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**Lahontan Regional Water Quality Control Board**

July 24, 2013

To Interested Parties:

**ADOPTED RESOLUTION NO. R6V-2013-0060 CERTIFYING A FINAL ENVIRONMENTAL IMPACT REPORT, COMPREHENSIVE GROUNDWATER CLEANUP STRATEGY FOR HISTORICAL CHROMIUM DISCHARGES FROM PACIFIC GAS & ELECTRIC COMPANY'S HINKLEY COMPRESSOR STATION, SAN BERNARDINO COUNTY**

Enclosed is a copy of Resolution No. R6V-2013-0060 that was adopted at the Regional Board meeting held in Barstow, CA on July 17 & 18, 2013. If you have any questions, please contact our office at (530) 542-5400.



Amber Wike  
Office Technician

Enclosure

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

**RESOLUTION NO. R6V-2013-0060**

**CERTIFYING A FINAL ENVIRONMENTAL IMPACT REPORT**

**FOR**

**COMPREHENSIVE GROUNDWATER CLEANUP STRATEGY FOR HISTORICAL  
CHROMIUM DISCHARGES FROM PACIFIC GAS AND ELECTRIC COMPANY'S  
HINKLEY COMPRESSOR STATION (STATE CLEARINGHOUSE NO. 2008011097)**

San Bernardino County

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**WHEREAS** the California Regional Water Quality Control Board, Lahontan Region (Water Board), finds:

- 1) The Pacific Gas and Electric Company's (PG&E's) Hinkley Compressor Station is located southeast of the community of Hinkley, about 8 miles west of Barstow in San Bernardino County. The Compressor Station has operated since 1952. From 1952 to 1965, hexavalent chromium-based corrosion inhibitor was added to water used in the cooling towers, and the untreated cooling tower water was discharged to unlined evaporation ponds. The unlined ponds have since been closed, covered, and replaced by lined evaporation ponds. In 1987, PG&E reported to the State that total chromium and hexavalent chromium concentrations exceeding the California drinking water standard of 50 parts per billion (ppb) total chromium were found in groundwater beneath and down gradient of the site.
- 2) Since 1987, The Water Board has been requiring PG&E to carry out investigation and cleanup actions for chromium in groundwater at the Hinkley Compressor Station. Various cleanup methods have been operated on a limited-scale basis to stop the spreading of chromium in groundwater and to test cleanup methods to remove chromium from soils and groundwater, including excavation of contaminated soil, groundwater extraction and agricultural land treatment, in-situ (subsurface) treatment, and freshwater injection into the aquifer.
- 3) In Cleanup and Abatement Order (CAO) No. R6V-2008-0002 dated August 6, 2008, the Water Board directed PG&E, among other things, to develop a Feasibility Study for a comprehensive cleanup strategy for chromium in groundwater. Amended CAO R6V-2008-0002A1 established background chromium concentrations to be used to assess cleanup strategies.

- 4) PG&E submitted a Feasibility Study (FS), dated August 2010, presenting four action alternatives for final cleanup of the chromium-contaminated groundwater, along with a "no action" alternative. The action alternatives involved different combinations and intensities of four cleanup technologies, three of which were already being implemented on a limited scale (as described in finding 2, above). In addition to the three implemented technologies, the FS also proposed ex-situ remediation, which involves groundwater extraction and chromium removal at an aboveground facility. The four action alternatives evaluated cleanup to the currently adopted maximum background levels of 3.1 parts per billion (ppb) hexavalent chromium and 3.2 ppb total chromium. The 2010 FS estimated the time required to clean up groundwater to maximum background levels ranged from 110 to 260 years.
- 5) Current cleanup activities are regulated under individual and general Waste Discharge Requirements (WDRs) and/or monitoring orders. Implementation of any final cleanup proposal will require new and/or additional WDRs. The expansion of remediation activities using existing or new technologies may result in potentially significant impacts to the environment that were not analyzed in previous environmental documents. In addition to issuing general (project area-wide) WDRs for implementation of the cleanup, the Water Board will also consider issuance of a new CAO, which will specify cleanup levels and time requirements. The issuance of new WDRs and a CAO are discretionary actions subject to the California Environmental Quality Act (CEQA). Therefore, the Water Board, as Lead Agency in accordance with CEQA, must certify an Environmental Impact Report (EIR) before taking these discretionary actions.
- 6) On November 24, 2010, a Notice of Preparation of a Draft EIR was circulated for a 30-day comment period. A CEQA scoping meeting was held in Hinkley to gain input from the public on the scope and content of the Draft EIR. As required by California Water Code section 13307.5, a 30-day public review period on the Feasibility Study was also initiated.
- 7) On January 26 and 27, 2011, Water Board staff held public information meetings in Hinkley to discuss comments received on PG&E's FS and the scope and content of the EIR, and provide information on the chromium plume boundary and PG&E's cleanup activities.
- 8) At its regular meeting in March 2011, the Water Board held a public workshop on the Draft EIR. The workshop focused on key issues to be examined in the Draft EIR, including cleanup levels to be considered in the EIR; whether the alternatives in PG&E's FS represented a reasonable range of cleanup times and best available technologies; and the types of environmental impacts that should be considered in the EIR. Members of the public expressed concerns over the lengthy time periods required for all alternatives to achieve final cleanup.

