



State Water Resources Control Board

UNDERGROUND STORAGE TANK (UST) CASE CLOSURE SUMMARY

Agency Information

Agency Name: Santa Ana Regional Water Quality Control Board (Santa Ana Water Board)	Address: 3737 Main Street, Suite 500 Riverside, CA 92501-3348
Agency Caseworker: Miguel Oviedo	Case No.: 083602283T

Case Information

UST Cleanup Fund (Fund) Claim No.: 12126	Global ID: T0607100283
Site Name: Big Bear Marina	Site Address: 500 Paine Road Big Bear Lake, CA 92315
Responsible Party Big Bear Municipal Water District Attention: Mike Stephenson	Address: P.O. Box 2863 Big Bear Lake, CA 92315
Fund Expenditures to Date: \$897,120	Number of Years Case Open: 30

[GeoTracker Case Record](http://geotracker.waterboards.ca.gov/?gid=T0607100283) : <http://geotracker.waterboards.ca.gov/?gid=T0607100283>

Summary

The Low-Threat Underground Storage Tank Case Closure Policy (Policy) contains general and media-specific criteria, and cases that meet those criteria are appropriate for closure pursuant to the Policy because they pose a low threat to human health, safety, and the environment. The Site meets all of the required criteria of the Policy and therefore, is subject to closure.

The Site is a commercial petroleum fueling and dock facility, located less than 200 feet from Big Bear Lake. An unauthorized release was reported in May 1993 following the removal of three gasoline USTs. During UST removal activities, approximately 250 cubic yards of impacted soil were removed and disposed of offsite. Enhanced bioremediation by nutrient injection was conducted at the Site during 2000 and approximately 1,350 cubic yards of impacted soil were excavated to a depth of 14 feet and disposed offsite from May 1993 through June 2014. Groundwater extraction was

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

Big Bear Marina, T0607100283
500 Paine Road, Big Bear Lake

conducted from May 1994 through April 2017, from June 2019 to October 2019, and from June 2020 to February 2022, removing a reported total of 64,629 gallons of groundwater.

Since 1993, fourteen groundwater monitoring wells have been installed, eight destroyed, and the remaining six wells are regularly monitored. No free product has been documented at the site and the petroleum release is limited to the soil and shallow groundwater. The remaining petroleum hydrocarbon plume is stable and less than 100 feet in length. The affected groundwater is not currently being used as a source of drinking water. Concentrations of petroleum hydrocarbons were not detected in water samples LW-1 or LW-2 from Big Bear Lake during September 2022.

Remaining petroleum constituents are limited, stable, and decreasing. Additional assessment would be unnecessary and will not likely change the conceptual model. Any remaining petroleum constituents do not pose significant risk to human health, safety, or the environment under current conditions.

Rationale for Closure Under the Policy

- General Criteria – Site **MEETS ALL EIGHT GENERAL CRITERIA** under the Policy.
- Groundwater Media Specific Criteria – Site meets the criteria in **Class 5**. The regulatory agency determines, based on an analysis of Site-specific conditions that under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health, safety, and to the environment and water quality objectives will be achieved within a reasonable time frame.
- Petroleum Vapor Intrusion to Indoor Air – Site meets **Criteria 2 (a), Scenario 4**. The concentrations of benzene, ethylbenzene, and naphthalene in soil gas are less than the Policy limits as it applies to the bioattenuation zone, land use, and existing or planned future building structures at the Site.
- Direct Contact and Outdoor Air Exposure – Site meets **Criteria 3 (a)**. Maximum concentrations of petroleum constituents in soil from confirmation soil samples are less than or equal to those listed in Table 1 of the Policy.

Big Bear Marina, T0607100283
500 Paine Road, Big Bear Lake

Recommendation for Closure

The corrective action performed at this Site ensures the protection of human health, safety, and the environment. The corrective action performed at this Site is consistent with chapter 6.7 of division 20 of the Health and Safety Code, implementing regulations, applicable state policies for water quality control and applicable water quality control plans. Case closure is recommended.

Reviewed By:



Dayna Cordano, P.G. No. 9694
Senior Engineering Geologist

08/03/2023

Date

