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

STAFF REPORT FOR REGULAR MEETING OF JULY 9, 2004

Prepared on June 10, 2004

ITEM NUMBER: **13**

SUBJECT: **Corrective Action Plan Approval; (Former) Olympian, 13250 Big Basin Way, Boulder Creek, Santa Cruz County**

SUMMARY:

Olympian submitted a Corrective Action Plan (CAP) on May 7, 2004, to cleanup underlying petroleum hydrocarbon impacted groundwater. The CAP was prepared at Regional Board staff's request to select appropriate remedial alternatives following site characterization.

Based on prior work, the extent of hydrocarbon-impacted groundwater has been adequately defined. Shallow groundwater generally occurs at 10 feet (or less) below ground surface and flows toward the northeast. The following interim remediation activities have been completed; (1) excavation and offsite disposal of approximately 25 cubic yards (cy) of hydrocarbon impacted soil in October 1992, (2) excavation and offsite disposal of approximately 740 cy in April and May 2000, (3) excavation and offsite disposal of approximately 170 cy in January 2001, and (4) batch extraction and offsite disposal of approximately 8,500 gallons of groundwater from two wells from June through December 2001.

March 16, 2004 groundwater monitoring results indicated maximum total petroleum hydrocarbon concentrations as gasoline (TPH) at 16,600 micrograms per liter (µg/L), and benzene at 155 µg/L. Methyl-*tertiary*-butyl ether (MTBE) was detected at a maximum concentration of 28.6 µg/L. This Regional Board's water quality objectives are 1,000 µg/L for TPH, 1 µg/L for benzene, and 5 µg/L for MTBE.

Based on a potential remedial alternatives evaluation, Olympian's consultant (TEC) has selected In-situ bioremediation/chemical oxidation as the preferred corrective action. In-situ bioremediation/chemical oxidation will be used to enhance bio-degradation and attenuation of residual dissolved- and adsorbed-phase hydrocarbons within the groundwater plume. The coarse-grained, permeable, water-bearing formation is expected to provide relatively rapid distribution of injected agents (such as, oxygen or oxygen releasing compounds) at a wide application spacing.

Regional Board staff approved the CAP in a May 20, 2004 letter. With this approval, TEC has begun preparation of a Remedial Action Plan that will outline the specific CAP details including; (1) selection of bioremediation enhancement agent(s), (2) agent application rates or volumes, (3) injection point spacing, and (4) post application monitoring necessary to evaluate remedial effectiveness.