

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**AMENDED CLEANUP AND ABATEMENT ORDER NO. 6-87-160A2**  
**WDID NO. 6B362031001**

REQUIRING THE PACIFIC GAS AND ELECTRIC COMPANY TO CLEANUP AND ABATE  
THE EFFECTS OF PAST WASTE DISCHARGES OF HEXAVALENT CHROMIUM TO  
GROUND WATERS OF THE MOJAVE HYDROLOGIC UNIT

San Bernardino County

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

1. On December 29, 1987, the Regional Board issued Cleanup and Abatement Order (CAO) No. 6-87-160 to the Pacific Gas and Electric Company (PG&E). CAO No. 6-87-160 was issued because wastewater containing hexavalent chromium was discharged at PG&E's Hinkley Compressor Station in a manner that polluted ground water. For the purposes of this CAO amendment, PG&E is referred to as the "Discharger" and the Hinkley Compressor Station is referred to as the "Facility."
2. CAO No. 6-87-160 required the Discharger to submit technical reports regarding: (1) characterization of the nature and extent of soil and ground water pollution and (2) characterization of the site hydrogeology. CAO No. 6-87-160 also required the Discharger to initiate efforts to cleanup hexavalent chromium contamination in the soil and ground water. The technical reports and cleanup activities were completed by the Discharger in an appropriate and timely manner.
3. On June 3, 1994, the Regional Board Executive Officer amended the CAO (6-87-160A1). The amended CAO required the submittal of technical reports regarding: (1) further characterization of the ground water pollution and the site hydrogeology, and (2) destruction of production wells that could potentially provide a conduit for migration of hexavalent chromium to an underlying aquifer. CAO No. 6-87-160A1 also required the Discharger to design and implement a full-scale ground water extraction system. These technical reports and cleanup activities were also completed by the Discharger in an appropriate and timely manner.
4. On July 17, 1997, the Regional Board adopted revised Waste Discharge Requirements (WDRs) in Board Order No. 6-97-81 to regulate the discharge of the extracted ground water to two alfalfa irrigation fields owned by PG&E. During the irrigation process the hexavalent chromium in the extracted ground water is converted to trivalent chromium. The trivalent chromium, which is mostly non-soluble in neutral pH ground water, is chemically bound within the upper few feet of soil in the alfalfa irrigation fields.
5. A final cleanup level for hexavalent chromium in the ground water has not been developed and justified by the Discharger. This amendment to CAO No. 6-87-160 establishes the cleanup level for hexavalent chromium in the ground water at background water quality (which in this case is the laboratory method reporting limit). The discharger may request

that the Regional Board establish a higher cleanup level in accordance with State Water Resources Control Board Resolution No. 92-49 (Policy regarding Cleanup and Abatement).

6. The Discharger has used computer modeling to predict hydraulic capture zones for the ground water extraction system. Periodic data evaluations are necessary to demonstrate adequate performance of the ground water extraction system. This amendment to CAO No. 6-87-160 requires such analysis and reporting on an annual basis.
7. This enforcement action is being taken by this regulatory agency to enforce provisions of the California Water Code and as such is exempt from the provisions of the California Environmental Quality Act (CEQA - Public Resources Code, Section 21000 et seq.) according to CEQA guidelines.

**IT IS HEREBY ORDERED** that, pursuant to California Water Code Section 13304, the Discharger shall comply with the following:

1. The cleanup level for hexavalent chromium in the ground water is the laboratory method reporting limit, which shall be no greater than 10  $\mu\text{g/L}$ .
2. No later than **November 15, 1998**, the Discharger shall submit a technical report to the Regional Board that, based on computer modeling for the existing ground water extraction system, provides an estimate of the time necessary to reach the cleanup level for hexavalent chromium in the ground water throughout the plume.
3. No later than **June 30, 1999**, the Discharger shall begin submitting annual reports to the Regional Board detailing an evaluation of the effectiveness of corrective action activities. At a minimum, the evaluation shall: (1) compare the actual effectiveness of corrective actions with the computer model estimations; (2) make recommendations for any potential modifications to optimize the ground water extraction system; and, (3) make recommendations for any needed revision of the computer model and provide a revised estimate of the time to reach the target cleanup level for hexavalent chrome in the ground water.

If, in the opinion of the Executive Officer, the Discharger does not comply with this CAO in a reasonable and timely manner, the Executive Officer may recommend additional enforcement action by the Regional Board, which may include the imposition of administrative civil liability or referral to the Attorney General of the State of California for such legal action as he may deem appropriate.

Ordered by:

  
for HAROLD J. SINGER  
EXECUTIVE OFFICER

Dated:

August 3, 1998