. **No Impact.** The Project would not increase hazards because of a design feature or incompatible uses because the two additional impoundments would be located entirely within the existing Compressor Station facility and are considered a compatible use. Potential hazards associated with construction vehicles blocking access on local roadways is addressed under "a".
- e. **Less than Significant with Incorporated Mitigation.** The two additional impoundments would be within the existing Compressor Station facility and would not interfere with any emergency access. However, as described under "a", Project construction would result in a small increase in large vehicles on the roadway for a short period of time and thus a slight potential for blocked roadways while waiting to enter the Project area. This could potentially block an emergency vehicle using the roadway. **Mitigation Measure TRA-1** would reduce this impact to less than significant by ensuring emergency vehicle access is maintained and no roadways are closed.
- f. **No Impact.** The project would not conflict with County plans and policies regarding public transit, bicycle or pedestrian facilities because there would be no direct or indirect effect on such facilities. The Project area is in a rural area and would not generate additional workers.

XVII. Utilities and Service Systems	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.17 Utilities and Service System

- a. **Less than Significant.** The Project would not exceed RWQCB wastewater treatment requirements. As discussed in Chapters 1 and 2 and in Section 3.9, Hydrology and Water Quality, the Project consists of the construction of two additional Class II surface impoundments for management of facility derived wastewater and their operation and maintenance. The Revised RWD and Addendum (Cardno ENTRIX 2012a, 2012b) would be the source of revised facility WDRs issued by the Regional Board. The facility would comply with WDRs issued by the Regional Board. Implementation of the Operation and Maintenance Plan and the Monitoring and Reporting Program would prevent exceedances of the Regional Board wastewater treatment requirements.
- b. **Less than Significant.** The Project includes construction of two additional Class II surface impoundments for management of facility derived wastewater. This MND covers the effects

associated with construction, operation, and maintenance of the impoundments, and has presented mitigation measures that would be implemented to reduce potential impacts to a less-than-significant level. Therefore, the Project would not result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- c. **No Impact.** Project implementation would not require additional stormwater facilities. The facilities being constructed would allow for additional storage area for facility wastewater and stormwater.
- d. **No Impact.** The existing PG&E facility water wells that serve the existing Compressor Station facilities in the Project area would be sufficient to meet facility demand with construction of the two additional impoundments, which would hold wastewater and would not generate demand for additional water supply. During construction activities, water supply to workers will be provided by PG&E. No additional water supply wells would need to be constructed with implementation of the Project.
- e. **No Impact.** All wastewater generated at the existing facility is managed onsite. Potable water and water used in toilets and sinks is disposed of in onsite septic systems. Although temporary construction workers would use on-site septic system, there would be no additional permanent workers and thus \no additional demand would be placed on a local wastewater treatment provider. The on-site septic system is located within the Compressor Station facility (Project area) on the north of the compressor station (Cardno ENTRIX 2012).
- f. **Less than Significant.** Project construction would generate solid waste from removing vegetation in Ponds 6R and 7R and from scrap pieces remaining after installation of the engineered HDPE liner. All solid waste generated during construction of the proposed surface impoundments would be transported offsite to the appropriate disposal facility dependent on waste classification. The Barstow Sanitary Landfill, located in Barstow is the closest landfill to the project area and has an 80,354,500-cubic-yard capacity. The Barstow Sanitary Landfill accepts agricultural, construction/demolition, industrial, mixed municipal, biosolids (sludge), and other designated waste. The Barstow Sanitary Landfill is expected to reach capacity by 2071 (California Department of Resources Recycling and Recovery 2010). .Once operating, any solid waste generated by the two additional impoundments would be negligible, and there would be no additional employees generating solid waste.
- g. **No Impact.** The proposed Project involves the construction of two additional Class II surface impoundments for management of facility derived wastewater. The Revised ROWD and Addendum (Cardno ENTRIX 2012a, 2012b) propose to clean close Ponds 4, 5, 6R, and 7R and close Pond 8 as a Class II landfill to manage all residual waste. Closure of these facilities would comply with all federal, state, and local statutes and regulations related to solid waste (Cardno ENTRIX 2012a, 2102b) The project would generate minimal solid waste during operations and thus would comply with requirements for solid waste.

XVIII. Mandatory Findings of Significance	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.18 Mandatory Findings of Significance

- a. **Less than Significant Impact with Mitigation Incorporated.** The Project is not expected to threaten or reduce fish, or plant populations, but could adversely affect wildlife species identified as candidate, sensitive or special status species (refer to Section 3.4). Mitigation measures, such as pre-construction surveys, worker environmental awareness training, and construction monitoring, time-of-year restrictions, are included to protect biological resources including Mohave ground squirrel, desert tortoise, burrowing owl, and other endangered or protected species (refer to Mitigation Measures BIO-1 through BIO-6 in Section 3.4) would reduce impacts to a less than significant level.

The project is not expected to eliminate important examples of the major periods of California history or prehistory because none were identified in the Project area; however, excavation activities during construction could result in the discovery of previously unknown buried cultural or historical resources (refer to Section 3.5). Mitigation measures to stop work if resources are discovered and determine the potential need for protection are included to protect unknown cultural resources (refer to Mitigation Measure CUL-1 in Section 3.5).

Therefore, with the mitigation measures incorporated into the Project, the potential for the Project to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range

of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory would be less than significant.

- b. **Less than Significant Impact with Mitigation Incorporated.** The Project has the potential to result in incremental effects that, when viewed in connection with the effects of other projects, could be cumulatively considerable. Other projects include previously approved containment and remediation activities and the currently proposed Hinkley Groundwater Remediation Project (which expands the containment and remediation activities), conducted by PG&E to remediate groundwater contaminated with Cr[VI] that historically originated from the Compressor Station.

Potential cumulative effects include construction-related dust, GHG emissions, noise and traffic. Implementing Mitigation Measures AIR-1, GHG-1, NOI-1 and TRA-1 (described in Sections 3.3, 3.7, 3.12 and 3.16 above) would ensure project impacts are less than significant and do not result in a substantial contribution to cumulative effects.

Additionally, there is potential for cumulative effects related to groundwater and water quality. Large volumes of groundwater would be extracted as part of the Hinkley Groundwater Remediation Project, as described in the environmental impact report prepared for the project (ICF 2012). Following issuance of the existing WDRs (Board Order 6-97-82) adopted in 1997, pumping was close to the annual average of 30,000 gpd. However, over the years, pumping has been significantly reduced to account for less evaporation in the existing surface impoundments due to weather conditions and use of better cooling tower corrosion chemicals. Therefore, in recent years, pumping has been less than 30,000 on an annual average basis. The Project would allow PG&E to return to the permitted pumping rate of 30,000 gpm on a year-round basis, which would result in a minor increase in pumping rates compared to existing levels. However, the additional total annual volume of water required to operate the Compressor Station with the two new surface impoundments would result in a minimal impact on groundwater supplies, even with the simultaneous operation of the Hinkley Groundwater Remediation Project. Thus, the Project would not result in a substantial contribution to cumulative depletion of groundwater supplies. Further, the project includes a comprehensive Monitoring and Reporting program to protect groundwater resources and effectively determine whether water degradation is occurring (refer to Section 2.2 above).

Therefore, no adverse cumulative impact to the environment is anticipated.

- c. **Less than Significant Impact with Mitigation Incorporated.** This IS/MND evaluates potential environmental effects for 17 issue areas or resource topics to determine if there would be substantial adverse effects on human beings. Mitigation measures have been identified for potential impacts (described in Sections 3.3, 3.7, 3.12 and 3.16 above). Implementation of Mitigation Measures AIR-1, GHG-1, NOI-1 and TRA-1 would be required during construction, operation and maintenance of the Project and, thus, would ensure project impacts are less than significant and do not result in environmental effects that cause substantial adverse effects on human beings, either directly or indirectly.

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4.2 Personal Communications

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Schoemann, Sally. Senior Consultant / Civil and Environmental Engineering with Cardno ENTRIX. October 10, 2012 – email to Alexa La Plante titled *Response to ICF Questions re. Hinkley Pond 6R/7R Project*.

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Telephone Conversation with Danica Schaffer-Smith, Cardno ENTRIX.

Chapter 5

Report Preparation

This initial study was originally prepared by Cardno ENTRIX in June 2012 and was reviewed and revised by ICF International (formerly Jones & Stokes) under Lahontan Water Board direction.

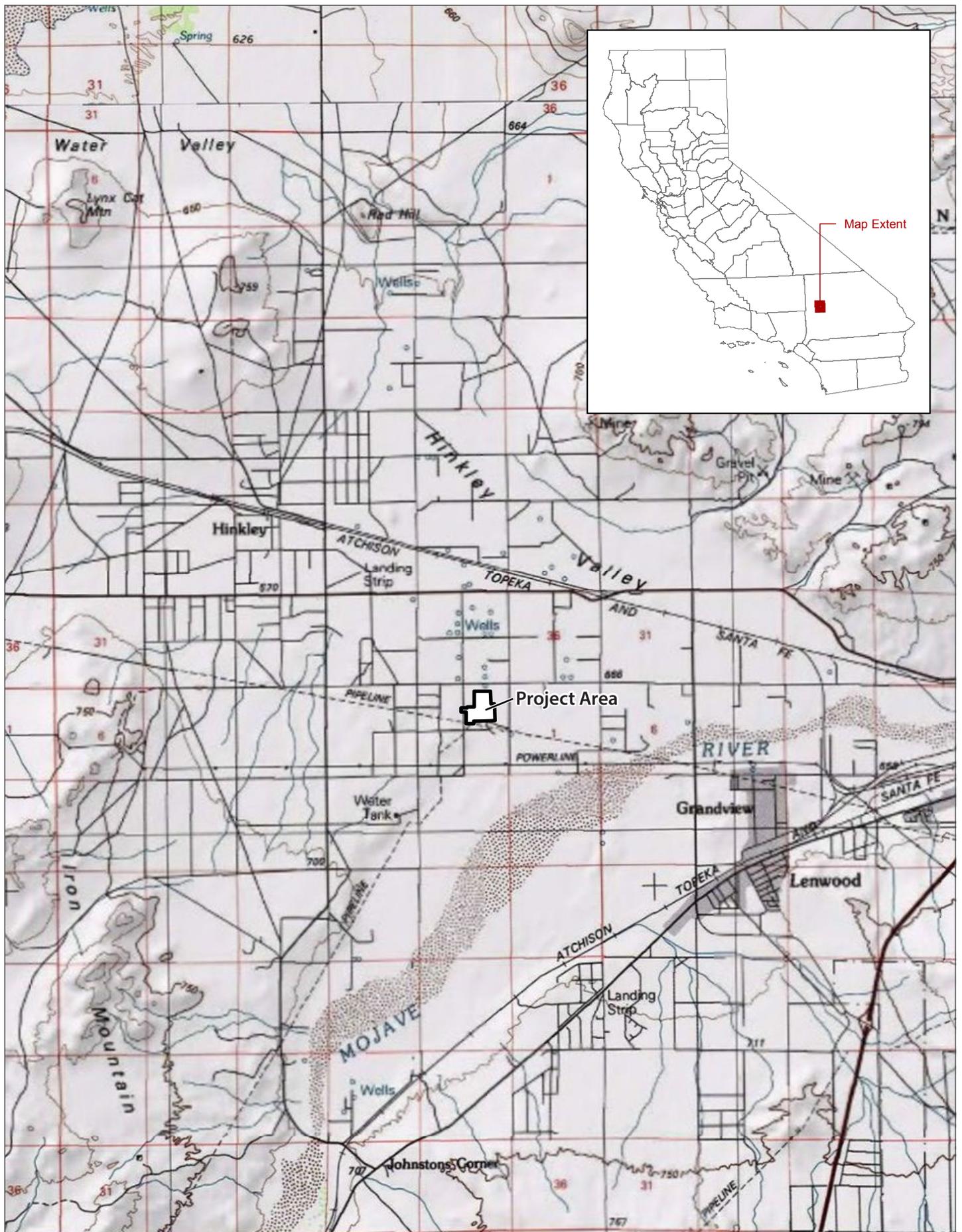
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Biological Resources	Richard Williams / Robert Knutson
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Traffic	Erin DeVine, P.G.
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Greenhouse Gas Emissions	Matthew McFalls
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Hydrology and Water Quality	Alexa La Plante
Noise	Alexa La Plante
Population and Housing	Alexa La Plante
Public Services	Alexa La Plante
Transportation/Traffic	Alexa La Plante
Utilities and Service Systems	Alexa La Plante
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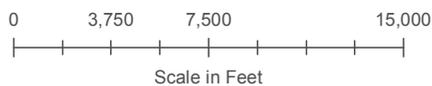


Sources: USGS 1982, Cardno ENTRIX.

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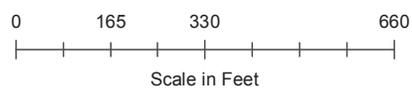
FIGURE 2-1

Project Vicinity
 Hinkley Compressor Station
 Hinkley, CA



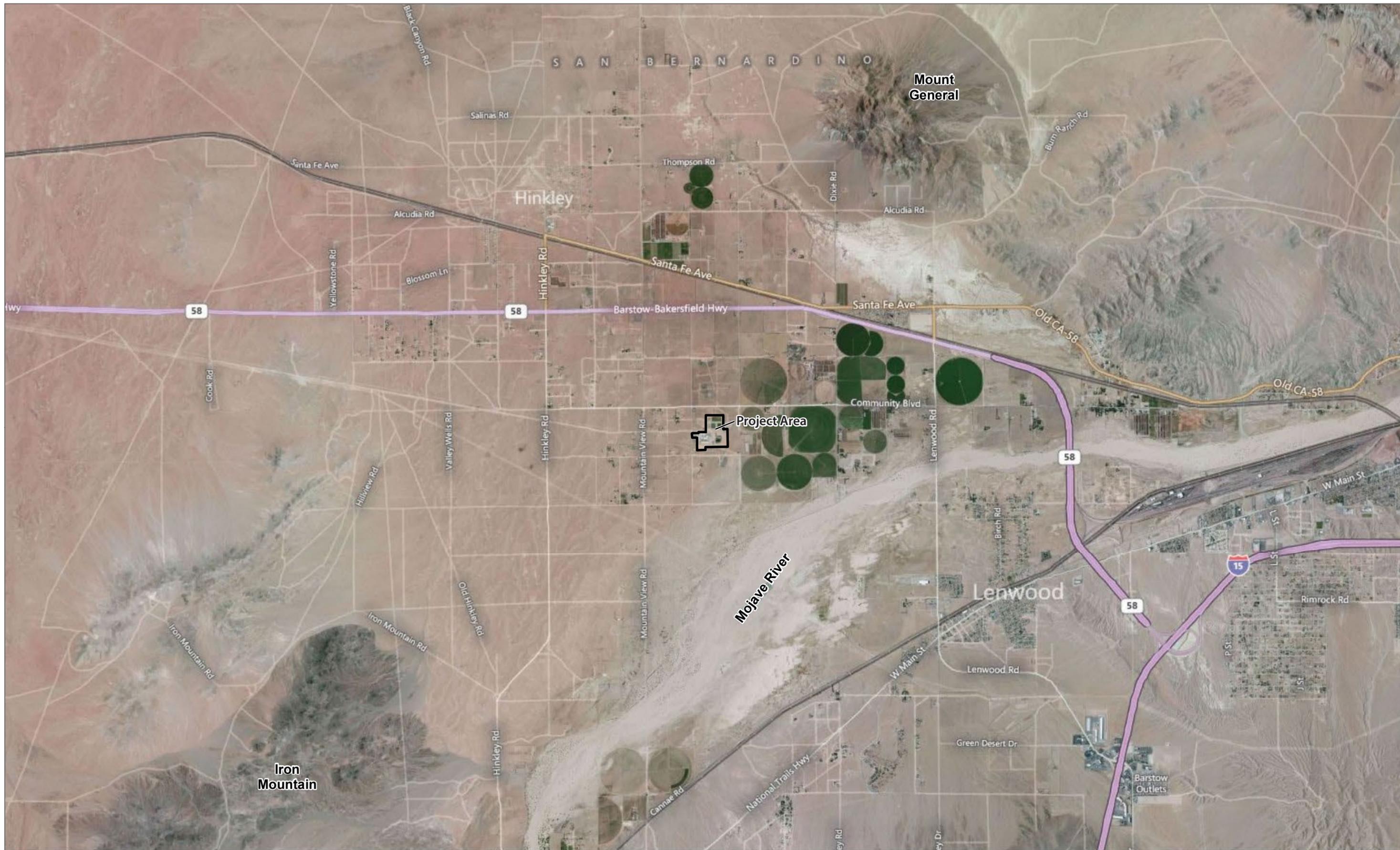


Sources: NAIP 2011, Cardno ENTRIX.



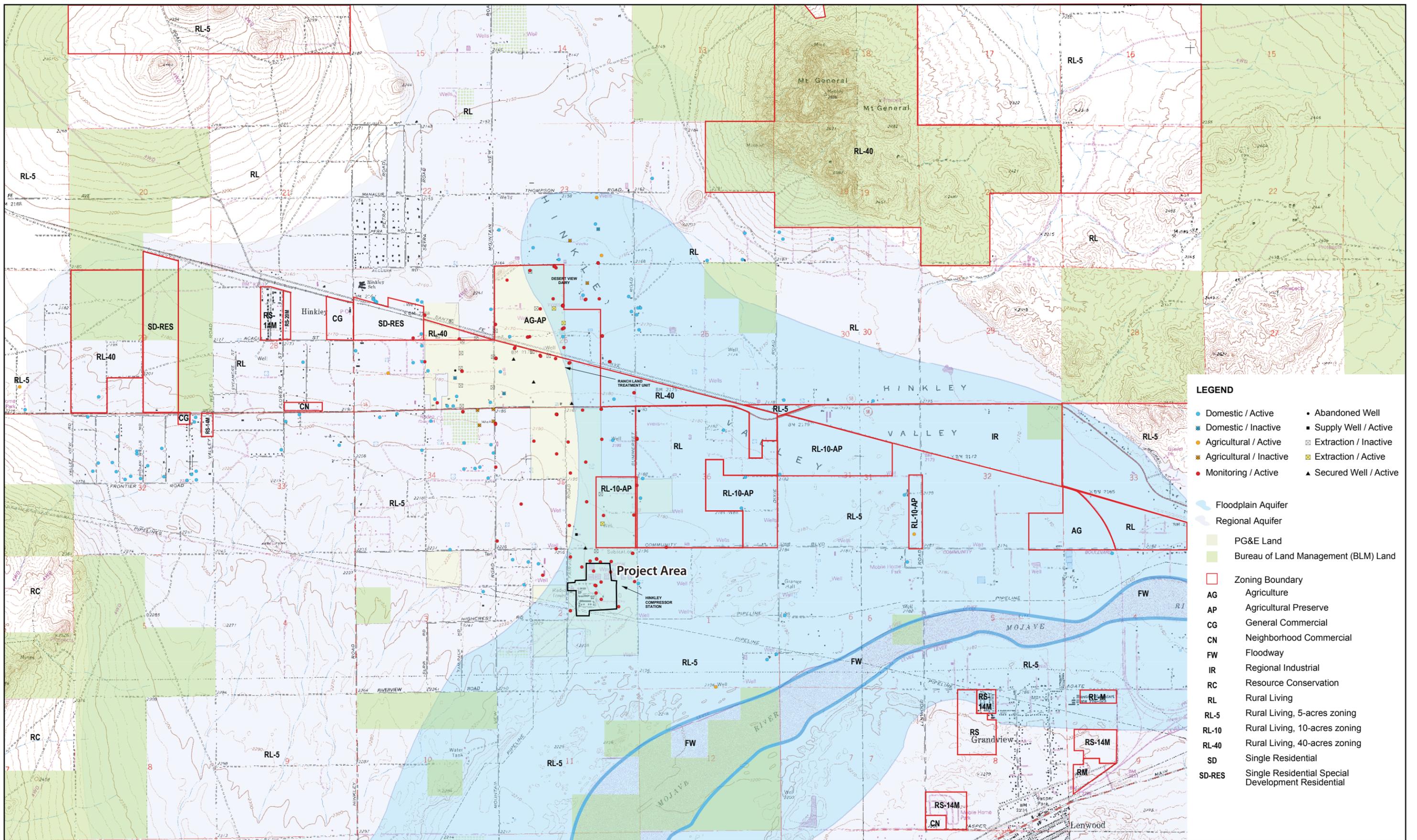
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FIGURE 2-2
Project Area
 Hinkley Compressor Station
 Hinkley, CA

8-180



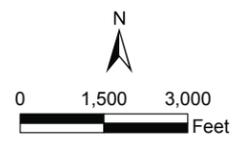
Source: Cardno ENTRIX.





