



Department of
Toxic Substances
Control

Preventing
environmental
damage from
hazardous waste,
and restoring
contaminated
sites for all
Californians.



State of California



California
Environmental
Protection Agency

Fact Sheet – July 2009

Pacific Gas and Electric Company (PG&E) Topock Environmental Investigation Update

The Department of Toxic Substances Control (DTSC) has sent you this fact sheet to provide current information about the environmental investigation and cleanup activities for the PG&E Topock Compressor Station (referred to as the “Site”). The Site is located in San Bernardino County, 15 miles southeast of Needles, California and one-half-mile west of the Colorado River.

This fact sheet includes the following information:

- Summary of Environmental Site Investigations to date
- Summary of the 2009 Community Survey Results
- Next Steps

Community Meetings

Community meetings will be held to further inform the community members about the clean up process and to provide a summary of environmental investigations at the Site. DTSC invites you to attend one of the following meeting times and locations:

Tuesday, July 28, 2009	Thursday, July 30, 2009
Parker Community/Senior Center Time: 4:30 p.m. – 7:30 p.m. 1115 12th St. Parker, Arizona 85344 928. 669.9514	Golden Shores Civic Association Times: 11 a.m. – 2 p.m. & 4 p.m. – 7 p.m. 13136 S. Golden Shores Parkway Topock, Arizona 86436 928.768.2121

DTSC representatives will provide visual displays and will be available to answer your questions or concerns about the Site.

Overview

As the **lead agency** overseeing environmental investigations at the Site, DTSC has directed PG&E, in accordance with California and federal laws, to investigate the nature and extent of **groundwater** and soil contamination resulting from operations of the compressor station. The investigation known as the **RCRA Facility Investigation/Remedial Investigation (RFI/RI)** is a key step in the Site cleanup process.

The RFI/RI is divided into three different volumes with general content as follows:

- Volume 1 – Site background and history (completed August 2007)
- Volume 2 and Addendum – Groundwater and surface water characterization associated with the Bat Cave Wash contamination (completed in June 2009)
- Volume 3 – Soil characterization and remaining areas of concern (anticipated completion in 2012)

RFI/RI results and the Site **risk assessment** will be used to develop and evaluate appropriate clean-up methods in a report called **Corrective Measures Study/ Feasibility Study (CMS/**

FS). Once the CMS/FS is complete, DTSC will propose a **final remedy** for the Site in a **Statement of Basis** document. Along with the Statement of Basis, DTSC will issue a Draft **Environmental Impact Report (EIR)**, which documents the potential environmental impacts of the clean-up project as proposed. There will be a 60-day public comment period and a public hearing before the proposed final remedy is approved. The RFI/RI Volumes 1 and 2 can be found at the Topock website: www.dtsc-topock.com, or at the local repositories listed on the last page of this fact sheet.

Summary of Investigation Findings

The RFI/RI Volume 1 Report, completed in August 2007, documents information about compressor station operations, past disposal practices, and **constituents of potential concern**. The report also identified 32 **areas of concern** that required further investigation. Three of the 32 areas were investigated and reported in Volume 2 as it relates to the groundwater contamination released into a natural desert dry wash called the “Bat Cave Wash.” The remaining areas are being investigated and will be reported in Volume 3.

Words in **bold** are defined in the Glossary of Terms.



The three areas of concern investigated as part of Volume 2 are:

- The former **percolation bed** in the Bat Cave Wash
- Area around former percolation bed
- Inactive injection well (PGE-08)

The figure to the right shows the three areas investigated. The focus of the investigation was to define the nature and extent of contamination in groundwater, **surface water**, **pore water** and **river sediment** from historic releases in the Bat Cave Wash area and the inactive injection well, PGE-08.

After finding groundwater contamination, PG&E installed over 100 monitoring wells, collected data for more than 10 years, and summarized the water quality data in the RFI/RI Volume 2 Report (completed in February 2009) and its addendum (completed in June 2009). As a result of the studies, the report identified the extent of the groundwater contamination associated with the historical releases in the three focused areas. The report also identified that constituents of potential concern for groundwater are **hexavalent chromium**, **total chromium**, **molybdenum**, **selenium**, and **nitrate**. The figure to the left highlights the hexavalent chromium plume associated with past releases in the Bat Cave Wash area. The data did not suggest a current impact to the Colorado River surface water, pore water, or river sediment in the vicinity of the Site.

