

# **Charnock (Santa Monica) MTBE Project Update October 2002**

**Steven C. Linder, P.E.**

**EPA Region 9**

**415-972-3369**

**[linder.steven@epa.gov](mailto:linder.steven@epa.gov)**

# Santa Monica Charnock Update

- How liability and litigation issues have effected EPA's actions related to the project.
- Lessons learned from remediation efforts.
- EPA's proposed cleanup order and PRP reactions
- Tentative settlement between the City of Santa Monica and ChevronTexaco and ExxonMobil
- What's Next?

# Background – Brief Chronology

- Aug 95 – Discovery of MTBE at Wells
- Oct 96 – All wells shut down
- Mar 97 – EPA begins enforcement
- Mid 97 – Shell/Chevron/Exxon reach temporary settlement with City of Santa Monica
- Jun 98 – Agencies identify 24 sources of MTBE pollution and call for Consent Decree
- Feb 99 – Major liability dispute begins amongst major PRPs due to Shell's failure to sign agreement which they co-authored.
- Sep 99 – After protracted negotiations without success, and because PRPs did not renew settlement with City, Agencies issue water replacement order to Shell

## Background – Brief Chronology (cont.)

- Dec 99 – Temporary Settlement with City ends – City Council outraged
- Mar 00 - Agencies proposed AOC for regional investigation and feasibility study
- Mar 00 – Chevron sues Shell
- Jun 00 – City of Santa Monica sues PRPs\*
- Nov 00 – Agencies enters into AOC with Shell
- Jan 01 – SoCal Water sues City of Santa Monica and PRPs\*\*
- Apr 01 – Chevron vs. Shell decided – Shell prevails
- Nov 01 – Regional investigation and feasibility study complete

## Background – Brief Chronology (cont.)

- Mar 02 – EPA sends out scope for regional cleanup and additional investigation for stakeholder comment
- Jul 02 – Issuance of UAO by EPA for regional cleanup planned
- Jul 02 – City of Santa Monica announces its settlement with ChevronTexaco and ExxonMobil
- Aug 02 – Shell begins to realize that City's settlement may affect issuance of regional order
- Current – Shell has been meeting with EPA to try to persuade us to issue regional order or take other actions to control regional cleanup