- LEGEND**
- Domestic / Active
 - Domestic / Inactive
 - Agricultural / Active
 - Agricultural / Inactive
 - Monitoring / Active
 - Abandoned Well
 - Supply Well / Active
 - Extraction / Inactive
 - Extraction / Active
 - Secured Well / Active
 - Floodplain Aquifer
 - Regional Aquifer
 - PG&E Land
 - Bureau of Land Management (BLM) Land
 - Zoning Boundary
 - AG Agriculture
 - AP Agricultural Preserve
 - CG General Commercial
 - CN Neighborhood Commercial
 - FW Floodway
 - IR Regional Industrial
 - RC Resource Conservation
 - RL Rural Living
 - RL-5 Rural Living, 5-acres zoning
 - RL-10 Rural Living, 10-acres zoning
 - RL-40 Rural Living, 40-acres zoning
 - SD Single Residential
 - SD-RES Single Residential Special Development Residential

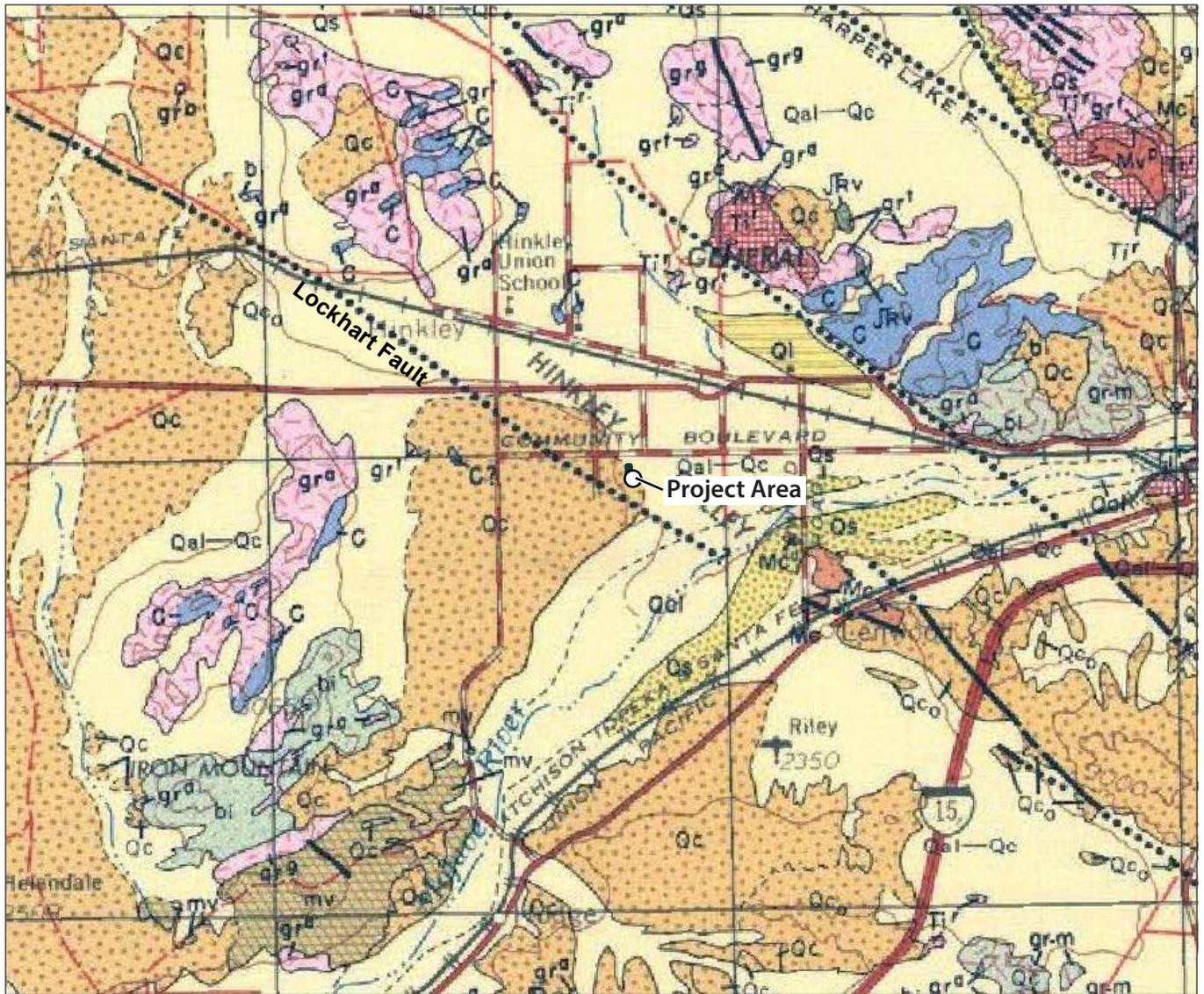
Sources: San Bernardino County 2007, Cardno ENTRIX.



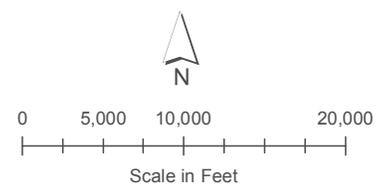
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FIGURE 3-2

**Topography and Land Use
in the Hinkley Valley**
Hinkley Compressor Station
Hinkley, CA



- | | | | |
|--|---|--|--|
| | Dune sand | | Mesozoic granitic rocks: gr ^a -granite and adamellite; gr ^g -granodiorite; gr ^t -tonalite and diorite |
| | Alluvium | | Mesozoic basic intrusive rocks |
| | Quaternary lake deposits | | Pre-Cretaceous metavolcanic rocks |
| | Pleistocene nonmarine | | Pre-Cenozoic granitic and metamorphic rocks |
| | Miocene volcanic: Mv ^r —rhyolite; Mv ^a —andesite; Mv ^b —basalt; Mv ^p —pyroclastic rocks | | Undivided Carboniferous marine |
| | Tertiary intrusive (hypabyssal) rocks: Ti ^r —rhyolite; Ti ^a —andesite; Ti ^b —basalt | | Fault Trace |

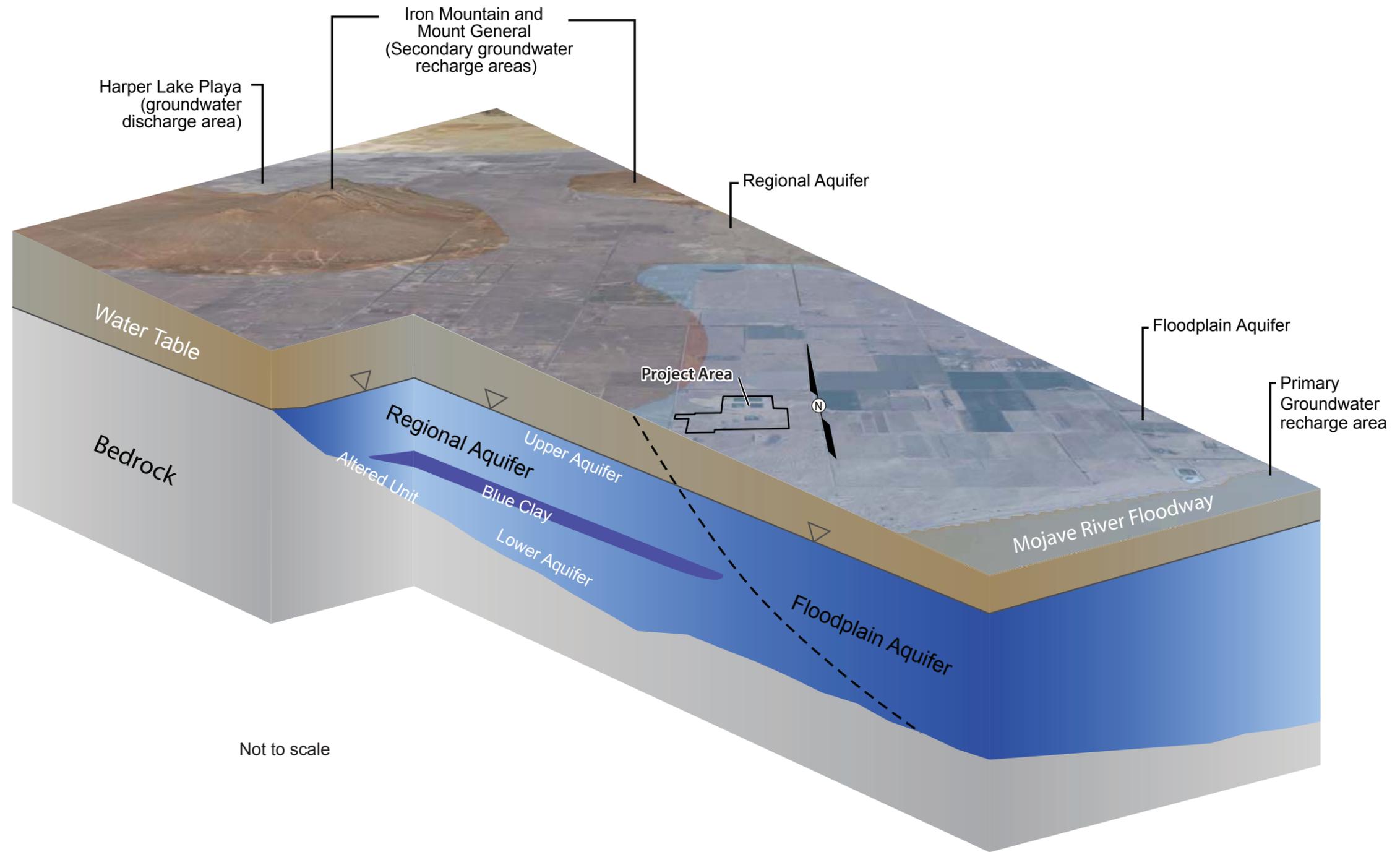


Sources: USGS 1968, Cardno ENTRIX.

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FIGURE 3-4

Regional Geologic Setting
Hinkley Compressor Station
Hinkley, CA



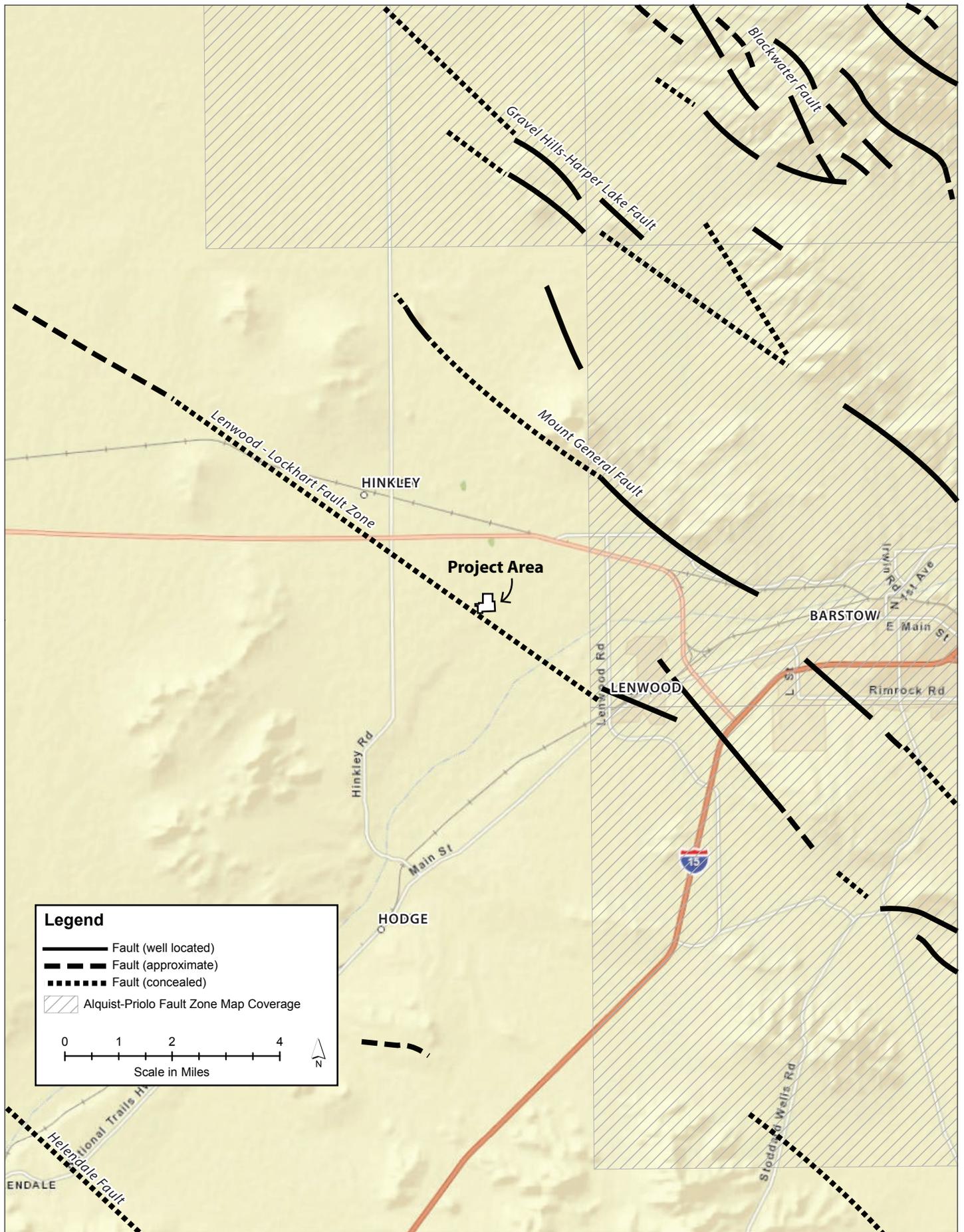
Source: PG&E 2007, Cardno ENTRIX.

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FIGURE 3-5

Generalized Conceptual Diagram of Local Geology and Groundwater in the Hinkley Valley
 Hinkley Compressor Station
 Hinkley, CA

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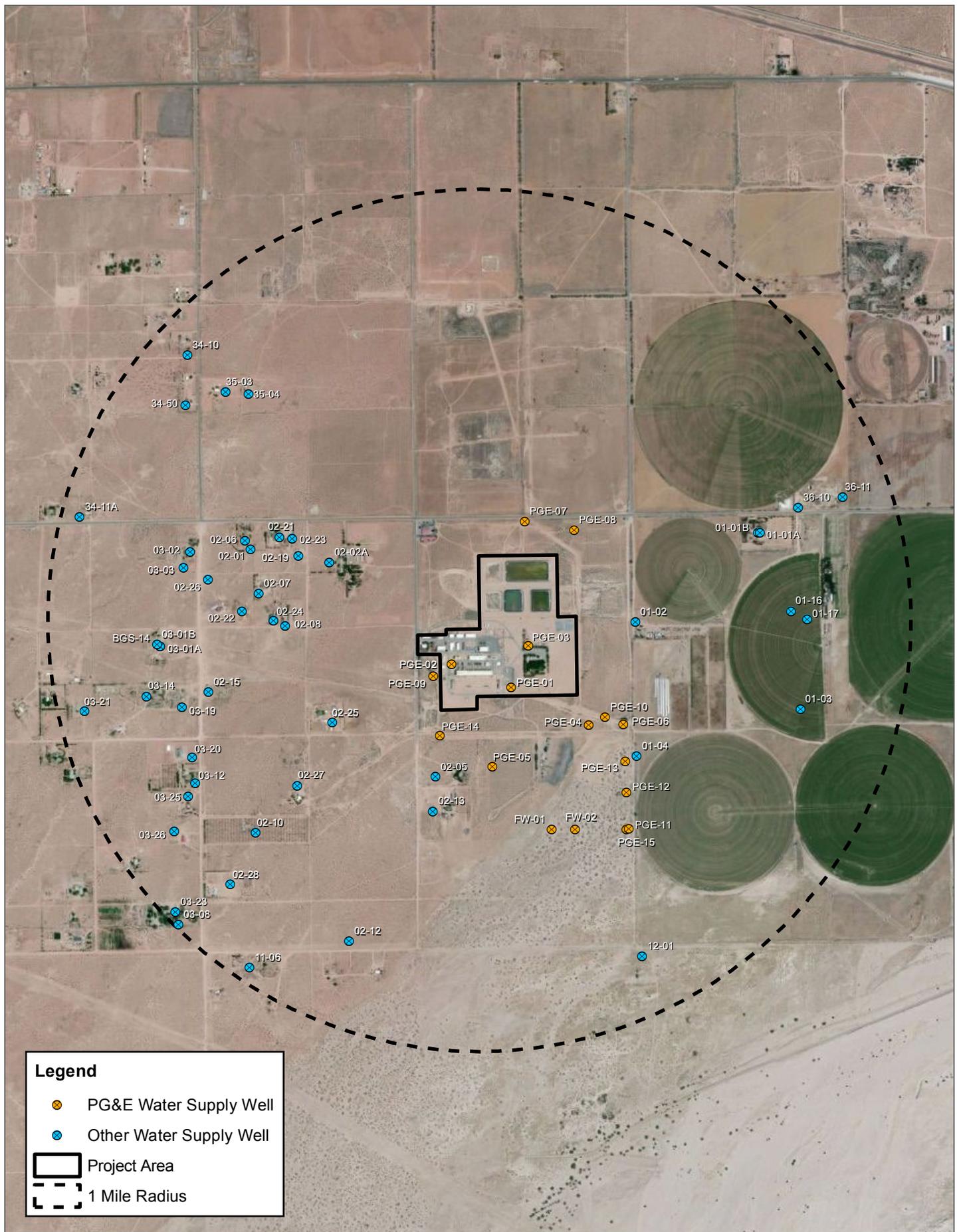
Sources: Base map: Cardno ENTRIX. Faults: California Department of Conservation 2010.

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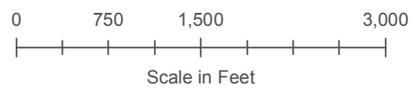
FIGURE 3-6

Geologic Faults in the Hinkley Valley

Hinkley Compressor Station
Hinkley, CA



Source: Cardno ENTRIX.



