

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

**AMENDED CLEANUP AND ABATEMENT ORDER NO. R6V-2011-0005
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

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. For the purposes of this Order, PG&E is referred to as the "Discharger."
2. On August 6, 2008, the Water Board issued Cleanup and Abatement Order (CAO) No. R6V-2008-0002 to the Discharger to clean up and abate the effects of waste discharges and threatened discharges containing hexavalent chromium and total chromium to waters of the State. The CAO, in part, required the Discharger to prevent the chromium plume from migrating to locations where hexavalent chromium is below the background levels.
3. Sampling in the Hinkley Valley indicates that hexavalent and total chromium occur naturally in groundwater at variable concentrations, according to the February 27, 2007, document, *Groundwater Background Chromium Study Report, Hinkley Compressor Station*. The mean concentrations detected in background are 1.19 micrograms per liter ($\mu\text{g/L}$) for hexavalent chromium and 1.52 $\mu\text{g/L}$ for total chromium. The work plan for the Study recommended that maximum background concentrations should be expressed as the 95% upper tolerance limits. The 95% upper tolerance limit is the value that is estimated to include 95 percent of the population with a 95 percent confidence level. The 95% upper tolerance limits are 3.09 $\mu\text{g/L}$ for hexavalent chromium and 3.23 $\mu\text{g/L}$ for total chromium.
4. At the November 12-13, 2008 meeting, the Water Board considered the 2007 *Background Chromium Study*, along with comments and recommendations by

interested persons and staff. Following the meeting, the Water Board Executive Officer issued Amended CAO No. R6V-2008-0002A1 to establish background concentrations for chromium in Hinkley Valley groundwater as follows:

Maximum background hexavalent chromium = 3.1 µg/L

Maximum background total chromium = 3.2 µg/L

Average background hexavalent chromium = 1.2 µg/L

Average background total chromium = 1.5 µg/L

5. The levels described in Finding 4, above, are used to determine compliance with background concentrations against which remediation strategies are to be assessed, and to determine if the chromium plume has migrated into areas previously unaffected by PG&E's discharge. The levels also provide for the basis for determining wells which are considered affected by PG&E's discharge. Wells with concentrations that exceed these background levels are deemed affected by the discharge of waste chromium from the Facility.
6. On July 28, 2010, Water Board staff received information from PG&E that hexavalent and total chromium concentrations exceeded background concentrations at three residential wells and four shallow monitoring wells along Summerset Roads, and to the east of Summerset Road, north of Santa Fe Avenue. Three of these wells contained hexavalent chromium ranging from greater than 4 µg/L to 5.5 µg/L. These data indicate that the chromium plume had migrated to locations where the hexavalent chromium levels had previously been below background levels, according to previously submitted data. This violates the requirements of CAO No. R6V-2008-0002 regarding plume migration described in Finding 2, above.
7. The migration of the waste chromium plume constitutes a discharge of waste creating a condition of pollution to previously unaffected groundwaters of the State.

AUTHORITY – LEGAL REQUIREMENTS

8. California Water Code section 13304, subdivision (a) states in part:

Any person . . . who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged to waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for,

uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner.

9. The conditions described in these Findings identify discharges of wastes in violation of a previously issued CAO, where chromium wastes have been discharged or deposited into waters of the State (groundwater) or probably will be discharged into the waters of the State. The Discharger is therefore subject to Water Code section 13304.
10. The Water Code does not define what constitutes an "affected" well. As described in Finding 5, above, Water Board staff has determined that any well with concentrations of total or hexavalent chromium above the maximum background levels described in Finding 4 are affected by PG&E's discharge.
11. Pursuant to Water Code section 13304, subdivision (f):

Replacement water provided pursuant to subdivision (a) shall meet all applicable federal, state, and local drinking water standards, and shall have comparable quality to that pumped by the public water system or private well owner prior to the discharge of waste.
12. Pursuant to Water Code section 13267, subdivision (b):

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the reports, and shall identify the evidence that supports requiring that person to provide the reports.
13. This Order requires monitoring and reports pursuant to Water Code section 13267, subdivision (b). The monitoring required by this Order is necessary to evaluate the extent of pollution in groundwater, determine affected well owners, and to protect human health. Workplan and technical reports required in this

Order are essential to design a water replacement plan and implementation schedule and to determine compliance with this Order.