# Background – Tahoe MTBE Litigation

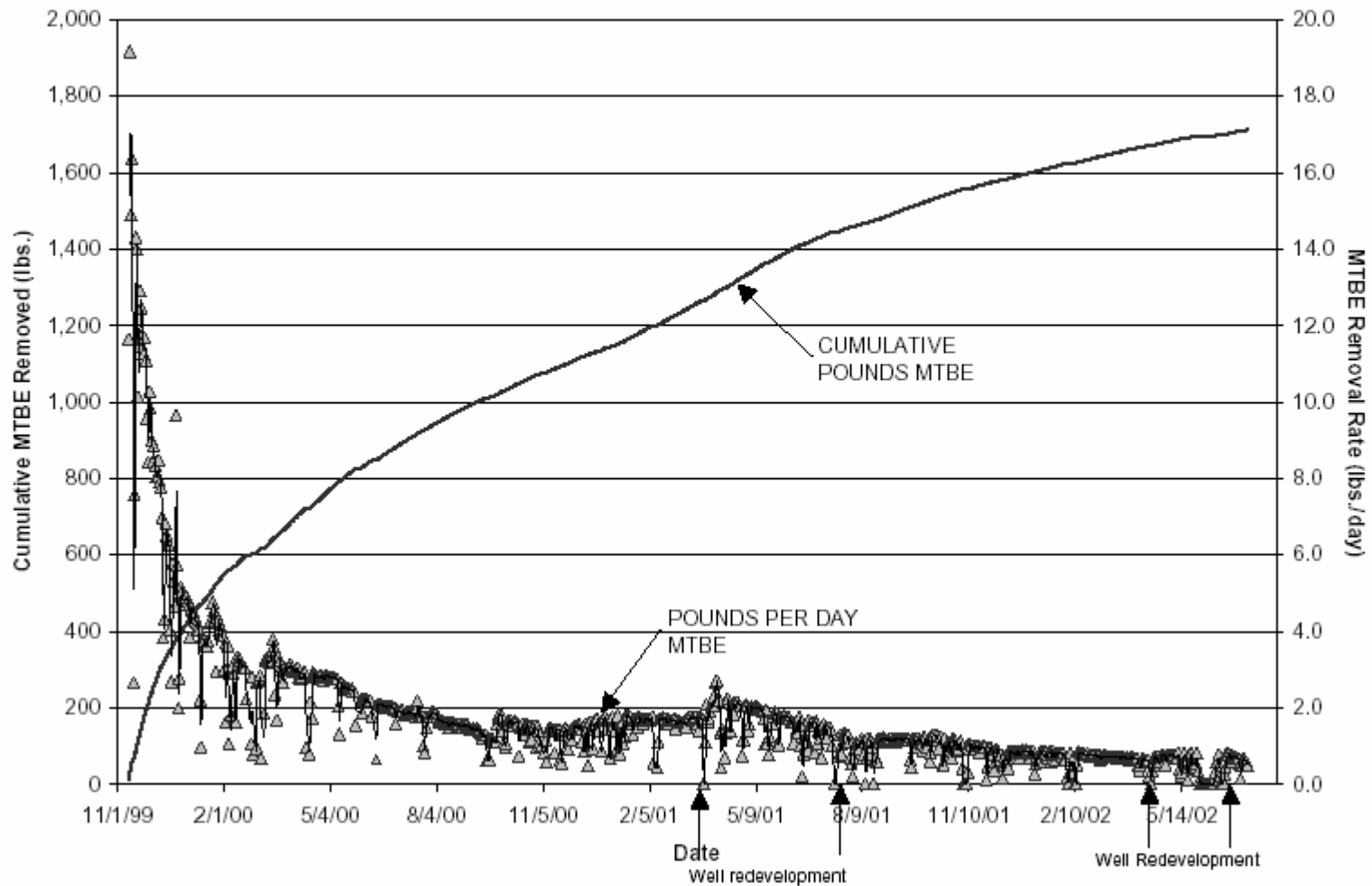
- Nov 1998- Tahoe sues gas stations and MTBE producers
- April 2002 – Jury finds Shell and Lyondell acted with malice due to their knowledge of MTBE risks
- July 2002 – Remainder of major defendants settle ending 10 month marathon trial – settlement total approximately **\$69 Million!**