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FIGURE 3-7
 Water Supply Wells within 1 Mile Radius
 Hinkley Compressor Station
 8-188 Hinkley, CA

Appendix A
Air Quality Emissions Calculations

ICF REVISIONS TO ONROAD CALCULATIONS, DAILY

	Daily VMT	Pounds per Day									
		ROG	CO	NOX	SOX	PM10	PM2.5	CO2	CH4	N2O	CO2e
Pickup Truck/SUV	160	0.0457917	1.254165	0.160689	0.0015287	0.0009582	0.0008622	151.01891	0.016	0.016	156.31491
Semi Truck w/Flatbed Trailer (equipment)	120	0.1457267	0.6919051	3.0882906	0.0041536	0.1786514	0.1499515	435.36798	0.012	0.012	439.33998
Water Truck	10	0.0121439	0.0576588	0.2573575	0.0003461	0.0148876	0.012496	36.280665	0.001	0.001	36.611665
Pickup Truck/SUV	320	0.0915833	2.5083301	0.321378	0.0030574	0.0019165	0.0017245	302.03782	0.032	0.032	312.62982
Dump Truck (rock)	80	0.0971511	0.4612701	2.0588604	0.0027691	0.1191009	0.0999677	290.24532	0.008	0.008	292.89332
Semi Truck w/Flatbed Trailer (GCL)	2600	3.1574123	14.991278	66.912963	0.089995	3.8707797	3.2489487	9432.973	0.26	0.26	9519.033
Semi Truck w/Flatbed Trailer (HDPE)	1600	1.9430229	9.2254018	41.177208	0.0553815	2.3820183	1.999353	5804.9065	0.16	0.16	5857.8665
Semi Truck w/Flatbed Trailer (equipment)	200	0.2428779	1.1531752	5.147151	0.0069227	0.2977523	0.2499191	725.61331	0.02	0.02	732.23331
Water Truck	10	0.0121439	0.0576588	0.2573575	0.0003461	0.0148876	0.012496	36.280665	0.001	0.001	36.611665
Pickup Truck/SUV	160	0.0457917	1.254165	0.160689	0.0015287	0.0009582	0.0008622	151.01891	0.016	0.016	156.31491
Haul Truck (waste materials)	40	0.0485756	0.230635	1.0294302	0.0013845	0.0595505	0.0499838	145.12266	0.004	0.004	146.44666
Semi Truck w/Box Trailer (piping)	240	0.2914534	1.3838103	6.1765812	0.0083072	0.3573027	0.299903	870.73597	0.024	0.024	878.67997
Semi Truck w/Flatbed Trailer (equipment)	40	0.0485756	0.230635	1.0294302	0.0013845	0.0595505	0.0499838	145.12266	0.004	0.004	146.44666
Water Truck	10	0.0121439	0.0576588	0.2573575	0.0003461	0.0148876	0.012496	36.280665	0.001	0.001	36.611665
Maximum Daily Emissions, pounds (Phase 1, onsite) - from ENTRIX'S CALCULATIONS		2.96	13.21	18.51	0.03	1.19	1.01	2363	0.25	0.13	2409
Maximum Daily Emissions, pounds (Phase 2, onsite) - from ENTRIX'S CALCULATIONS		1.46	8.05	9.41	0.02	0.65	0.55	1468	0.12	0.08	1496
Maximum Daily Emissions, pounds (Phase 3, onsite) - from ENTRIX'S CALCULATIONS		0.88	4.8	6.23	0.01	0.44	0.37	969	0.07	0.05	986
Maximum Daily Emissions, pounds (Phase 1, offsite)		0.2036623	2.0037289	3.5063372	0.0060284	0.1944972	0.1633097	622.66756	0.029	0.029	632.26656
Maximum Daily Emissions, pounds (Phase 2, offsite)		5.5441914	28.397114	115.87492	0.1584718	6.6864554	5.6124089	16592.057	0.481	0.481	16751.268
Maximum Daily Emissions, pounds (Phase 3, offsite)		0.4465401	3.1569042	8.6534881	0.0129511	0.4922495	0.4132288	1348.2809	0.049	0.049	1364.4999
Maximum Daily Emissions, pounds (All Phases, onsite)		2.96	13.21	18.51	0.03	1.19	1.01	2363	0.25	0.13	2409
Maximum Daily Emissions, pounds (All Phases, offsite)		5.5441914	28.397114	115.87492	0.1584718	6.6864554	5.6124089	16592.057	0.481	0.481	16751.268
TOTAL		8.50	41.61	134.38	0.19	7.88	6.62	18955.06	0.73	0.61	19160.27
MDAQMD Thresholds		137	548	137	137	82	82	--	--	--	548,000

ICF REVISIONS TO ONROAD CALCULATIONS, TOTAL

	Total VMT	Total Emissions									
		ROG	CO	NOX	SOX	PM10	PM2.5	CO2	CH4	N2O	CO2e
Pickup Truck/SUV	1600	0.0002	0.0063	0.0008	0.0000	0.0000	0.0000	0.7551	0.0001	0.0001	0.7816
Semi Truck w/Flatbed Trailer (equipment)	240	0.0001	0.0007	0.0031	0.0000	0.0002	0.0001	0.4354	0.0000	0.0000	0.4393
Water Truck	100	0.0001	0.0003	0.0013	0.0000	0.0001	0.0001	0.1814	0.0000	0.0000	0.1831
Pickup Truck/SUV	1600	0.0002	0.0063	0.0008	0.0000	0.0000	0.0000	0.7551	0.0001	0.0001	0.7816
Dump Truck (rock)	160	0.0001	0.0005	0.0021	0.0000	0.0001	0.0001	0.2902	0.0000	0.0000	0.2929
Semi Truck w/Flatbed Trailer (GCL)	10400	0.0063	0.0300	0.1338	0.0002	0.0077	0.0065	18.8659	0.0005	0.0005	19.0381
Semi Truck w/Flatbed Trailer (HDPE)	3200	0.0019	0.0092	0.0412	0.0001	0.0024	0.0020	5.8049	0.0002	0.0002	5.8579
Semi Truck w/Flatbed Trailer (equipment)	400	0.0002	0.0012	0.0051	0.0000	0.0003	0.0002	0.7256	0.0000	0.0000	0.7322
Water Truck	50	0.0000	0.0001	0.0006	0.0000	0.0000	0.0000	0.0907	0.0000	0.0000	0.0915
Pickup Truck/SUV	1600	0.0002	0.0063	0.0008	0.0000	0.0000	0.0000	0.7551	0.0001	0.0001	0.7816
Haul Truck (waste materials)	40	0.0000	0.0001	0.0005	0.0000	0.0000	0.0000	0.0726	0.0000	0.0000	0.0732
Semi Truck w/Box Trailer (piping)	240	0.0001	0.0007	0.0031	0.0000	0.0002	0.0001	0.4354	0.0000	0.0000	0.4393
Semi Truck w/Flatbed Trailer (equipment)	40	0.0000	0.0001	0.0005	0.0000	0.0000	0.0000	0.0726	0.0000	0.0000	0.0732
Water Truck	100	0.0001	0.0003	0.0013	0.0000	0.0001	0.0001	0.1814	0.0000	0.0000	0.1831
Total Project Emissions, pounds (Phase 1, onsite) - from ENTRIX'S CALCULATIONS		0.01373	0.061595	0.079395	0.00011	0.0053	0.00449	9.791	0.00122	0.00061	10.0065
Total Project Emissions, pounds (Phase 2, onsite) - from ENTRIX'S CALCULATIONS		0.003375	0.019005	0.02023	0.000035	0.001475	0.00124	3.164	0.000295	0.000195	3.231
Total Project Emissions, pounds (Phase 3, onsite) - from ENTRIX'S CALCULATIONS		0.00358	0.020625	0.021295	0.000035	0.001725	0.00145	3.329	0.000315	0.000205	3.399
Total Project Emissions, pounds (Phase 1, offsite)		0.0004	0.0073	0.0052	0.0000	0.0003	0.0002	1.3719	0.0001	0.0001	1.4040
Total Project Emissions, pounds (Phase 2, offsite)		0.0089	0.0472	0.1837	0.0003	0.0106	0.0089	26.5325	0.0008	0.0008	26.7942
Total Project Emissions, pounds (Phase 3, offsite)		0.0005	0.0075	0.0062	0.0000	0.0003	0.0003	1.5170	0.0001	0.0001	1.5504
Total Project Emissions, tons (All Phases, onsite)		0.0207	0.1012	0.1209	0.0002	0.0085	0.0072	16.2840	0.0018	0.0010	16.6365
Total Project Emissions, tons (All Phases, offsite)		0.0098	0.0620	0.1950	0.0003	0.0112	0.0094	29.4214	0.0010	0.0010	29.7486
TOTAL TONS		0.030	0.163	0.316	0.000	0.020	0.017	46	0.003	0.002	46
MDAQMD Thresholds		25	100	25	25	15	15	--	--	--	100,000
TOTAL METRIC TONS		--	--	--	--	--	--	41	0.003	0.002	42
Amortized over 30 years		--	--	--	--	--	--	--	--	--	1.4
County of San Bernardino Threshold		--	--	--	--	--	--	--	--	--	3,000

ICF REVISIONS TO THE CONSTRUCTION EMISSIONS ANALYSIS

EMFAC 2011 OUTPUT

Obtained from: http://www.arb.ca.gov/jpub/webapp/EMFAC2011WebApp/rateSelectionPage_1.jsp

EMFAC 2011										worker trips													
2013 Estimated Annual Emission Rates										all other trips (HHDT in EMFAC 2007)													
EMFAC 2011 Vehicle Categories																							
San Bernardino COUNTY																							
Mojave Desert AIR BASIN																							
Mojave Desert AQMD																							
Area	CalYr	Season	Veh	Fuel	MdlYr	Speed (Miles/hr)	Pop (Vehicles)	VMT (Miles/day)	Trips (Trips/day)	VMT% by type	ROG_RUNEX (gms/mile)	CO_RUNEX (gms/mile)	NOX_RUNEX (gms/mile)	CO2_RUNEX (gms/mile)	CO2_RUNEX(Pa) (gms/mile)	PM10_RUNEX (gms/mile)	PM10_PMTW (gms/mile)	PM10_PMBW (gms/mile)	PM2_5_RUNEX (gms/mile)	PM2_5_PMTW (gms/mile)	PM2_5_PMBW (gms/mile)	SOX_RUNEX (gms/mile)	
San Bernardino (MD)	2013	Annual	LDA	GAS	AllMyr	AllSpeeds	147858.1898	1.21E+07	930616.9532	0.9968	0.078594711	2.272148892	0.225139203	339.1816371	310.7756249	0.00190715	0.007999959	0.036749814	0.001712688	0.001999999	0.015749919	0.003424217	
San Bernardino (MD)	2013	Annual	LDA	DSL	AllMyr	AllSpeeds	518.0067803	39085.04439	3004.555263	0.0032	0.049143332	0.250828826	0.760404218	395.1250836	351.5346814	0.036241724	0.007999959	0.036749815	0.033342387	0.001999999	0.015749992	0.003772109	
San Bernardino (MD)	2013	Annual	LDT1	GAS	AllMyr	AllSpeeds	24174.51219	1916003.057	146844.5035	0.9988	0.234088079	5.551362071	0.620580168	390.9298338	358.2053625	0.004606806	0.007999959	0.036749816	0.004116784	0.001999999	0.015749919	0.003997459	
San Bernardino (MD)	2013	Annual	LDT1	DSL	AllMyr	AllSpeeds	32.38828241	2279.055686	172.3456144	0.0012	0.074545917	0.358115157	0.940749492	394.3066094	350.14718	0.061607615	0.007999959	0.036749815	0.056679008	0.001999999	0.015749992	0.003764324	
San Bernardino (MD)	2013	Annual	LDT2	GAS	AllMyr	AllSpeeds	57884.70032	4879055.057	363208.9125	0.9996	0.104398122	3.12581218	0.44429511	462.5649732	432.0553771	0.002225944	0.007999959	0.036749815	0.002005784	0.001999999	0.015749992	0.004670165	
San Bernardino (MD)	2013	Annual	LDT2	DSL	AllMyr	AllSpeeds	26.8213501	2129.16447	152.144498	0.0004	0.058291393	0.298449709	0.952875496	390.9185276	353.1106697	0.046466911	0.007999958	0.036749815	0.04275163	0.001999999	0.015749992	0.003731951	
San Bernardino (MD)	2013	Annual	LHD1	GAS	AllMyr	AllSpeeds	11871.55643	709520.5099	176868.4955		0.102593548	3.161566752	0.918218102	692.8735779	685.9448421	0.001155292	0.007999958	0.036749814	0.00106473	0.001999999	0.015749919	0.006969354	
San Bernardino (MD)	2013	Annual	LHD1	DSL	AllMyr	AllSpeeds	8390.420003	511023.9191	105540.923		0.142165336	0.910961461	7.061800909	523.4420372	518.2076168	0.030380091	0.011999938	0.0764396	0.027949685	0.002999985	0.032759828	0.004997102	
San Bernardino (MD)	2013	Annual	LHD2	GAS	AllMyr	AllSpeeds	890.7590981	52442.46943	13270.98237		0.080792782	2.99738789	0.74414857	692.8736341	685.9448978	0.00101892	0.007999958	0.036749814	9.10E-04	0.001999999	0.015749919	0.006966008	
San Bernardino (MD)	2013	Annual	LHD2	DSL	AllMyr	AllSpeeds	2627.562892	157841.703	33051.43232		0.135096309	0.88653545	6.913991686	521.8959053	516.6796462	0.028760342	0.011999938	0.08917953	0.026459514	0.002999984	0.038219793	0.004982342	
San Bernardino (MD)	2013	Annual	MCY	GAS	AllMyr	AllSpeeds	11903.01418	271343.3487	23803.64622		3.649265511	46.20012908	1.397074176	157.9598286	156.3802303	0.001086633	0.007999518	0.036747065	8.65E-04	0.001999988	0.015748741	0.002419293	
San Bernardino (MD)	2013	Annual	MDV	GAS	AllMyr	AllSpeeds	56927.33426	4330166.78	357445.6919	0.8871	0.115499274	3.704620914	0.596721891	585.4817829	556.6317071	0.00214566	0.007999959	0.036749814	0.001958035	0.001999999	0.015749919	0.005906731	
San Bernardino (MD)	2013	Annual	MDV	DSL	AllMyr	AllSpeeds	48.80408629	3733.126831	285.9122275	0.0008	0.040928139	0.217306511	0.628349262	401.4737906	375.244327	0.030310713	0.007999959	0.036749816	0.030369857	0.001999999	0.015749919	0.003827718	
San Bernardino (MD)	2013	Annual	MH	GAS	AllMyr	AllSpeeds	4602.188044	80643.29651	460.4029282		0.1809648	10.57085211	1.564847723	689.696911	682.7997241	0.001960609	0.007999958	0.036749813	0.001748315	0.001999999	0.015749919	0.00705669	
San Bernardino (MD)	2013	Annual	MH	DSL	AllMyr	AllSpeeds	821.1792587	14495.8215	82.11793338		0.180329958	0.64579157	7.659797064	1069.3508	1058.657292	0.288794581	0.011999938	0.130339314	0.265691022	0.002999985	0.055859694	0.010208686	
San Bernardino (MD)	2013	Annual	Motor Coach	GAS	AllMyr	AllSpeeds	27.80253164	4017.103751	0		0.267439995	1.64486091	10.39421904	1647.995487	1631.515532	0.391373295	0.011999937	0.130339319	0.360398312	0.002999984	0.055859708	0.015722647	
San Bernardino (MD)	2013	Annual	OBUS	DSL	AllMyr	AllSpeeds	175.7659073	16712.88629	8026.92335		0.218885451	8.144745361	3.232322568	689.6966205	682.7996453	5.76E-04	0.007999958	0.036749815	5.31E-04	0.001999999	0.015749919	0.007199398	
San Bernardino (MD)	2013	Annual	PTO	DSL	AllMyr	AllSpeeds	0	0	4362.511027		0.737651665	3.478027216	13.9549913	2142.780523	2121.352718	0.408895507	0	0	0.376266667	0	0	0.020443128	
San Bernardino (MD)	2013	Annual	SBUS	GAS	AllMyr	AllSpeeds	35.04804816	2833.369135	140.1922008		3.976381355	55.56129058	3.627873704	742.1199385	734.6987391	0.01585284	0.007999959	0.036749815	0.0103034924	0.001999999	0.015749992	0.004063255	
San Bernardino (MD)	2013	Annual	SBUS	DSL	AllMyr	AllSpeeds	356.244338	11397.9275	0		0.404602247	2.129086602	10.73759136	1286.165049	1273.303398	0.235710308	0.011999937	0.744796108	0.216853484	0.002999984	0.319198332	0.012270616	
San Bernardino (MD)	2013	Annual	T6 Ag	DSL	AllMyr	AllSpeeds	34.84925784	1172.86022	0		0.441814498	1.323907803	8.462439437	1073.620695	1062.884488	0.437211518	0.011999937	0.130339319	0.402234596	0.002999984	0.055859708	0.010242843	
San Bernardino (MD)	2013	Annual	T6 CAIRP heavy	DSL	AllMyr	AllSpeeds	21.34741052	1330.617883	0		0.156807461	6.97095037	3.346429052	1063.670158	1053.033457	0.194086116	0.011999937	0.130339319	0.179039927	0.002999984	0.055859708	0.010147911	
San Bernardino (MD)	2013	Annual	T6 CAIRP small	DSL	AllMyr	AllSpeeds	62.92291967	4388.283628	0		0.140929173	7.40191418	3.748418463	1060.446784	1049.842316	0.203001135	0.011999937	0.130339319	0.186761044	0.002999984	0.055859708	0.010171158	
San Bernardino (MD)	2013	Annual	T6 instate constructi	DSL	AllMyr	AllSpeeds	148.7958595	7664.933442	0		0.343398355	1.055590175	8.700628515	1066.451444	1055.78693	0.337595089	0.011999937	0.130339319	0.310587482	0.002999984	0.055859708	0.010174445	
San Bernardino (MD)	2013	Annual	T6 instate constructi	DSL	AllMyr	AllSpeeds	305.2968682	19193.85541	0		0.243960511	0.980639172	5.844206509	1061.888087	1051.269206	0.311721177	0.011999937	0.130339319	0.286783483	0.002999984	0.055859708	0.010130909	
San Bernardino (MD)	2013	Annual	T6 instate heavy	DSL	AllMyr	AllSpeeds	422.570803	22106.5723	0		0.331925454	1.028734506	8.375923574	1065.646555	1054.990809	0.326379416	0.011999937	0.130339319	0.300260963	0.002999984	0.055859708	0.010166766	
San Bernardino (MD)	2013	Annual	T6 instate small	DSL	AllMyr	AllSpeeds	888.2879909	56706.58643	0		0.231524383	0.941056365	5.519464423	1060.963032	1050.353669	0.295026474	0.011999937	0.130339319	0.271424356	0.002999984	0.055859708	0.010122086	
San Bernardino (MD)	2013	Annual	T6 OOS heavy	DSL	AllMyr	AllSpeeds	12.23891555	762.9019348	0		0.156807461	6.97095037	3.346429053	1063.670158	1053.033457	0.194086116	0.011999937	0.130339319	0.179039927	0.002999984	0.055859708	0.010147911	
San Bernardino (MD)	2013	Annual	T6 OOS small	DSL	AllMyr	AllSpeeds	36.07502179	251.85945	0		0.140929173	7.40191418	3.748418464	1060.446784	1049.842316	0.203001135	0.011999937	0.130339319	0.186761044	0.002999984	0.055859708	0.010171158	
San Bernardino (MD)	2013	Annual	T6 Public	DSL	AllMyr	AllSpeeds	118.7255888	2102.777274	0		0.05081007	0.209840086	8.117032961	1085.195364	1074.34341	0.054741457	0.011999937	0.130339319	0.05306214	0.002999984	0.055859708	0.010353271	
San Bernardino (MD)	2013	Annual	T6 utility	DSL	AllMyr	AllSpeeds	35.14963177	692.0462894	0		0.117505139	0.507657903	5.595668991	1061.850409	1051.236498	0.194457481	0.011999937	0.130339319	0.178900883	0.002999984	0.055859708	0.010130594	
San Bernardino (MD)	2013	Annual	T6TS	GAS	AllMyr	AllSpeeds	492.9380201	43949.77533	9862.70475		0.267779589	9.37428108	2.534113572	689.6966254	682.7996591	0.001091737	0.007999958	0.036749812	9.68E-04	0.001999999	0.015749919	0.007040641	
San Bernardino (MD)	2013	Annual	T7 Ag	DSL	AllMyr	AllSpeeds	44.81387558	3100.231863	0		0.610704878	2.575667157	14.58187935	1660.863428	1644.254794	0.010321133	0.035999812	0.061739677	0.553215443	0.008999953	0.026459862	0.015845414	
San Bernardino (MD)	2013	Annual	T7 CAIRP	DSL	AllMyr	AllSpeeds	2774.92647	63487.2491	0		0.31988349	3.272878965	8.105015996	1644.212769	1627.770642	0.478359914	0.03599812	0.061739677	0.440856011	0.008999953	0.026459862	0.01586558	
San Bernardino (MD)	2013	Annual	T7 CAIRP constructi	DSL	AllMyr	AllSpeeds	23.58477547	5599.6022	0		0.337628589	2.363806276	8.290574002	1644.927988	1628.478708	0.3884403	0.03599812	0.061739677	0.440978098	0.008999953	0.026459862	0.015693382	
San Bernardino (MD)	2013	Annual	T7 NNOOS	DSL	AllMyr	AllSpeeds	2683.380617	714224.4236	0		0.193208738	1.53901779	4.458785213	1633.170591	1616.838885	0.25763526	0.03599812	0.061739677	0.237024439	0.008999953	0.026459		

Appendix B
**Protocol Trapping Surveys for Mohave Ground
Squirrel—Hinkley Compressor Station,
Hinkley, California**

**Mohave Ground Squirrel
(*Xerospermophilus mohavensis*) Trapping Results for
“Hinkley Compressor Station - Ponds 6R & 7R”
County of San Bernardino,
Town of Hinkley,
State of California**

Prepared for

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June 27, 2012

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Introduction:

At the request of Cardno ENTRIX, Phoenix Biological Consulting conducted a Mohave ground squirrel (MGS; *Xerospermophilus mohavensis*) trapping survey within a project site located near the city limits of Hinkley, San Bernardino County, State of California. The project proponent, Pacific Gas and Electric Company (PG&E), proposes to construct and operate two Class II surface impoundments (Ponds 6R and 7R) for evaporation of wastewater generated at the Hinkley Compressor Station. Protocol trapping, using the January 2003 Survey Guidelines, was performed to determine presence/absence of MGS at the proposed sites for Ponds 6R and 7R. The principal investigator, Ryan Young, supervised the field work which was performed by an independent field investigator, Cathy Halley, through a Memorandum of Understanding (MOU) between the California Department of Fish and Game (CDFG) and Phoenix Biological Consulting. The visual survey was conducted on April 15th by Ryan Young. The trapping survey schedule consisted of three trapping sessions: 1) April 23rd to 27th; 2) May 19th to 23rd; and 3) June 15th to 19th (Table 1). The results of the visual survey and trapping sessions were negative for MGS.