- 9) Water Board staff requested review of PG&E's FS from the California Department of Toxic Substances Control and the US Environmental Protection Agency. Both agencies had suggestions to strengthen the FS, but generally agreed that the range of technologies proposed represented best available technologies for chromium groundwater remediation.
- 10) To address concerns over the cleanup times estimated in PG&E's FS, Water Board staff directed PG&E to propose additional alternatives with reduced cleanup times. Throughout 2011 and into 2012, PG&E submitted FS addenda proposing optimized combinations of the four cleanup technologies to reduce the time required to clean up the chromium from groundwater. Staff selected five of the most promising optimized alternatives to analyze in the Draft EIR, along with the "No Project" alternative as required by CEQA. The five action alternatives estimated cleanup of groundwater to maximum background levels to take between 29 to 50 years; estimates to clean up to the average background hexavalent chromium level of 1.2 ppb ranged from 75 to 95 years. Cleanup of groundwater to below 50 ppb chromium (the current drinking water standard for chromium) were estimated to take between 3 and 20 years.
- 11) Throughout development of the EIR, the Water Board has sought to involve and inform interested stakeholders, and to exceed the public noticing and review requirements specified by CEQA. For example, from 2010 through 2013, Water Board staff held seven informational meetings at the Hinkley School to hear public input and provide information on the Draft EIR. The Draft EIR or related topics were also on the agenda at five Water Board public meetings held in Barstow during EIR development from 2011 through 2013. Spanish-language interpreters were present at meetings and Spanish translation of notices, fact sheets and meeting materials were provided.
- 12) On August 20, 2012, a Notice of Availability of a Draft EIR was mailed to interested parties, distributed via an electronic mail subscription service, posted to the Water Board's webpage, and published in three newspapers of regional interest, including one Spanish-language newspaper. A Notice of Completion was filed with the State Clearinghouse to notify responsible and trustee agencies of the availability of the Draft EIR. The Draft EIR was circulated for a 76-day public review and comment period, exceeding CEQA's 45-day review requirement. At a Water Board meeting on September 12, 2012, the Draft EIR was summarized, and a court reporter was present to transcribe all verbal comments made to the Water Board on the Draft EIR. Two public information meetings on the Draft EIR were also held in Hinkley in August and October 2012.
- 13) Following the close of the comment period, Water Board staff and its EIR consultant, ICF International, prepared responses to comments and made revisions to the Draft EIR. Comments received were summarized at a public meeting of the Water Board on January 16, 2013, held in Barstow.

14) Revisions to the Draft EIR were made to provide additional detail and information on several key issues raised during the comment period:

- Expanded project boundaries to account for chromium detections in domestic wells in the northern and western project areas
- Identification of an "environmentally superior alternative"
- Changed significance conclusion to "less than significant" for the impact of potential aquifer compaction based on new information
- Additional details on remediation byproducts, including requirements for monitoring prior to any increase of in-situ remediation
- Enhanced investigation on stability of trivalent chromium in soils
- Literature evaluation of electrocoagulation technology

Numerous other revisions were made to provide clarity or additional information, correct typographical errors, and improve readability. All revisions are clearly shown in strikeout and underline format in Volume II of the Final EIR. Volume I of the Final EIR contains comment letters, and responses to all comments received, including those transcribed at the September 12, 2012 Water Board meeting in Barstow.

15) Although not required by CEQA, the Water Board released the entire Final EIR 62 days prior to the Water Board's consideration of certification of the Final EIR. This was not a recirculation of the EIR pursuant to CEQA, as none of the revisions resulted in "significant new information", as that term is defined in CEQA regulations. Rather, recognizing the volume and complexity of the document, staff opted to provide an extended period to review the responses and revisions contained in the Final EIR.

16) On June 6, 2013, Water Board staff held a public meeting in Hinkley to review the Final EIR, including the key revisions bulleted in finding 14, above. In addition to the responses to comments, the Final EIR describes the cleanup project's goals and objectives, provides details on five "action alternatives" to meet those goals, and discusses impacts associated with each alternative. Ways to avoid or reduce impacts (mitigation measures) are outlined. Impacts which cannot be avoided or reduced to less than significant levels are clearly identified in the Final EIR.

17) In a letter dated June 24, 2013 (shown in Attachment 1 to this Resolution), PG&E requested changes to the Final EIR. Water Board staff's response to PG&E's letter is included in Attachment 2, and proposed revisions to the Final EIR are shown in Attachment 3 (Errata Sheet). The proposed revisions correct a typographical error, and clarify certain mitigation requirements related to biological resources. As such, the revisions are not significant new information to the Final EIR, and recirculation is not required. The Attachments, including the Errata Sheet are made a part of the Final EIR and its record.

18) Water Board staff will develop draft WDRs and a CAO for public review and comment in fall 2013. When the Water Board adopts WDRs and a CAO in winter 2014, it will make the findings required by CEQA sections 15091 through 15093, regarding any significant environmental effects of the project, including a statement of overriding considerations before adopting a project which may result in unavoidable significant impacts.

19) In summary, the Water Board finds that the record as whole demonstrates that the Final EIR analyzes a reasonable range of alternatives which would feasibly attain the project's goals and objectives, and would avoid or substantially lessen the significant impacts of the project. Impacts which cannot be avoided or reduced to less than significant levels are clearly identified in the Final EIR. Public involvement and consultation requirements of CEQA were met or exceeded throughout the development of the EIR.

