



## Department of the Interior Central Hazardous Materials Fund

# Topock Compressor Station

The Pacific Gas & Electric (PG&E) Topock Compressor Station (Site) is located approximately 15 miles southeast of Needles, California, in San Bernardino County. The compressor sits approximately 1,500 feet from the Colorado River, along the California/Arizona state border. The Site is surrounded by Federal land, including the Fish and Wildlife Service's (FWS) Havasu National Wildlife Refuge, and Bureau of Reclamation (BOR) lands managed by Bureau of Land Management (BLM).

The Topock Compressor Station began operations in 1951, compressing natural gas that is transported via pipeline from the southwestern United States to PG&E's central and northern California service territory. During this process, the gas temperature naturally increases; it is then cooled using cooling towers before it can continue through the pipelines. From 1951 through 1985, PG&E used a chromium-based additive that included hexavalent chromium to prevent corrosion in its cooling towers. From 1951 to 1964, wastewater containing hexavalent chromium was discharged into percolation beds in Bat Cave Wash, a normally dry wash adjacent to the Site. Beginning in 1964, PG&E began treating the wastewater to remove hexavalent chromium and in 1985, PG&E stopped using the chromium-based additive and switched to a phosphate-based solution.

The California Department of Toxic Substances Control (DTSC) is providing oversight for corrective action under state law and federally delegated Resource Conservation and Recovery Act (RCRA) authority, and in accordance with a Corrective Action Consent Agreement entered into between PG&E and DTSC, 1996.



*The PG&E Site is located approximately 15 miles southeast of Needles, California, along the California/Arizona border.*



*The PG&E Compressor Station sits at the foot of the Chemehuevi Mountains approximately 1,500 feet from the Colorado River.*

The Federal Agencies are involved in this matter, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) because hazardous substances have been released that impacted Department managed lands. In July 2005, PG&E and the Department of the Interior (Department) entered into the Administrative Consent Agreement to implement investigations at the site. In 2013, a Consent Decree between PG&E and the United States, on behalf of Department, was entered into. It required the design, construction and operation of the groundwater remedy selected in the 2010 Groundwater Record of Decision. For purposes of this investigation, and cleanup, the Site has been divided into two "operable units"—one addressing chromium contaminated groundwater, and the other addressing potentially contaminated soil.

# REMEDIATION PROCESS

## Groundwater

The investigation of groundwater began in 1997. In the course of the groundwater investigation, PG&E documented an extensive plume of hexavalent chromium, extending from the PG&E facility under Federal lands toward the Colorado River with concentrations of hexavalent chromium concentrations as high as 15,700 parts per billion (ppb). Background concentrations are 32 ppb. Interim Measures were implemented in 2004 to ensure that hexavalent chromium and other contaminants in the groundwater did not reach the Colorado River until a permanent remedy could be implemented. Currently, a pump and treat groundwater system, referred to as IM-3, is in place for hydraulic control and contaminant removal. The final groundwater remedy was selected by DTSC and Department in 2011 and is referred to as “In-situ Treatment with Fresh Water Flushing.” It is anticipated that remedy construction will start in 2017.



*Representatives from local Native American Tribes and Federal agencies visit the Site.*

## Soil

Historical disposal practices associated with Compressor Station operations could have resulted in soil contamination inside and outside the Station boundaries. The soil investigation is being conducted in two phases. The first phase occurred in 2008. The second phase was initiated in 2015 to address subsequent data gaps to ensure that data collected are of sufficient quantity and quality to enable decision making regarding site cleanup. The Remedial Investigation Report, expected in May 2017, will summarize the assessment of the soil on and around the Station and will include an evaluation of the potential risk to human health and the environment. This information will assist decision making regarding the need for soil remediation. Soil investigations at the Site, identified hazardous substances on PG&E property that posed a substantial threat of release onto the Havasu National Wildlife Refuge. In accordance with the Department Action Memorandum, PG&E initiated a removal action at one area in 2010. Over 11,000 cubic yards of

## HISTORICAL AND CULTURAL RESOURCES



*The Colorado River spans 1,440 miles and provides water supply, hydroelectric power, recreation, and resources to the Southwest.*

The Topock Remediation Project Area of Potential Effects (APE) is contained within what Native American Tribes have identified as a larger area of traditional and cultural importance. Nine federally recognized Native American tribes have ancestral ties to the area and have expressed interest in the project: BLM has determined that a Traditional Cultural Property or property of traditional religious and cultural significance that is eligible for listing on the National Register of Historic Places exists in the area of the Topock project. The area contains sensitive cultural resources that are of religious and cultural significance to the tribes, as well as other identified historic areas, including portions of historic Route 66. The Department and bureaus are working together to address historic and cultural issues at the Site.