STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF FEBRUARY 4, 2010
Prepared December 31 2009

ITEM NUMBER: **9**

SUBJECT: **Staff Closures**

THIS ACTION: Status Update – Information item only

Background:

This staff report summarizes information for staff-closed groundwater cleanup cases, including two underground storage tank (UST) cleanup sites. Central Coast Water Board staff closed these sites because the groundwater beneath each site has reached water quality goals that are protective of beneficial uses. No Central Coast Water Board action is necessary for these items.

Former Exxon Station #70227, 1042 Del Monte Boulevard, Monterey, Monterey County [Wei Liu 805-542-4648]

The site is a retail gasoline station located in an area of light commercial/recreational uses on Del Monte Avenue in Monterey. In 1984, the station owner replaced four fuel and one used-oil underground storage tanks (USTs) at the site. A second used-oil UST was removed in 1986. Prior to remedial activities at the site, the historical groundwater sample results showed maximum concentrations of 81,000 micrograms per liter (µg/L) of total petroleum hydrocarbon as gasoline (TPH-g), 520 µg/L of benzene, 1,200,000 µg/L of methyl tertiary-butyl ether (MTBE), and 220 µg/L of tert-butyl alcohol (TBA). All other petroleum hydrocarbons in groundwater samples were either not detected above the laboratory detection limits or below this Central Coast Water Board's cleanup goals. Petroleum hydrocarbon concentrations detected in soil were also all below the Central Coast Water Board's soil cleanup goals.

In September 1999, the responsible party submitted a Corrective Action Plan (CAP) recommending groundwater extraction and treatment (GET) and soil vapor extraction with additional air sparge as the most appropriate remedial alternative for this site. Central Coast Water Board staff approved the CAP in early 2000. The responsible party installed three air sparge/soil vapor extraction (AS/SVE) wells in March 2000. In late 2000, the responsible party began operating the GET and AS/SVE systems at the site. The AS/SVE system operated from December 2000 to January 2002, and removed approximately 857 pounds of vapor-phase petroleum hydrocarbons, including approximately 11.5 pounds of benzene. The GET system operated at the site from November 2000 to June 2007, and treated approximately 4,770,000 gallons of groundwater, removing approximately 25 pounds of TPH-g, 0.3 pounds of benzene, and 101 pounds of MTBE.

Groundwater analytical data from subsequent post-remediation monitoring events confirmed that contaminant concentrations had decreased to below groundwater quality objectives. The most recent groundwater sample results during the fourth quarter 2008 indicate that

concentrations of all petroleum hydrocarbon constituents, including fuel oxygenates, were below their respective laboratory detection limits or groundwater quality objectives.

The depth to groundwater at the site has ranged from approximately two feet to sixteen feet below ground surface. Groundwater flow direction beneath the site is consistently to the southwest with a gradient ranging from 0.007 to 0.017 foot per foot. There are no known private or municipal water supply wells located within a 1,000-foot radius of the site. The nearest surface water is Lake El Estero, located approximately 80 feet west of the site.

Based on site cleanup actions, soil sampling results, and groundwater monitoring results, the groundwater is not impacted above cleanup goals and no further investigation or cleanup is necessary at this site. We have notified the Monterey County Environmental Health Department, the property owner and other interested parties of our plan to close this case. We have not received comments or objections to the planned closure of this case. The responsible party was directed to destroy all monitoring wells. We received a well destruction report documenting the proper destruction of all monitoring wells on November 23, 2009. The Executive Officer issued a final case closure letter on December 8, 2009.

Mid-Carmel Valley Fire District, 8455 Carmel Valley Road, Carmel, Monterey County [John Goni, (805) 542-4628)]

Central Coast Water Board staff plans to close this UST case. Results of groundwater monitoring in October 2009 showed MTBE at a concentration of 5 micrograms per liter (µg/L) in one monitoring well (MW-3). No other petroleum hydrocarbon constituents were detected. The site is an active fire station. The Fire District (District) removed two 550-gallon underground tanks in January of 1992. The District has regularly monitored groundwater contamination at the site since 1992. The maximum concentration of MTBE in groundwater from monitoring well MW-3 was 420 µg/L in June of 1996. The contamination has attenuated naturally, and natural attenuation processes are expected to continue to reduce the MTBE concentration to non-detectable concentration levels.

The site lies within the Carmel River Hydrologic Unit. The "Water Quality Control Plan, Central Coast Region" (Basin Plan) designates groundwater beneficial uses in this Basin to be domestic and municipal supply, agricultural supply, and industrial supply. The groundwater cleanup goal for MTBE is 5.0 µg/L based on the California Secondary MCL. Groundwater at the site is approximately 7 to 20 feet below ground surface. Groundwater flow in the shallow zone is to the southwest. There are two domestic wells within 1/8 mile of this site. Central Coast Water Board staff does not expect the remaining contamination to affect either well due to the depth of the wells and the limited contaminant concentration. The Monterey County Environmental Health Department concurs with case closure

Based on site soil sampling results, and groundwater monitoring results, the groundwater is not impacted above cleanup goals and no further investigation or cleanup is necessary at this site. We have notified the Monterey County Health Department, the property owner and other interested parties of our plan to close this case. We have not received comments or objections to the planned closure of this case. The responsible party will be directed to destroy all monitoring wells. The Central Coast Water Board staff will close this case, and the Executive Officer will issue a final case closure letter, upon receipt of a well destruction report documenting the proper destruction of all monitoring wells.