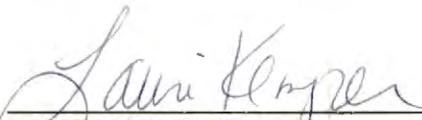
**THEREFORE, BE IT RESOLVED** that:

Pursuant to § 21080, et seq. of the California Public Resources Code, the Lahontan Water Board, after considering the entire record, including written and oral testimony at the hearing, certifies that:

- a. The Final EIR, including Attachments 1 and 2, and the Errata Sheet (Attachment 3), has been completed in compliance with CEQA.
- b. The Lahontan Water Board has reviewed and considered the information in the Final EIR, and Attachments 1 and 2, and the Errata Sheet (Attachment 3).
- c. The Final EIR, Attachments 1 and 2, and Errata Sheet (Attachment 3) reflect the independent judgment and analysis of the Lahontan Water Board.

**CERTIFICATION**

I, Lauri Kemper, Acting Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Lahontan Region on July 17, 2013.



LAURI KEMPER, P.E.  
Acting Executive Officer

- Attachments:
- 1. Comment letter from PG&E, dated June 24, 2013
  - 2. Water Board staff responses to PG&E letter
  - 3. Errata Sheet, Final EIR



June 24, 2013

Kim M. Niemeyer  
Senior Staff Counsel,  
State Water Resources Control Board  
Office of Chief Counsel  
1001 I Street  
Sacramento, CA 95814

Re: **Final EIR for the Comprehensive Groundwater Cleanup for Historical Chromium Discharges from PG&E's Hinkley Compressor Station**

Dear Ms. Niemeyer:

We have reviewed the Final EIR for the groundwater cleanup work associated with historic discharges from the Hinkley Compressor Station (the "Final EIR"). The changes between the Draft EIR and Final EIR have improved the quality and accuracy of the document. We have a few additional comments suggesting revisions that could be made prior to the certification of the Final EIR that would further improve the document. These comments are outlined below.

1. Revise the Requirement for Replacement Water

The Final EIR has been revised to require replacement water for interior household uses to be equal to or less than Water Board established maximum background levels. (Final EIR at p. 3.1-110.) PG&E requests that this mitigation measure be revised to permit replacement water to meet the primary MCL for Cr6 at such time it is adopted consistent with PG&E's Voluntary Whole House Replacement Water Program. PG&E requests the following revision to WTR-MM-2 on Final EIR page 3.1-110:

For chromium, alternative water supply shall be equal to or less than Water Board established maximum background levels until an MCL for Cr6 (as opposed to the existing MCL for CrT) is adopted by the State of California. At such time, alternative water supply shall be equal to or less than the MCL for Cr6.

2. Revise the Definition of Actually Affected Well

PG&E requests that the definition of an actually affected well be revised to be consistent with CAO R6V-2011-005A2. After an MCL for Cr6 is adopted by the State of California, that order no longer requires replacement water for a well that meets the new MCL for four quarters. PG&E requests the following revision to Mitigation Measure WTR-MM-2a on Final EIR page 3.1-113:

“Actually affected domestic wells” will be defined as any domestic water supply well with chromium (hexavalent or total) concentrations that exceed any of the following criteria due to remedial actions:

- Maximum background levels (if the well previously had concentrations below maximum background levels); or
- concentrations increase by 10% or more (if the well previously had concentrations that exceed maximum background levels).

However, after an MCL for Cr6 is adopted by the State of California, a well shall not be considered an “actually affected well” after four consecutive quarters of Cr6 detections which do not exceed the MCL.

The requested revision will provide consistency with the obligations imposed on PG&E while also ensuring that domestic users of wells that may be significantly impacted by remedial activities will be provided indoor household water meeting California drinking water standards. *See In The Matter Of The Petitions Of Olin Corporation And Standard Fusee, SWRCB Order WQ 2005-0007 at p. 6 (replacement water should only be required for well water that does not meet federal, state and local drinking standards where such standards exist.)*

3. Clarify the Timing for Completion of TDS and Radionuclides Investigation

Mitigation Measure WTR-MM-5 has been revised to require PG&E to complete an investigation of TDS and radionuclides within one year of the approval of WDRs allowing new agricultural treatment units. PG&E requests that the timing for completion of the investigation be tied to the approval of the investigation plan rather than approval of the WDRs. Otherwise, if there is a significant time period between PG&E’s submittal of the investigation plan (due within 3 months of the approval of WDRs) and its approval, it may be infeasible to complete the investigation for reasons beyond PG&E’s control. PG&E requests the following revision to WTR-MM-5 on Final EIR page 3.1-122:

The investigation shall be completed within one year of Water Board approval of WDRs allowing new agricultural treatment units the investigation plan.

4. Revise Text Regarding a Potential Leak of Chromium

The presence of the northwestern plume finger, which was noted in the Fourth Quarter 2012 Report, is discussed in the response to comments in Volume 1 and in text changes made to Volume 2 (the Draft EIR). The discussion of the northwestern plume finger is not consistent across the EIR. The master response to comment on the chromium plume boundary control (pages 3-6 of Volume 1) and the additions to the Project Description (pages 2-5 of Volume 2), acknowledge that there are several possible explanations for the plume finger. To better understand the cause, this “new area is presently being investigated to determine the migration pathway for chromium.” (Volume 2, p. 2-5.) The text on page 3.1-50, however, is inconsistent with this statement. That text draws conclusions about the migration pathway despite the statements in other sections that further assessment is ongoing and necessary to determine the pathway. Accordingly, we suggest modifying the text on page 3.1-50, lines 13 to 16, as follows so that it is consistent with statements that the migration pathway is not yet known:

Plume migration may be explained several different ways, but the actual cause has not yet been determined. The area is being investigated to determine the migration pathway for chromium. appears to be a result of two actions: pumping from an agricultural well near Hinkley Road and significant decreased freshwater injection into well IN-03. The Water Board will be requiring that PG&E conduct corrective actions to re-establish the freshwater barrier and contain the plume once the cause of migration has been determined. migration back to the original configuration.

