



ENVIRONMENTAL INVESTIGATION RESULTS

Pacific Gas and Electric Company
Topock Gas Compressor Station
15 Miles Southeast of Needles, California

Update to Fact Sheet #1

September 1999

INTRODUCTION

The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), is the lead agency overseeing an investigation at Pacific Gas and Electric Company's Topock Gas Compressor Station site in eastern San Bernardino County. Results of the environmental investigation to date indicate that there is no immediate threat to human health or the environment, and that contamination has not impacted the Colorado River. Therefore, DTSC has determined that the normal corrective action process can proceed without implementing Interim Measures at the site.

The objective of the investigation is to characterize the nature and extent of certain hazardous substances at the site. This fact sheet serves as an update to DTSC's Fact Sheet #1 dated March 1998. The update provides a brief overview and information on recent site investigations, fieldwork completed, results to date, opportunities for public involvement, and information on repository locations where additional information can be obtained. Detailed information relating to the regulatory requirements, the summary of the corrective action process, and history of activities at the Topock Gas Compressor Station can be obtained by reviewing Fact Sheet #1, which can be obtained in any of the five repositories listed on page 5.

OVERVIEW

The Topock Gas Compressor Station is located in eastern San Bernardino County, about 15 miles southeast of Needles and south of Freeway I-40 (see Figure 1). The facility, which began operation in 1951, compresses natural gas for transportation through pipelines to Pacific Gas and Electric Company's service territory in Central and Northern California. As natural gas is compressed, its temperature increases and the compressed gas is cooled with water in two cooling towers before it is transported through the pipelines.

From 1951 to 1985, the company used a corrosion inhibitor containing hexavalent chromium to prevent corrosion of the cooling tower equipment. From 1951 to the mid-1960s, the untreated wastewater containing hexavalent chromium was discharged into the Bat Cave Wash area (see Figure 2), a normally dry stream bed that drains into the Colorado River. In the mid- to late-1960s, Pacific Gas and Electric Company began to treat the wastewater to convert hexavalent chromium to a non-hazardous form of chromium known as trivalent chromium. In the early 1970s, the company discharged the treated wastewater to an injection well near the Bat Cave Wash and later began storing the wastewater exclusively in lined evaporation ponds.

CORRECTIVE ACTION PROCESS

A corrective action process is designed to evaluate the nature and extent of releases of hazardous substances at a site. The process also identifies, develops and implements appropriate corrective measures, if required, to protect public health and the environment. As part of the corrective action process, Pacific Gas and Electric Company developed a Work Plan outlining the specifics of the planned facility investigation. DTSC reviewed and approved the Work Plan before the investigation began.

SAMPLING FIELDWORK COMPLETED

Currently, there are 38 existing monitoring wells at the site, including 11 pre-existing wells, 7 monitoring wells installed during the initial site investigation, and 20 additional wells installed since March of 1998 (see Figure 2). When Fact Sheet #1 was issued in March 1998, the first phase of the sampling fieldwork was being finished. Since that time, additional phases of fieldwork were performed at the site. Prior to performing this additional work, Work Plan amendments describing all proposed

additional investigations were approved by DTSC and submitted to key regulatory agencies and also placed in the designated public information repositories for the site.

The additional fieldwork included the following activities:

- A total of 20 additional monitoring wells were installed and sampled to further characterize the horizontal and vertical extent of hexavalent chromium in groundwater.
- All existing wells have been tested and will continue to be sampled.
- Water samples were taken at multiple locations and depths in the Colorado River.
- As part of the quality control process, duplicate groundwater and surface water samples were sent to a second laboratory for independent analysis. During two sampling events, the DTSC collected its own samples and completed independent analyses at the DTSC laboratory.
- Additional soil samples were collected and analyzed at and near the compressor station. At an area north of the compressor station, soils were sampled and a small amount of construction debris that contained asbestos was removed.
- Air sampling was performed during excavation activities at and near the compressor station.

