

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

**MEETING OF JULY 17-18, 2013
BARSTOW**

ITEM: 11

SUBJECT: CONSIDERATION OF 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

CHRONOLOGY: This chronology lists Water Board actions related to completing an Environmental Impact Report (EIR) to identify and evaluate environmental impacts associated with the comprehensive cleanup of chromium in groundwater. The EIR provides support to the Water Board for future consideration of an upcoming Cleanup and Abatement Order and Waste Discharge Requirements governing the comprehensive cleanup of chromium in groundwater.

Aug and Nov 2008 Cleanup and Abatement Order (CAO) No. R6V-2008-0002 (adopted in August) 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 (adopted in November) established background chromium concentrations to be used to assess cleanup strategies.

Nov 24, 2010 Water Board staff circulated a Notice of Preparation to interested parties and agencies, requesting input on the scope and content of an environmental document for comprehensive cleanup of waste chromium in groundwater.

Dec 1, 2010 Public scoping meeting for Draft EIR held in Hinkley.

Jan 2011 - Jan 2012	Water Board staff, interested stakeholders, the US EPA and the California Department of Toxic Substances Control provided PG&E comments and input to improve the FS. PG&E submitted FS addenda during 2011 and into 2012. The FS and its addenda provided the basis for the alternatives and environmental analysis in the EIR.
Jan 26 and 27, 2011	Public information meetings in Hinkley to discuss comments received on PG&E's Feasibility Study (FS) and the scope of the Draft EIR.
Mar 9, 2011	Water Board meeting in Barstow to discuss EIR issues including cleanup times, cleanup standards, and potential project impacts.
Dec 8, 2011	Public information meeting to update stakeholders on Draft EIR development.
Aug 21- Nov 5, 2012	Draft EIR released for a 76-day review and comment period.
Aug 29, and Oct 16, 2012	Informational meetings held in Hinkley on the Draft EIR.
Sept 12, 2012	Water Board meeting in Barstow to review the Draft EIR and accept verbal comments.
Jan 13, 2013	Water Board meeting in Barstow to hear a summary of Draft EIR comments and proposed path to certify Final EIR.
May 15, 2013	Final EIR released, containing written responses to comments, and revisions to the Draft EIR.

June 6, 2013

Public information meeting on Final EIR held in Hinkley.

BACKGROUND: As summarized at the Water Board's January 13, 2013 meeting, numerous comments were received on the Draft EIR. The Final EIR includes all comments received on the Draft EIR and responses to the comments (in Volume I), and revisions to the Draft EIR, which has been reproduced in its entirety with revisions shown in strike-out and underline (in Volume II).

Although not required by the California Environmental Quality Act (CEQA), the Water Board released the entire Final EIR 62 days prior to Water Board 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 allow the public time to review the responses and revisions contained in the final EIR.

DISCUSSION: **Revisions to Final EIR.** The Final EIR was revised 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 areas
- Identification of an "environmentally superior alternative"
- Changed the level of significance conclusion regarding impact of potential aquifer compaction based on new information to less than significant
- Additional details on remediation byproducts, including requirements for monitoring prior to any increase in 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.

Certifying the Final EIR. Certification of the EIR consists of the Water Board making a determination that: 1) the EIR has been completed in compliance with CEQA; 2) the Water Board reviewed and considered the information contained in it; 3) and that the EIR reflects the Water Board's independent judgment and analysis.

The Water Board will use the EIR to support its future adoption of a CAO and WDRs (a General Permit). The new General Permit for remediation activities would set limits on allowable impacts, and require mitigation measures and monitoring consistent with the EIR. In issuing its CAO, the Water Board can set cleanup levels and timeframes to meet those levels.

RECOMMENDATION:

Adopt Resolution Certifying the Final EIR. The Water Board may provide direction to staff on the content and requirements of an upcoming CAO and WDRs.

ENCLOSURE:

Enclosure	Item	Bates Number
1	Resolution R6V-2013-PROPOSED	11-7

Note: The Final EIR was provided to Water Board members under separate cover (compact disk or binder).

ENCLOSURE 1

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

RESOLUTION NO. R6V-2013-(PROPOSED)

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

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) 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.

18) 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 has been completed in compliance with CEQA.
- b. The Lahontan Water Board has reviewed and considered the information in the Final EIR.
- c. The Final EIR reflects the independent judgment and analysis of the Lahontan Water Board.

CERTIFICATION

I, PATTY Z. KOUYOUMDJIAN, 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.

PATTY Z. KOUYOUMDJIAN,
Executive Officer