5. Revise the Mitigation Measure for Greenhouse Gas Emissions

The County instituted a Greenhouse Gas Reduction Plan in 2011 that aims to decrease the overall emissions attributable to new development in the County by 31% from projected 2020 unmitigated emissions. (GHG Emissions Reduction Plan, Appendix A at p. 61.) Under that plan, projects that do not exceed 3,000 MTCO<sub>2</sub>e per year are considered to be consistent with the plan’s reduction goals. (*Id.* at p. 4-5.) For projects exceeding 3,000 MTCO<sub>2</sub>e per year, the County may use screening tables that have a point system to determine appropriate GHG reduction measures. (*Id.*) If screening tables are not used, the project is required to “quantify project specific GHG emissions or otherwise demonstrate that project specific GHG emissions achieve the equivalent level of GHG emissions efficiency as a 100-point project.” (*Id.* at p. 4-6.) The plan does not require individual projects with emissions that exceed 3,000 MTCO<sub>2</sub>e per year to necessarily reduce emissions by 31%. Instead, the requirement is to reduce emissions to a point where the emissions from the project “when considered together with those from existing

development, will allow the County to meet its 2020 target and support longer-term reductions in GHG emissions beyond 2020.” (*Id.* at p. 4-5.)

Mitigation measure AIR-MM-8 requires PG&E to comply with the County’s GHG emission reduction standards. The mitigation measure mischaracterizes the requirements of the reduction plan, however, by requiring an alternative with GHG emissions that exceed 3,000 MTCO<sub>2</sub>e to reduce those emissions by 31% rather than to comply with reduction measures in the screening table or demonstrate efficiency equal to 100 points. To avoid potential conflicts between the County’s requirements and this EIR, we suggest the following changes to the text on page 3.5-44, lines 1 to 9:

If any alternative is confirmed to be more than 3,000 MTCO<sub>2</sub>e per year, then instead of the requirements above in Mitigation Measure AIR-MM-7 and the requirements described above, PG&E will be responsible to reduce emissions by amounts required by the County’s Greenhouse Gas Reduction Plan ~~at least 31% percent~~. In this case PG&E will work with County Planning and submit any required evidence that emissions will be reduced by required amounts, ~~anticipated to be a minimum of 31 percent~~

6. Revise Mitigation Measures that Require the Approval of CDFW for Issues Outside of CDFW’s Jurisdiction

The Final EIR has been revised to add the requirement that the California Department of Fish and Wildlife (“CDFW”) approve certain mitigation measures related to special status plant species. PG&E believes that the Water Board is the more appropriate agency to make such approvals. Because there is no specific application that PG&E will be submitting to CDFW, the process to obtain CDFW’s approval is unclear. Without a clear approval process, trying to obtain CDFW approval could negatively affect the Water Board’s implementation schedule. Accordingly, deleting the requirement that CDFW approve measures related to special status plant species would provide the Water Board greater control over the project’s timing.

Further, case law supports the Water Board retaining approval authority over this mitigation measure. (See, e.g., *Ass’n of Irrigated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383 [county was not required to conduct protocol-level surveys].) The changes proposed below, which delete the requirement to obtain approval from CDFW, will not lessen the certainty that the mitigation will be effective because it is reasonable to assume that the Water Board will enforce the mitigation and, as revised, CDFW would still have the opportunity to comment on the mitigation through a consultation process. Moreover, the changes would be consistent with CDFW’s statements that it does not have authority to approve projects (although it can impose conditions when approving a Section 2081 permit or streambed alteration agreement), but instead offers expert advice through consultation with the permitting agency. (See, e.g., Cal. Energy Commission Webpage, available at <http://www.energy.ca.gov/windguidelines/faq.html>.)

For the reasons stated above, we request the following revisions mitigation measure BIO-MM-1o on page 3.7-55, lines 20 to 34:

- If any listed plant species are observed during focused surveys of the work areas, the extent of the population will be clearly demarcated in the field by protective fencing, lath stakes, and/or flagging, as appropriate, for avoidance and the regulatory agencies will be notified. If project related impacts to a listed plant species will occur, initiation of consultation with CDFGW or USFWS as appropriate will be required. Avoidance of listed species is the first priority; disturbance shall only be approved if the Water Board, ~~CDFG and/or USFWS~~ all determines, after consultation with CDFW and/or USFWS and approval of the appropriate agency if a take permit is required, that complete avoidance is infeasible.
  - If any plant species that are not listed under CESA or ESA but are identified as special-status species (“non-listed plant species”) are observed during focused surveys of the work areas, the extent of the population will be clearly demarcated in the field by protective fencing, lath stakes, and/or flagging, as appropriate, for avoidance. . . . Avoidance of non-listed, but rare species is the first priority; disturbance shall only be approved if the Water Board ~~and CDFG~~ both determines, after consultation with CDFW, that complete avoidance is infeasible.
7. Clarify Discussion of the Mojave Fringe Toed Lizard Habitat Location and Revise the Mitigation for Potential Impacts to that Habitat

The final EIR adds a few sentences that discuss the location of habitat suitable for the Mojave fringe-toed lizard. We agree that Mojave fringe-toed lizards could live in desert dunes (habitat and soil), and according to Figure 3.7.1, this habitat exists south of the Mojave River and in a small area in the northwestern portion of the project area. Accordingly, we suggest that you make the following correction on page 3.7-42, lines 8 to 10:

Desert dunes habitat is located in the south part of the project area (below the Mojave River) and in the ~~northwestern~~eastern part of the project area (See Figure 3.7.1).

