

## Lahontan Regional Water Quality Control Board

December 21, 2012

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Pacific Gas and Electric Company  
3401 Crow Canyon Road  
San Ramon, CA 94105-1814

### INVESTIGATIVE ORDER NO. R6V-2012-0060

### BYPRODUCT PLUME MONITORING IN IRZ AREAS, PACIFIC GAS AND ELECTRIC COMPANY (PG&E), HINKLEY COMPRESSOR STATION, SAN BERNARDINO COUNTY (BOARD ORDER NO. R6V-2010-0014)

This Investigative Order directs PG&E to submit a technical report to the Water Board for fully defining and monitoring byproduct manganese plumes created from the In-situ Reactive Zone (IRZ) project (Project) in Hinkley. The Water Board's requirement that you submit technical reports is made pursuant to Section 13267 of the California Water Code.

### Background

PG&E is currently operating three IRZ areas to remediate chromium in groundwater from historic discharges at the Hinkley Compressor Station. From south to north, the IRZ areas are: Source Area, South Central Area, and Central Area. The three IRZ areas were combined into one project and placed under one monitoring and reporting program (MRP) on July 7, 2010, under the General Permit for Board Order No. R6V-2008-0014. The operation of the Project is documented in monitoring reports submitted to the Water Board every three months.

The Project involves the injection of a carbon source, such as ethanol, to reduce hexavalent chromium in groundwater to trivalent chromium in soil. The in-situ remediation process also reduces other metals in the Project area, usually for a limited distance and for a temporary period. Under the MRP, PG&E is required to report the concentration and location of byproducts created from reducing conditions in the IRZ areas. The Third Quarter 2012 MRP includes a map in Figure 4-2 showing the drawn boundaries for manganese concentrations greater than the permitted water quality standard of 390 ppb. The manganese plume extends from the Source Area at the Compressor Station to almost Highway 58, about 1.5 miles to the north. The manganese plume, however, is not fully defined on its northwestern, western, southern, and southeastern boundaries.

The Water Board requires that PG&E submit a workplan for fully defining the manganese plume in the IRZ areas, which potentially threaten nearby domestic wells. The workplan must propose additional monitoring points, existing or to be added, that will define the manganese plume in both the shallow and deep zones of the upper aquifer.

## Requirements

Pursuant to section 13267 of the California Water Code, PG&E is required to submit to the Water Board a workplan **within 30 days** from the date of this letter proposing to fully define the manganese plume in the upper aquifer in these areas:

- North: in the 1000-ft gap between wells EX-21 and EX-22.
- West: in the 1,300-ft gap between wells CA-MW-108 and SC-MW-13.
- Southwest: in the 1,900-ft gap between wells SA-MW-16 and MW-78.
- South: in the 1,100-ft gap between wells MW-78 and MW-39.
- East: in the 1,000-ft gap between wells SA-MW-25 and SC-MW-01.

To be consistent with previous monitoring programs, proposed IRZ monitoring points shall be no more than 200 feet apart from each other in the west to east direction and no more than 400 feet apart from each other in the south to north direction. In addition, the workplan shall propose a tracer test along the western IRZ boundaries.

Beginning first quarter 2013, I am requiring that the following existing monitoring wells be added to the quarterly (every three months) manganese monitoring program to ensure that byproducts do not potentially impact nearby domestic wells: MW-17, MW-36, MW-37, MW-38, MW-46, MW-61, MW-67, MW-73, MW-78, MW-155, SA-MW-27. All other sampling of injection wells, monitoring wells, and extraction wells, as conducted during third quarter 2012 shall continue in future quarterly monitoring events. All future monitoring reports must show the extent of the manganese plumes for the shallow and deep zones of the upper aquifer on separate maps. Finally, quarterly reports must include potentiometric maps of the IRZ area.

## Enforcement

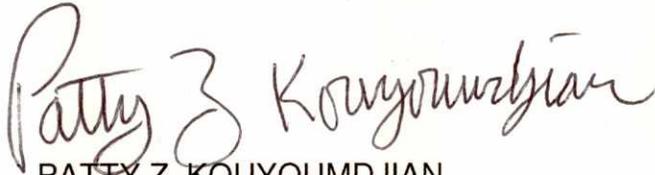
Technical reports required by this Order are necessary to investigate the water quality in the Hinkley basin during PG&E's ongoing cleanup of chromium pursuant to Cleanup and Abatement Order R6V-2008-0002 and amendments. The need for this investigation outweighs the burden on PG&E to produce the information for defining the manganese plume in groundwater will assist in evaluating potential threats to public health.

Pursuant to section 13268 of the Water Code, a violation of Water Code Section 13267 requirement may subject you to civil liability of up to \$1,000 per day for each day in which the violation occurs.

Sheryl Bilbrey  
Pacific Gas and Electric Company

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If you should have any questions, please contact Lauri Kemper at 542-5436 or [lkemper@waterboards.ca.gov](mailto:lkemper@waterboards.ca.gov) or Lisa Dernbach at (530) 542-5424 or [ldernbach@waterboards.ca.gov](mailto:ldernbach@waterboards.ca.gov).



PATTY Z. KOUYOUMDJIAN  
EXECUTIVE OFFICER

Enclosure: Section 13267 Fact Sheet

cc: PG&E Technical Mail List and liris list (and web posting)

LSD/adw/T: Order No. R6V-2012-0060 PG&E 13267 Mn Plume monitoring  
Send to file: (VVL) WDID 6B360804007

**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 13267<sup>1</sup> 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](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.

<sup>1</sup> All code sections referenced herein can be found by going to [www.leginfo.ca.gov](http://www.leginfo.ca.gov). Copies of the regulations cited are available from the Regional Board upon request.