Location:

The site is located at the southeast corner of Fairview Road and Community Blvd and north of the Mojave River. The site is situated within the NW ¼, NE ¼, Section 2, Township 10 North, Range 3 West, San Bernardino Meridian, Hinkley Quadrangle 7.5 Minute Series (Topographic) Map, County of San Bernardino, State of California (Table 2; Figure 3).

Table 1: Trapping Schedule

Trap Session	First	Second	Third
	04/23/2012 to 04/27/2012	05/19/2012 to 05/23/2012	06/15/2012 to 06/19/2012
Trap Hours	57.50 hrs	36.50 hrs	35.50 hrs

Site Characterization and Current Land Use:

The current land use within the site consists of a compressor station and evaporation ponds. The vegetation within the ponds, that are not being used, is characterized as highly disturbed saltbush scrub vegetation within both ponds 6R & 7R (Figures 1 & 2). The adjacent land use consists of saltbush scrub. PG&E operates a compressor station and evaporation ponds within the survey area. The topography consists of level terrain except within the ponds. The soils consist of silty-clay with a moderate alkaline component. The elevation of site is approximately 2,199 feet.

The predominant perennial plant species within the ponds is Shadscale (*Atriplex confertifolia*). The predominant annual plant species encountered were Devil's lettuce (*Amsinkia tessellata*) and Russian thistle (*Salsola tragus*) (Table 4).

No off-highway-vehicle (OHV) use was detected during the trapping events. No feral dogs were sighted on or near the sight. Several ravens were detected each trapping day.

Mohave Ground Squirrel Natural History

The Mohave ground squirrel is small, grayish, diurnal squirrel that is currently listed under the California Endangered Species Act as a threatened species. The CDFG is the responsible agency that provides oversight through the California Environmental Quality Act (CEQA) for project related activities.

MGS occur in the western half of the Mojave Desert. Its historical range encompasses Antelope Valley to Lucerne Valley, in the south. MGS occurrences in the southern range are very rare. The northern limits of the range are near Owens Dry Lake bed and through China Lake Naval Weapons Station and portions of Death Valley National Park. The eastern limits extend to Barstow and south along the Mojave River. MGS are dormant in the fall and winter months. They emerge from hibernation in February and begin pair bonding and mating during March. If rainfall is adequate, MGS will reproduce. If rainfall levels do not provide sufficient rainfall to support significant annual plant growth then MGS will merely forage on herbaceous perennials and shrubs in order to gain enough body mass to survive another prolonged period of dormancy. They can enter dormancy as early as late May to early July. Juveniles will remain above-ground until August in order to gain sufficient fat reserves prior to entering dormancy.

Several other squirrels occur within their range; white tailed antelope ground squirrel (AGS; *Ammospermophilus leucurus*), round-tailed ground squirrel (RTGS; *Xerpermophilus tereticaudus*) and the California ground squirrel (CGS; *Xerpermophilus beecheyi*). RTGS and CGS are commonly mistaken as MGS. AGS occur throughout the range of the MGS but are easily distinguished by a lateral white stripe on each side. RTGS occur only along the Barstow area of the MGS range and throughout the eastern Mojave Desert. CGS are typically found near human habitation with scattered populations throughout the MGS range but primarily in the southern portion of the range or in irrigated areas.

Methodologies:

The visual survey was conducted on April 22nd, 2012, during mid-afternoon. All potential MGS habitat was surveyed during this visit. A list of the plant species detected during the initial visit was compiled (Table 4). The trapping procedures followed the 2003 Survey Guidelines set forth by the CDFG. Due to the limited acreage in the study area, only 80 traps were deployed at 35 meter spacing within suitable habitat. The grid consisted of two 4X10 grid arrays within each pond. Standard, small-mammal, aluminum, foldable, ventilated 12" Sherman traps was used. Cardboard boxes were used as shade covers for each trap. Traps and shade covers were placed on the north side of the nearest bush on a north-south axis to provide the greatest shade cover possible. Temperature readings were

taken and recorded every hour at a height of 1 foot and at ground level in the shade of a bush. Traps were checked every two to four hours depending on temperature and other influential factors such as potential pregnant or lactating females in traps, dogs on grids, cold weather, expected juveniles etc. Traps were open within one hour after sunrise and closed within one hour before sunset. Traps were closed when air temperature reached 90 °F, when temperature fell below 50 °F or during periods of rainy weather. The bait used consisted of crushed four-way grains with molasses and mixed with peanut butter and water.

Table 2

Grid Location:

(UTM, WGS Datum)

Grid Name	NE Corner		NW Corner		SW Corner		SE Corner	
Pond 6R	485451	3862499	485408	3862497	485408	3862437	485453	3862439
Pond 7R	485451	3862590	485405	3862593	485408	3862543	485451	3862543

Results:

MGS were not seen nor heard during the visual survey and during the three trapping sessions at this site during the field season of 2012. AGS were captured and visually detected during the field surveys.

A total of 32 small mammal captures occurred during the three trapping sessions (Table 3). No juvenile squirrels were captured during the 2012 survey period. The lack of juveniles indicates 2012 was not a reproductive year and the potential of dispersal during the second and third session was not likely. Total open-trap hours were 129.50 for the entire grid. There were no injuries to small mammals during the trapping activities. One western whiptail (*Cnemidophorus tigris*) was caught. No other incidental captures occurred. A list of all vertebrate species detected is listed on Table 5.

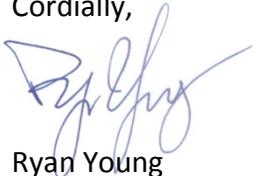
Certification:

I hereby certify that the statements furnished above and in the attached exhibits present the data and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this report was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: June 27, 2012 Signed: 
Report Author

Field Work Performed By: 

Cordially,



Ryan Young
Phoenix Ecological Consulting
PO Box 720949
Pinon Hills, CA 92372-0949

Table 3: List of vertebrate species trapped

Mammals	Number of Trapping events
White-tailed Antelope Ground Squirrel (<i>Ammospermophilus leucurus</i>)	32
Reptiles	Number of trapping events
Western Whiptails (<i>Cnemidophorus tigris</i>)	1
Total animals trapped	33

Table 4: List of Vascular plants encountered on site

FAMILY	Species	Common Name	Habit
GYMNOSPERMS (CONIFERS)			
DICOT ANGIOSPERMS (FLOWERING PLANTS)			
BORAGINACEAE		BORAGE FAMILY	
	<i>Amsinckia tessellata</i>	Fiddleneck	Annual
	<i>Cryptantha sp.</i>		Annual
BRASSICACEAE		MUSTARD FAMILY	
	<i>Brassica tournefortii</i>	N/A	Annual
	<i>Hirschfeldia incana</i>	Moroccan mustard	Annual or perennial
CHENOPODIACEAE		GOOSEFOOT FAMILY	
	<i>Atriplex confertifolia</i>	Saltbush	Shrub
	<i>Salsola tragus</i>	Russian thistle	annual
EUPHORBIACEAE		SPURGE FAMILY	
	<i>Chamaesyce albomarginata</i>	Rattlesnake weed	herbaceous perennial
FABACEAE		PEA FAMILY	
	<i>Astragalus lentiginosus</i>	Freckled milkvetch	Annual
GERANIACEAE			
	<i>Eriodinium cicutarium</i>	Red-stemmed filaree	Annual
MONOCOT ANGIOSPERMS (FLOWERING PLANTS)			
POACEAE		GRASS FAMILY	
	<i>Achnatherum speciosum</i>	Desert needle grass	Perennial
	<i>Distichilis spiatica</i>	Salt grass	Perennial
	<i>Vulpia bromoides</i>	Fescue	annual

Table 5: List of vertebrate species visual/aurally detected on site

Mammals
black tailed jack rabbit (<i>Lepus californicus</i>)
coyote (<i>Canis latrans</i>)
desert cottontail (<i>Sylvilagus audubonii</i>)
white-tailed antelope ground squirrel (<i>Ammospermophilus leucurus</i>)
Birds
American kestrel (<i>Falco sparverius</i>)
anna's hummingbird (<i>Calypte anna</i>)
barn swallow (<i>Hirundo rustica</i>)
black-throated sparrow (<i>Amphispiza bilineata</i>)
common raven (<i>Corvus corax</i>)
cooper's hawk (<i>Accipiter cooperii</i>)
European starling (<i>Sturnus vulgaris</i>)
horned lark (<i>Eremophila alpestris</i>)
house finch (<i>Carpodacus mexicanus</i>)
killdeer (<i>Charadrius vociferus</i>)
mallard (<i>Anas platyrhynchos</i>)
mourning dove (<i>Zenaida macroura</i>)
northern mockingbird (<i>Mimus polyglottos</i>)
red-tailed hawk (<i>Buteo jamaicensis</i>)
sage sparrow (<i>Amphispiza belli</i>)
say's phoebe (<i>Sayornis saya</i>)
turkey vulture (<i>Cathartes aura</i>)
western kingbird (<i>Tyrannus verticalis</i>)
white crowned sparrow (<i>Zonotrichia leucophrys</i>)
Reptiles
side blotched lizard (<i>Uta stansburiana</i>)
western whiptail (<i>Cnemidophorus tigris</i>)

Figure 1: Corner photos Pond 6

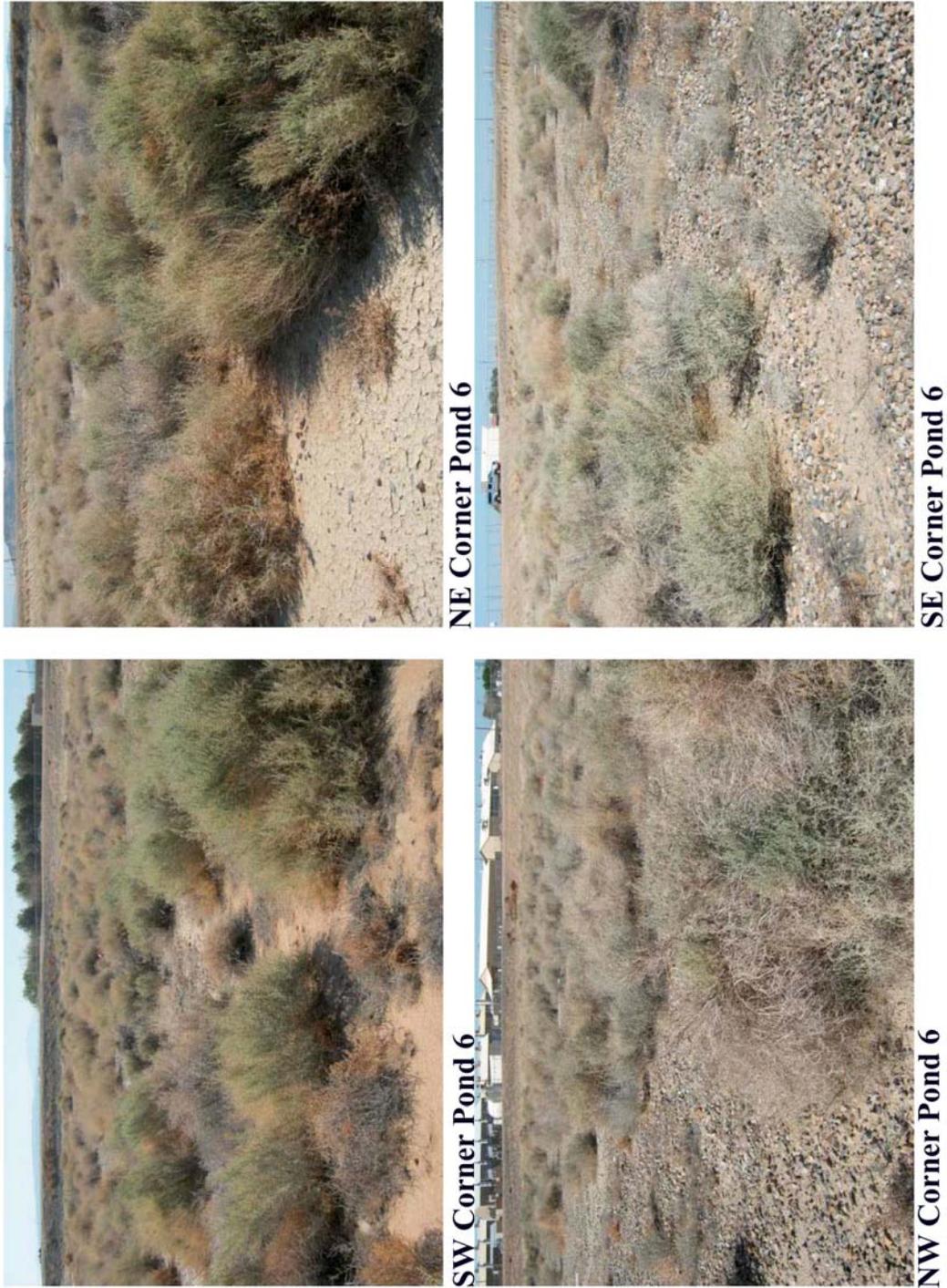


Figure 2: Corner photos Pond 7

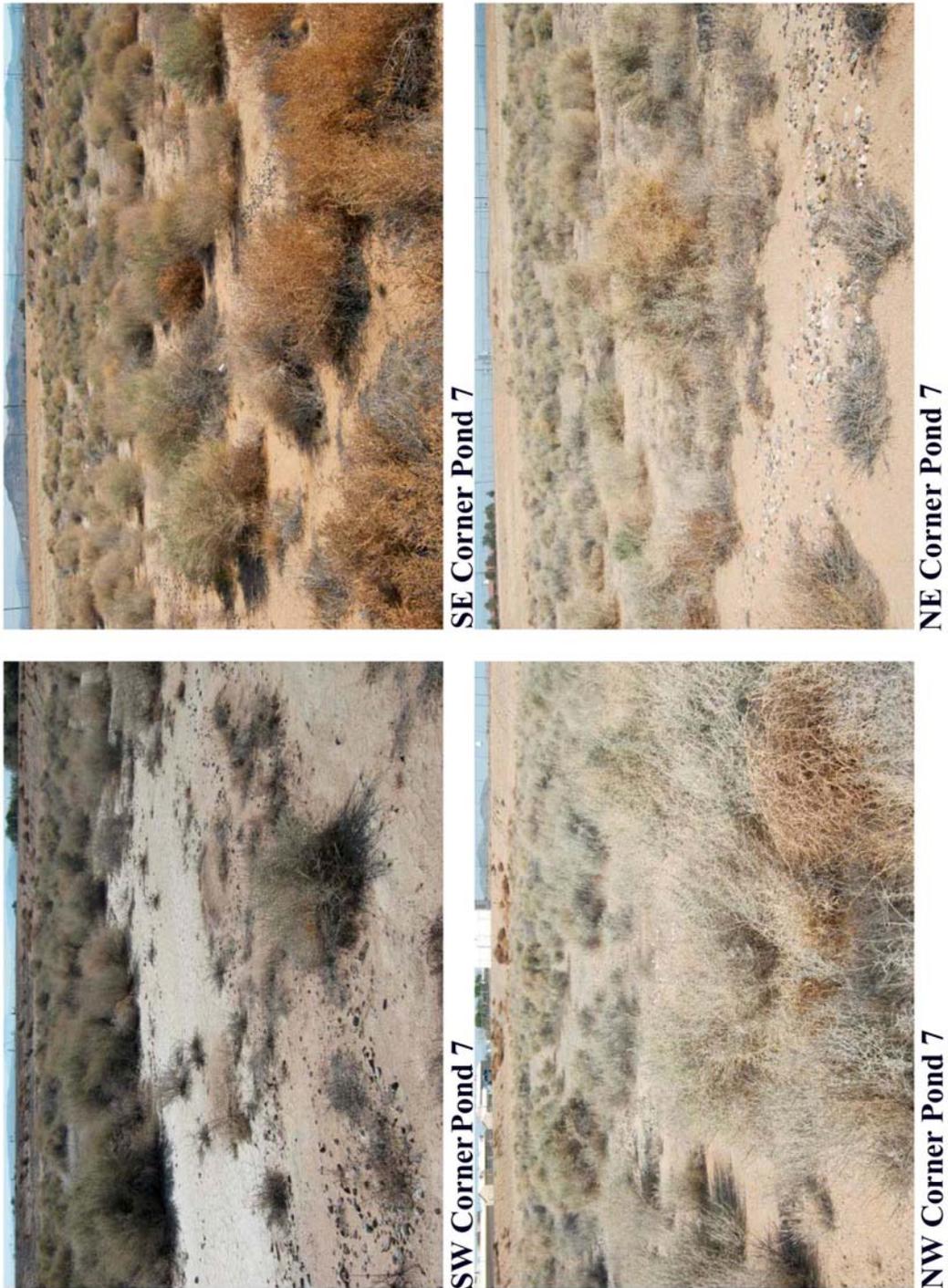
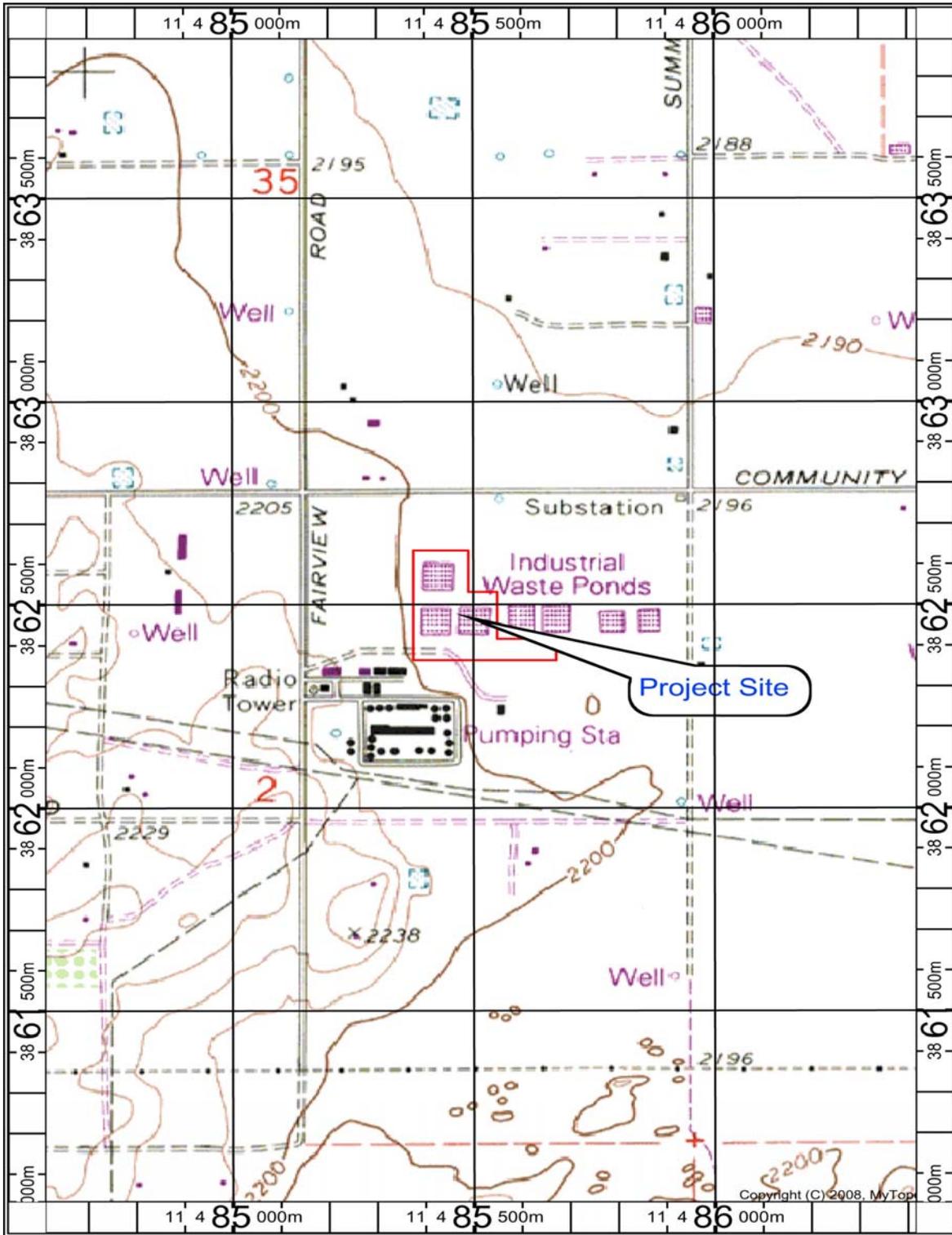