The final EIR also adds a mitigation measure in response to a comment from CDFW to reduce potential impacts to Mojave fringe-toed lizard habitat. (Final EIR at p. 3.7-55.) CDFW requested that the mitigation measure require replacing lost habitat at a ratio of 3 to 1.

Notably, CDFW did not state whether this was a minimum ratio and did not suggest that the ratio should apply to mitigate temporary, rather than permanent, impacts to habitat. We are mitigating temporary impacts to other species’ habitat, such as the Mojave ground squirrel and desert tortoise, at a ratio of 1 to 1. Although CDFW did not suggest that temporary impacts to Mojave fringe-toed lizard habitat had to be mitigated, if it does, it should be at no more than a 1

Kim Niemeyer  
June 24, 2013  
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to 1 ratio, which would be consistent with the EIR's treatment of the Mojave ground squirrel and desert tortoise.

To clarify the mitigation requirements, we suggest modifying mitigation measure BIO-MM-1p on page 3.7-55, lines 40 to 42, as follows:

Compensatory mitigation for the loss of Mojave fringe-toed lizard habitat will be determined through consultation with CDFGW.  
The ~~minimum~~ compensation ratio for the permanent loss of suitable Mojave fringe-toed lizard habitat will be 3:1.

8. Conclusion

The changes proposed above will make the EIR more accurate and comprehensive than it is now. These changes do not alter the alternatives analyzed by the EIR or introduce new information that suggests an alternative would have a potentially significant environmental impact that has not already been addressed. The proposed text changes merely clarify, amplify, and make insignificant modifications to the EIR to make it more accurate, and therefore, if accepted, would not require the Water Board to recirculate the EIR. (See 14 Cal. Code Regs. § 15088.5(b).) Please contact me if you have any questions or would like to discuss any of the above suggestions further.

Sincerely,



Juan M. Jayo

cc: Anne Holden, Lahontan Regional Water Quality Control Board  
Rich Walter, ICF International

## Comments



Pacific Gas and  
Electric Company™

Juan M. Jayo

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June 24, 2013

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Re: **Final EIR for the Comprehensive Groundwater Cleanup for Historical Chromium Discharges from PG&E's Hinkley Compressor Station**

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1. Revise the Requirement for Replacement Water

The Final EIR has been revised to require replacement water for interior household uses to be equal to or less than Water Board established maximum background levels. (Final EIR at p. 3.1-110.) PG&E requests that this mitigation measure be revised to permit replacement water to meet the primary MCL for Cr6 at such time it is adopted consistent with PG&E's Voluntary Whole House Replacement Water Program. PG&E requests the following revision to WTR-MM-2 on Final EIR page 3.1-110:

For chromium, alternative water supply shall be equal to or less than Water Board established maximum background levels until an MCL for Cr6 (as opposed to the existing MCL for CrT) is adopted by the State of California. At such time, alternative water supply shall be equal to or less than the MCL for Cr6.

## Responses

1. Significant impacts related to chromium increases in a water supply well are defined in the EIR as exceedances of the currently adopted maximum background levels. The maximum background level for Cr6 is currently 3.1 ppb. There is no current MCL specifically for Cr6.

This significance criterion is consistent with State Water Board Anti-degradation Policy, which requires that high quality waters be maintained unless certain findings are made, and Resolution 92-49, which states, in part, that attaining background water quality levels is the goal for cleanup and abatement of polluted groundwater. Therefore, using the maximum background value of Cr6 is appropriate to define significant impacts under CEQA.

In order to mitigate increases in Cr6 in water supply wells due to remedial actions to a level of insignificance, replacement water is required. Replacement water quality must be equal to or better than the maximum background level for Cr6. This is consistent with the requirements of Water Code section 13304(f), which requires that the replacement water "meet not only all applicable federal, state and local drinking water standards," but that it also is of comparable quality to that pumped by the ... private well owner prior to the discharge of waste."

The background value, rather than a future (unknown) MCL for Cr6 -is the appropriate level for replacement water because if the future MCL for Cr6 was adopted at a level higher than the maximum background, then replacement water quality could be provided at a quality worse than the water quality in an impacted well. This situation would render the mitigation measure ineffective for its intended purpose – to mitigation impacts from the remediation project to a level of insignificance, where feasible. Providing replacement water at a quality worse than that in the impacted well would not meet this purpose.

Therefore, no revisions to the Final EIR are proposed.

## Comments

### 2. Revise the Definition of Actually Affected Well

PG&E requests that the definition of an actually affected well be revised to be consistent with CAO R6V-2011-005A2. After an MCL for Cr6 is adopted by the State of California, that order no longer requires replacement water for a well that meets the new MCL for four quarters. PG&E requests the following revision to Mitigation Measure WTR-MM-2a on Final EIR page 3.1-113:

“Actually affected domestic wells” will be defined as any domestic water supply well with chromium (hexavalent or total) concentrations that exceed any of the following criteria due to remedial actions:

- Maximum background levels (if the well previously had concentrations below maximum background levels); or
- concentrations increase by 10% or more (if the well previously had concentrations that exceed maximum background levels).