14. Pursuant to Water Code section 13304, the Water Board is entitled to, and may seek, reimbursement for all reasonable costs actually incurred by the Water Board to investigate unauthorized discharges of wastes or to oversee cleanup of such waste, abatement of the effect thereof, or other remedial action pursuant to this Order.
15. 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 (Public Resources Code section 21000 et seq.), pursuant to California Code of Regulations (CCR), title 14, section 15321, subdivision (a)(2). The implementation of this Order is also an action to assure the restoration of the environment and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, section 21000 et seq.), in accordance with CCR, title 14, sections 15308 and 15330.

IT IS HEREBY ORDERED, pursuant to Water Code sections 13267 and 13304, the Discharger must:

1. **By January 25, 2011**, submit and implement a proposed water replacement plan to the Water Board's Assistant Executive Officer for approval. The water replacement plan shall describe a method to supply uninterrupted replacement water service (i.e., bottled water or equivalent), to residences or businesses served by private or community domestic wells in which hexavalent chromium has been detected at concentrations exceeding 3.1 µg/L, or total chromium has been detected at concentrations exceeding 3.2 µg/L, based on data generated in the most recent sampling event for any domestic well in the Project Area. The Project Area is defined as the area up to 3,000 feet from the 3.1 µg/L hexavalent chromium plume boundary identified in the most recent groundwater monitoring report submitted by the Discharger. The Project Area may be modified if chromium concentrations increase above 3.1 µg/L (hexavalent) or 3.2 µg/L (total) in additional supply wells. "Uninterrupted water service" means that water shall be supplied continuously to meet human water consumption needs (including drinking and cooking) with no break in water availability longer than two hours.
 - 1.1. The water replacement plan shall describe how the water needs of each replacement water recipient shall be determined to ensure adequate uninterrupted water supply. The water replacement plan shall describe plans to monitor domestic supply wells within the Project Area described in Order No. 1, above, for the purpose of determining the likelihood of future exceedance of the maximum background level of hexavalent or total chromium to assess the need for any domestic supply well's inclusion into the replacement water plan. The plan must also describe how new

residences or businesses will be added to the program should hexavalent chromium or total chromium be detected in domestic or community wells exceeding the above listed concentrations.

- 1.2. Implement the approved water replacement plan as revised after comments from Water Board staff. Replacement water service for a particular well can only be ceased upon the Assistant Executive Officer's concurrence that at least three sampling events occurring no less than 30 days apart verify that chromium concentrations are less than 3.1 µg/L hexavalent chromium and 3.2 µg/L total chromium.
2. **By January 28, 2011**, provide a letter report to the Water Board listing all residences and business that have been provided uninterrupted replacement water service. The letter report must include addresses, well numbers, and detected hexavalent chromium and total chromium concentrations.
3. **By February 1, 2011**, provide written notification to all parcel owners and occupants in the Project Area that hexavalent chromium concentrations in groundwater may exceed the maximum background of 3.1 µg/L, or total chromium concentrations may exceed the maximum background of 3.2 µg/L. The Discharger shall also include notification that all potentially affected wells will need to be sampled on a quarterly basis, beginning February 15, 2011. The notification should include letters to each business, residence or individual in the Project Area. Copies of the notifications must be received by the Water Board.
4. **Beginning April 30, 2011**, in all further quarterly reports submitted to the Water Board, provide a listing of all residences and businesses addresses and well numbers that have been provided uninterrupted replacement water service. Include the method(s) that the Discharger has implemented to provide uninterrupted replacement water service including how this service will be maintained. If access to properties for well sampling or water delivery is denied, list the address, well number, and date of denied access. CAO No. R6V-2008-0002 requires the Discharger to submit quarterly groundwater monitoring reports by January 30th, April 30th, July 30th, and October 30th of each year.

Liability for Oversight Costs Incurred by Water Board: The Discharger shall be liable, pursuant to Water Code section 13304, to the Water Board for all reasonable costs incurred by the Water Board to investigate unauthorized discharges of waste, or to oversee clean up of such waste, abatement of the effects thereof, or other remedial action, pursuant to this Order. The Discharger shall reimburse the Water Board for all reasonable costs associated with site investigation, oversight, and cleanup. Failure to pay any invoice for the Water Board's investigation and oversight costs within the time stated in the invoice (or within thirty days after the date of invoice, if the invoice does not set forth a due date) shall be considered a violation of this Order. If the Discharger is enrolled in a State Board-managed reimbursement program, reimbursement shall be

made pursuant to this Order and according to the procedures established in that program.

Certifications for All Plans and Reports: All technical and monitoring plans and reports required in conjunction with this Order are required pursuant to Water Code section 13267 and shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying (under penalty of perjury in conformance with the laws of the State of California) that the workplan and/or report is true, complete, and accurate. Hydrogeologic reports and plans shall be prepared or directly supervised by, and signed and stamped by a Professional Geologist or Professional Civil Engineer registered in California.

