

Groundwater Quality Report Card	
Regional Water Board:	San Diego, Region 9
Beneficial Uses Affected:	MUN, AGR, IND, PROC
Implemented Through:	CAO
Site Assessment Complete:	2009
Corrective Action Began:	1992
Verification Monitoring Began:	2014

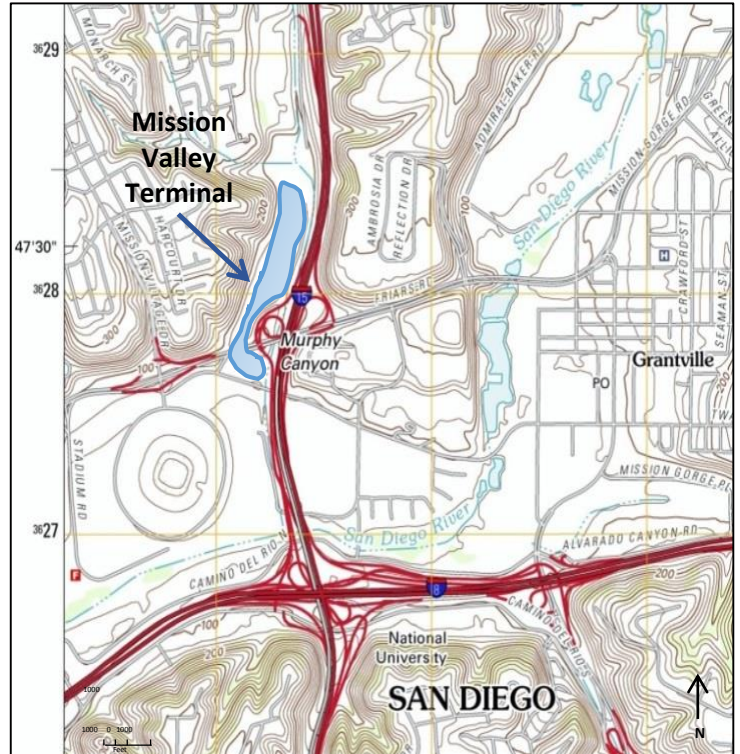
Petroleum Hydrocarbon in Mission Valley Terminal	
STATUS	<input checked="" type="checkbox"/> Conditions Improving
	<input type="checkbox"/> Data Inconclusive
	<input type="checkbox"/> Improvement Needed
	<input type="checkbox"/> Targets Achieved/No Further Action Needed
Media Type:	<input type="checkbox"/> Aquatic Sediment <input checked="" type="checkbox"/> Groundwater
	<input checked="" type="checkbox"/> Sediment <input type="checkbox"/> Surface Water

Water Quality Improvement Strategy

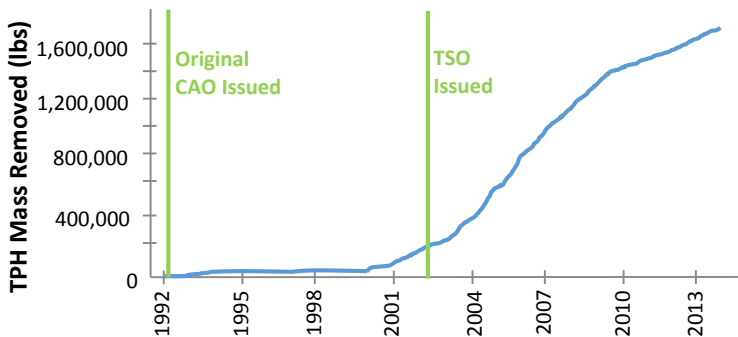


Mission Valley Terminal (MVT) is a 67-acre petroleum fuel distribution facility in San Diego, California. Located adjacent to Murphy Canyon Creek, a tributary to the San Diego River, historical accidental releases of petroleum liquids from the fuel supply operations at MVT have contaminated soil and groundwater on- and off-site. Pollutants of concern include dissolved phase total petroleum hydrocarbons (TPH; found in crude oil) and light non-aqueous phase liquid (LNAPL; contaminants, such as gasoline, that are not soluble in water and have lower densities than water). Initial site characterization of MVT began in 1991. In 1992, Region 9 issued a [Cleanup and Abatement Order \(CAO\)](#) (amended in [2005](#), [2010](#), and [2011](#)) after LNAPL was discovered in monitoring wells. Subsequent investigations indicated that the groundwater plume, as defined by concentrations of TPH constituents (including methyl-tertiary butyl ether [MTBE] and tributyl alcohol [TBA]), extended approximately 4,900 feet to the south, including beneath much of the Qualcomm Stadium property. In 2002, a [Time Schedule Order \(TSO\)](#) was issued to compel dischargers to complete their investigation, and propose an effective remediation strategy.