However, after an MCL for Cr6 is adopted by the State of California, a well shall not be considered an “actually affected well” after four consecutive quarters of Cr6 detections which do not exceed the MCL.

The requested revision will provide consistency with the obligations imposed on PG&E while also ensuring that domestic users of wells that may be significantly impacted by remedial activities will be provided indoor household water meeting California drinking water standards. *See In The Matter Of The Petitions Of Olin Corporation And Standard Fusee*, SWRCB Order WQ 2005-0007 at p. 6 (replacement water should only be required for well water that does not meet federal, state and local drinking standards where such standards exist.)

### 3. Clarify the Timing for Completion of TDS and Radionuclides Investigation

Mitigation Measure WTR-MM-5 has been revised to require PG&E to complete an investigation of TDS and radionuclides within one year of the approval of WDRs allowing new agricultural treatment units. PG&E requests that the timing for completion of the investigation be tied to the approval of the investigation plan rather than approval of the WDRs. Otherwise, if there is a significant time period between PG&E’s submittal of the investigation plan (due within 3 months of the approval of WDRs) and its approval, it may be infeasible to complete the investigation for reasons beyond PG&E’s control. PG&E requests the following revision to WTR-MM-5 on Final EIR page 3.1-122:

## Responses

2. See response to comment 1 regarding why maximum background values are appropriate to define significant impacts that trigger mitigation rather than the unknown future MCL for Cr6.

“Actually affected wells” for the purposes of EIR mitigation are determined using exceedances of the maximum background chromium values as one threshold. This criterion is based on the significance criteria specified in the Draft and Final EIR.

Because it is unknown at this time what the future MCL for Cr6 might be, using the future MCL to define affected wells could result in one of two unacceptable situations:

a. If the MCL is set lower than the maximum background level for Cr6, affected wells could include those containing naturally-occurring Cr, requiring PG&E to mitigate impacts for which it may not be responsible for. This would be inconsistent with State of California policies and regulations, and CEQA regulations.

b. If the future MCL for Cr6 was adopted at a level higher than maximum background, then a well would not be considered affected until the Cr6 levels rose to exceed that MCL. Depending on the level of the future Cr6 MCL, this could allow significant degradation to the water quality in the aquifer, inconsistent with the State Board’s Resolution 68-16 (Statement of Policy with Respect to Maintaining High Quality Waters).

Therefore, no revisions to the Final EIR are proposed.

3. PG&E has already been collecting TDS and uranium data for agricultural fields currently in operation and could reasonably submit its investigation plan within months of the approval of a general WDR, having still more than half a year to complete the investigation. Thus, the request to have up to a year following workplan approval does not appear necessary. However, in the unlikely occurrence that Water Board staff’s approval of an

investigation plan is delayed such that completing the investigation within one year of WDR approval is not feasible, PG&E may always request an extension to the due date for the investigation completion.

Therefore, no revisions to the Final EIR are proposed.

## Comments

The investigation shall be completed within one year of Water Board approval of WDRs allowing new agricultural treatment units the investigation plan.

### 4. Revise Text Regarding a Potential Leak of Chromium

The presence of the northwestern plume finger, which was noted in the Fourth Quarter 2012 Report, is discussed in the response to comments in Volume 1 and in text changes made to Volume 2 (the Draft EIR). The discussion of the northwestern plume finger is not consistent across the EIR. The master response to comment on the chromium plume boundary control (pages 3-6 of Volume 1) and the additions to the Project Description (pages 2-5 of Volume 2), acknowledge that there are several possible explanations for the plume finger. To better understand the cause, this "new area is presently being investigated to determine the migration pathway for chromium." (Volume 2, p. 2-5.) The text on page 3.1-50, however, is inconsistent with this statement. That text draws conclusions about the migration pathway despite the statements in other sections that further assessment is ongoing and necessary to determine the pathway. Accordingly, we suggest modifying the text on page 3.1-50, lines 13 to 16, as follows so that it is consistent with statements that the migration pathway is not yet known:

Plume migration may be explained several different ways, but the actual cause has not yet been determined. The area is being investigated to determine the migration pathway for chromium. appears to be a result of two actions: pumping from an agricultural well near Hinkley Road and significant decreased freshwater injection into well IN-02. The Water Board will be requiring that PG&E conduct corrective actions to re-establish the freshwater barrier and contain the plume once the cause of migration has been determined. migration back to the original configuration.

### 5. Revise the Mitigation Measure for Greenhouse Gas Emissions

The County instituted a Greenhouse Gas Reduction Plan in 2011 that aims to decrease the overall emissions attributable to new development in the County by 31% from projected 2020 unmitigated emissions. (GHG Emissions Reduction Plan, Appendix A at p. 61.) Under that plan, projects that do not exceed 3,000 MTCO<sub>2</sub>e per year are considered to be consistent with the plan's reduction goals. (*Id.* at p. 4-5.) For projects exceeding 3,000 MTCO<sub>2</sub>e per year, the County may use screening tables that have a point system to determine appropriate GHG reduction measures. (*Id.*) If screening tables are not used, the project is required to "quantify project specific GHG emissions or otherwise demonstrate that project specific GHG emissions achieve the equivalent level of GHG emissions efficiency as a 100-point project." (*Id.* at p. 4-6.) The plan does not require individual projects with emissions that exceed 3,000 MTCO<sub>2</sub>e per year to necessarily reduce emissions by 31%. Instead, the requirement is to reduce emissions to a point where the emissions from the project "when considered together with those from existing

## Responses

4. While the wording in various sections of the EIR regarding the western plume finger is not exactly the same, Water Board staff do not believe that this presents an inconsistency. On page 3.1-50, the paragraph states that the migration of the plume finger "appears to be a result of two actions . . . ." This is not a conclusive statement on the cause of plume migration, and the two actions discussed in that paragraph are reasonable scenarios based on pumping and injection data.