Figure 3: Vicinity Map



Appendix A: Mohave Ground Squirrel Survey Form

Mohave Ground Squirrel Survey Guidelines
January 2003

Page 5 of 5

Mohave Ground Squirrel (MGS) Survey and Trapping Form (photocopy as needed)**PART I - PROJECT INFORMATION** (use a separate form for each sampling grid)Project name: PG&E Hinkley Compressor Station Property owner: PG&ELocation: Township Pond 36 E T Range 3W Section 2; ¼ Section NEQuad map/series: Hinkley Quad UTM coordinates: See Report
GPS coordinates of trapping-grid cornersAcreage of Project Site: 10 acres Acreage of potential MGS habitat on site: 5 acresTotal acreage visually surveyed on project site: 10 acres Date(s): April 22
visual surveysVisual surveys conducted by: Ryan Young & Cathy Halley
names of all persons by date (use back of form, if needed)Total acres trapped: 5 Number of sampling grids: 2Trapping conducted by: Cathy Halley / Mike Halley
names of all persons by sampling term and sampling grid (use back of form, if needed)Dates of sampling term(s): FIRST 4/23-4/27 SECOND 5/19-5/23 THIRD 6/15-6/19
if required if required**PART II - GENERAL HABITAT DESCRIPTION** (use back of form, if needed)Vegetation: dominant perennials: Saltbrush scrub.other perennials: Amorpha

dominant annuals: _____

other annuals: _____

Land forms (mesa, bajada, wash): FlatSoils description: clay-loamElevation: 2,199 ft. Slope: 0%**PART III - WEATHER** (report measurements in the following categories for each day of visual survey and each day of trapping; using 24-hour clock, indicate time of day that each measurement was made; use a separate blank sheet for each day)Temperature: AIR minimum and maximum; SOIL minimum and maximum; Cloud Cover: % in AM and % in PM; Wind Speed: in AM and in PM

Appendix B: Weather Data

PART III – WEATHER

Project Name: PG&E Hinkley Compressor Station Pond 6&7

Property Owner: Private

Year: 2012 (Trapping Period _1_)

Grid Number: One

WEATHER (temperature = °C; cloud cover = %; wind speed = kph)

DATE:04/23/12 ACTIVITY: trapping Day 1

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	16 °C	0600
AIR TEMPERATURE, MAX.	33.3 °C	1400
SOIL TEMPERATURE, MIN.	15.5 °C	0600
SOIL TEMPERATURE, MAX.	32.3 °C	1400
CLOUD COVER, AM	0%	0800
CLOUD COVER, PM	1%	1600
WIND SPEED, AM	0	0800
WIND SPEED, PM	0	1600

DATE:04/24/12 ACTIVITY: trapping Day 2

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	13.4 °C	0600
AIR TEMPERATURE, MAX.	30.7 °C	1300
SOIL TEMPERATURE, MIN.	13.4 °C	0600
SOIL TEMPERATURE, MAX.	32.2 °C	1300
CLOUD COVER, AM	10	0800
CLOUD COVER, PM	15	1600
WIND SPEED, AM	2	0800
WIND SPEED, PM	3	1600

DATE:04/25/12 ACTIVITY: trapping Day 3

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	18.1 °C	0600
AIR TEMPERATURE, MAX.	30.4 °C	1400
SOIL TEMPERATURE, MIN.	18.6 °C	0600
SOIL TEMPERATURE, MAX.	31.4 °C	1400
CLOUD COVER, AM	100%	0800
CLOUD COVER, PM	100%	1600
WIND SPEED, AM	2 MPH	0800
WIND SPEED, PM	2 MPH	1600

DATE:04/26/12 ACTIVITY: trapping Day 4

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	11.8 °C	0600
AIR TEMPERATURE, MAX.	24.8 °C	1500
SOIL TEMPERATURE, MIN.	13.5 °C	0600
SOIL TEMPERATURE, MAX.	26.9 °C	1400
CLOUD COVER, AM	90 %	0800
CLOUD COVER, PM	90%	1600
WIND SPEED, AM	0	0800
WIND SPEED, PM	3	1600

DATE:04/27/12 ACTIVITY: trapping Day 5

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	9.9 °C	0600
AIR TEMPERATURE, MAX.	28.4 °C	1500
SOIL TEMPERATURE, MIN.	10.1 °C	0600
SOIL TEMPERATURE, MAX.	29.5 °C	1500
CLOUD COVER, AM	5%	0800
CLOUD COVER, PM	10%	1600
WIND SPEED, AM	4 MPH	0800
WIND SPEED, PM	4 MPH	1600

Appendix B: Weather Data

PART III – WEATHER

Project Name: PG&E Hinkley Compressor Station Pond 6&7

Property Owner: Private

Year: 2012 (Trapping Period _2_)

Grid Number: One

WEATHER (temperature = °C; cloud cover = %; wind speed = kph)

DATE:05/19/12 **ACTIVITY:** trapping Day 1

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	19.9 °C	0600
AIR TEMPERATURE, MAX.	30.8 °C	1400
SOIL TEMPERATURE, MIN.	20.0 °C	0600
SOIL TEMPERATURE, MAX.	32.8 °C	1400
CLOUD COVER, AM	0%	0800
CLOUD COVER, PM	0%	1600
WIND SPEED, AM	5 MPH	0800
WIND SPEED, PM	5 MPH	1600

DATE:05/20/12 **ACTIVITY:** trapping Day 2

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	16.9 °C	0600
AIR TEMPERATURE, MAX.	31.1 °C	1300
SOIL TEMPERATURE, MIN.	17.6 °C	0600
SOIL TEMPERATURE, MAX.	32.3 °C	1300
CLOUD COVER, AM	0	0800
CLOUD COVER, PM	0	1600
WIND SPEED, AM	1	0800
WIND SPEED, PM	2	1600

DATE:05/21/12 **ACTIVITY:** trapping Day 3

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	17.2 °C	0600
AIR TEMPERATURE, MAX.	33.0 °C	1400
SOIL TEMPERATURE, MIN.	17.6 °C	0600
SOIL TEMPERATURE, MAX.	33.8 °C	1400
CLOUD COVER, AM	0%	0800
CLOUD COVER, PM	2%	1600
WIND SPEED, AM	1 MPH	0800
WIND SPEED, PM	7 MPH	1600

DATE:05/22/12 **ACTIVITY:** trapping Day 4

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	19.4 °C	0600
AIR TEMPERATURE, MAX.	31.8 °C	1500
SOIL TEMPERATURE, MIN.	19.3 °C	0600
SOIL TEMPERATURE, MAX.	33.2 °C	1400
CLOUD COVER, AM	40 %	0800
CLOUD COVER, PM	15 %	1600
WIND SPEED, AM	6 MPH	0800
WIND SPEED, PM	4 MPH	1600

DATE:05/23/12 **ACTIVITY:** trapping Day 5

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	19.3 °C	0600
AIR TEMPERATURE, MAX.	31.6 °C	1500
SOIL TEMPERATURE, MIN.	18.4 °C	0600
SOIL TEMPERATURE, MAX.	32.2 °C	1500
CLOUD COVER, AM	15%	0800
CLOUD COVER, PM	15%	1600
WIND SPEED, AM	13 MPH	0800
WIND SPEED, PM	15 MPH	1600

Appendix B: Weather Data

PART III – WEATHER

Project Name: PG&E Hinkley Compressor Station Pond 6 & 7

Property Owner: Private

Year: 2012 (Trapping Period _3_)

Grid Number: One

WEATHER (temperature = °C; cloud cover = %; wind speed = kph)

DATE: 06/15/2012 **ACTIVITY: trapping Day 1**

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	22.4 °C	0630
AIR TEMPERATURE, MAX.	33.5 °C	11:45
SOIL TEMPERATURE, MIN.	21.0 °C	06:30
SOIL TEMPERATURE, MAX.	33.7 °C	11:45
CLOUD COVER, AM	4 %	0800
CLOUD COVER, PM	5 %	1600
WIND SPEED, AM	2 MPH	0800
WIND SPEED, PM	1 MPH	1600

DATE: 06/16/2012 **ACTIVITY: trapping Day 2**

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	22.1 °C	0630
AIR TEMPERATURE, MAX.	31.7 °C	11:45
SOIL TEMPERATURE, MIN.	21.7 °C	06:30
SOIL TEMPERATURE, MAX.	33.8 °C	11:45
CLOUD COVER, AM	0 %	0800
CLOUD COVER, PM	5 %	1600
WIND SPEED, AM	2 MPH	0800
WIND SPEED, PM	10 MPH	1600

DATE: 06/17/2012 **ACTIVITY: trapping Day 3**

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	21.4 °C	0630
AIR TEMPERATURE, MAX.	32.7 °C	11:45
SOIL TEMPERATURE, MIN.	21.0 °C	06:30
SOIL TEMPERATURE, MAX.	33.8 °C	11:45
CLOUD COVER, AM	0 %	0800
CLOUD COVER, PM	0 %	1600
WIND SPEED, AM	2 MPH	0800
WIND SPEED, PM	3 MPH	1600

DATE: 06/18/2012 **ACTIVITY: trapping Day 4**

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	22.4 °C	0630
AIR TEMPERATURE, MAX.	33.4 °C	11:45
SOIL TEMPERATURE, MIN.	21.5 °C	06:30
SOIL TEMPERATURE, MAX.	34.3 °C	11:45
CLOUD COVER, AM	0 %	0800
CLOUD COVER, PM	1 %	1600
WIND SPEED, AM	3 MPH	0800
WIND SPEED, PM	14 MPH	1600

DATE: 06/19/2012 **ACTIVITY: trapping Day 5**

WEATHER CONDITION	VALUE	TIME
AIR TEMPERATURE, MIN.	23.7 °C	0630
AIR TEMPERATURE, MAX.	32.5 °C	11:45
SOIL TEMPERATURE, MIN.	22.5 °C	06:30
SOIL TEMPERATURE, MAX.	33.4 °C	11:45
CLOUD COVER, AM	0 %	0800
CLOUD COVER, PM	0 %	1600
WIND SPEED, AM	16 MPH	0800
WIND SPEED, PM	20 MPH	1600

ENCLOSURE 5

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ERRATA

CLASS II SURFACE IMPOUNDMENTS 6R AND 7R PG&E HINKLEY COMPRESSOR STATION, HINKLEY, CA INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

PREPARED FOR:

Lahontan Regional Water Quality Control Board
14440 Civic Drive, Suite 200
Victorville, CA 92392

PREPARED BY:

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415.677.7100

January 2013

ICF International. 2013. Errata - Class II Surface Impoundments 6R and 7R, PG&E Hinkley Compressor Station Hinkley, Errata Revisions to the California Initial Study/Mitigated Negative Declaration. January. (ICF 00569.12) San Francisco, CA. Prepared for Lahontan Regional Water Quality Control Board, Victorville, CA.

Introduction

This document is an errata that presents revisions made to the proposed mitigated negative declaration and initial study (IS/MND) distributed November 2012 by the Lahontan Regional Water Quality Control Board (Lahontan Water Board). The proposed IS/MND was distributed for agency and public review for a period of 30 days beginning November 13, 2012, and concluding December 12, 2012. The electronic version of the IS/MND may be viewed at www.waterboards.ca.gov/lahontan.

The revisions are presented in the order they appear in the IS/MND, with the relevant page number(s) indicated with italicized print. New or revised text is shown with underline for additions and ~~strike-out~~ for deletions. All text revisions are to provide clarification or additional detail as determined appropriate by Lahontan Water Board staff and/or in response to comments received on the IS/MND. The text revisions do not affect the conclusion that there are no potential significant environmental effects with mitigation.

Text Revisions

Global, throughout the IS/MND, all references to “proposed” or “draft” IS/MND are changed to “final”.

Page 3-2, the Environmental Factors Potentially Affected section is revised as follows (change initiated by staff, for clarification):

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this Project (i.e., the Project would involve at least one impact that is a “Potentially Significant Impact” or “Less than Significant with Mitigation and requires mitigation to be reduced to a less than significant level), as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural and Forestry | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology/Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Page 2-1, the first paragraph under Section 2.1, Proposed Project, is revised as follows for clarification:

The two new surface impoundments would increase the existing surface impoundment area (4.53 acres) by an additional 2.48 acres (1.22 acres for Pond 6R and 1.26 acres for Pond 7R) for a total surface impoundment area of approximately 7.00 acres. The total operating capacity of proposed pond 6R would be 1.68 MG and of proposed pond 7R would be 1.26 MG (Cardno ENTRIX 2012a).

Page 2-3, the second paragraph under Section 2.2, Monitoring and Reporting Program, is revised as follows for clarification:

A revised MRP is proposed to include the two new surface impoundments. The revised MRP (proposed as MRP No. ~~R6V-2012-TENTRSV-2013-PROP~~) is designed to document the chemical constituents in wastewater and pond sludge and to provide early warning of any leaks through the liner systems. A Water Quality Protection Standard (WQPS) is presented in the ~~Tentative~~ proposed WDRs and includes Monitoring Parameters, Constituents of Concern (COCs), concentration limits, Monitoring Points and the Point of Compliance, defined as required by CCR Title 27, Section 20405, to ensure the earliest possible detection of a release from the surface impoundments to the underlying soil, groundwater, and/or surface water. The WQPS was established through prior monitoring at the three existing surface impoundments. A requirement is included in the proposed WDRs to establish a WQPS for the purposes of monitoring the additional surface impoundments.

Page 3-20, the third paragraph under Section 3.4, Biological Resources, is revised as follows for clarification:

Additionally, the desert kit fox ~~is and~~ migratory waterfowl are known to occur in the desert area.

Page 3-22, the paragraph with header, "Other Species", under Section 3.4, Biological Resources, is revised as follows for clarification:

In addition to the species documented by CNDDDB, the Project area supports limited foraging habitat for three other California species of special concern known from the region: ferruginous hawk (*Buteo regalis*) (only present as transient migrant or winter resident), loggerhead shrike (*Lanius ludovicianus*), and prairie falcon (*Falco mexicanus*). Existing trees associated with developments in the Project vicinity provide suitable roosting habitat for these special-status species. No suitable nesting habitat (almost exclusively rock ledges) occurs on the Project area for prairie falcon. Suitable nesting habitat may be present in the Project area and vicinity for loggerhead shrike. In California, loggerhead shrike typically nests in large shrubs or trees (Humple 2008) but can also use weedy plant species (e.g., Russian thistle) and man-made structures. In addition, several species of migratory waterfowl are known to use the adjacent water ponds (Ponds 4, 5, and 8) as temporary stop-overs.

Page 3-24, a new paragraph with header, "Migratory Waterfowl", under Section 3.4, Biological Resources, is included as follows for clarification:

Migratory Waterfowl. A long-term operational impact of the project is that two ponds would once again hold waste water. Based on the existing observations of migrating waterfowl species at the existing impoundments, the pond area would likely support temporary stop-over habitat

for waterfowl species. This impact is considered beneficial for migratory waterfowl species. As described in Section 3.8, Hazardous and Hazardous Materials, the proposed ponds would not store waste water at hazardous concentrations; therefore, no mitigation is proposed or required under CEQA for impacts to migratory waterfowl.

Page 3-24, additional text for Mitigation Measures BIO-1, under Section 3.4, Biological Resources, is included as follows for clarification:

Mitigation Measure BIO-1: Implement desert tortoise protection measures before and during construction. The project applicant will ensure the following measures are implemented and included in construction specifications.

- Protocol surveys for desert tortoise were conducted in October 2011. Because protocol surveys are only valid for one year if no presence was found, a biologist will conduct USFWS protocol-surveys for desert tortoise based on the 2010 United States Fish and Wildlife Service survey protocol. These surveys will be conducted during the desert tortoise's most active periods [April through May or September through October when air temperatures are below 40° C (104° F)].
- Prior to surface disturbance and construction activities, a qualified biologist will conduct a preconstruction clearance survey for desert tortoise within the Project area to ensure that all tortoise are absent, or that any tortoises that are present move passively off site and out of harm's way. The protocol (U.S. Fish and Wildlife Service ~~2009~~2010) states that two consecutive surveys will be conducted immediately prior to surface disturbance within the Project area.
- Following the pre-construction survey and prior to surface disturbance, the construction contractor in coordination with a qualified biologist will place desert tortoise exclusion fencing along the perimeter of the proposed work areas to prevent encounters with desert tortoise during construction activities. The specifications of the desert tortoise exclusion fencing will follow USFWS (Desert Tortoise Field Manual: Chapter 8. Desert Tortoise Exclusion Fence) (U.S. Fish and Wildlife Service 2009).
- If desert tortoises are found to occupy the project area during the protocol survey, preconstruction clearance survey, or active construction phase, all work will be halted and consultation with USFWS and CDFG will be required to determine how the project will proceed. If there is a potential for "take" of tortoise (as defined by federal and state endangered species acts) then an Incidental Take Permit (ITP) will be required from FWS and/or CDFG. The authorized biologist in consultation with FWS/CDFG will then determine whether additional surveys or fencing are needed. Tortoises will not be moved without an ITP.
- A Translocation Plan will be prepared and submitted to CDFG and USWFS as part of the ITP application. Unless otherwise directed by CDFG and USFWS, any desert tortoises found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat within 500 m of their original location. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Desert

tortoise translocation will follow Guidelines for Handling Desert Tortoise (Desert Tortoise Field Manual: Chapter 7; USFWS 2009) at all times if handling tortoises is required.

- A qualified biologist will ~~remain at the site~~ conduct biological monitoring during work hours and conduct daily pre-construction clearance surveys in areas to be disturbed until temporary tortoise-proof fencing has been installed to exclude desert tortoises from entering the work area. The qualified biologist will also inspect the condition of tortoise-proof fencing. If desert tortoises are found within the construction areas, a qualified biologist will ensure it moves away passively.
- Once desert tortoise-proof fence is in place, daily biological monitoring will be conducted. The biological monitor will have the authority to stop all activities until appropriate corrective measures have been completed.
- Work shall be restricted to daylight hours, except during an emergency. Traffic speed shall be maintained at 15 mph or less in the work area.
- Until tortoise-proof fencing is in place around the Project area, no open trenches, excavations or other potential trap hazards will be left unfenced or uncovered overnight. These hazards will be removed each day prior to the work crew and biologist leaving the Project area as long as it is not fully enclosed by tortoise-proof fencing.
- Until tortoise-proof fencing is in place around the Project area, parked vehicles and equipment within the Project area will be inspected by workers (as instructed through the project environmental awareness training) prior to being moved each day. If a tortoise is found beneath vehicles or equipment, it will be monitored until it moves out of the area. Under no circumstances should the tortoise be moved or touched.
- All construction activities, vehicle parking, equipment and material storage areas will be contained within the area surrounded by tortoise-proof fencing.
- Prior to and during construction, all desert tortoises sighted within the Project area will be immediately reported to the qualified biologist and project foreman, and any construction activity that could potentially jeopardize the tortoise will be halted immediately until the desert tortoise moves passively (on its own) from harm's way. Desert tortoises observed in the Project area will be monitored and allowed to move out of the project area passively.
- If a desert tortoise is injured or killed, the authorized biologist will be notified, the injury or death documented, and the animal taken to a qualified veterinarian or the carcass removed by the biologist. If an injured desert tortoise is identified that may have been affected by Project-related activities, a qualified biologist will immediately transport the animal to a veterinary clinic approved by CDFG. PG&E will be responsible for payment of any veterinarian bills for injured tortoises. CDFG and USFWS will be notified in writing within five calendar days, with photographs and a written description of any injury/mortality, circumstances, probable cause and recommendations for avoidance of future incidents. The agencies will assess the final condition of the animal if it recovers.
- To minimize attractiveness to desert tortoise predators (e.g., common ravens and feral dogs), trash and food items will be contained in closed containers and will be removed from the Project site at the end of each work day. No pets or firearms will be permitted in the Project area.

- Following completion of the construction phase of the Project, the applicant will improve the existing chain link fence around the Compressor Station facility, which includes the surface impoundments, to eliminate large gaps between the fence and the ground surface to prevent desert tortoise from entering the Project area. The applicant will maintain the fence to ensure there are no gaps, which will reduce the likelihood that desert tortoise or other wildlife move into the Project area, thus minimizing entrapment or negative interactions with tortoises during Project operation.

Page 3-26, Mitigation Measures BIO-2, under Section 3.4, Biological Resources, is revised as follows for clarification:

Mitigation Measure BIO-2: Implement burrowing owl protection measures before and during construction. The project applicant will ensure the following measures are implemented and included in construction specifications.

