COMMUNITY Update

The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation and pollution prevention.

Pacific Gas & Electric Company (PG&E) Topock Compressor Station, Environmental Investigation Update

Introduction

The **California Department of Toxic Substances Control (DTSC)** is the lead state agency overseeing the soil and groundwater investigation and cleanup at the Pacific Gas & Electric Company (PG&E) Topock Compressor Station and adjacent land, collectively known as the Topock Site in San Bernardino County, California. This Community Update provides current information about the environmental investigation and cleanup activities at the Topock Site.

Topock Compressor Station and Surrounding Communities

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Final Groundwater Subsequent Environmental Impact Report

The **California Environmental Quality Act (CEQA)** is a state law that requires the lead agency of a project to consider and disclose potential environmental effects of its proposed actions before approving the actions. In May 2015, DTSC announced that a **Draft Subsequent Environmental Impact Report (SEIR)** would be prepared for the groundwater remedy Final Design Report. The purpose of the Draft SEIR is to evaluate potential environmental impacts that could result from implementing the final Remedy Design for the Groundwater **Remediation** Project that were not identified or have substantially changed since DTSC's approval of the conceptual cleanup alternative in the 2011 EIR and the 2013 Addendum to the EIR.

In early January 2017, DTSC published a Notice of Availability of the Draft SEIR for public review and comment. The public notice announced the 47-day public comment period from January 12, 2017 to February 27, 2017. In addition, DTSC hosted two public meetings; held in Needles, California on January 31, 2017 and Golden Shores, AZ on February 1, 2017. During the comment period between January 12, 2017 through February 27, 2017, DTSC received over 300 comments. All comments received were considered in the preparation of the Final SEIR. Responses to all comments are compiled into Volume 1 of the Final SEIR. The Final SEIR for the groundwater remedy was certified and the Final Design was approved on April 24, 2018.

The Final SEIR, Final Design Report, and all supporting documents are available in the Information Repositories (page 5) and on the project website (www.dtsc-topock.com).

Ecological and Biological Update

State and federal agencies require PG&E to adhere to provisions designed to evaluate, survey and address potential biological and ecological adverse impacts. Protection of biological resources such as wildlife, plants and their habitats has been incorporated in investigative and cleanup activities at the Topock Site and addressed in the Final SEIR.

Planning for Groundwater Remedy Construction

With the Final Design approved on April 24, 2018, PG&E has begun the planning for the construction of the final groundwater remedy. PG&E anticipates beginning construction in the second quarter of 2018. At the onset of construction activities, a PG&E Public Information Office will be established at Moabi Regional Park to supplement existing outreach and project communications by providing real time information and answering questions on the project. Upon completion of necessary infrastructures, PG&E will manage the startup, operation, and monitoring of the final groundwater remedy with DTSC oversight.

Until the final groundwater remedy is installed, the interim measures in place since 2005 continues to protect the Colorado River. To date, approximately 8,930 pounds of chromium have been removed from groundwater. After chromium is removed, the cleaned water is then recycled back into the aquifer.

Soil Investigation and Evaluation

Soil sampling related to Soil Investigation field work was conducted between December 2015 and March 2016, January through March 2017, and the later part of April 2017.

Field Work included:

- Collection of over 1,000 soil samples at 364 locations.
- Trenching of 15 locations to evaluate possible contamination.
- Collection of sediment and pore water samples from 10 locations at the edge of the Colorado River by the East Ravine.

Upon completion of the soil investigation field work and evaluation for data gaps, DTSC and the U.S. **Department of the Interior (DOI)** concurred with PG&E to begin the soil risk assessment process following the approved 2008 Soil Risk Assessment Work Plan and its addendum in 2009 and 2015, as well as additional direction from DTSC in November 2017. The risk assessment will provide information about potential human health threats and ecological risks posed by contaminated soil, and assist DTSC in making risk management decision on the need for soil cleanup. The Soil Risk Assessment Report is anticipated to be completed in 2018.

