

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

**AMENDED CLEANUP AND ABATEMENT ORDER NO. R6V-2011-0005A2  
WDID NO. 6B369107001  
REQUIRING PACIFIC GAS AND ELECTRIC COMPANY  
TO CLEAN UP AND ABATE WASTE DISCHARGES OF  
TOTAL AND HEXAVALENT CHROMIUM TO THE  
GROUNDWATERS OF THE MOJAVE HYDROLOGIC UNIT**

San Bernardino County

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

1. The Pacific Gas and Electric Company (PG&E) owns and operates the Hinkley Compressor Station (hereafter the "Facility") located southeast of the community of Hinkley in San Bernardino County.
2. On October 11, 2011, the Water Board issued Cleanup and Abatement Order R6V-2011-0005A1 (Order) to PG&E. The Order required, in part, that PG&E provide interim and whole house replacement water service to those served by domestic or community wells that are within the affected area and determined to be impacted by its discharge. The Order defined impacted wells as all domestic or community wells in the affected area that are above 3.1 µg/L hexavalent chromium or 3.2 µg/L total chromium. The affected area was defined as all domestic wells located laterally within one mile downgradient or cross-gradient from the 3.1 µg/L hexavalent chromium or 3.2 µg/L total chromium plume boundaries based upon monitoring well data drawn in the most current quarterly site-wide groundwater monitoring report submitted by PG&E.
3. The Order also defined impacted wells as those domestic or community wells in the affected area containing hexavalent chromium in concentrations greater than 0.02 µg/L that were the result of PG&E's discharge at the Facility. PG&E was required to develop a method to determine if a well within the affected area that contained detectable levels of hexavalent chromium below 3.1 µg/L or total chromium below 3.2 µg/L was impacted by its discharge. PG&E, in letters dated November 23, 2011 and December 22, 2011, provided its position that there is currently no credible method to determine the source of hexavalent chromium in domestic wells with detections below the current background values (3.1 µg/L hexavalent chromium or 3.2 µg/L total chromium).
4. PG&E, by letter dated April 16, 2012, has indicated its intent to implement a Voluntary Whole House Replacement Water Program (Program). On June 6, 2012, PG&E submitted a letter ([Appendix D](#)) with its "Revised Replacement Water Supply Feasibility Report," (Feasibility Study) supplementing information regarding the Program. The Program will provide interim (until the whole house replacement water is implemented) or whole house replacement water service for drinking water purposes that meets all California primary and secondary drinking water standards

and hexavalent chromium levels of less than 0.02 ug/L<sup>1</sup> or the final MCL, once that standard is adopted by CDPH, to all those served by domestic or community wells in the affected area when analytical monitoring results from those wells indicate detectable levels of hexavalent chromium at any time during the most recent four consecutive quarters (eligible property owners). The affected area will continue to be defined to include all domestic wells located laterally within one mile downgradient or cross-gradient from the contiguous, including contiguous areas depicted with dashed lines, 3.1 µg/L hexavalent chromium or 3.2 µg/L total chromium plume boundaries based upon monitoring well data drawn in the most current quarterly site-wide groundwater monitoring report submitted by PG&E.<sup>2</sup> Wells of new eligible property owners that choose to participate will be added to the Program based on data collected and evaluated each quarter.

5. PG&E will provide a schedule for the voluntary program that provides for full implementation of the Program by August 31, 2013. Full implementation is defined as the installation of replacement water systems to all eligible property owners as identified in the Fourth Quarter 2012 Groundwater Monitoring Report submitted in January 2013 that chose to participate in the Program. For any eligible property owners identified after the Fourth Quarter 2012 Groundwater Monitoring Report, PG&E will notify the Regional Board of the additional eligible property owner(s) and will contact the eligible property owner(s) within 5 days of verified sampling results and offer to supply interim bottled water and will provide the eligible property owner(s) with information regarding the Program. Once the eligible property owner has elected to participate in the Program, PG&E will install the replacement water system within six months. For eligible property owners, PG&E has committed to full installation, operation, maintenance and monitoring for one of two options: 1) drilling a deeper well (in areas where hydrogeological conditions make it feasible) on residential property to draw water from the lower aquifer; or 2) installing individual whole house systems that treat water at the well head (supplemented by small under-sink treatment systems).
6. In support of this Program, PG&E submitted a Feasibility Study, dated April 9, 2012 (with a revised version on June 6, 2012) that analyzed several replacement water options and recommended two options, installation of deep wells or installation of ion exchange units for the treatment of all water plus an undersink reverse osmosis (RO) unit for additional treatment of all water used for drinking water purposes for residents within the affected area with domestic wells that have detections of hexavalent chromium above 3.1 µg/L. PG&E will offer the same two options to eligible property owners as part of the Program.