No Limitation of Water Board Authority: This Order in no way limits the authority of this Water Board to institute additional enforcement actions or to require additional investigation and cleanup of the site consistent with the Water Code. This Order may be revised by the Executive Officer as additional information becomes available.

Enforcement Options for Noncompliance with the Order: Failure to comply with the terms or conditions of this Cleanup and Abatement Order will result in additional enforcement action, which may include the imposition of administrative civil liability pursuant to Water Code sections 13350 and 13268 or referral to the Attorney General of the State of California for such legal action as he or she may deem appropriate.

Evidentiary Hearing before the Water Board - Any person affected by this action of the Water Board may request an evidentiary hearing before the Water Board. The Water Board's Executive Officer may elect to hold an informal hearing or a "paper hearing" in lieu of scheduling a hearing before the Water Board itself. If the Discharger decides to request an evidentiary hearing, send the request to the Water Board Assistant Executive Officer, Attn: Lauri Kemper. Please consider the following carefully:

- a. The Water Board must receive your request within **30 calendar days** of the date of this Order.
- b. The request must include all comments, technical analysis, documents, reports, and other evidence that you wish to submit for the evidentiary hearing. However, please note that the administrative record will include all materials the Water Board has previously received regarding this Site. You are not required to submit documents that are already in the record.
- c. The Executive Officer or Water Board may deny a request for a hearing after reviewing the evidence.
- d. If the Discharger does not request an evidentiary hearing, the State Water Resources Control Board (State Water Board) may prevent the

Discharger from submitting new evidence in support of a State Board petition.

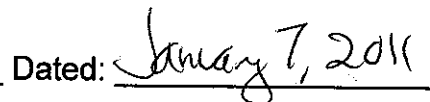
- e. The Discharger's request for an evidentiary hearing, if one is submitted, does not stay the effective date of the Order, whether or not a hearing is scheduled.
- f. A request for an evidentiary hearing does not extend the 30-day period to file a petition with the State Water Board (see below). However, in that case, the Discharger is advised to ask the State Board to hold the petition in abeyance while the Discharger's request for an evidentiary hearing is pending. (Refer to CCR Title 23 Section 2050.5(d)) Additional information regarding the SWRCB petition process is provided below.

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 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 calendar 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.

Ordered by:



Dated:



LAURI KEMPER
ASSISTANT EXECUTIVE OFFICER

**Fact Sheet – Requirements for Submitting Technical Reports
Under Section 13267 of the California Water Code**

October 8, 2008

What does it mean when the regional water board requires a technical report?

Section 13267¹ of the California Water Code provides that "...the regional board may require that any person who has discharged, discharges, or who is suspected of having discharged...waste that could affect the quality of waters...shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires".

This requirement for a technical report seems to mean that I am guilty of something, or at least responsible for cleaning something up. What if that is not so?

Providing the required information in a technical report is not an admission of guilt or responsibility. However, the information provided can be used by the regional water board to clarify whether a given party has responsibility.

Are there limits to what the regional water board can ask for?

Yes. The information required must relate to an actual or suspected discharge of waste, and the burden of compliance must bear a reasonable relationship to the need for the report and the benefits obtained. The regional water board is required to explain the reasons for its request.

What if I can provide the information, but not by the date specified?

A time extension can be given for good cause. Your request should be submitted in writing, giving reasons. A request for a time extension should be made as soon as it is apparent that additional time will be needed and preferably before the due date for the information.

Are there penalties if I don't comply?

Depending on the situation, the regional water board can impose a fine of up to \$1,000 per day, and a court can impose fines of up to \$25,000 per day as well as criminal penalties. A person who submits false information is guilty of a misdemeanor and may be fined as well.

What if I disagree with the 13267 requirement and the regional water board staff will not change the requirement and/or date to comply?

Any person aggrieved by this action of the Regional 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 the 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.

Claim of Copyright or other Protection

Any and all reports and other documents submitted to the Regional 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 Regional Board and the State Water Resources Control 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 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 Regional Board's purposes, and will result in the document being returned to the discharger as if the task had not been completed.

If I have more questions, who do I ask?

Requirements for technical reports normally indicate the name, telephone number, and email address of the regional water board staff person involved at the end of the letter.

¹ All code sections referenced herein can be found by going to www.leginfo.ca.gov. Copies of the regulations cited are available from the Regional Board upon request.