Investigation results and the conclusions of the Soil Risk Assessment Report will be documented in the **Soil Resource Conservation and Recovery Act (RCRA) Facility Investigation/Remedial Investigation (RFI/RI)** Report. The RFI/RI Report for soil is anticipated to be completed in 2019.

View from the Colorado River of the "Topock Gorge"

NOTICE TO HEARING-IMPAIRED INDIVIDUALS: TTY users may use the California Relay Service at 1-800-735-2929 or (711).

Tribal and Stakeholder Communications Continue

Recognizing the importance of the environmental investigations and cleanup activities at the Topock Site to Tribal Nations who have cultural ties to the surrounding land and Colorado River, several focused work groups have been established to foster consultation and to gather input on the project. Federal and state laws provide for communication and consultation with Native American Tribal Governments, stakeholders and the community on this environmental project. Throughout the soil and groundwater investigation and cleanup, these work groups have continued to meet regularly and as needed to discuss project related issues.

Site Background and History

The Station is located in eastern San Bernardino County, about 12 miles southeast of the city of Needles, California, south of Interstate 40, and one-half mile west of the Colorado River.

In 1951, the Station began compressing natural gas for transportation through pipelines to PG&E's service area in central and northern California. As natural gas is compressed at the Station, its temperature increases and must be cooled. From 1951 to 1985, PG&E added chromium to the water used in the cooling towers and other equipment to prevent equipment corrosion. From 1951 to 1964, cooling tower wastewater containing **hexavalent chromium** was discharged into a natural wash adjacent to the Station.

Over time, the hexavalent chromium seeped into the groundwater and created a **groundwater plume** that extends from below the Station towards the Colorado River. Based on results from periodic testing of the river water, the hexavalent chromium plume is not impacting the quality of the river water. In addition, historical operations at the Station have also resulted in contamination in soils located both outside and inside the Station fence line.

In 1996, PG&E entered into a voluntary agreement with DTSC to investigate the nature and extent of contamination at the Topock Site and to clean up any such contamination. In 2005 and 2013, PG&E signed similar agreements with DOI as the federal lead agency to protect lands owned by the federal government.

In 2011, DTSC and DOI selected "In-Situ Treatment with Freshwater Flushing" as the final groundwater remedy for the Topock Site. The concept of the remedy is to install injection and extraction wells along a road approximately 600 feet west of the Colorado River. Nutrients are injected to the contaminated groundwater to stimulate the growth of harmless, but helpful, naturally occurring bacteria. The bacteria then create geochemical conditions that remove hexavalent chromium from groundwater by converting it to non-soluble trivalent chromium. Extraction wells near the river act as a secondary barrier to prevent contamination from reaching the river. Additional injection wells located around the plume inject fresh water and extracted groundwater to push the plume toward the treatment zone.

Workers collect soil samples at Solid Waste Management Unit 1 as part of the soil investigation in January 2017

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Glossary of Terms

California Environmental Quality Act (CEQA): A law mandating review of environmental impact of governmental action. It requires that public agencies evaluate the environmental effects of proposed activities, and that the public be informed and allowed to comment on the project prior to agencies' decision.

Department of the Interior (DOI): The United States department charged with conservation and development of natural resources. The DOI uses sound science to manage and sustain America's lands, water, wildlife, and energy resources, honors our nation's responsibilities to tribal nations, and advocates for America's island communities.

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

Environmental Impact Report (EIR): An informational document that informs decision makers and the public of the significant environmental effect of a project and identifies ways to minimize the significant effects and to identify alternatives to the project.

Groundwater: Water beneath the Earth's surface (aquifers) that flows through soil and rock openings.

Groundwater Plume: A body of contaminated groundwater. The movement of a groundwater plume can be 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.

Hexavalent Chromium: Hexavalent chromium is a form of chromium. Chromium is a metal naturally found in rocks, soil, and the tissue of plants and animals. Hexavalent chromium can be found naturally at low concentrations, but it is also used in industrial products and processes, and is a known carcinogen.