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<sup>1</sup> For purposes of this standard, drinking water must test below the reporting limit of 0.06 ug/L due to the limitation of laboratory analysis of low levels of chromium.

<sup>2</sup> PG&E's quarterly site-wide groundwater monitoring report identifies all detections of hexavalent chromium above 3.1 µg/L in monitoring wells that are not contiguous to the main portion of the plume and either proposes additional data collection to determine its source or presents data to support a conclusion regarding potential impact from PG&E's discharge.

7. Order No. R6V-2011-0005A1, section 2.d. states that PG&E is required to present the Feasibility Study to the community to determine the acceptability of each method. In compliance with this requirement and as part of the Program, PG&E has and will continue to conduct community outreach. PG&E has committed to provide opportunities for the community to learn more about the options examined in the Feasibility Study via public and one-on-one meetings. A key component of this effort is to provide a comprehensive outreach plan to engage eligible property owners, describe the pros and cons of the methods considered and offer the more feasible of the two recommended whole house replacement water options.
8. The Water Board cannot specify the manner in which PG&E provides whole house replacement water to eligible property owners. If PG&E implements its Program and includes all wells within the affected area that have detectable levels of hexavalent chromium at any time during the most recent four consecutive quarters, it would negate the need to develop a methodology, as required by section 3.a. of Order No. R6V-2011-0005A1, to determine if the hexavalent chromium at levels above non-detect, but below 3.1 µg/L hexavalent chromium or 3.2 µg/L total chromium in the well was due to PG&E's discharge. Moreover, the Program meets the requirements of Water Code section 13304 and Order No. R6V-2011-0005A1 and responds to community concerns regarding quality of water in domestic wells in the affected area and meets the requirements of environmental justice.
9. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provision of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.), pursuant to California Code of Regulations (CCR), title 14, section 15321, subdivision (a)(2). In addition, CEQA includes a "common sense exemption" in CCR title 14, section 15061, subdivision (b)(3), which states that where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. It can be seen with substantial certainty that the issuance of this order, which amends Order R6V-2011-0005A1, would not have a significant effect on the environment.
10. In consideration of PG&E's voluntary implementation of the whole house replacement water Program, the Water Board will modify Order No. R6V-2011-0005A1 as indicated below.

**IT IS HEREBY ORDERED**, pursuant to Water Code section 13304 that Order No. R6V-2011-0005A1 is amended as follows:

1. Feasibility Study Community Involvement Process

PG&E proposes to implement a voluntary whole house replacement water Program as defined in Findings 4 - 6 and PG&E's letter and revised Feasibility Study dated June 6, 2012 and will present the Feasibility Study Report to those eligible under the Program. The Feasibility Study community involvement process shall be deemed complete on July 31, 2012 and prior to that date PG&E shall provide the

independent consultant described in Paragraph 4 of Order No. R6V-2011-0005A1 at least two opportunities to discuss the revised Feasibility Study dated June 6, 2012 with the community at regularly scheduled Community Advisory Committee meetings or similar meetings or open houses open to the community.

## 2. Paragraph 2 Suspension:

Based on the memorandum provided by PG&E on June 6, 2012, the Feasibility Study meets the requirements of Order No. R6V-2011-0005A1 and is accepted pending completion of The Feasibility Study community involvement process as outlined in Ordering paragraph 1. Except for Paragraphs 2(c)(8)<sup>3</sup>, 2(f) and 2(g), the requirements in paragraph 2 of Order No. R6V-2011-0005A1 are suspended as long as PG&E implements a voluntary Program as described in Findings 4 - 6 and PG&E's June 6, 2012 revised Feasibility Study and letter including:

a) replacement water service to eligible property owners that have wells that contain levels of hexavalent chromium greater than 3.1 µg/L or total chromium greater than 3.2 µg/L and are willing to receive replacement water. This will be done within 120 days of acceptance of the Feasibility Study by the Water Board,<sup>4</sup> and

b) full implementation of the Program, as defined in Finding 5, by August 31, 2013. Within 14 days of acceptance of the Feasibility Study by the Water Board,<sup>5</sup> PG&E must submit to the Water Board a detailed schedule for full implementation of the Program (as defined in Finding 5) by August 31, 2013. This schedule may be extended by the Executive Officer if PG&E demonstrates that additional time is necessary.