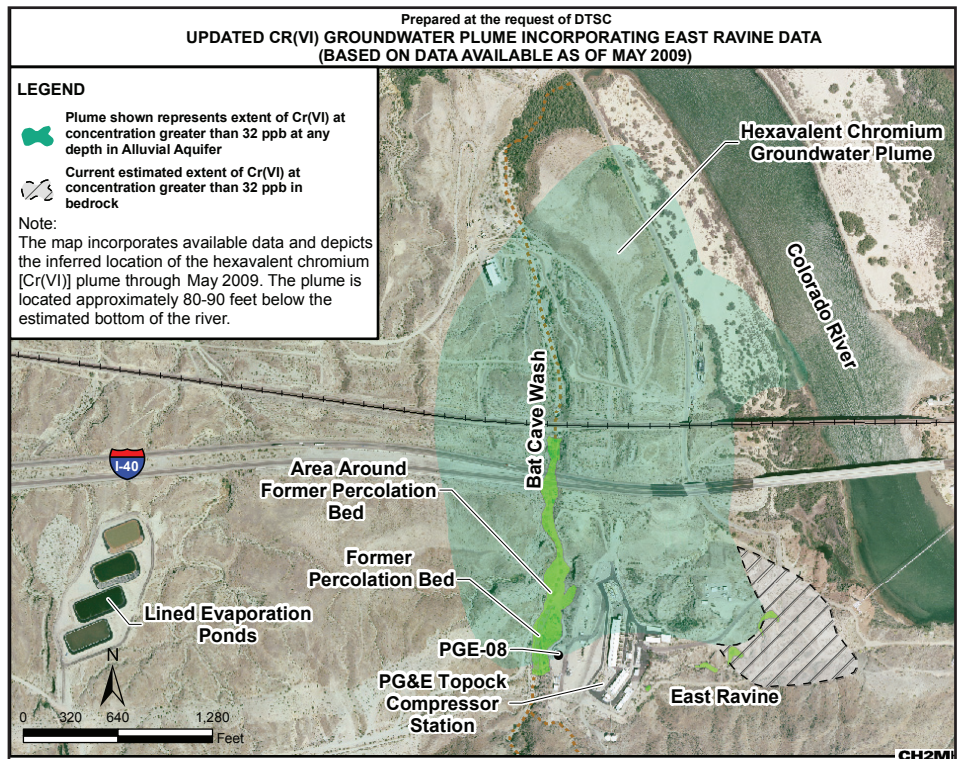


Pictured above is a flush mount groundwater monitoring well at the Site.

Investigation of soil contamination and other areas of concern are ongoing. As of May 2008, PG&E has installed new monitoring wells in eight locations. Findings from the East Ravine study area will be presented in upcoming reports, while the RFI/RI Volume 3 report will be completed in the first quarter of 2012.

2009 Topock Community Survey

DTSC distributed a community survey to the public in January 2009. The survey was designed to gather information about the community's level of awareness and interest in the Site and allow an opportunity for the community to express any specific concerns about the Site and the public involvement process. The survey results also provided useful community feedback regarding the needs and concerns of the Site's surrounding community.



The current plume map above includes the East Ravine area. PG&E is preparing a report on the East Ravine. The report will be placed at the local information repositories when completed.

DTSC received over 200 responses to the survey. In general, survey results showed that the community is most interested in the following:

- Receiving more information about the environmental impacts of the Site.
- Learning about potential effects of chromium on public health.
- Determining whether there are any chromium impacts to the Colorado River and the surrounding environment.
- Being informed about the timeline for Site cleanup.

Next Steps

PG&E is currently preparing the CMS/FS to evaluate alternatives for the cleanup of the groundwater plume associated with past releases in the Bat Cave Wash area. The study is anticipated to be completed at the end of 2009. In addition, PG&E will complete a soil investigation of the remaining areas of concern and will summarize the data in the forthcoming RFI/RI Volume 3 Report, anticipated to be completed in 2012.

DTSC anticipates holding a public comment period on the proposed groundwater cleanup plan and associated draft EIR in Spring 2010. Public hearing dates will be held during the public comment period to allow an opportunity for community input on the final groundwater remedy selection.

2009 Complete RFI/RI Volume 2 & Addendum
2009 Complete CMS/FS
2009 – 2010 Public Comment on Statement of Basis for final remedy
2012 RFI/RI Volume 3: Soil

Glossary of Terms

Area of Concern: Areas in and around a project site that either have shown high levels of contamination or may have been contaminated from past operations, making them focus areas of the site investigation.

Community Survey: A survey prepared by DTSC and distributed to the community surrounding a project site. The survey is a tool to gather information about the community's level of awareness and interest in a project site, understand specific concerns about a project site and to gather project specific public involvement questions or concerns.

Constituents of Potential Concern: Chemical elements or compounds (e.g. chromium) which may or may not be present at a project site.