RESULTS TO DATE

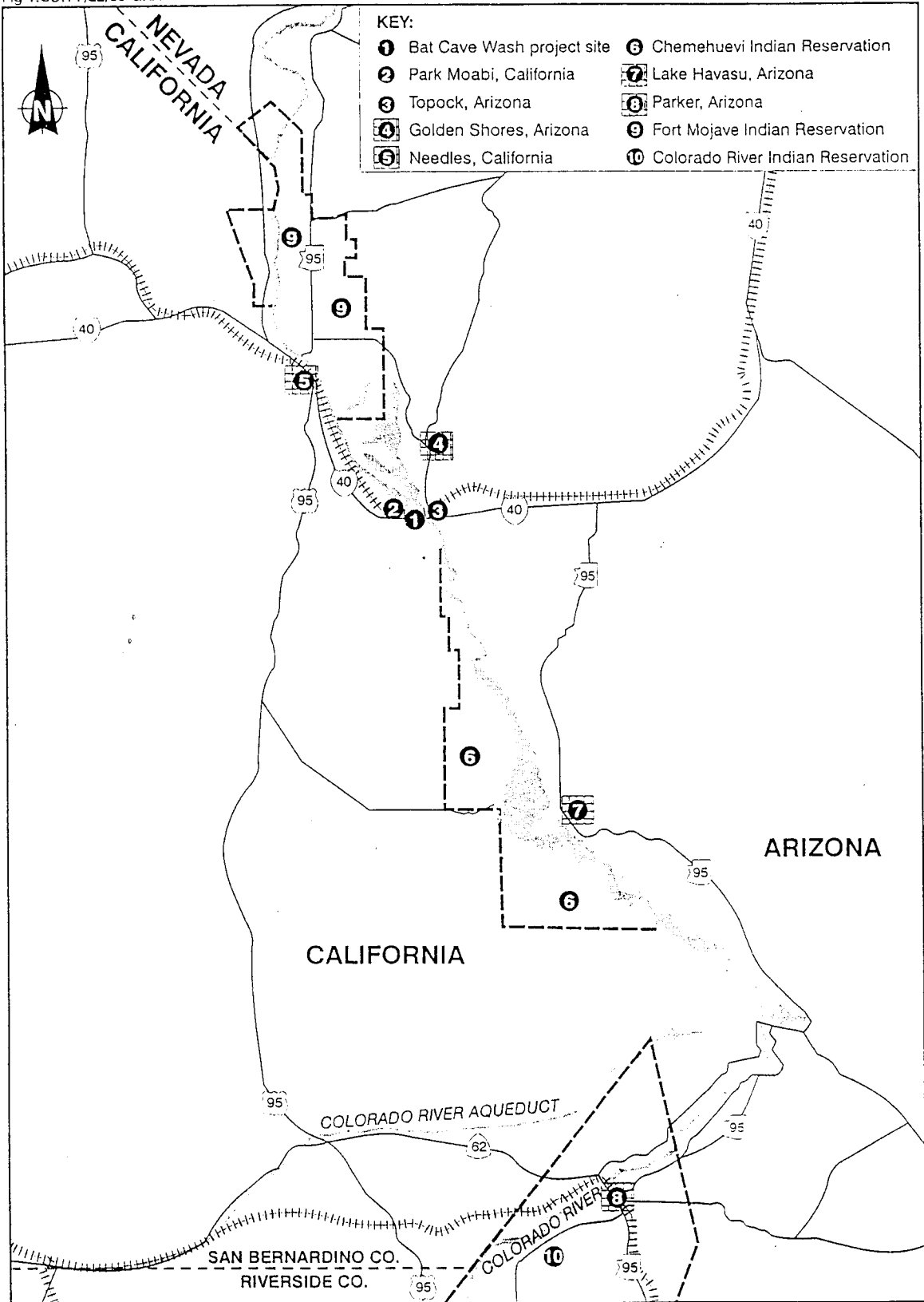
The results of the investigation completed to date indicate that:

- The detected levels of hexavalent chromium in groundwater and soils do not present an immediate threat to human health or the environment.
- In most of the locations, the samples have been non-detect or below the drinking water standard of 0.05 parts per million. The highest level of hexavalent chromium detected in the groundwater was 13 parts per million in one well near the station property. This groundwater is not being used for drinking or any other purpose.