c) for any eligible property owners identified after the Fourth Quarter 2012 Groundwater Monitoring Report, PG&E will notify the Regional Board of the additional eligible property owner(s) and will contact the eligible property owner(s) within 5 days of verified sampling results and offer to supply interim bottled water and will provide the eligible property owner(s) with information regarding the Program. Once the eligible property owner has elected to participate in the Program, PG&E will install the replacement water system within six months.

If the Executive Officer determines that PG&E is failing to implement the Program as outlined in Findings 4 - 6 and as described in PG&E's June 6, 2012 revised Feasibility Study and letter, he/she will notify PG&E of the failure and provide 30 days for PG&E to cure the failure. If the failure is not cured, PG&E must achieve compliance with Paragraph 2 of the Order within 90 days of notification of its failure to implement the Program. This requirement for notice of failure to comply and

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<sup>3</sup> The monitoring program submitted by PG&E on May 11, 2012 satisfies Paragraph 2(c)(8).

<sup>4</sup> Acceptance of the Feasibility Study means that the Water Board has reviewed the Feasibility Study for technical completeness, particularly as to whether it meets the minimum requirements of Order No. R6V-2011-0005A1, Ordering Paragraph 2.c, and does not mean that the Water Board identifies a preferred option for replacement water.

<sup>5</sup> See footnote 3, above.

opportunity to cure does not, however, apply to meeting the final compliance dates in paragraphs (a)-(c), above.

3. A new section, Paragraph 3.f., is added to the Order as follows:

3.f. When a final MCL (or drinking water standard) for hexavalent chromium is adopted by CDPH, the requirements of Order No. R6V-2011-0005A1 and this Order (CAO NO. R6V-2011-0005A2) pertaining to providing either interim or whole house replacement water for impacted wells only applies to locations with wells containing hexavalent chromium at levels above the MCL level established by CDPH. Following the adoption of an MCL for hexavalent chromium, PG&E's obligation to provide interim or whole house replacement water ceases for those locations with four consecutive quarters of hexavalent chromium detections which do not exceed the MCL.

4. Paragraphs 3.a. through 3.e. Suspension

The requirements of Paragraph 3.a through 3.e. in Order No. R6V-2011-0005A1 are suspended as long as PG&E implements the Program as described in Findings 4 - 6 and PG&E's June 6, 2012 revised Feasibility Study and letter.. PG&E may implement this Program to provide interim, and, pursuant to the schedules of this Order, whole house replacement water without identifying, pursuant to Paragraph 3a of Order No. R6V-2011-0005A1, which wells with hexavalent chromium levels less than 3.1 µg/L its discharge has impacted,. If the Executive Officer determines that PG&E is failing to implement the Program as outlined in Findings 4 - 6 and as described in PG&E's June 6, 2012 revised Feasibility Study and letter, he/she will notify PG&E of the failure and provide 30 days for PG&E to cure the failure. If the failure is not cured, PG&E must achieve compliance with Paragraph 3.a. of the Order within 45 days of notification of its failure to implement the Program. This requirement for notice of failure to comply and opportunity to cure does not, however, apply to meeting the final compliance dates in paragraphs 2(a)-(c), above.

#### **Order No. R6V-2011-0005 and Order No. R6V-2011-0005A1**

Order No. R6V-2011-2005A1 amended Orders 1 and 2 in CAO R6V-2011-0005 for providing replacement water supply and submitting reports to the Water Board. All other Orders in CAO R6V-2011-0005 and CAO R6V-2011-0005A1 remain in effect unless later modified by the Water Board, the Water Board's Executive Officer, or his/her designated representative.

**Right to Petition:** Any person aggrieved by this action of the Lahontan Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. 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, of 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](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

Ordered by: Patty Z. Kouyoumdjian Dated: June 7, 2012  
PATTY Z. KOUYOUMDJIAN  
EXECUTIVE OFFICER