Therefore, no revisions to the Final EIR are proposed.

5. The 100-point screening table is appropriate for residential and commercial projects. The EIR project (groundwater remediation) does not fit into the screening table framework and thus it would be inappropriate to do a 100-point equivalent. The 100 points corresponds roughly to 31% on average. Thus, the project should be required to reduce emissions by 31%.

Therefore, no revisions to the Final EIR are proposed.

## Comments

development, will allow the County to meet its 2020 target and support longer-term reductions in GHG emissions beyond 2020.” (*Id.* at p. 4-5.)

Mitigation measure AIR-MM-8 requires PG&E to comply with the County’s GHG emission reduction standards. The mitigation measure mischaracterizes the requirements of the reduction plan, however, by requiring an alternative with GHG emissions that exceed 3,000 MTCO<sub>2</sub>e to reduce those emissions by 31% rather than to comply with reduction measures in the screening table or demonstrate efficiency equal to 100 points. To avoid potential conflicts between the County’s requirements and this EIR, we suggest the following changes to the text on page 3.5-44, lines 1 to 9:

If any alternative is confirmed to be more than 3,000 MTCO<sub>2</sub>e per year, then instead of the requirements above in Mitigation Measure AIR-MM-7 and the requirements described above, PG&E will be responsible to reduce emissions by amounts required by the County’s Greenhouse Gas Reduction Plan at least 31 percent. In this case PG&E will work with County Planning and submit any required evidence that emissions will be reduced by required amounts, ~~anticipated to be a minimum of 31 percent~~

6. Revise Mitigation Measures that Require the Approval of CDFW for Issues Outside of CDFW’s Jurisdiction

The Final EIR has been revised to add the requirement that the California Department of Fish and Wildlife (“CDFW”) approve certain mitigation measures related to special status plant species. PG&E believes that the Water Board is the more appropriate agency to make such approvals. Because there is no specific application that PG&E will be submitting to CDFW, the process to obtain CDFW’s approval is unclear. Without a clear approval process, trying to obtain CDFW approval could negatively affect the Water Board’s implementation schedule. Accordingly, deleting the requirement that CDFW approve measures related to special status plant species would provide the Water Board greater control over the project’s timing.

Further, case law supports the Water Board retaining approval authority over this mitigation measure. (See, e.g., *Ass’n of Irrigated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383 [county was not required to conduct protocol-level surveys].) The changes proposed below, which delete the requirement to obtain approval from CDFW, will not lessen the certainty that the mitigation will be effective because it is reasonable to assume that the Water Board will enforce the mitigation and, as revised, CDFW would still have the opportunity to comment on the mitigation through a consultation process. Moreover, the changes would be consistent with CDFW’s statements that it does not have authority to approve projects (although it can impose conditions when approving a Section 2081 permit or streambed alteration agreement), but instead offers expert advice through consultation with the permitting agency. (See, e.g., Cal. Energy Commission Webpage, available at <http://www.energy.ca.gov/windguidelines/faq.html>.)

## Responses

6. PG&E is correct that there is no formal approval process through the California Department of Fish and Wildlife regarding mitigation for impacts to special status plants. Therefore, deleting the requirement that CA DFW approve measures related to special status plants is appropriate. Water Board staff will consult with appropriate agencies as needed, and retain the ability to enforce mitigation measures related to special status plants.

The Final EIR will be revised as suggested.

## Comments

For the reasons stated above, we request the following revisions mitigation measure BIO-MM-1o on page 3.7-55, lines 20 to 34:

- If any listed plant species are observed during focused surveys of the work areas, the extent of the population will be clearly demarcated in the field by protective fencing, lath stakes, and/or flagging, as appropriate, for avoidance and the regulatory agencies will be notified. If project related impacts to a listed plant species will occur, initiation of consultation with CDFGW or USFWS as appropriate will be required. Avoidance of listed species is the first priority; disturbance shall only be approved if the Water Board, ~~CDFG and/or USFWS all determines, after consultation with~~ CDFW and/or USFWS and approval of the appropriate agency if a take permit is required, that complete avoidance is infeasible.
- If any plant species that are not listed under CESA or ESA but are identified as special-status species ("non-listed plant species") are observed during focused surveys of the work areas, the extent of the population will be clearly demarcated in the field by protective fencing, lath stakes, and/or flagging, as appropriate, for avoidance. . . . Avoidance of non-listed, but rare species is the first priority; disturbance shall only be approved if the Water Board and ~~CDFG both determines, after~~ consultation with CDFW, that complete avoidance is infeasible.