- Hexavalent chromium was not detected in the three monitoring wells installed along the bank of the Colorado River.
- Hexavalent chromium has not been detected in the 36 water samples of the Colorado River collected on different occasions from nine separate locations, and at different water depths.
- Tests to date indicate the groundwater is not reaching the Colorado River.
- Hexavalent chromium in the soil is present in localized areas at or near the compressor station, and does not present an immediate threat to human health and the environment.
- Hexavalent chromium has not been detected in the air based on air samples taken during soil excavation activities.

NEXT COURSE OF ACTION

- DTSC has determined that the normal corrective action process can proceed without implementing Interim Measures at the site.
- In the coming months Pacific Gas and Electric Company will prepare a comprehensive site characterization report, to be submitted to DTSC. Upon review and approval of the site characterization report, DTSC will issue another fact sheet.
- If corrective measures are necessary, the next step in the process will be to conduct a Corrective Measures Study in which various alternatives for clean up will be evaluated. Possible clean-up alternatives might include pumping the groundwater and treating it at the surface; treating the groundwater in place; or a combination of the two approaches.
- Alternatives will be evaluated for effectiveness in protecting the environment, reliability, technical feasibility, cost, community acceptance and other factors. A public notice will be mailed to the public seeking community input before DTSC approves the final clean-up alternative.



SOURCE: Ecology and Environment, Inc. 1997

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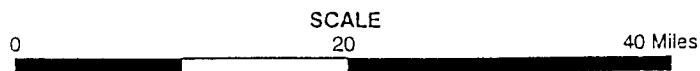


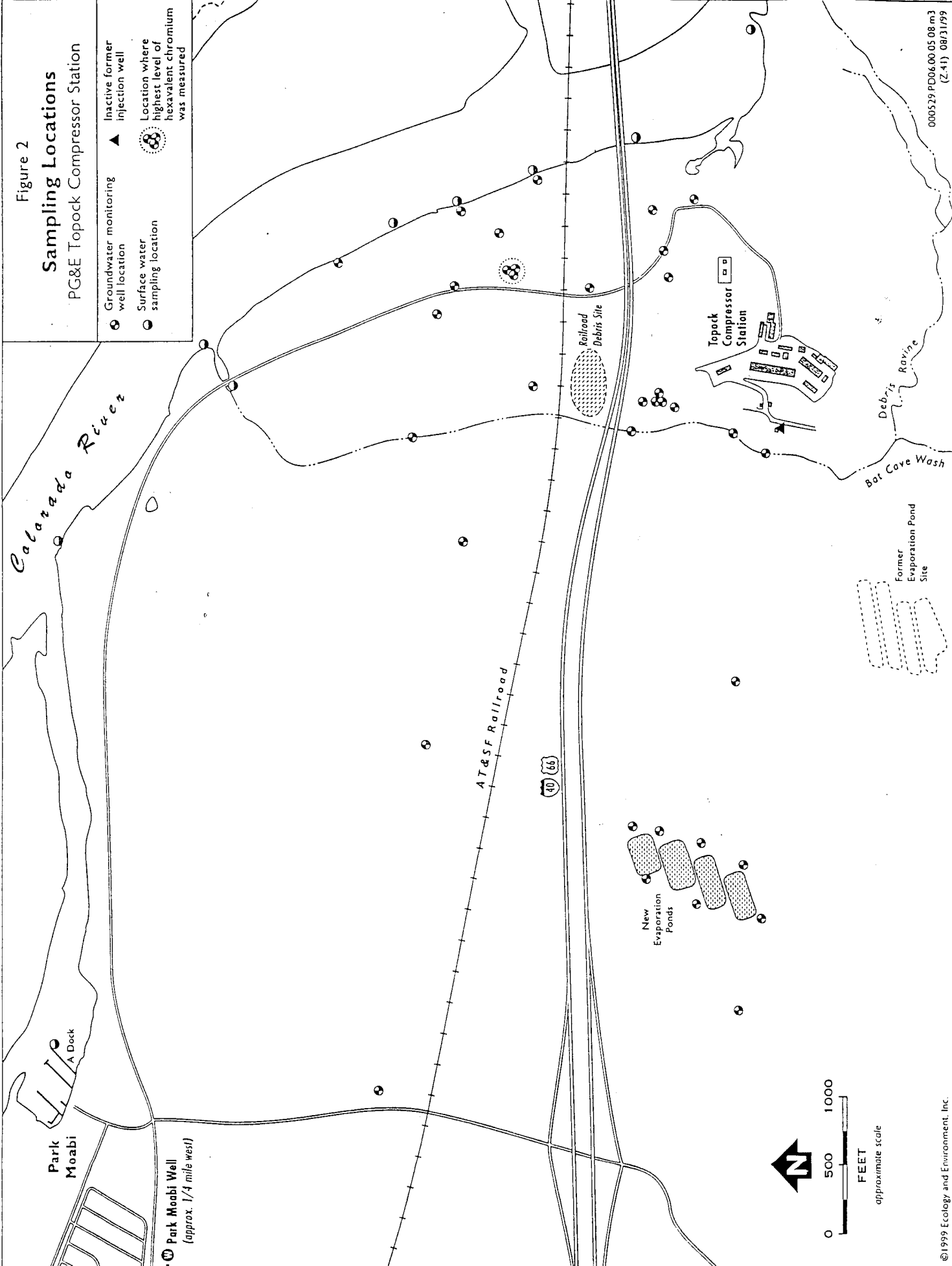
Figure 1 REGIONAL LOCATION AND SURROUNDING COMMUNITIES

