

# Topock Review

R e m e d i a t i o n

May 2011 Issue 5

## Alternative E: In-Situ Treatment with Freshwater Flushing Selected as the Groundwater Remedy for the PG&E Topock Site Remedy Implementation Work Plan Under Preparation

On January 20, 2011, the **Department of the Interior (DOI)**, on behalf of the US Fish and Wildlife Services (USFWS), the Bureau of Land Management (BLM), and the Bureau of Reclamation (Reclamation), selected *Alternative E: In-Situ Treatment with Freshwater Flushing as the Groundwater Remedy* for the Topock site.

On January 31, 2011, the **California Department of Toxic Substances Control (DTSC)** certified the Environmental Impact Report (EIR) and adopted *Alternative E: In-Situ Treatment with Freshwater Flushing as the Groundwater Remedy* for the Topock site.

### TOPOCK TICKER:

Mark your calendar for these important dates.

**April 28** – Plant Uptake Follow-up Meeting, BLM, Needles, CA

**April 29** – AOC 4 Lessons Learned Meeting, BLM Needles, CA

**Mid-May** – 3rd Meeting on CHPMP, TBD

**May 18-19** – TLP Meeting, MWD Gene Camp, Parker, AZ

**June 15** – CWG Meeting, Henderson, NV

### FOR MORE INFO:

Visit DTSC's Topock Project Website: [www.dtsc-topock.com](http://www.dtsc-topock.com)

### UPCOMING REPORTS:

**Draft Corrective Measure Implementation/Remedial Design Work Plan** – May 2

**Draft Soil RCRA Facility Investigation/Remedial Investigation Work Plan** – May 6

**Draft Cultural Historic Property Management Plan** - September

THE TOPOCK REMEDIATION REVIEW is dedicated to enhancing stakeholder understanding of technical and regulatory information, encouraging participation in decision making forums, and fostering timely and effective project management and decisions for the Topock Compressor Station project final remedy.



DEPARTMENT OF TOXIC SUBSTANCES CONTROL



### THE SELECTED GROUNDWATER REMEDY INCLUDES:

- ✓ An In-Situ Reactive Zone (IRZ) along National Trails Highway using a line of wells that may be used as both injection and extraction wells to circulate groundwater and distribute an organic carbon source to promote conditions that bring about the reduction of hexavalent chromium to trivalent chromium.
- ✓ Flushing using a combination of fresh water injections and injections of carbon amended water in wells upgradient of the plume.
- ✓ Extraction wells near the Colorado River to provide hydraulic capture of the plume, accelerate cleanup of the floodplain, and enhance the flow of contaminated groundwater through the IRZ line.
- ✓ Bedrock extraction wells in the eastern (downgradient) end of the East Ravine area to provide hydraulic capture of contaminated groundwater in bedrock. Extracted water will be treated and managed using the same active treatment system that will be used to and manage contaminated groundwater extracted from the alluvial aquifer.
- ✓ Institutional Controls to restrict surface land uses and prevent the use of groundwater.
- ✓ Monitored Natural Attenuation as a long term component to address residual hexavalent chromium that may remain in recalcitrant portions of the aquifer after in-situ treatment.

## Corrective Measure Implementation/Remedial Design Work Plan Under Preparation

Upon selection of the Groundwater Remedy, DTSC directed PG&E to prepare a *Corrective Measure Implementation/Remedial Design (CMI/RD) Work Plan*, which lays out the framework for implementing the Groundwater Remedy. A draft of the work plan will be submitted for stakeholders and tribes review and comment on May 2, 2011. **The 30-day comment period runs through June 4, 2011.** Project schedule and implementation milestones are highlighted on the back page and to the right respectively.

### GENERAL IMPLEMENTATION TIMELINE

#### Approval of CMI/RD Work Plan

- August 2011 (after Tribal review)

#### Approval of Final Design

- September 2012 (after Tribal review)

#### Approval of Remedial Action Work Plan

- September 2012 (after Tribal review)

