



Water Board to Consider Three New Groundwater Cleanup Projects at Pacific Gas and Electric Company (PG&E) Hinkley Compressor Station

Esta hoja informativa está disponible en Español. Por favor llame a la Mesa Directiva del Agua al (760) 241-6583.

In response to orders issued by the California Regional Water Quality Control Board, Lahontan Region (Water Board), PG&E has proposed three new projects that are intended to further contain and treat groundwater contaminated with hexavalent chromium from the Pacific Gas and Electric Company Compressor Station in Hinkley, California. The Water Board will evaluate each project in accordance with the California Environmental Quality Act, and will consider establishing waste discharge requirements and a monitoring and reporting program to prevent the project from creating water quality problems.

The projects to be considered are briefly described below:

- **Cleanup of Groundwater at the Source Area** – PG&E is planning a phased, cleanup action of groundwater at the Compressor Station's former unlined wastewater ponds. This project is aimed at cleaning up the highest occurring concentrations of chromium in groundwater. Food-grade lactate (milk sugar) and vegetable oil are proposed for injection to groundwater to create a treatment zone that will convert hexavalent chromium to less mobile trivalent chromium. As trivalent chromium precipitates and adheres to soil, total chromium concentrations are reduced in groundwater.
- **Additional Groundwater Control and Cleanup using the Ranch Land Treatment Unit** – This project, located between the Santa Fe Railroad and Highway 58, is intended to provide further containment of polluted groundwater at the plume's north and northwest end. The additional groundwater capture will be accomplished by pumping multiple extraction wells from west of the Ranch land treatment unit. Extracted water will be applied to fields through either a subsurface drip or a subsurface drip irrigation system using low flow rates. No aerosols are expected to be created using either irrigation method. Crops, such as alfalfa, will be grown on the fields and harvested several times a year.
- **Pilot Study for Chromium Treatment in the Central Plume Area** – An additional pilot study is proposed north of Frontier Road to evaluate large-scale groundwater cleanup across the plume's width. The pilot study will inject lactate and vegetable oil into groundwater, as was done during the 2005 pilot study at the Compressor Station. Whey injections

will also be included in the new pilot study. These food-grade products should stimulate the conversion of hexavalent chromium to trivalent chromium, thereby reducing total chromium concentrations in groundwater.

More detailed descriptions of the three projects will be available for public review at the Water Board office and the Barstow Library. The public will have an opportunity to provide comments on the proposed project when the Water Board publishes the 30-day comment period in the Desert Dispatch.

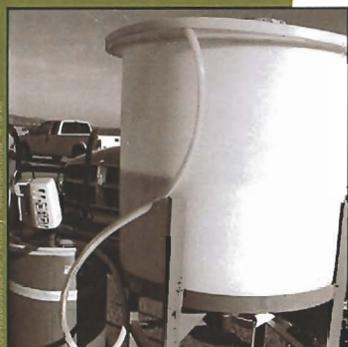
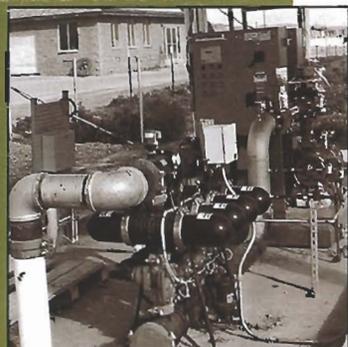
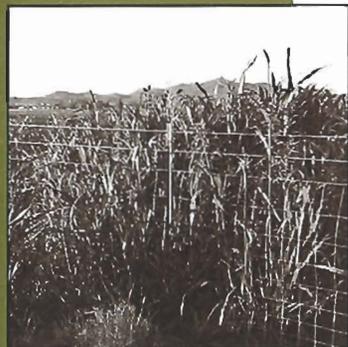
HISTORY

The PG&E Hinkley Compressor Station compresses natural gas before transporting it through pipelines to central and northern California. Operation began at the compressor station in 1952. Between 1952 and 1966, PG&E used hexavalent chromium as an anti-corrosion agent in the cooling tower water. From 1952 to 1964, untreated wastewater from the cooling towers was discharged into unlined ponds at the compressor station. Some of the wastewater in the unlined ponds percolated to the groundwater. Beginning in 1964, the wastewater was treated prior to discharge to the unlined ponds while alternative corrosion inhibitors were evaluated. In 1966, phosphate replaced hexavalent chromium as the anti-corrosion agent in the cooling tower water and lined evaporation ponds were constructed. Nevertheless, hexavalent chromium from the former wastewater ponds has affected the groundwater north of the Compressor Station in an area approximately two miles long and one mile wide.

Para información en español sobre la reunión informativa, por favor vea la parte arriba de la página 2.

IN THIS NOTICE:

- Description of projects to be considered by the Water Board – see page 1
- Announcement of an informational meeting in May 2006 – see page 2
- Background Chromium Study – see page 2
- Glossary of terms – see page 2
- New local information repository at Barstow Library – see page 3
- How to submit comments to the Water Board – see page 3





PUBLIC INFORMATIONAL MEETING WEDNESDAY, MAY 3, 2006, 7:00 - 9:00 PM HINKLEY ELEMENTARY SCHOOL

Water Board staff will host a meeting to present information about current and new projects planned at the site. The meeting will be informal and will include a series of posters presentations. Water Board staff will be available to provide information and answer questions. Spanish language interpreters will be available at the meeting.

The public is encouraged to attend the meeting to learn about the current and planned projects and to express their comments. If you have any questions about the meeting, please contact Cindi Mitton at (760) 241-6583 or cmitton@waterboards.ca.gov.