Corrective Measure Study/Feasibility Study (CMS/FS): A study conducted by the facility owner/operator to identify and evaluate alternative cleanup options to address contamination at a project site.

Department of Toxic Substances Control (DTSC): A department within the California Environmental Protection Agency in charge of the regulation of hazardous waste from generation to final disposal, and for overseeing the investigation and cleanup of hazardous waste sites.

Environmental Impact Report (EIR): A report designed to examine the potential environmental impacts of proposed activities.

Final Remedy: The final cleanup action proposed for managing contaminants at a project site.

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

Hexavalent Chromium: A form of chromium. Chromium is a metal naturally found in rocks, soil and the tissue of plants and animals. Hexavalent chromium is used in industrial products and processes and is a known carcinogen when inhaled (i.e., through breathing).

Lead Agency: A public agency with the principal responsibility for ordering and overseeing site investigation and cleanup.

Molybdenum: A metallic element widely distributed in the Earth's crust that is used in industrial products and processes.

Nitrate: Nitrates and nitrites are nitrogen-oxygen chemical compounds which combine with various organic and inorganic compounds. Once taken into the body, nitrates are converted into nitrites.

Percolation Bed: An unlined bed with built-up sides constructed of soil that collects discharged wastewater and allows it to soak into the ground and/or evaporate.

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

Pore Water: Pore water is characterized as water located within pore spaces between the grains of sediment beneath

the bottom of the river.

Resource Conservation and Recovery Act (RCRA): A federal law that establishes a regulatory system to track and provide safe procedures for management of hazardous wastes from the time of generation to final disposal.

RCRA Facility Investigation/Remedial Investigation (RFI/RI): An investigation that occurs in the corrective action process following a RCRA Facility Assessment. It is an in-depth study designed to gather data needed to determine the nature and extent of contamination at site.

Risk Assessment: Qualitative and quantitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence and/or use of specific pollutants.

Sediment(s): The soil, sand and minerals at the bottom of surface waters, such as streams, lakes and rivers. The term may also refer to solids that settle out of any liquid.

Selenium: A non-metallic element abundant in the Earth's crust that is used in industrial products and processes.

Statement of Basis: A document which describes the basis for DTSC's proposed remedy and cleanup standards.

Surface Water: All water naturally open to the atmosphere such as rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.

Total Chromium: The additive of concentrations from all forms of chromium, mainly comprising of hexavalent and trivalent forms. The California drinking water standard for total chromium is 50 micrograms per liter (or parts per billion), while the Federal standard is 100 micrograms per liter.

DTSC Contacts

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Notice to Hearing-Impaired Individuals

You can obtain additional information about the site by using the California State Relay Service at 1 (888) 877-5378 (TDD). Ask them to contact Christina Fu at 714.484.5488



Information Repository Locations

Project reports, fact sheets, and other project documents can be found on the web at: www.dtsc-topock.com, or in the Information Repositories listed below.

Needles Public Library

1111 Bailey Avenue
Needles, CA 92363
Contact Kirsten Mouton: 760.326.9255
Hours:
10am – 6pm, Monday and Tuesday
10am – 4pm, Wednesday
10am – 5pm, Thursday through Saturday

Chemehuevi Indian Reservation

2000 Chemehuevi Trail
Havasu Lake, CA 92363
Contact Gilbert Parra: 760.858.1140
Hours: 8am – 4pm, Monday – Friday

Golden Shores/Topock Library Station

13136 Golden Shores Parkway
Topock, AZ 86436
Contact Kim Stoddard: 928.768.2235
Hours:
8am – 2pm, Tuesday and Thursday
3pm – 6pm, Wednesday

Lake Havasu City Library

1770 North McCulloch Blvd.
Lake Havasu City, AZ 86403
Contact Audrey LaCommare: 928.453.0718
Hours:
9am – 6pm, Monday and Wednesday
9am – 8pm, Tuesday and Thursday
9am – 5pm, Friday and Saturday

Colorado River Indian Tribes Public Library

2nd Avenue and Mojave Road
Parker, AZ 85344
Contact Elvira Holghee: 928.669.1285
Hours:
8am – noon, 1pm – 5pm
Monday– Friday

Parker Public Library

1001 Navajo Avenue
Parker, AZ 85344
Contact Jeannie Smith: 928.669.2622
Hours:
9am – 7pm, Monday– Friday
9am – 2pm, Saturday

DTSC

5796 Corporate Avenue
Cypress, CA 90630
Contact Julie Johnson: 714.484.5337
Hours:
9am – noon, 1pm – 4pm
Monday – Thursday

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Inside: Information about
PG&E Topock Compressor Station