- Protocol-level surveys for burrowing owls will be conducted according to current CDFG protocols (currently CDFG 2012c), or any CDFG approved variation. The nesting season survey window will begin as early as February 15 and no later than April 15, and continue through August 31.
- Prior to construction, a qualified biologist will conduct a preconstruction survey for burrowing owls no greater than 30 days prior to commencing ground disturbing or construction activities, with a second preconstruction survey within 24 hours prior to commencing ground disturbing or construction activities. The limits of this preconstruction survey will include the disturbance area and a 400-foot buffer.
- If during the protocol-level surveys or the preconstruction survey burrowing owl are observed, the following mitigation measures will be applied:
 - As compensation for the direct loss of burrowing owl nesting and foraging habitat, habitat will be acquired and permanently protected at a ratio determined through consultation with CDFG. The minimum ratio will be 6.5 acres per pair or single bird.
 - A non-wasting endowment account for the long-term management of the preservation site for burrowing owls will be established. The site will be managed for the benefit of burrowing owls. The preservation site, site management, and endowment will be approved by the Lead Agency after consultation with CDFG.
 - All owls associated with occupied burrows that will be directly impacted (temporarily or permanently) by the project will be relocated and the following measures will be implemented to avoid take of owls:
 - Occupied burrows will not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
 - Owls will be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be

provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows will be excavated using hand tools and refilled to prevent reoccupation.

- All relocation will be approved by the Lahontan Water Board after consultation with CDFG. The permitted biologist will monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring will be submitted to the Lead Agency and CDFG within 30 days following completion of the relocation and monitoring of the owls.
- A Burrowing Owl Mitigation and Monitoring Plan will be submitted to the Lahontan Water Board and the CDFG for review and approval prior to relocation of owls. The Burrowing Owl Mitigation and Monitoring Plan will describe proposed relocation and monitoring plans. The plan will include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location, and type of burrows) will also be included in the plan. The Plan will also describe proposed off-site areas to preserve to compensate for impacts to burrowing owls/occupied burrows at the project site.
- If burrowing owls take occupancy in the Project area before or during construction, the construction contractor will ensure that work-exclusion buffers are maintained. Work will not occur within 160 feet of occupied burrows during the non-breeding season (September 1 through January 31) or within 250 feet during the breeding season (February 1 through August 31), unless otherwise approved by the monitoring biologist and CDFG. A qualified biologist and CDFG will determine if burrowing owls and their habitat can be protected in place on or adjacent to a Project area with the use of buffer zones, visual screens (such as hay bales) or other feasible measures while Project activities are occurring to minimize disturbance impacts.
- If owls are identified during construction, on-site passive relocation will be avoided to the greatest extent practicable, and only implemented if avoidance cannot be met. Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows. Any passive relocation plan will need to be approved by the CDFG.
- ~~CDFG consultation will be required to determine if compensatory mitigation will be needed to fully mitigate Project impacts on burrowing owl if they are determined to be nesting within the new surface impoundment area.~~

Page 3-28, Mitigation Measures BIO-4, under Section 3.4, Biological Resources, is revised as follows for clarification:

Mitigation Measure BIO-4: Implement loggerhead shrike and other breeding bird protection measures during construction. The project applicant will ensure the following measures are implemented and included in construction specifications to avoid and minimize impacts to nesting birds.

- The construction contractor will schedule ground-disturbing activities, as well as any other work that generates elevated human activity, noise and vibration above background operation levels, between February 1 and August 31 to avoid the breeding season between September 1 and January 31, to the greatest extent feasible.
- If nests are encountered during construction, qualified biologists will attempt to re-locate to a nearby and undisturbed location away from equipment.
- If any ground-disturbing activities, or any other work that generates elevated human activity, noise and vibration above background operation levels, will take place during the bird nesting season between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for nesting birds (including raptors) 7 days before these activities are initiated. If any active nests are identified in the Project area or within 300 feet of the Project area, the following buffer(s) a 300-feet of the Project area, the following buffer (s) will be established in the field with staking and flagging:
 - 100 feet for loggerhead shrike,
 - 250 feet for burrowing owl,
 - 300 feet for raptors, and
 - 50 feet for other nesting birds.

The specified buffer size may be reduced on a case-by-case basis with CDFG approval if, based on compelling biological or ecological reasoning (e.g. the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, and level of project activity) and as determined by qualified wildlife biologist, that implementation of a specified smaller buffer distance will still avoid Project-related "take" (as defined by Fish and Game Code Section 86) of adults, juveniles, chicks, or eggs associated with a particular nest.

- If other birds are present on site during Project operation, PG&E staff will continue current practices of maintaining distances from birds and avoiding nests when present.

Page 3-45, the fourth paragraph under Section 3.8, Hazards and Hazardous Materials, is revised as follows for clarification:

The natural or background soil chemistry in the vicinity of the surface impoundments was evaluated as part of the 1995 closure work, and the results are summarized in the closure documentation report (Trident 1996) and the Addendum to the RWD (Cardno ENTRIX 2012b). However, complete closure information was not provided for the previous surface impoundments Ponds 6 and 7, and thus additional information regarding the existing soil conditions is required by the proposed WDRs prior to construction.

Page 3-49, the section entitled, "Groundwater Basin", under Section 3.9, Hydrology and Water Quality, is revised as follows for clarification:

The Project vicinity is located in South Lahontan Hydrologic Region within the Centro Subarea of the Middle Mojave River Groundwater Basin. According to the Basin Plan for the Lahontan Region, the beneficial uses of the Mojave River Valley Groundwater Basin include municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), freshwater replenishment (FRSH), and Aquaculture (AQUA). The immediate Project area is located within the Hinkley Valley aquifer west of Barstow and north of the Mojave River. Water levels in the Centro Subarea have been relatively stable with seasonal fluctuations and declines during dry years followed by recovery during wet periods.

Page 3-50, the section entitled, "Groundwater Quality", under Section 3.9, Hydrology and Water Quality, is revised as follows for clarification:

The geochemistry of the entire Hinkley Valley aquifer has not been fully characterized. However, the quality of the water being used at the Hinkley Compressor Station, the water being discharged to the surface impoundments, and the groundwater directly beneath the surface impoundments is known for monitoring purposes. Potential constituents in the Hinkley aquifer include arsenic, iron, manganese, nitrate, Total Dissolved Solids (TDS), and chromium. Maximum contaminant levels (MCLs) are enforceable limits for contaminants in drinking water and Secondary Maximum Contaminant Levels (SMCLs) are established to protect the public welfare (i.e., adversely affect its odor, taste or appearance). Federal MCLs are established under the Federal Safe Drinking Water Act and State MCLs are established by California Department of Public Health and must be at least as stringent as the federal MCL, if one exists. Potential constituents in the Hinkley aquifer are compared to Federal and State MCLs to characterize its water quality.

Page 3-51, the third paragraph in the section entitled, "Groundwater Quality", under Section 3.9, Hydrology and Water Quality, is revised as follows for clarification:

Chromium levels have been heavily affected by historical discharges of chromium-contaminated water from the PG&E facility in the 1950s and 1960s which has resulted in a large area of contaminated groundwater in the Hinkley Valley. The Compressor Station is the source area for hexavalent chromium (Cr[VI]) contamination in groundwater caused by percolation of untreated cooling water from unlined surface impoundments operating from 1952-1965. Chromium-contaminated soil since has been excavated from shallow depths in the area of the former unlined surface impoundments, pipelines, and beneath tanks (Lahontan Water Board 2008b). The highest concentrations of Cr[VI] in groundwater are still almost directly below the former unlined surface impoundments at the Compressor Station, with concentrations reported up to 4,200 µg/L in second quarter 2012. However, just south of the Compressor Station (i.e., up-gradient of the chromium plume) groundwater is considered outside of the Cr[VI] plume and is used for freshwater supply for Compressor Station operations and remedial activities (from PGE-14, FW-01, and FW-02). As stated in the proposed WDRs, the proposed locations of the new surface impoundments are outside of the original discharge and source areas for the Cr[VI] contamination from the Compressor Station.

Page 4-5, the following references under Section 4.1, Printed References, are added as follows:

California Department of Fish and Game. 2012c. Staff Report on Burrowing Owl Mitigation. Available from <http://www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf>

U.S. Fish and Wildlife Service. 2010. Preparing for any action that may occur within the range of the Mojave Desert Tortoise. Available from http://www.fws.gov/ventura/species_information/protocols_guidelines/

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ENCLOSURE 6

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MITIGATION MONITORING PLAN

**CLASS II SURFACE IMPOUNDMENTS 6R AND 7R
PG&E HINKLEY COMPRESSOR STATION, HINKLEY, CA
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

January 2013

ICF International. 2013. Mitigation Monitoring Plan. Class II Surface Impoundments 6R and 7R PG&E Hinkley Compressor Station Hinkley, California Initial Study/Mitigated Negative Declaration. January. (ICF 00569.12) San Francisco, CA. Prepared for Lahontan Regional Water Quality Control Board, Victorville, CA.

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Mitigation Monitoring Plan

Introduction

The Lahontan Regional Water Quality Control Board, as Lead Agency under the California Environmental Quality Act (CEQA) and State CEQA Guidelines, has prepared a Initial Study/Mitigated Negative Declaration for PG&E Hinkley Compressor Station Hinkley, California. When a lead agency makes findings on significant effects identified in an Initial Study/Mitigated Negative Declaration, it must also adopt a program for reporting or monitoring mitigation measures that were adopted or made conditions of project approval (Public Resources Code [PRC] Section 21081.6[a]; State CEQA Guidelines Sections 15091[d], 15097).

This document represents the mitigation monitoring plan (MMP) prepared by the Lahontan Regional Water Quality Control Board for the Project. This MMP includes all measures required to reduce potentially significant environmental impacts to a less-than-significant level. It also identifies the timing of implementation and the entities responsible for implementing the mitigation and monitoring the mitigation. The mitigation measures, timing, and responsibility are summarized in Table 1, and the full text of the mitigation measures follows.

This MMP has been prepared by the Lahontan Regional Water Quality Control Board, with technical assistance from ICF International, an environmental consulting firm. Questions should be directed to Lisa Dernbach at the Lahontan Regional Water Quality Control Board.

Contact Information:

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Table 1. Mitigation Monitoring Plan – Summary of Mitigation Measures

Mitigation Measure	Implementation Timing	Implementation Responsibility	Monitoring Responsibility¹	Monitoring Notes
BIO-MM-1: Implement desert tortoise protection measures before and during construction.	Prior to and During Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
BIO-MM-2: Implement burrowing owl protection measures before and during construction.	Prior to and During Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
BIO-MM-3: Implement American badger and desert kit fox protection measure prior to and during construction.	Prior to and During Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
BIO-MM-4: Implement loggerhead shrike and other breeding bird protection measures during construction.	Prior to and During Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
BIO-MM-5: Prepare and conduct a sensitive species worker awareness program.	Prior to and During Construction	Project Applicant with qualified biologist or construction monitor	Lahontan Regional Water Quality Control Board	
BIO-MM-6: Maintain a log for biological resources mitigation measures.	Prior to, During and After Construction	Project Applicant with qualified biologist	Lahontan Regional Water Quality Control Board	
CUL-MM-1: Stop work if cultural resources are encountered during ground-disturbing activities.	During Construction	Project Applicant with Construction Contractor	Lahontan Regional Water Quality Control Board	
GHG-MM-1: Implement San Bernardino County GHG construction standards during construction.	Prior to and During Construction	Project Applicant with Construction contractor	Lahontan Regional Water Quality Control Board	
NOI-MM-1: Restrict construction activities to day time hours and weekdays.	During Construction	Project Applicant with Construction contractor	Lahontan Regional Water Quality Control Board	

Mitigation Measure	Implementation Timing	Implementation Responsibility	Monitoring Responsibility¹	Monitoring Notes
TRA-MM-1: Implement traffic control measures during construction.	During Construction	Project Applicant with Construction contractor	Lahontan Regional Water Quality Control Board	

¹ The Lahontan Water Board may hire a qualified contractor to conduct mitigation monitoring.

Mitigation Measures

Biological Resources

Mitigation Measure BIO-1: Implement desert tortoise protection measures before and during construction. The project applicant will ensure the following measures are implemented and included in construction specifications.

- Protocol surveys for desert tortoise were conducted in October 2011. Because protocol surveys are only valid for one year if no presence was found, a biologist will conduct USFWS protocol-surveys for desert tortoise based on the 2010 United States Fish and Wildlife Service survey protocol. These surveys will be conducted during the desert tortoise's most active periods [April through May or September through October when air temperatures are below 40° C (104° F)].
- Prior to surface disturbance and construction activities, a qualified biologist will conduct a preconstruction clearance survey for desert tortoise within the Project area to ensure that all tortoise are absent, or that any tortoises that are present move passively off site and out of harm's way. The protocol (U.S. Fish and Wildlife Service 2010) states that two consecutive surveys will be conducted immediately prior to surface disturbance within the Project area.
- Following the pre-construction survey and prior to surface disturbance, the construction contractor in coordination with a qualified biologist will place desert tortoise exclusion fencing along the perimeter of the proposed work areas to prevent encounters with desert tortoise during construction activities. The specifications of the desert tortoise exclusion fencing will follow USFWS (Desert Tortoise Field Manual: Chapter 8. Desert Tortoise Exclusion Fence) (U.S. Fish and Wildlife Service 2009).
- If desert tortoises are found to occupy the project area during the protocol survey, preconstruction clearance survey, or active construction phase, all work will be halted and consultation with USFWS and CDFG will be required to determine how the project will proceed. If there is a potential for "take" of tortoise (as defined by federal and state endangered species acts) then an Incidental Take Permit (ITP) will be required from FWS and/or CDFG. The authorized biologist in consultation with FWS/CDFG will then determine whether additional surveys or fencing are needed. Tortoises will not be moved without an ITP.
- A Translocation Plan will be prepared and submitted to CDFG and USWFS as part of the ITP application. Unless otherwise directed by CDFG and USFWS, any desert tortoises found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat within 500 m of their original location. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Desert tortoise translocation will follow Guidelines for Handling Desert Tortoise (Desert Tortoise Field Manual: Chapter 7; USFWS 2009) at all times if handling tortoises is required.

- A qualified biologist will conduct biological monitoring during work hours and conduct daily pre-construction clearance surveys in areas to be disturbed until temporary tortoise-proof fencing has been installed to exclude desert tortoises from entering the work area. The qualified biologist will also inspect the condition of tortoise-proof fencing. If desert tortoises are found within the construction areas, a qualified biologist will ensure it moves away passively.
- Once desert tortoise-proof fence is in place, daily biological monitoring will be conducted. The biological monitor will have the authority to stop all activities until appropriate corrective measures have been completed.
- Work shall be restricted to daylight hours, except during an emergency. Traffic speed shall be maintained at 15 mph or less in the work area.
- Until tortoise-proof fencing is in place around the Project area, no open trenches, excavations or other potential trap hazards will be left unfenced or uncovered overnight. These hazards will be removed each day prior to the work crew and biologist leaving the Project area as long as it is not fully enclosed by tortoise-proof fencing.
- Until tortoise-proof fencing is in place around the Project area, parked vehicles and equipment within the Project area will be inspected by workers (as instructed through the project environmental awareness training) prior to being moved each day. If a tortoise is found beneath vehicles or equipment, it will be monitored until it moves out of the area. Under no circumstances should the tortoise be moved or touched.
- All construction activities, vehicle parking, equipment and material storage areas will be contained within the area surrounded by tortoise-proof fencing.
- Prior to and during construction, all desert tortoises sighted within the Project area will be immediately reported to the qualified biologist and project foreman, and any construction activity that could potentially jeopardize the tortoise will be halted immediately until the desert tortoise moves passively (on its own) from harm's way. Desert tortoises observed in the Project area will be monitored and allowed to move out of the project area passively.
- If a desert tortoise is injured or killed, the authorized biologist will be notified, the injury or death documented, and the animal taken to a qualified veterinarian or the carcass removed by the biologist. If an injured desert tortoise is identified that may have been affected by Project-related activities, a qualified biologist will immediately transport the animal to a veterinary clinic approved by CDFG. PG&E will be responsible for payment of any veterinarian bills for injured tortoises. CDFG and USFWS will be notified in writing within five calendar days, with photographs and a written description of any injury/mortality, circumstances, probable cause and recommendations for avoidance of future incidents. The agencies will assess the final condition of the animal if it recovers.
- To minimize attractiveness to desert tortoise predators (e.g., common ravens and feral dogs), trash and food items will be contained in closed containers and will be removed from the Project site at the end of each work day. No pets or firearms will be permitted in the Project area.
- Following completion of the construction phase of the Project, the applicant will improve the existing chain link fence around the Compressor Station facility, which includes the

surface impoundments, to eliminate large gaps between the fence and the ground surface to prevent desert tortoise from entering the Project area. The applicant will maintain the fence to ensure there are no gaps, which will reduce the likelihood that desert tortoise or other wildlife move into the Project area, thus minimizing entrapment or negative interactions with tortoises during Project operation.

Mitigation Measure BIO-2: Implement burrowing owl protection measures before and during construction. The project applicant will ensure the following measures are implemented and included in construction specifications.

- Protocol-level surveys for burrowing owls will be conducted according to current CDFG protocols (currently CDFG 2012c), or any CDFG approved variation. The nesting season survey window will begin as early as February 15 and no later than April 15, and continue through August 31.
- Prior to construction, a qualified biologist will conduct a preconstruction survey for burrowing owls no greater than 30 days prior to commencing ground disturbing or construction activities, with a second preconstruction survey within 24 hours prior to commencing ground disturbing or construction activities. The limits of this preconstruction survey will include the disturbance area and a 400-foot buffer.
- If during the protocol-level surveys or the preconstruction survey burrowing owl are observed, the following mitigation measures will be applied:
 - As compensation for the direct loss of burrowing owl nesting and foraging habitat, habitat will be acquired and permanently protected at a ratio determined through consultation with CDFG. The minimum ratio will be 6.5 acres per pair or single bird.
 - A non-wasting endowment account for the long-term management of the preservation site for burrowing owls will be established. The site will be managed for the benefit of burrowing owls. The preservation site, site management, and endowment will be approved by the Lead Agency after consultation with CDFG.
 - All owls associated with occupied burrows that will be directly impacted (temporarily or permanently) by the project will be relocated and the following measures will be implemented to avoid take of owls:
 - Occupied burrows will not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
 - Owls will be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows will be excavated using hand tools and refilled to prevent reoccupation.
 - All relocation will be approved by the Lahontan Water Board after consultation with CDFG. The permitted biologist will monitor the relocated owls a minimum

of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring will be submitted to the Lead Agency and CDFG within 30 days following completion of the relocation and monitoring of the owls.

- A Burrowing Owl Mitigation and Monitoring Plan will be submitted to the Lahontan Water Board and the CDFG for review and approval prior to relocation of owls. The Burrowing Owl Mitigation and Monitoring Plan will describe proposed relocation and monitoring plans. The plan will include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location, and type of burrows) will also be included in the plan. The Plan will also describe proposed off-site areas to preserve to compensate for impacts to burrowing owls/occupied burrows at the project site.
- If burrowing owls take occupancy in the Project area before or during construction, the construction contractor will ensure that work-exclusion buffers are maintained. Work will not occur within 160 feet of occupied burrows during the non-breeding season (September 1 through January 31) or within 250 feet during the breeding season (February 1 through August 31), unless otherwise approved by the monitoring biologist and CDFG. A qualified biologist and CDFG will determine if burrowing owls and their habitat can be protected in place on or adjacent to a Project area with the use of buffer zones, visual screens (such as hay bales) or other feasible measures while Project activities are occurring to minimize disturbance impacts.
- If owls are identified during construction, on-site passive relocation will be avoided to the greatest extent practicable, and only implemented if avoidance cannot be met. Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows. Any passive relocation plan will need to be approved by the CDFG.

Mitigation Measure BIO-MM-3: Implement American badger and desert kit fox protection measure prior to and during construction. The project applicant will ensure the following measures are implemented and included in construction specifications to avoid and minimize impacts to the American badger and desert kit fox.

- If there is evidence that a burrow may be occupied by a badger or a kit fox during preconstruction surveys (see BIO-1) and if construction will occur during the natal season, all construction activities will cease within a 100-foot buffer of the burrow during the natal season (February–July) unless otherwise authorized by CDFG. Removal of an occupied American badger or desert kit fox burrow at anytime of the year will require coordination with CDFG.

Mitigation Measure BIO-4: Implement loggerhead shrike and other breeding bird protection measures during construction. The project applicant will ensure the following measures are implemented and included in construction specifications to avoid and minimize impacts to nesting birds.

- The construction contractor will schedule ground-disturbing activities, as well as any other work that generates elevated human activity, noise and vibration above background

operation levels, between February 1 and August 31 to avoid the breeding season between September 1 and January 31, to the greatest extent feasible.