AVISO DE UNA REUNION INFORMATIVA MIERCOLES, 3 DE MAYO 2006, 7:00 - 9:00 PM ESCUELA PRIMARIA HINKLEY

Personal de la Mesa Directiva del Agua tendrá una reunión para presentar información sobre proyectos actuales y nuevos planificados para el sitio. La reunión será informal e incluirá una serie de presentaciones estáticas. El personal de la Mesa Directiva del Agua estará disponible para proporcionar información y para contestar sus preguntas. Intérpretes de español estarán disponibles en esta reunión.

Se anima al público asistir a la reunión para conocer los proyectos actuales y previstos y también para expresar sus comentarios. Si usted tiene alguna pregunta sobre la reunión, por favor llame a Cindi Mitton al (760) 241-6583 o cmitton@waterboards.ca.gov.

BACKGROUND CHROMIUM STUDY

PG&E has initiated collection of water samples from well locations beyond the plume boundary to evaluate naturally-occurring chromium in groundwater. The sampling began in early 2006 and continues every three months until the end of the year. Most well sampling will take place on private parcels after gaining access from owners. Sample results will be used to assess the range of naturally-occurring chromium in different parts of the Hinkley Valley. PG&E may use the results to

request that the Water Board set cleanup goals for chromium in groundwater that are considered background levels and reflective of natural aquifer conditions.

The Background Chromium Study proposal is currently available for public review at the Water Board office and the Barstow Library.

GLOSSARY

Aquifer: A water-bearing layer of rock or sediment that is capable of yielding useable amounts of water.

Groundwater: Water beneath the earth's surface that flows through soil and rock openings, aquifers, and often serves as a source of drinking water.

Hexavalent chromium: A form of chromium, a metal naturally found in rocks, soil, and the tissue of plants and animals. Also used in industrial products and processes, hexavalent chromium is a known carcinogen when inhaled.

Land Treatment Unit (LTU): A permitted waste-treatment unit that uses land application methods to treat waste to acceptable levels. The treatment of wastes at the Hinkley site is achieved through natural soil chemistry and biological processes.

Water Board: Lahontan Regional Water Quality Control Board – A California agency that sets and enforces water quality standards for a specific geographic jurisdiction and enforces state water quality laws. It is part of CalEPA.

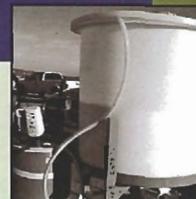
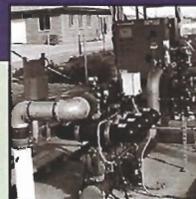
Pilot Study: Operation of a small-scale version of a potential larger system for the purpose of verifying that the test itself is feasible and will work in the field as designed. Pilot test results are typically used to design and optimize a larger system.

Plume: A body of contaminated groundwater flowing from a specific source. The movement of groundwater is influenced by such factors as local groundwater flow patterns and pumping activity, the character of the aquifer in which the groundwater is contained, and the density of the contaminants.

Remediation: Cleanup or other methods used to remove or contain a spill or potentially hazardous materials at a site.

Total chromium: The additive of all chromium concentrations, mainly being hexavalent and trivalent. The only drinking water standard for chromium in California is 50 parts per billion as Total Chromium.

Trivalent chromium: A form of chromium that is not toxic at low levels. Unlike hexavalent chromium, trivalent is not very soluble in water and often occurs as an oxidized metal in a solid form.



ANNOUNCEMENT OF NEW PUBLIC REPOSITORY FOR SELECTED DOCUMENTS

Information Repository Locations

A local information repository has been created at the Barstow Public Library. The purpose of the repository is to provide easier access for local residents to view recent documents. Selected project reports are found in the new Barstow Information Repository located at:

Barstow Branch

San Bernardino County Library
304 East Buena Vista
Barstow, CA 92311
(760) 256-4850

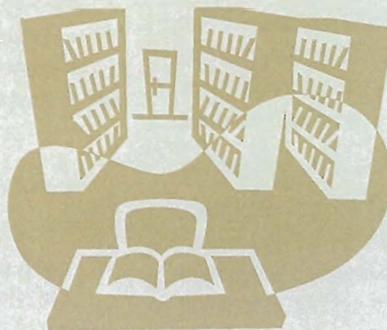
Library Hours:

Monday: 12 noon - 8 pm
Tuesday: 10 am - 6 pm
Wednesday: 12 noon - 8 pm
Thursday: 10 am - 6 pm
Friday: 10 am - 6 pm
Saturday: 9 am - 5 pm
Sunday: CLOSED

California Environmental Protection Agency
Lahontan Regional Water Quality Control Board (Water Board):

Victorville Office

14440 Civic Drive, Suite 200
Victorville, CA 92392
Phone: (760) 241-6583
Fax: (760) 241-7308
Open Mon-Fri 8 am to 5 pm



COMMENT AND MAILING LIST FORM FOR INFORMATION ABOUT FUTURE ACTIVITIES AT PG&E'S HINKLEY COMPRESSOR STATION

If you would like to be added to or taken off the distribution list for the mail related to the site, or to submit questions or comments, please either fill out this form, call the Water Board at (760) 241-6583, or send an email to cmitton@waterboards.ca.gov. If filling out the form below, mail it to Cindi Mitton, Lahontan RWQCB, 14440 Civic Drive, Suite 200, Victorville, CA 92392.

Name: _____

Address: _____

City/State/Zip: _____

Phone/E-mail: _____

Affiliation (if any): _____

Comments/Questions: _____

Water Board mailings are solely for the purpose of keeping persons informed of activities. Mailing lists are not routinely released to outside parties. However, they are considered public records and, if requested, may be subject to release.