

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF FEBRUARY 2, 2012

Prepared January 11, 2012

ITEM NUMBER: 12

SUBJECT: Recommended Closures

Background:

This staff report provides summaries of recommended case closures for one Underground Storage Tank (UST) site. For this site, soil and/or groundwater beneath the site has not attained water quality or soil cleanup goals for one or more constituents. Staff's closure recommendation is premised on the knowledge that: 1) the remaining constituent concentrations are sufficiently low so as to not pose a threat to surrounding existing beneficial uses of the water (e.g., supply wells, surface waters, etc.); 2) the constituent sources have been removed; 3) monitoring has indicated that the groundwater plumes are contracting in size and concentration; and 4) continued monitoring at these sites would not provide additional benefit for the staff resources invested. These sites are appropriate for closure, based on the site-specific information provided below for each of these cases.

UNDERGROUND STORAGE TANK CASE CLOSURES

Burns' Property, 553 Munras Avenue, Monterey, Monterey County
[Wei Liu 805/542-4648]

Central Coast Water Board staff recommends closure of this UST case where groundwater sample results indicate benzene and methyl tertiary butyl ether (MTBE) contamination remains in groundwater at concentrations slightly greater than the Central Coast Water Board's cleanup goal. The first 2011 semi-annual groundwater monitoring results show benzene at 1.9 micrograms per liter ($\mu\text{g/L}$) in one on-site monitoring well. MTBE is present at concentrations above cleanup goals in three on-site wells with a highest concentration of 49 $\mu\text{g/L}$ (see Figure 1). The Water Board's cleanup goals for benzene and MTBE are 1 $\mu\text{g/L}$ and 5 $\mu\text{g/L}$, respectively. Other petroleum hydrocarbon constituents, including total petroleum hydrocarbons as gasoline (TPH-g), benzene, and other oxygenate fuel additives were either not detected or were detected at concentrations below their respective cleanup goals.

The site was operated by the previous owners/operators as a retail service station from prior to 1955 until 1996. The current owner/responsible party is Mr. Tom Burns. In October 1996, two on-site USTs and pump islands were excavated and removed from the site. The site was subsequently used as an automotive repair facility until 2008 when all site buildings were demolished and three additional USTs were excavated and removed. Approximately 360 cubic yards of contaminated soil were also removed from the site in July and August 2008. Currently, the site is vacant. Consultants conducted groundwater extraction and treatment at the site between 2006 and 2008. A total of 21,125 gallons of polluted groundwater was extracted, treated, and discharged to the sanitary sewer. Approximately 20 gallons of petroleum hydrocarbons were removed from groundwater beneath the site during the groundwater extraction activities. During the course of the post-remediation confirmation monitoring, hydrocarbon concentrations have declined to below or near their

respective cleanup goals, and concentrations slightly exceeding the cleanup goals are limited to a small area on-site.

Monterey Bay is located approximately 2,000 feet north of the site. The groundwater flow direction around the site is primarily to the north with groundwater depths ranging from approximately 3 to 8 feet below ground surface. The closest water well is approximately 900 feet west-southwest of the site. The MTBE plume is not expected to impact Monterey Bay or the water well because of their respective distances from the site, low residual contaminant concentration, and the localized extent of the contamination.

Central Coast Water Board staff recommends closure of this case based on the following:

1. The contaminant source and mass were removed by UST removals and soil excavation;
2. The extent of the residual MTBE plume has been fully delineated. The plume is localized in a small area in the vicinity of wells MW-2 and MW-3, and the detected maximum concentrations of 1.9 µg/L benzene and 49 µg/L MTBE are slightly above the respective cleanup goals of 1 µg/L and 5 µg/L, respectively;
3. Groundwater data indicate that on-site remediation was effective and has significantly reduced concentrations of pollutants in groundwater. Central Coast Water Board staff expect the remaining benzene and MTBE will continue to attenuate naturally; and
4. Case closure is consistent with State Board Resolution No. 92-49, Section III.G., which allows consideration of cost-effective abatement measures where attainment of reasonable objectives, less stringent than background water quality, does not unreasonably affect present or anticipated beneficial uses of groundwater, and will not result in water quality less than that prescribed by the Basin Plan.

Residual contamination still exists on-site that could pose an unacceptable risk under certain site redevelopment activities such as site grading, excavation, or de-watering. Therefore, any changes in land use, grading activities, soil excavation, or groundwater dewatering require prior notification to the Central Coast Water Board, Monterey County Environmental Health Services (EHS), and the appropriate local planning and building departments. This notification must include a statement that residual soil and groundwater contamination underlie the property, and a description of the mitigation actions necessary (if any) to ensure that any possibly contaminated soils or groundwater brought to the surface by these activities are managed appropriately. Future site disturbance could require worker health and safety protection, and restrictions on the disposal of soil and groundwater. Monterey County EHS may require additional site assessment if the property is proposed to be redeveloped. Additional actions required by the EHS may include, but are not limited to, a case review, further remedial action, soil gas analysis, and a human health risk assessment.

Based on the above, there is no longer a threat to groundwater quality and no further groundwater investigation or cleanup is necessary. Monterey County Health Department staff agrees with this determination. Water Board staff notified the responsible party, the City of Monterey, County of Monterey, and other interested parties of this proposed case closure. We have not received any comments on the proposed closure of this case. Unless the Central Coast Water Board objects, and pending proper monitoring well destruction, the Executive Officer will issue a formal case closure letter.

Figure 1 – Estimated Extent of Residual MTBE in Groundwater (Post-Remediation)