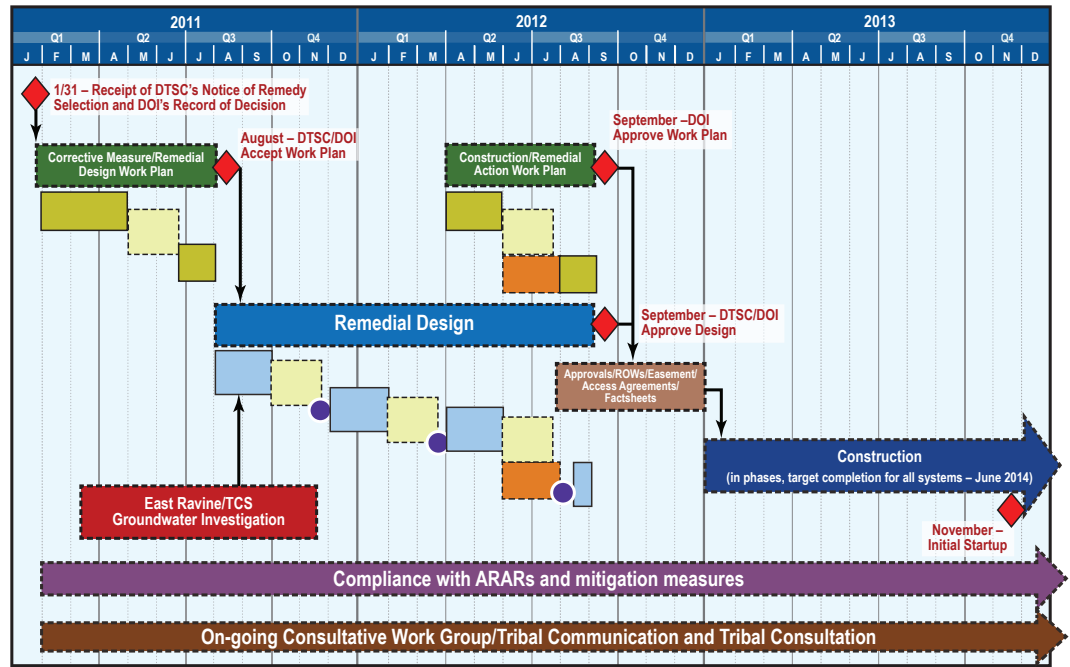
#### Start of Construction

- January 2013

#### Initial Startup

- November 2013

# Topock Remediation Project Design and Construction Schedule for 2011-2013



LEGEND

- Draft/Final Work Plan
- Agencies/CWG/TWG/Tribes Review
- Preliminary/Intermediate/Final/Revised Final Design
- Tribal Consultation
- Comment Resolution

## 2013

- Start Soil Risk Assessment
- Complete RFI/RI Volume 3 Report
- Initial startup of Groundwater Remedy
- Start construction of Groundwater Remedy

## 2012

- Start RFI/RI Volume 3 Report
- Obtain approvals/agreements to implement the Groundwater Remedy
- Complete Remedial Design

## 2011

- Start Soil Field Implementation
- Approve Soil RFI/RI Work Plan
- Complete East Ravine-Topock Groundwater Compressor Station Investigation
- Start Remedial Design
- Approve CMI/RD Work Plan
- Selected Groundwater Remedy

## Federal Section 106 Compliance Update

The Programmatic Agreement for the Topock Remediation Project was completed on October 26, 2010.

On March 18, 2011, BLM held a kick-off meeting for the development of the Cultural Historic Property Management Program (CHPMP) that specifies how cultural and historic properties within the Area of Potential Effect (APE) will be treated during project implementation. The CHPMP is due one year after signing of the Record of Decision (i.e., by January 20, 2012). BLM is anticipating a Draft CHPMP by September 2011.

### SOIL RFI/RI WORK PLAN TIMELINE

#### Submit Draft Work Plan

- May 6

#### Stakeholders Review

- May 11 – June 22

#### Tribal Consultation

- May 11 – July 5

#### Submit Response to Comments (RTCs)

- August 5

#### Agencies review/accept RTCs

- August 8 – September 2

#### Agencies approve Work Plan

- September 5

## Soil RCRA Facility Investigation/ Remedial Investigation (RFI/RI) Work Plan Under Preparation

On January 4, 2011, the agencies directed PG&E to combine Soil Part A (outside the fence line) and Soil Part B (inside the fence line) into one unified Soil Work Plan. The Draft Soil Work Plan will be submitted for review and comment on May 6, 2011. The timeline associated with the Soil RFI/RI Work Plan is on the left. Field work is planned to start in October 2011.

### QUESTIONS REGARDING THIS NEWSLETTER OR THE TOPOCK PROJECT SHOULD BE DIRECTED TO:

**Aaron Yue**  
DTSC Project Manager  
Phone: (714) 484-5439  
Email: [ayue@dtsc.ca.gov](mailto:ayue@dtsc.ca.gov)

**Pamela Innis**  
DOI Topock Remedial Project Manager  
Phone: (303) 445-2502  
Email: [pamela.innis@ios.doi.gov](mailto:pamela.innis@ios.doi.gov)