Figure 2

Sampling Locations

PG&E Topock Compressor Station

- Groundwater monitoring well location
- Surface water sampling location
- Inactive former injection well
- Location where highest level of hexavalent chromium was measured



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**OPPORTUNITIES FOR
PUBLIC INVOLVEMENT**

DTSC has solicited public input for the project and invites continued public involvement. A Public Participation Plan has been prepared and can be found at any one of the five repositories. DTSC will continue to provide updates to the public through fact sheets and/or letters as needed. If the community expresses greater interest in the project investigation process DTSC will conduct public meetings. If during the course of the investigation DTSC determines that immediate action is required to protect human health and the environment the public will be notified.

FOR ADDITIONAL INFORMATION

If you have questions concerning this project or would like additional information about the Pacific Gas and Electric Company's Topock Compressor Station site, please call the contacts listed below or visit and refer to the documents available at one of the 5 information repositories. Tayseer Mahmoud, DTSC Project Manager at (714) 484-5418, or Martin Prisco, DTSC Public Participation Specialist at (818) 551-2875. The Project Manager for Pacific Gas and Electric Company is Melvin Wong. The project contact at Pacific Gas and Electric Company is Linda Quinones-Vaughan, Public Affairs at (661) 321-4407.

INFORMATION REPOSITORIES

Department of Toxic Substances Control
5796 Corporate Ave, Cypress, CA 90630
Contact: Ms. Julie Johnson, (714) 484-5337
8am - 5pm, Mon - Fri

Golden Shores / Topock Library Station
13136 Golden Shores Pkwy, Topock, AZ 86436
Contact: Ms. Tina O'Hara, (520) 768-2235
2pm - 7pm, Mon; 8am - 1pm, Tues & Thurs

Chemehuevi Valley Indian Reservation
1980 Palo Verde Drive, Havasu Lake, CA 92363
Contact: Mr. Ed White, (760) 858-1116
7:30am - 4pm, Mon - Fri

Lake Havasu City Library
1787 McCulloch Blvd, Lake Havasu City, AZ 86403
Contact: Ms. Sharon Lane, (520) 453-0718
9am - 5pm, Mon, Wed, Fri & Sat; 9am - 8pm Tues & Thurs

Needles Library, 1111 Bailey Avenue, Needles, CA 92363
Contact: Ms. Barbara Degidio, (760) 326-9255
10am - 6pm, Mon - Tues; 10am - 5pm Thurs & Sat; 12pm - 5pm, Fri

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
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