7. Clarify Discussion of the Mojave Fringe Toed Lizard Habitat Location and Revise the Mitigation for Potential Impacts to that Habitat

The final EIR adds a few sentences that discuss the location of habitat suitable for the Mojave fringe-toed lizard. We agree that Mojave fringe-toed lizards could live in desert dunes (habitat and soil), and according to Figure 3.7.1, this habitat exists south of the Mojave River and in a small area in the northwestern portion of the project area. Accordingly, we suggest that you make the following correction on page 3.7-42, lines 8 to 10:

Desert dunes habitat is located in the south part of the project area (below the Mojave River) and in the ~~northwestern~~eastern part of the project area (See Figure 3.7.1).

The final EIR also adds a mitigation measure in response to a comment from CDFW to reduce potential impacts to Mojave fringe-toed lizard habitat. (Final EIR at p. 3.7-55.) CDFW requested that the mitigation measure require replacing lost habitat at a ratio of 3 to 1.

Notably, CDFW did not state whether this was a minimum ratio and did not suggest that the ratio should apply to mitigate temporary, rather than permanent, impacts to habitat. We are mitigating temporary impacts to other species' habitat, such as the Mojave ground squirrel and desert tortoise, at a ratio of 1 to 1. Although CDFW did not suggest that temporary impacts to Mojave fringe-toed lizard habitat had to be mitigated, if it does, it should be at no more than a 1

## Responses

7. The first part of this comment suggests a revision to correct an error describing where habitat for Mojave fringe-toed lizards occurs in the project area.

The Final EIR will be revised as suggested.

The second part of comment 7 suggests clarifying that the 3:1 ratio for compensatory mitigation for the loss of Mojave fringe-toed lizard applies to permanent loss of habitat, rather than temporary impacts. This is correct.

The Final EIR will be revised as suggested.

## Comments

to 1 ratio, which would be consistent with the EIR's treatment of the Mojave ground squirrel and desert tortoise.

To clarify the mitigation requirements, we suggest modifying mitigation measure BIO-MM-1p on page 3.7-55, lines 40 to 42, as follows:

Compensatory mitigation for the loss of Mojave fringe-toed lizard habitat will be determined through consultation with CDFGW. The minimum-compensation ratio for the permanent loss of suitable Mojave fringe-toed lizard habitat will be 3:1.

### 8. Conclusion

The changes proposed above will make the EIR more accurate and comprehensive than it is now. These changes do not alter the alternatives analyzed by the EIR or introduce new information that suggests an alternative would have a potentially significant environmental impact that has not already been addressed. The proposed text changes merely clarify, amplify, and make insignificant modifications to the EIR to make it more accurate, and therefore, if accepted, would not require the Water Board to recirculate the EIR. (See 14 Cal. Code Regs. § 15088.5(b).) Please contact me if you have any questions or would like to discuss any of the above suggestions further.

Sincerely,



Juan M. Jayo

cc: Anne Holden, Lahontan Regional Water Quality Control Board  
Rich Walter, ICF International

## Responses

## ERRATA SHEET

### FINAL ENVIRONMENTAL IMPACT REPORT, COMPREHENSIVE GROUNDWATER CLEANUP STRATEGY HISTORICAL CHROMIUM DISCHARGES FROM PG&E'S HINKLEY COMPRESSOR STATION, SAN BERNARDINO COUNTY

The following revisions, shown in ~~strikeout~~ and underline format, are made to the Final EIR.

Section, pages, line numbers	Revision
3.7, 3.7-42, lines 8 to 10	Desert dunes habitat is located in the south part of the project area (below the Mojave River) and in the north <del>western</del> <u>eastern</u> part of the project area (See Figure 3.7.1)
3.7, 3.7-55, lines 20 to 34	<ul style="list-style-type: none"> <li data-bbox="667 596 1455 1050">• If any listed plant species are observed during focused surveys of the work areas, the extent of the population will be clearly demarcated in the field by protective fencing, lath stakes, and/or flagging, as appropriate, for avoidance and the regulatory agencies will be notified. If project related impacts to a listed plant species will occur, initiation of consultation with CDFG and or USFWS <u>as appropriate</u> will be required. Avoidance of listed species is the first priority; disturbance shall only be approved if the Water Board, <del>CDFG and/or USFWS all determines,</del> <u>after consultation with CDFG and/or USFWS and approval of the appropriate agency if a take permit is required,</u> that complete avoidance is infeasible.</li> <li data-bbox="667 1121 1455 1717">• If any plant species that are not listed under CESA or ESA but are identified as special-status species (“non-listed plant species”) are observed during focused surveys of the work areas, the extent of the population will be clearly demarcated in the field by protective fencing, lath stakes, and/or flagging, as appropriate, for avoidance. Avoidance will occur to the maximum extent feasible. If impacts are proposed to non-listed CRPR rank 1A, 1B, or 2 plant species, a brief analysis will be completed to determine the appropriate mitigation. Additional measures as a result of this analysis may be required, such as seeding, transplanting, collection of seeds to be used for the future conservation of the species, and/or compensatory mitigation habitat. Avoidance of non-listed, but rare species is the first priority; disturbance shall only be approved if the Water Board <del>and CDFG both determines,</del> <u>after consultation with CDFG,</u> that complete avoidance is infeasible.</li> </ul>
3.7, 3.7-55, lines 40 to 42	<ul style="list-style-type: none"> <li data-bbox="667 1730 1455 1848">• Compensatory mitigation for the loss of Mojave fringe-toed lizard habitat will be determined through consultation with CDFG. The <del>minimum</del> <u>permanently</u> compensation ratio for <u>the permanent loss of suitable</u> Mojave fringe-toed lizard habitat will be 3:1.</li> </ul>