- If nests are encountered during construction, qualified biologists will attempt to re-locate to a nearby and undisturbed location away from equipment.
- If any ground-disturbing activities, or any other work that generates elevated human activity, noise and vibration above background operation levels, will take place during the bird nesting season between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for nesting birds (including raptors) 7 days before these activities are initiated. If any active nests are identified in the Project area or within 300 feet of the Project area, the following buffer(s) a 300-feet of the Project area, the following buffer (s) will be established in the field with staking and flagging:
 - 100 feet for loggerhead shrike,
 - 250 feet for burrowing owl,
 - 300 feet for raptors, and
 - 50 feet for other nesting birds.

The specified buffer size may be reduced on a case-by-case basis with CDFG approval if, based on compelling biological or ecological reasoning (e.g. the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, and level of project activity) and as determined by qualified wildlife biologist, that implementation of a specified smaller buffer distance will still avoid Project-related "take" (as defined by Fish and Game Code Section 86) of adults, juveniles, chicks, or eggs associated with a particular nest.

- If other birds are present on site during Project operation, PG&E staff will continue current practices of maintaining distances from birds and avoiding nests when present.

Mitigation Measure BIO-5: Prepare and conduct a sensitive species worker awareness program. Prior to the initiation of construction activities, the qualified biologist and/or Environmental Monitor will prepare a worker awareness program to educate workers about the sensitive species that could be present in the Project area (including desert tortoise, Mohave ground squirrel, burrowing owl, and nesting birds) and the mitigation measures to protect them (Mitigation Measures BIO-1, BIO-2, and BIO-3). At a minimum, the awareness program will emphasize the following information relative to these species: (a) distribution on the job site; (b) general behavior and ecology; (c) sensitivity to human activities; (d) legal protection; (e) penalties for violating State or federal laws; (f) reporting requirements; and (g) project protective mitigation measures. PG&E and the construction contractor will ensure all workers have received the awareness program and understand the various components. Interpretation will be provided for non-English speaking construction workers.

Mitigation Measure BIO-6: Maintain a log for biological resources mitigation measures. The qualified Biologist will maintain a daily log of all biological mitigation measures implemented before, during, and after construction to protect biological resources (including Mitigation Measures BIO-1, BIO-2, BIO-3 and BIO-4).

Cultural Resources

Mitigation Measure CUL-MM-1: Stop work if cultural resources are encountered during ground-disturbing activities. The applicant will ensure the construction specifications include a stop work order if cultural resources or artifacts are discovered during construction. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil (“midden”) containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Paleontological resources (i.e., fossils) and human remains might include bones.

If potential cultural resources as described above are found, all work within 50 feet of the find will be stopped until qualified cultural resources staff is notified and determines and notifies appropriate qualified professional (e.g., archaeologist, architectural historian, paleontologist) and Native American representative to assess the significance of the find. If the find is determined to be potentially significant, the qualified professional(s), in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, preservation in place, capping, excavation, documentation, and curation. Any recommendations will be reviewed by PG&E and appropriate agencies.

If any human remains are discovered the County Coroner will be notified immediately according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) will be followed.

Greenhouse Gas Emissions

Mitigation Measure GHG-MM-1: Implement San Bernardino County GHG construction standards during construction. PG&E or its contractor will include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance in the project completion report to the Lead Agency. PG&E or its contractor will do the following, in compliance with the San Bernardino County Greenhouse Gas Emissions Reduction Plan (December 2011).

- Select construction equipment based on low GHG emissions factors and high-energy efficiency. Where feasible, diesel-/gasoline-powered construction equipment will be replaced, with equivalent electric or compressed natural gas (CNG) equipment.
- Because it may not be feasible to use electric or CNG equipment per the County performance standard, the Project will use biodiesel fuel if the following applies:
 - Biodiesel fuel becomes available within 20 miles of the Project area.
 - The California Air Resources Board has certified that the locally available biodiesel results in reduction of GHG emissions.

- Biodiesel fuel is approved by the manufacturer for use in diesel trucks or equipment used for remedial activities, including farm equipment and construction equipment.
- The cost of biodiesel is not more than 125% above the price of regular diesel fuel, then
- As biodiesel comes in blended amounts (B5 = 5% biodiesel; B20 = 20% biodiesel; B100 = 100% biodiesel), PG&E will use the highest biodiesel blend that is approved for use in site trucks or equipment, available, and within the price limitation noted above.
- Grading contractor will implement the following when possible:
 - Training operators to use equipment more efficiently.
 - Identifying the proper size equipment for a task can also provide fuel savings and associated reductions in GHG emissions.
 - Replacing older, less fuel-efficient equipment with newer models.
 - Using global positioning system (GPS) for grading to maximize efficiency.
- Grading plans will include the following statements:
 - “All construction equipment engines will be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration.”
 - “All construction equipment (including electric generators) will be shut off by work crews when not in use and will not idle for more than 5 minutes.”
- Recycle and reuse construction and demolition waste (e.g., soil, vegetation, concrete, lumber, metal, and cardboard) per County Solid Waste procedures.
- Educate all construction workers about the required waste reduction and the availability of recycling services.
- The project manager will ensure that the contract specifications related to GHG are followed by the contractor and will include in the project completion report to the Water Board a summary of mitigation measures implemented before, during, and after construction activities.

Noise

Mitigation Measure NOI-MM-1: Restrict construction activities to day time hours and weekdays. The construction contractor or project manager will ensure that construction activities involving the use of tractor trailers, heavy equipment, and/or pneumatic tools will be performed between 7:00 a.m. and 7:00 p.m. on Monday through Saturday, and no work at noise levels above 45db at the nearest occupied residence will be performed on Sundays or federal holidays. Additionally, this equipment will not be allowed to idle longer than 5 minutes.

Transportation and Traffic

Mitigation Measure TRA-MM-1: Implement traffic control measures during construction. To minimize impacts on local surface streets in the project area, PG&E will ensure that construction contractors implement the following traffic control measures during project construction:

- On days with large truck traffic, use personnel as necessary to direct traffic and prevent vehicles from lining up on county roads and highways during construction.
- Vehicles will not be allowed to block the roadway, resulting in an inadvertent temporary lane closure, while waiting to enter the Project area for longer than five minutes.
- Emergency vehicle access will be maintained at all times, and there will be no road closures.
- Maintain log entries whenever the above mitigation measure is implemented.

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ENCLOSURE 7

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PG HINKLEY COMPRESSOR STATION PONDS IS/MND - SUMMARY OF COMMENTS AND RESPONSES
Lahontan Regional Water Quality Control Board
December 21, 2012

Commenter No.	Commenter	Individual Comment No.	Comment Description	RESPONSE
1	DTSC - Rafiq Ahmed	1	Introduction to letter and receipt of the MND. Provides a description of the Project verbatim from MND.	Comment noted. It does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	2	The MND should evaluate whether conditions within the Project area may pose a threat to human health or the environment. Provides list of agency databases for resources.	The MND evaluates conditions in the project that could have a potentially significant impact on the environment and human health. The MND identifies such conditions that may exist during the project construction phase and operation phase. The MND describes mitigation measures that will reduce potentially significant impacts to less than significant levels. This comment does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	3	The MND should identify the mechanism to initiate any required investigation and/or remediation for any site within the Project area that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents.	The Report of Waste Discharge discusses a sampling plan following excavation of soil from the former Ponds 6 and 7. That plan is acknowledged in the MND. Should soil samples come back showing constituents at concentrations that have the potential to affect water quality, the Water Board will act as lead agency and the County will be included in correspondence and permit acquisition. Since chemicals were not discharged in the recent past at hazardous waste concentrations, it is not anticipated that hazardous wastes will be an encountered during construction of Ponds 6R and 7R. This comment does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	4	Any environmental investigations, sampling and/or remediation for a site should be conducted under a workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings, etc. of the investigation should be included in the MND.	All environmental investigations will be conducted under a workplan approved by the Water Board and, if necessary, the County. Investigation findings and potential remedial actions will be recorded in a technical report and copied to appropriate government agencies. This comment does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	5	If structures are planned to be demolished, an investigation should be conducted for the presence of other hazardous chemicals. If hazardous chemicals are found, proper precautions should be taken and they should be remediated in compliance with state regulations.	The MND states that construction of Ponds 6R and 7R involves the excavation of soil only. No building or structure demolition will be involved where hazardous chemicals may be present. This comment does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	6	Sampling may be required for soil excavation or fill. If soil is contaminated, it must be properly disposed. If soil is imported, sampling should be conducted to ensure it is not contaminated.	The Report of Waste Discharge describes a sampling plan following excavation activities. Soils determined to be designated waste will be required to be disposed at a permitted off-site facility. Soil imported for new ponds will be sampled to ensure contaminated fill is not being added to the site. This comment does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	7	Human health (environment of sensitive receptors) should be protected during field activities. If necessary, a health risk assessment should be conducted.	The MND identifies sensitive receptors within specified distances (i.e., 1,000 feet) of the project and lists mitigation measures to be implemented during project construction and operation to minimize the public's exposure of potential risks. This comment does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	8	If the Project area was used for agriculture, livestock or related activities, onsite soils and groundwater might contain pesticides or other related residue. Proper investigation and, if necessary, remedial actions should be conducted.	The project area was not subject to agriculture, livestock, or similar activities that might involve pesticides, residues, or other chemicals that could potentially affect worker health or the environment. This comment does not affect the conclusion that there are no potential significant environmental effects.

PG HINKLEY COMPRESSOR STATION PONDS IS/MND - SUMMARY OF COMMENTS AND RESPONSES

Lahontan Regional Water Quality Control Board

December 21, 2012

Committer No.	Committer	Individual Comment No.	Comment Description	RESPONSE
1	DTSC - Rafiq Ahmed	9	If hazardous waste will be generated by the proposed operations, the wastes must be managed in accordance with state regulations.	No hazardous wastes are expected to be encountered during project construction and operation. However, should hazardous waste be encountered, it will be handled, stored, and disposed in accordance with state regulations and appropriate agencies will be copied on all documents. This comment does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	10	DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for governmental agencies that are not responsible parties or a Voluntary Cleanup Agreement (VCA) for private parties.	DTSC's ability to provide cleanup oversight should hazardous wastes be encountered is acknowledged. This comment does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	11	In future CEQA docs, please provide your email address so DTSC can send comments both electronically and by mail.	Comment noted. Email addresses of regulators will be provided in future correspondence. This comment does not affect the conclusion that there are no potential significant environmental effects.
1	DTSC - Rafiq Ahmed	12	If you have questions, please contact Rafiq Ahmed.	Comment noted. This comment does not affect the conclusion that there are no potential significant environmental effects.
2	Annette Airo	1	PG&E is going to dig two more ponds? This town has had enough. I received my results back from the Cr test, and it states that I am at 0.91. I am sick with worry. I bought this house in Dec 2008, and it should not have been allowed to have been sold.	The proposed two surface impoundments are designed to prevent waste water from percolating to groundwater. The impoundments will be lined to minimize leakage, and the sumps will be monitored to ensure the system is operating as designed. The historical releases at the Compressor Station causing chromium pollution to groundwater was due to discharges to unlined ponds, which was ceased in the mid-1960s. Chromium has not been used as a corrosion inhibitor in cooling tower water since the mid-1960s, and there is no further risk of pollution to groundwater. Current chemicals used to inhibit corrosion include phosphate and boron which are monitored in waste water discharged to lined ponds. The proposed project will not affect on-going remedial activities to clean up chromium in groundwater from historical releases. This comment does not affect the conclusion that there are no potential significant environmental effects.
3	DWR - Nidel Gayou	1	The tentative WDRs do not describe the size and capacity of the two proposed ponds; whereas, the MND describes the proposed size but not the capacity.	The MND has been revised to include the proposed capacity of the two surface impoundments (6R and 7R). This comment does not affect the conclusion that there are no potential significant environmental effects.
4	The People of Hinkley - Nick Panchev	1	May we address Kim Niemeyer as "The Board's Attorney"?	Yes – Mrs. Niemeyer is the Lahontan Regional Water Quality Control Board's (Water Board) attorney. This comment does not affect the conclusion that there are no potential significant environmental effects.
4	The People of Hinkley - Nick Panchev	2	The People of this State reserve the constitutional right to address it as the "Board's Attorney", since it is being paid by the Taxpayer's taxes in this State.	Comment noted. It does not affect the conclusion that there are no potential significant environmental effects.
4	The People of Hinkley - Nick Panchev	3	This serves as an objection to adopt a mitigated declaration.	Comment noted. It does not affect the conclusion that there are no potential significant environmental effects.
4	The People of Hinkley - Nick Panchev	4	The People of Hinkley object to the adoption of the Negative Declaration based on the reasoning provided in this letter.	Comment noted. It does not affect the conclusion that there are no potential significant environmental effects.

PG HINKLEY COMPRESSOR STATION PONDS IS/MND - SUMMARY OF COMMENTS AND RESPONSES

Lahontan Regional Water Quality Control Board

December 21, 2012

Committer No.	Committer	Individual Comment No.	Comment Description	RESPONSE
4	The People of Hinkley - Nick Panchev	5	To construct the new ponds on the same location as the prior ponds will destroy evidentiary exhibits for contamination with toxic substances, alleged to be previously utilized by PG&E to discharge Chromium and Manganese, which were used as corrosion prevention toxic substance for cooling towers at the Compressor Station.	The proposed locations of the new surface impoundments are outside of the original discharge and source areas for the hexavalent chromium contamination from the facility. This is explicitly stated in Finding #5 of the proposed WDRs. In addition, the jurisdiction of the Water Board is only over the discharge of waste. Therefore, although the Water Board can limit what PG&E discharges from its ponds, it does not have the ability to prohibit PG&E from conducting other activities on its property. If you have concerns about PG&E destroying evidence that may be relevant to your litigation against them, you should seek from the court an injunction against PG&E from taking actions that you believe could impair your case. This comment does not affect the conclusion that there are no potential significant environmental effects.
4	The People of Hinkley - Nick Panchev	6	To certify the MND is a scrupulous attempt by this Board to avoid afforded due process of law to the People of this State, thus the Board's action could be construed as above the law.	Comment noted. It does not affect the conclusion that there are no potential significant environmental effects.
4	The People of Hinkley - Nick Panchev	7	The fact remains that PG&E has to use the facility to discharge water containing corrosion resistance substances for their cooling towers; therefore, another location must be selected rather than on top of the existing (evidentiary) ponds. According to CEQA, certifying a MND must be unbiased and in compliance with all laws, not just to mitigate environmental impacts, in this case must be avoiding destruction of evidence.	Compliance with CEQA does not need to consider whether or not the location of the ponds would jeopardize evidence that may be relevant to litigation. CEQA is limited to looking at the potentially significant environmental impacts of a project. This comment does not affect the conclusion that there are no potential significant environmental effects.
4	The People of Hinkley - Nick Panchev	8	To assist in destruction of evidence is contrary to law, and the Board's act to certify could be construed as above the law, and absent of due process of law.	Comment noted. It does not affect the conclusion that there are no potential significant environmental effects.
5	Hinkley CAC	1	The Hinkley CAC oppose construction of the wastewater evaporation ponds. They have a proven history of failure and have a devastating effect on the environment and human health. There is sufficient cause to abandon the MND and perform an EIR. The MND seems to have 2 subjects: (1) the construction of the impoundments and (2) the operation of the impoundments. These need to be reviewed separately. The construction may not require an EIR, but the operation most certainly does.	The proposed two surface impoundments did not have a history of failure when they operated in the past before abandonment in 1996, nor do the current lined surface impoundments (Ponds 4, 5, and 8) have a history of failure. The current ponds operate in compliance with state regulations that are designed to prevent percolation of waste to groundwater. CEQA allows the evaluation of a project's construction and operation related to potential significant effects upon the environment under a mitigated negative declaration. Since all potentially significant impacts of the project can be mitigated to less than significant levels, a mitigated negative declaration is the appropriate document for evaluating the project. This comment does not affect the conclusion that there are no potential significant environmental effects.
5	Hinkley CAC	2	The document proposes "weekly" monitoring of the sump. Instead, real time monitoring connected to an alarm notification system should be conducted. Monitoring wells and surface water should also be real time monitored. The document lacks detail regarding the testing and monitoring methodology, QA/QC process, and explanation of methods used to establish background levels in soils.	Weekly and other periodic monitoring is standard practice. The methodology and full monitoring requirements of the surface impoundments are described in the Monitoring and Reporting Program, which is made part of the Waste Discharge Requirements, and are in compliance with CCR, title 27 requirements. The Waste Discharge Requirements, section V.A., requires the Discharger submit a Sampling And Analysis Plan, which must include methods proposed to be used to establish background soils levels in the area of the proposed surface impoundments. This comment does not affect the conclusion that there are no potential significant environmental effects.

PG HINKLEY COMPRESSOR STATION PONDS IS/MND - SUMMARY OF COMMENTS AND RESPONSES

Lahontan Regional Water Quality Control Board

December 21, 2012

Committer No.	Committer	Individual Comment No.	Comment Description	RESPONSE
5	Hinkley CAC	3	Disagree with the WB's determination that an EIR is not needed.	The objection to MND is noted. Based on the evaluation in the IS/MND, all potential impacts were determined to be less than significant or were mitigated to a less than significant level.
5	Hinkley CAC	4	This biological resources section does not distinguish clearly between the construction and operational phases. There is a substantial lack of species in the wildlife portion - migratory fowl are not discussed. This area requires an EIR. The "less than significant with mitigation incorporated" is not viable.	Construction and operation impacts are addressed in the discussion, which is presented by species. An analysis for migratory waterfowl species has been added to the biological resource section for potential operational impacts. This comment and the addition of the discussion for waterfowl does not affect the conclusion that there are no potential significant environmental effects.
5	Hinkley CAC	5	The document states there is no danger from an earthquake fault. It has been indicated by PG&E and WB that there is a fault that works as a dam near the remediation area. This is conflicting info. An EIR and geological studies need to be conducted. There is little or no distinguishing between construction and operational phases in this section.	The proposed two surface impoundments will be constructed to withstand the most likely credible earthquake to be experienced at the site. The Lockhart Fault is not considered to be an active fault as there is no surface feature, such as ground displacement, indicating recent activity (as required by the Alquist-Priolo Act). Lined surface impoundments have existed at the site since the mid-1960s without incident from an earthquake. The proposed two surface impoundments are expected to function in a similar manner and are not expected to fail should an earthquake occur during either the construction or operation phase. The Lockhart fault is a subsurface feature that acts to retard (slow down) the flow of groundwater across the fault trace at the water table, approximately 80 feet below ground surface. The Fault is not expected to have an effect upon surface water on ground in the project area. This comment does not affect the conclusion that there are no potential significant environmental effects.
5	Hinkley CAC	6	Potential hazardous wastes, including wastewaters to be contained in impoundments, are not clearly defined. There is no MSDS or list of elements/ingredients. This section requires more data and evidence to fully realize potential hazards. There are no sampling results or hard data. The WB is overseeing a cleanup project that will probably take 100 years total, yet you list most of the concerns as "less than significant". We do not agree. The only safe method of storage is in aboveground storage tanks.	The draft MND lists the constituents and concentrations of the waste water expected to be contained in the proposed two surface impoundments. These constituents do not occur at concentrations considered to be hazardous. Thus, the makeup of waste water to be stored in the new surface impoundments will not be hazardous to humans or wildlife. Constituents in waste water however do exist at concentrations to make it a designated waste capable of impairing groundwater quality and requiring that it be managed under state regulations. While groundwater contaminated with chromium exists beneath the project area, it is not a part of the project, and the proposed project will not affect on-going remedial activities to clean up chromium in groundwater from historical releases. Mitigation measures to be implemented during the project's construction and operation phases will reduce potentially significant impacts to less than significant levels, without any affect to remedial actions for chromium in groundwater.