In-Situ Treatment: Technology that treats contaminants in place within the soil or in groundwater. It typically involves injection of a material such as air, gases, chemical or biological reagents, or solid material (e.g., molasses or lactose) to chemically alter the contaminant or to encourage bacteria in the soil to aid in the treatment.

Remediation: Actions taken to remove or contain a toxic release or spill of hazardous substances at a site.

Resource Conservation and Recovery Act (RCRA) Facility Investigation/Remedial Investigation (RFI/RI): An investigation that occurs in the corrective action process following a Facility Assessment under RCRA and/or a Site Inspection under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). It is an in-depth study designed to gather data needed to determine the nature and extent of risks posed by uncontrolled hazardous waste sites and for evaluating potential remedial options.

Subsequent Environmental Impact Report (SEIR): An informational document that provides additional evaluation of new information of substantial importance since the adoption of the project with a previously certified EIR.

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Where to Find Project Information

The Final SEIR, Soil Investigation work plans, Final Design Report, fact sheets/Community Updates, and other project documents can be found at the websites and Information Repositories listed below.

On the Internet: www.dtsc-topock.com or www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=80001836

Needles Branch Library
1111 Bailey Avenue
Needles, CA 92362-3101
(760) 326-9255
Mon – Wed: 11am – 7pm
Thurs: 10am – 6pm
Fri: Closed
Sat: 9am – 5pm

Golden Shores/Topock Shores Library
13136 S. Golden Shores Parkway
Topock, AZ 86436-1356
(928) 768-2235
Mon, Fri, Sun: Closed
Tues, Thurs, Sat: 9am – 1pm
Wed: 2pm – 5pm

Chemehuevi Indian Reservation
Environmental Protection Office
2000 Chemehuevi Trail
Havasu Lake, CA 92363
(760) 858-1140
Mon – Fri: 7:30am – 4pm
Sat and Sun: Closed

Lake Havasu City Library
1770 North McCulloch Boulevard
Lake Havasu City, AZ 86403-6559
(928) 453-0718
Mon and Wed: 9am – 6pm
Tues and Thurs: 9am – 8pm
Fri and Sat: 9am – 5pm
Sun: Closed

Colorado River Indian Tribes Library
26600 Mohave Road
Parker, AZ 85344
(928) 669-1332
Mon – Fri: 8am – 5pm
Sat: 9am – 1pm
Sun: Closed

Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4732
(714) 484-5337
Mon – Fri: 9am – 12pm, 1pm – 4pm
Please contact Ms. Julie Johnson at the above number to make an appointment.

Alternate Format:
Documents made available to the public by DTSC may be made available in an alternative format (Braille, large format print, etc.) or in another language as appropriate, in accordance with state and federal law. Please contact Phil McPhaul, DTSC Public Participation Specialist, for assistance with alternative formats.

Whom to Contact at DTSC for Information

If you have any questions about the Project, please contact the following DTSC staff:

Aaron Yue, Project Manager
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4732
E-mail: Aaron.Yue@dtsc.ca.gov
(714) 484-5439

Phil McPhaul, Public Participation Specialist
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4732
E-mail: Philip.McPhaul@dtsc.ca.gov
(714) 484-5488

Media Inquiries
Russ Edmondson, Public Information Officer
Department of Toxic Substances Control
P.O. Box 806
Sacramento, CA 95812-0806
E-mail: Russ.Edmondson@dtsc.ca.gov
(916) 323-3372

Notice to Hearing-Impaired Individuals
TYY users may use the California Relay Service at 711 in state or 1-800-855-7100 outside California.

For more information about our department, please visit our website at www.dtsc.ca.gov.

COMMUNITY Update

Phil McPhaul
DTSC Public Participation Specialist
5796 Corporate Avenue
Cypress, CA 90630-4732