Mission Valley Terminal, San Diego



Cummulative TPH Mass Removed From MVT Site

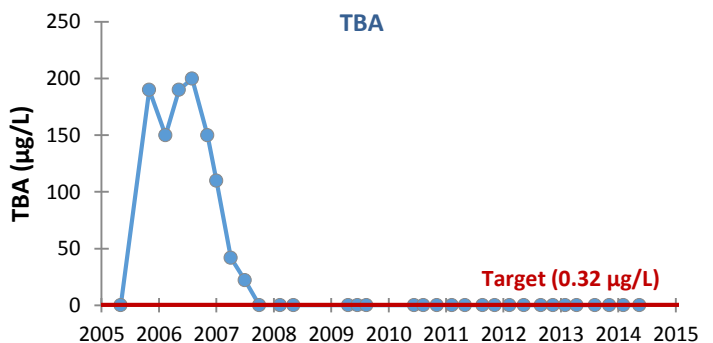
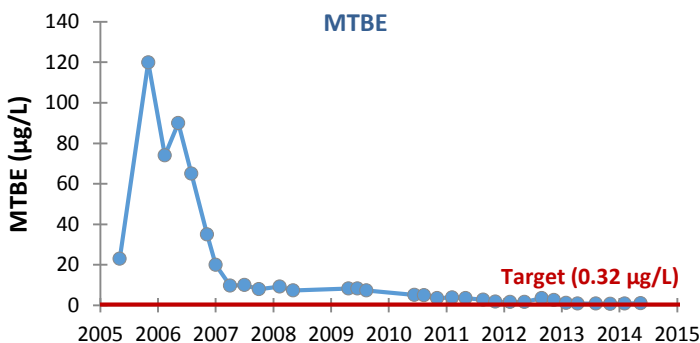


Data source: [Vadose Zone Monitoring and Remedial Progress Report, Fourth Quarter of 2013](#). 30 January 2014.

Water Quality Outcomes

- Off-site Corrective actions have removed more than 1,600,000 lbs. of TPH from soil and groundwater.
- LNAPL has been removed in primary off-site locations; the CAO is still in effect until the discharger demonstrates that cleanup objectives have been achieved.
- Monitoring data demonstrate the frequency and magnitude of off-site MTBE and TBA detections have decreased over time.
- Off-site verification monitoring began in 2014. Verification monitoring will be used to determine compliance with CAO directives, or if additional corrective actions are necessary.

Off-Site Groundwater Quality (Remediation Well RW-8)^a



^a Monitoring data for Remediation Well RW-8, and other monitoring wells on the MVT site, are available at [GeoTracker](#)

Groundwater Quality Report Card Glossary

Site Assessment Complete

This phase includes understanding the nature of substances that have been released into the environment and their horizontal and vertical location in the soils and groundwaters. These are identified through data collection and analysis. This information can then be used to evaluate appropriate cleanup methods and propose a cleanup strategy.

Corrective Action Began

Appropriate cleanup activities identified as a result of the site assessment are started. Continued sample collection and analysis during this period documents the effectiveness of cleanup activities, and demonstrates when target cleanup goals have been achieved.

Verification Monitoring

This is a period of continued sample collection and analysis that is necessary to ensure that cleanup levels are maintained under normal conditions over time, once cleanup activities have been halted.

Media Type

Aquatic Sediment

Solid materials that settle to the bottom of a water body. The minerals and organic matter that make up soils are some examples of solid materials. Water bodies may include streams, lakes, reservoirs, and oceans.

Groundwater

Water found in the subsurface that forms a saturated zone.

Sediment

Solid materials, such as soil, that are moved and deposited in a new location.

Surface Water

Liquid water that collects and/or flows on the ground surface.