# Background – MTBE Remediation Experiences

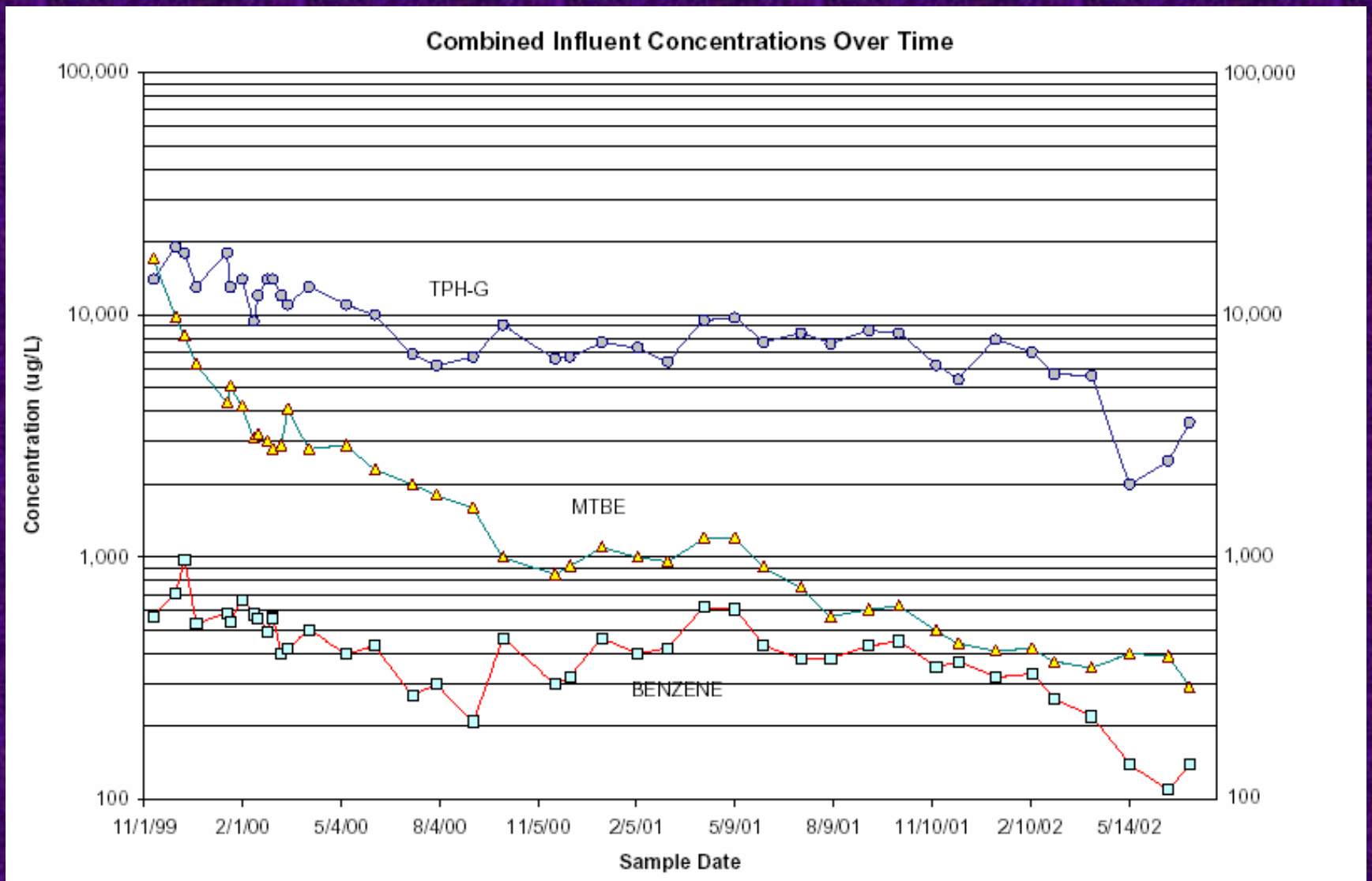
- Arcadia Remediation and Wellhead Treatment
- Tahoe USA Petroleum Site
- Santa Monica Charnock Venice and Sepulveda Intersection Area

# Tuller Remediation

## MTBE Mass Removal Over Time



# Tuller Remediation



# EPA's Proposed Cleanup Plan

- Incrementally ramping up regional remediation to approximately 1000 gpm within ~ 18 months
- Construction of engineered extraction wells
- Evaluation of the use of Horizontal Extraction Wells
- Additional Monitoring
- Determination of degree of drinking water wellhead treatment needed at a later point in time
- Approximate cost of our plan - \$25 Million  $\pm$  \$10 Million



# City of Santa Monica's Settlement Remedy

- No focused remediation – treatment of drinking water ultimately leading to restoration of groundwater quality.
- 7000 gpm (11,000 acre-ft/yr) Treatment Plant
- Reduction of MTBE and TBA to below regulatory standards.
- Assumed influent of 300 ug/l for MTBE and 30 ug/l for TBA.
- Construction of system at City's water facility on Bundy near Wilshire.
- Piping all water to facility for treatment.
- Approximate cost as estimated by City - \$200 Million

# Other Aspects of City's Tentative Settlement

- \$30 Million Cash (to use by City for Anything) from Chevron and Exxon.
- Invites four (4) other major parties to join (\$25 Million additional do anything with cash).
- 29 de minimus parties identified.
- Shell NOT INVITED to join.
- Settlement guarantees construction of treatment plant.
- City agrees to use best efforts to obtain maximum recovery from non-settling defendants.
- Portion of settlements rebate back to remedy costs (a.k.a. Mary Carter Agreement).

# Reactions to City's Tentative Settlement

- Shell's Reaction
- EPA's Reaction
- EPA's Future Options

# Charnock – Work Continues on Source Remediation and Investigation



Drilling in a Taqueria



Drilling between Houses

# Future of MTBE in California

