

Water Quality Report Card		Petroleum Releases from the Mission Valley Terminal	
Regional Water Board:	San Diego, Region 9	STATUS	<input checked="" type="checkbox"/> Conditions Improving <input type="checkbox"/> Data Inconclusive <input type="checkbox"/> Improvement Needed <input type="checkbox"/> Targets Achieved/Water Body Delisted
Beneficial Uses Affected:	MUN		
Implemented Through:	CAO		
Effective Date:	1992 (CAO)	Pollutant Type:	<input checked="" type="checkbox"/> Point Source <input type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy
Attainment Date:	2015 (Off-Terminal Area)	Pollutant Source:	Aboveground Storage Tank Facility      Petroleum

### Water Quality Improvement Strategy

The [Mission Valley Terminal \(MVT\)](#) is a 67-acre petroleum fuel storage and distribution facility in the City of San Diego adjacent to Murphy Canyon Creek, a tributary to the San Diego River. Historical releases of petroleum liquids from petroleum storage and distribution operations at the MVT have contaminated soil and groundwater onsite (known as the on-terminal area) and offsite (known as the off-terminal area). These petroleum releases may potentially impact the water quality of Murphy Canyon Creek and the San Diego River. Pollutants of concern in the soil and groundwater, in the on- and off-terminal areas, include benzene, toluene, ethylbenzene, xylene, methyl-tertiary butyl ether (MTBE), and tributyl alcohol (TBA). The Regional Water Board issued a [Cleanup and Abatement Order \(CAO\)](#) in 1992 after petroleum constituents were discovered in monitoring wells. Subsequent investigations indicated that the contaminated groundwater plume extended approximately 4,900 feet to the south of the MVT. In 2005, Kinder Morgan Energy Partners (discharger) implemented a remediation strategy in the off-terminal area that includes hydraulic containment at the on-terminal property boundary, groundwater and soil vapor extraction (SVE), and soil excavation. In 2015, the discharger demonstrated that the off-terminal area cleanup effort had achieved desired [alternative cleanup levels for the area](#). The same remediation strategy is being used for the on-terminal area cleanup. The Regional Water Board is currently completing Addendum No. 8 to the CAO that sets a date of January 21, 2024 to complete cleanup of the on-terminal area.

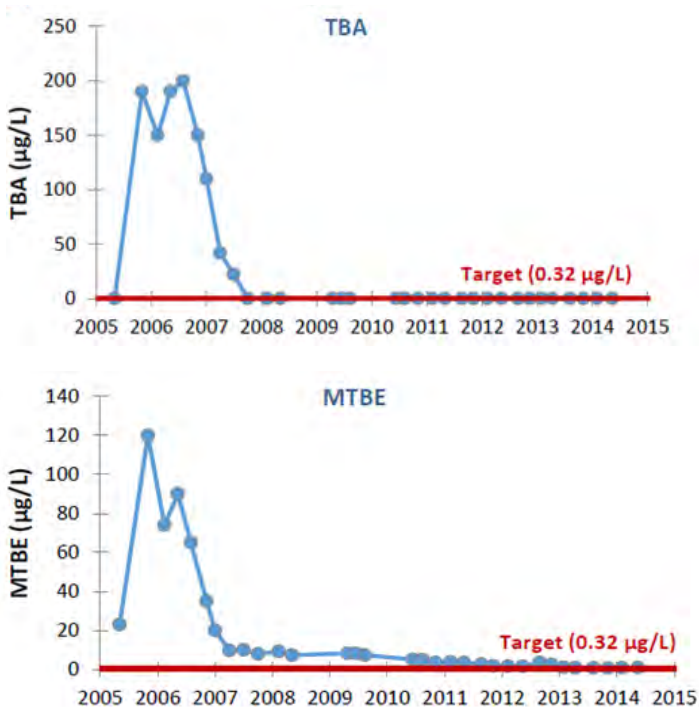
### Mission Valley Terminal



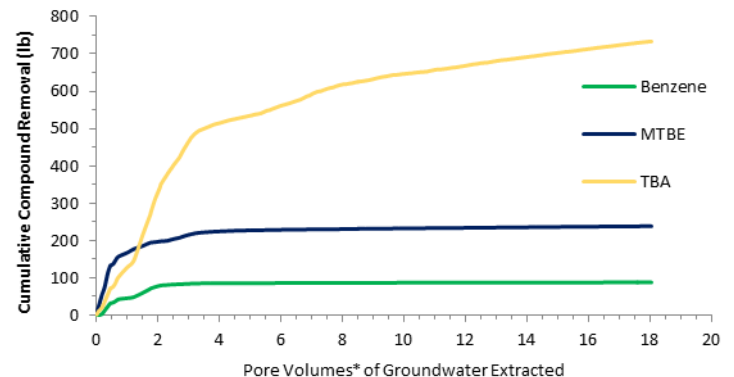
### Water Quality Outcomes

- Off-terminal area cleanup actions have removed over 1.6 million pounds of petroleum from soil and groundwater.
- The rise and sharp decline seen in the concentration graphs for TBA and MTBE is due to the startup and subsequent expansion of the remediation system.
- The cleanup levels in groundwater in the off-terminal area was achieved by October 2015.

### TBA and MTBE Concentrations in the Off-Terminal Area



### Cumulative Benzene, MTBE, and TBA Mass Removed in the Off-Terminal Area (2005—2015)<sup>a</sup>



<sup>a</sup>Data source: [Remedial Compliance Evaluation, January 30, 2015](#). Based on pore volume (\*the ratio of a porous material's air volume to a porous materials total volume) of fourth quarter 2005 distal TBA plume. Mass removal measured since February 2003.