PG HINKLEY COMPRESSOR STATION PONDS IS/MND - SUMMARY OF COMMENTS AND RESPONSES

Lahontan Regional Water Quality Control Board

December 21, 2012

Commenter No.	Commenter	Individual Comment No.	Comment Description	RESPONSE
5	Hinkley CAC	7	There is no distinction between construction and operational phases. All water quality needs real time monitoring. This section demands an EIR.	The MND adequately discusses potential impacts to water quality during the construction and operation phase of the project. During construction of Ponds 6R and 7R, erosion control measure will be in place to prevent potential runoff. Spill prevention plans will be adhered to should accidental spills or releases from equipment occur to prevent potential impacts to water quality. During project operation, monthly testing of waste water will be sufficient to ensure that chemicals considered to be hazardous to human and wildlife are not being sent to the new ponds. Since the percolation rate of waste water to groundwater at 80 feet is estimated to be 7 years, monthly lysimeter sampling and quarterly monitoring well sampling are an adequate monitoring frequency in such conditions. This comment does not affect the conclusion that there are no potential significant environmental effects.
5	Hinkley CAC	8	Does this refer to construction and operation? It is a mistake that this is listed as "no impact" taking into account the loss of population, housing and human life from past failure of impoundment ponds.	The draft MND sufficiently discusses that during the construction of the two proposed surface impoundments, there will be "no impact" regarding the loss of population, housing and human life, due to the short duration of six to eight weeks. The ponds will be overseen and operated by the same staff who oversee the existing ponds and will not have an impact on current population, housing, and human life. The comment about the past failure of ponds refers to releases of waste water containing chromium that was released to un-lined ponds that ceased in the mid-1960s and is not relevant to this project. This comment does not affect the conclusion that there are no potential significant environmental effects.
5	Hinkley CAC	9	In total disagreement with this section.	While no reasoning was provided, the disagreement with the Mandatory Findings of Significance section is noted. This comment does not affect the conclusion that there are no potential significant environmental effects.
6	DFG - Rebecca Jones	1	DFG introduces letter and redefines the Project. States that the Project is in the range of the desert tortoise.	Comment noted. It does not affect the conclusion that there are no potential significant environmental effects.
6	DFG - Rebecca Jones	2	According to IS/MND, protocol surveys for Desert Tortoise (DT) were conducted one year ago. These surveys are only valid for one year if no presence was found. DFG recommends protocol surveys for DT be conducted during the correct timeframe for DT. DFG requests that mitigation measures be revised for DT based on survey results.	Mitigation Measure (MM) BIO-1 has been revised to include protocol level surveys. Further measures will be based on survey results. This comment does not affect the conclusion that there are no potential significant environmental effects.
6	DFG - Rebecca Jones	3	Clearance surveys for DT prior to construction may not be conducted unless an incidental take permit (ITP) is obtained. DFG recommends that a preconstruction survey be conducted; and if DT is found, then an ITP will be required and activities will be halted until the permit is issued.	MM BIO-1 has been revised to note that if DT is found to occupy habitat and will need to be moved, then an ITP would be obtained and activities halted in the vicinity of the DT as necessary to avoid harm. This comment does not affect the conclusion that there are no potential significant environmental effects.
6	DFG - Rebecca Jones	4	A complete survey for Burrowing Owls (BUOW) consists of 4 visits. DFG recommends surveys be required to be performed to protocol at the appropriate times and results be submitted to Lead Agency.	MM BIO-2 has been revised to specify protocol level surveys for BUOW. This comment does not affect the conclusion that there are no potential significant environmental effects.
6	DFG - Rebecca Jones	5	Following survey, preconstruction BUOW may be required. If BUOW are observed, then DFG recommends several MMs (outlined in letter) to be applied.	MM BIO-2 has been revised to clarify requirements for compensatory mitigation and when it is required. This comment does not affect the conclusion that there are no potential significant environmental effects.

PG HINKLEY COMPRESSOR STATION PONDS IS/MND - SUMMARY OF COMMENTS AND RESPONSES

Lahontan Regional Water Quality Control Board

December 21, 2012

Commenter No.	Commenter	Individual Comment No.	Comment Description	RESPONSE
6	DFG - Rebecca Jones	6	DFG thanks the WB for the opportunity to comment and provides contact information for questions.	Comment noted. It does not affect the conclusion that there are no potential significant environmental effects.



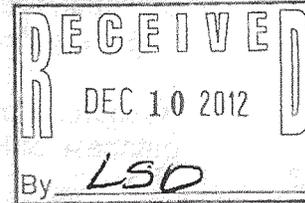
Department of Toxic Substances Control

Matthew Rodriguez
Secretary for
Environmental Protection

Deborah O. Raphael, Director
5796 Corporate Avenue
Cypress, California 90630

Edmund G. Brown Jr.
Governor

December 7, 2012



Ms. Lisa Demback
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

NOTICE OF INTENT TO ADOPT A DRAFT MITIGATED NEGATIVE DECLARATION FOR THE CLASS II SURFACE IMPOUNDMENT 6R AND 7R PG&E HINKLEY COMPRESSOR STATION PROJECT, (SCH#2012111038), SAN BERNARDINO COUNTY, CALIFORNIA

Dear Ms. Demback:

The Department of Toxic Substances Control (DTSC) has received your submitted Initial Study (IS) and a draft Mitigated Negative Declaration (MND) for the above-mentioned project. The following project description is stated in your document:

"The proposed project (Project) consists of the construction of two additional Class II surface impoundments, Ponds 6R and 7R. Former Ponds 6 and 7 were permitted to operate between 1982 and 1993, and closed in 1995. The Project area is the Compressor Station facility, which is approximately 55 acres and consists of the Compressor Station, parking area, five surface impoundments (three existing ponds and two proposed ponds), office area, and associated related piping and appurtenances. The Pacific Gas and Electric Company (PG & E) Hinkley Compressor Station is located in San Bernardino County, California, approximately 9 miles west of Barstow and 3 miles southeast of the community of Hinkley, California. The predominant surrounding land uses are undeveloped open space and rural residential. The surrounding and nearby community of Hinkley has historically been limited to single family houses on large agricultural acreage lots, as well as single family homes on smaller lots. The Project area is an existing industrial facility with a County zoning designation of Public Facilities."

Based on the review of the submitted document DTSC has the following comments:

- 1) The MND should evaluate whether conditions within the Project area may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:

- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
 - EnviroStor (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).
 - Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
 - Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
 - Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
 - GeoTracker: A List that is maintained by Regional Water Quality Control Boards.
 - Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
 - The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).
- 2) The MND should identify the mechanism to initiate any required investigation and/or remediation for any site within the proposed Project area that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents.
- 3) Any environmental investigations, sampling and/or remediation for a site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table. All closure, certification or remediation approval reports by regulatory agencies should be included in the MND.
- 4) If buildings, other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should also be conducted for the

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presence of other hazardous chemicals, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.

- 5) Project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.
- 6) Human health and the environment of sensitive receptors should be protected during the field activities. If necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.
- 7) If the project area was used for agricultural, livestock or related activities, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other related residue. Proper investigation, and remedial actions, if necessary, should be conducted under the oversight of and approved by a government agency at the site prior to construction of the project.
- 8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.
- 9) DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

Ms. Lisa Demback
December 7, 2012
Page 4

- 10) Also, in future CEQA document, please provide your e-mail address, so DTSC can send you the comments both electronically and by mail. | 11

If you have any questions regarding this letter, please contact Rafiq Ahmed, Project Manager, at rahmed@dtsc.ca.gov, or by phone at (714) 484-5491. | 12

Sincerely,



Rafiq Ahmed
Project Manager
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
Attn: Nancy Ritter
nritter@dtsc.ca.gov

CEQA # 3680

From: Annette Airo [aairo62@gmail.com]
Sent: Friday, November 16, 2012 3:19 PM
To: Dernbach, Lisa@Waterboards
Subject: Negative declaration

I just scanned through some of this. PG&E is going to dig two more ponds? I can't believe this, this town has had enough I want to live for another 25 to 30y years. I received my results back from the Chromium test it states I am at 0.91, my test I am doing was taken Wednesday supposed to be back in 10 days. I am sick with worry and stressed and have every right to be. I bought this house in December 2008 it should not of been allowed to have been sold.

Annette

We received the following verbal comment for the Mitigated Neg Dec and tentative WDRs from Nidel Gayou of the CA Dept. of Water Resources:
"The tentative WDRs do not describe the size and capacity of the two proposed ponds. Whereas, the MND describes the proposed size but not the capacity."

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From: info@thepeopleofhinkley.org [info@thepeopleofhinkley.org]
Sent: Tuesday, December 11, 2012 7:17 AM
To: Dernbach, Lisa@Waterboards
Subject: RE: Comments Still Being Accepted for Mitigated Negative Declaration at PG&E Compressor Station

Attn:
Lisa Dernbach
Lahontan Water Board
State of California
(530) 542-5424

December 11, 2012

Firstly, may we address Kim Niemeyer, Esq. as "The Board's Attorney", in lieu thereof "our attorney" as stated by Lisa Dernbach ?

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WHEREAS, although the Board's attorney is appointed by the Governor, State of California, The People of this State reserve their constitutional right to address it as the "Board's Attorney", since it is being paid by the Taxpayer's taxes in this State.

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Secondly, although this response is construed as response to sought comments, on said herein below sought adoption of certain Negative Declaration, herein below stated shall also be construed and serves as an OBJECTION TO ADOPT A MITIGATED DECLARATION, thus such an adoption must be set-aside, therefore such adoption is hereby demurred.

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COMES NOW, THE PEOPLE OF HINKLEY, STATE OF CALIFORNIA, [Constitutionally construed as BY THE PEOPLE AND FOR THE PEOPLE, WE THE PEOPLE] and in response to your request for comments in accordance with California SEQA,

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IN RE: "NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION" a true copy attached hereto for reference, objects to the adoption of said Negative Declaration, on the following grounds:

1. To construct surface pond No. 6 and 7, on the same location as prior ponds, will destroy evidentiary exhibits, to be sought under subpoena before the bench in the Superior Court, seeking investigation of said prior ponds contamination with toxic substances, alleged to be previously utilized by PG&E to discharge Manganese, being another corrosion prevention toxic substance for the cooling towers at the PG&E's facility in Hinkley, California, thereafter being ordered to cease and decess discharge Chromium (VI) in adjacent pond No. 1, a 350 million gallons plume, containing at least 3,000 ppb of Chromium VI, that poisoned ground waters in the Hinkley Valley, California for the past 60 years, and never cleaned to date.

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2. To certify said Negative Declaration for said Ponds No. 6 and 7, is hereby alleged as a scrupolous attempt by this Board to avoid afforded due process of law to The People of this State, thus the Board's action could be construed as above the law. | 6

3. The fact remains that PG&E's facility in Hinkley, California have to utilize certain facility to discharge water containing corrosion resistance substances for their cooling towers, in fact pumped-out ground water which is already containing Chromium VI in excess of 2,500 ppb, being 50 times over the Chromium (T) legal limit [(scientifically containing at least 80% of Chromium VI therefrom Chromium (T))] and therefore, another location must be selected, rather than on top of the existing [evidentiary] ponds. According to CEQA, certifying Negative Declaration must be unbiased and in compliance with all laws, not just mitigation of environmental impacts, in this case must be avoiding destruction of evidence. | 7

THEREFORE, to assist in destruction of evidence is contrary to codified into law rules and the Board's act to certify, could be construed as above the law, and absent of due process of law, as afforded to the people of this State, in specific to the People of Hinkley, California. | 8

Respectfully commented and Board's intent demurred by

Nick Panchev, Director
THE PEOPLE OF HINKLEY
[BY THE PEOPLE AND FOR THE PEOPLE, WE THE PEOPLE]
37350 Lenwood Road
Hinkley, CA 92374
Tel 909.614-4645
Email info@thepeopleofhinkley.org
Web www,thepeopleofhinkley.org

Invoked: Freedom of Information Act

cc: The People's ESQs
///

Comment from the Hinkley Community Advisory Committee on IS/MND.

We the Hinkley CAC oppose construction of wastewater evaporation ponds. These ponds have a proven history of failure. Past failure of PG&E wastewater evaporation ponds have had devastating effect on the environment and human health including death. We feel that there is sufficient cause to abandon the MND and perform an EIR. This document seems to have 2 subjects, the construction of the impoundments and the operation of the impoundments. The construction and the operation need to be reviewed separately. Whereas the construction may not require an EIR the operation most certainly does.

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Areas of concern in the IS/MND;

2.2 Monitoring and Reporting.

The document proposes "weekly" monitoring of the sump. Due to recent citations for non-compliance of the cleanup from past impoundments acceptable monitoring and leak detection would be real time monitoring connected to an alarm notification system. Monitoring wells should also be real time monitored as should surface water. The IS/MND provides no methodology of testing as described in 27 CCR division 2 subdivision 1 chapter 3 article sections 20380-20435. There is a substantial lack of detail about the monitoring and testing. No data on the methods and the QC/QA process. No in depth explanation of the methods used to establish background levels in the soils.

|

2

Chapter 3. Environmental Checklist and Discussion.

We the members of the Hinkley Community Advisory Committee disagree with the water board's determination that an EIR is not needed. This project requires an EIR.

|

3

3.4 Biological Resources;

Once again this section does not distinguish clearly between the construction phase and the operational phase.

|

4

3.4 continued

There is a substantial lack of species in the wildlife portion of the document. Migratory waterfowl are not discussed. Waterfowl will be attracted to the impoundment ponds when they are in operation. Once they have landed and flown away any chance of study of the impact on them leaves with them. Animals are attracted to water and there are far more in the area than listed in the document. This area requires an EIR. Your "less than significant with mitigation incorporated" cannot be accepted as viable without further evidence.

4

VI Geology and Soils including 3.6;

You indicate that there is no danger from an earthquake fault. In many presentations by PG&E and Lahontan it has been established that there is a fault that works as a dam near the remediation area. Due to this conflicting information we feel that an EIR and geological studies need to be implemented to establish which report is accurate if any. Again there is little or no distinguishing factor between construction impact and operational impact.

5

3.8 Hazards and Hazardous Materials;

The potential hazardous wastes are not clearly defined. Wastewaters to be contained in impoundments are not clearly defined. There is not an MSDS or list of elements/ingredients. This area is clearly lacking and will require further data and evidence to fully realize potential hazards. There are no sample results or hard data to be reviewed. Lahontan is here overseeing a cleanup project that will probably take 100 years total. Yet you list most of the concerns in this section as "less than significant impact". We do not agree. We submit that the only safe method of storage is in above ground tanks.

6

3.9 Hydrology and Water Quality;

Not sufficient delineation between construction and operation. All water quality needs to have real time monitoring. This section demands EIR.

7

3.13 Impact to Population and Housing;

Does this refer to construction or operation? We feel there must be some mistake that this is listed as "no impact" taking into account the loss of population, housing, and human life from past failure of impoundment ponds.

} 8

3.18; We are in total disagreement with 3.18.

} 9

Lester White _____

Lee Lewis _____

Larry Griep _____

Billy Hernandez _____

Daron Banks _____

Edward Duitsman _____

Nick Grill _____

John Turner _____

Jon Quass _____

Richard K. Johnson _____

Naz Awad _____

David Cheney _____

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Lester White *Lester White* CAC Chair

Lee Lewis *Lee Lewis* CAC Member.

Larry Griep _____

^{EVELIO} Billy Hernandez *Evelio Hernandez*

Daron Banks *Daron Banks* CAC Member

Edward Duitsman *Edward Duitsman* CAC member

Nick Grill *Nick Grill* CAC member

John Turner *John Turner* CAC Member.

Jon Quass _____

Richard K. Johnson *Richard K. Johnson* CAC Member (Alt) Oversight Committee

Naz Awad _____

David Cheney *David Cheney*

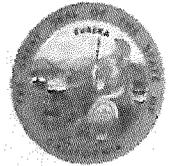
Nicolette Grill *Nicolette Grill*

9



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Inland Deserts Region
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Ontario, CA 91764
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EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director



December 12, 2012

Ms. Lisa Dernbach
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Subject: Class II Surface Impoundments 6R & 7R, PG&E Hinkley Compressor Station.
SCH:2012111038

Dear Ms Dernbach:

The California Department of Fish and Game (Department) is providing comments on the Initial Study and the Mitigated Negative Declaration (ISMND) for Class II Surface Impoundments 6R and 7R PG&E Hinkley Compressor Station (Project) prepared by the Lahontan Regional Water Quality Control Board (Lead Agency). The Department is providing these comments as the State agency which has statutory and common law responsibilities with regard to fish and wildlife resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by the Department (Fish and Game Code §711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish and Game Code §1802). The Department's Fish and wildlife management functions are implemented through its administration and enforcement of Fish and Game Code (Fish and Game Code §702). The Department is a trustee agency for fish and wildlife under the California Environmental Quality Act (see CEQA Guidelines, 14 Cal. Code Regs. §15386(a)) and a Responsible agency regarding any discretionary actions (CEQA §15381). The Department is providing these comments in furtherance of these statutory responsibilities, as well as its common law role as trustee for the public's fish and wildlife.

The Project as identified in the ISMND will consist of adding two new Class II surface Impoundments adjacent to three existing surface impoundments. The construction of the two new surface impoundments will impact 2.48 acres of the 55 acre parcel the PG&E Compressor Station facility lies on. The new 6R & 7R will be designed to meet all requirements for class II surface impoundments with an engineered alternative liner system to the prescriptive standards that are appropriate in the arid desert environment of the Hinkley Valley. The PG&E Compressor Station facility is located 9 miles west of Barstow and 3 miles southeast of the community of Hinkley in the county of San Bernardino.

The project is in the range of the desert tortoise (*Gopherus agassizii*, DT), which is listed as threatened under the California Endangered Species Act (CESA); and the burrowing owl (*Athene cunicularia*, BUOW), which is a Species of Special Concern and protected under Fish and Game Code Section 3503.5.

The Department offers the following comments and recommendations:

Desert Tortoise

According to the IS on page 3-20 protocol surveys were conducted approximately one year ago in October of 2011. Protocol surveys are only valid for one year if no presence was found. The 2010 United States Fish and Wildlife Service survey protocol for the DT recommends surveys be conducted during the tortoise's most active periods [April through May or September through October when air temperatures are below 40° C (104° F). The Department recommends protocol surveys for DT be conducted. After protocol surveys are completed during the correct timeframe, the Department requests the Lead Agency revise mitigation measures for desert tortoise accordingly based on survey results.

2

Mitigation Measure Bio-1: Implement desert tortoise protection measures during construction, page 3-23 states "*Prior to surface disturbance and construction activities, a qualified biologist will conduct a preconstruction clearance survey for DT within the Project area to ensure that all tortoise are absent, or that any tortoise present move passively off site and out of harm's way.*" Clearance surveys may not be conducted unless the Permittee obtains an Incidental Take Permit (ITP) from the Department. The Department recommends a pre-construction survey prior to surface disturbance and if during the surveys a DT is found then an ITP will be warranted and all construction will be halted until the permit is issued.

3

Burrowing Owl

A complete survey for BUOW consists of four separate site visits. Nesting Season Survey – begins as early as February 1 and continues through August 31. Survey for Winter Residents (non-breeding owls) – should be conducted between December 1 and January 31. The Department recommends the Lead Agency require surveys be performed to protocol at the appropriate times, and the results of which be submitted to the Lead Agency and the Department.

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Following these surveys, preconstruction BUOW surveys may be warranted. If during the preconstruction survey BUOW are observed, the Department recommends the Lead Agency require BUOW mitigation measures be applied as presented below.

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1. As compensation for the direct loss of burrowing owl nesting and foraging habitat, the project proponent shall mitigate by acquiring and permanently protecting known burrowing owl nesting and foraging habitat at the following ratio:

- a) Replacement of occupied habitat with occupied habitat at 1.5 times 6.5 acres per pair or single bird;
- b) Replacement of occupied habitat with habitat contiguous with occupied habitat at 2 times 6.5 acres per pair or single bird; and/or
- c) Replacement of occupied habitat with suitable unoccupied habitat at 3 times 6.5 acres per pair or single bird.

2. The project proponent shall establish a non-wasting endowment account for the long-term management of the preservation site for burrowing owls. The site shall be managed for the benefit of burrowing owls. The preservation site, site management, and endowment shall be approved by the Lead Agency after consultation with the Department.
3. All owls associated with occupied burrows that will be directly impacted (temporarily or permanently) by the project shall be relocated and the following measures shall be implemented to avoid take of owls:
 - a) Occupied burrows shall not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
 - b) Owls must be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows should be excavated using hand tools and refilled to prevent reoccupation.
 - c) All relocation shall be approved by the Lead Agency after consultation with the Department. The permitted biologist shall monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the Lead Agency and the Department within 30 days following completion of the relocation and monitoring of the owls.
4. A Burrowing Owl Mitigation and Monitoring Plan shall be submitted to the Lead Agency and the Department for review and approval prior to relocation of owls. The Burrowing Owl Mitigation and Monitoring Plan shall describe proposed relocation and monitoring plans. The plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location, and type of burrows) shall also be included in the plan. The Plan shall also describe proposed off-site areas to preserve to compensate for impacts to burrowing owls/occupied burrows at the project site as required under Condition 1.

Thank you for the opportunity to provide comments on the ISMND. Questions regarding this letter and further coordination on these issues should be directed to Heather Weiche, Environmental Scientist at (909) 980-8607 Hweiche@dfg.ca.gov.

Ms. Lisa Derbach
Class II Surface Impoundment PG&E
December 12, 2012
SCH:2012111038
Page 4 of 4

Sincerely,

A handwritten signature in cursive script that reads "Rebecca Jones".

Rebecca Jones
Acting Senior Environmental Scientist

Cc: Heather Weiche, Environmental Scientist
Department of Fish and Game
Ontario, CA

State Clearinghouse

CHRON