1747 Pacific Environmental Joseph Muzzio 408.441.7500 FX.7539 Unocal, 1935 Washington Ave., SL 94577

7/14/95

Soil and Groundwater Report for four borings and subsequent monitoring wells installed in 2/95. Groundwater encountered at between 29-30' bgs, stabilized at approximately 26-27' bgs. Groundwater gradient is reported as being approximately 0.03 and flows to the southwest. TPHg samples from the borings analyzed resulted in concentrations ranging from non-detectable to 100 ppm. Benzene was detected at a depth of 35 feet in boring U-6 at a concentration of 0.088 ppm. Groundwater samples showed TPHg in concentrations ranging from non-detectable to 14 ppm and benzene ranging from non-detectable to 860 ppb. The highest concentration of TPHg was detected in well U-6 (at 35' bgs), while the highest level of benzene was detected in well U-3, which is located south of the product islands. The maximum extent of the dissolved hydrocarbons appears to be limited to the eastern and southern portions of the site, suggesting that the product island are the probable source of petroleum hydrocarbon impact.

Recommendations are quarterly monitoring and samplings of all wells to continue, and additional groundwater investigations may be needed south of the site to delineate the downgradient extent of petroleum hydrocarbons in groundwater.

7/18/95

Review 1995 First Quarter Report- dated April 14, 1995. Four additional groundwater monitoring wells were performed in February 1995 (U-4,5,6,7). No work plan submitted for the installation of the four additional monitoring wells. Quarterly groundwater monitoring and sampling was performed in March 1995.

Recommendations will include additional quarterly reporting.

8/3/95

Review of SWI report for the additional four monitoring wells installed February 23, 1995. These wells were drilled to maximum depth of 42' bgs. Three on-site (U-4, U-5, and U-6) and one off-site well (U-7) were installed to a depth of 40' bgs. MWs U-3 and U-5 had the greatest concentrations of TPHg at 13,000 and 14,000 ppb respectively. Groundwater occurs at approximately 26-30' bgs and flows toward the southwest.

Recommendations/comments; The maximum extent of dissolved-phase hydrocarbons has yet to be determined, however the plume appears to be limited to the eastern and southern portions of the site in the vicinity of the product islands, which suggests that the product Islands are the probably source for the petroleum hydrocarbon impact in wells U-3 and U-6. Contamination found in well U-4 is probably associated with the UST's. Additional groundwater investigations may be needed south to the site to delineate the downgradient extent of groundwater contamination. Left message with Mr. Muzzio of Pacific Environmental Group (PEG) requesting information on 2nd quarter 1995 groundwater sampling results.

8/15/95 Review of quarterly ground water monitoring report of July 21, 1995.

Recommendations/Comments: Since significant contamination is still not substantially defined, request a SWI plan to define the lateral and vertical limits of contamination for off-site areas south of the pump islands. Need additional wells located off-site to characterize definintion of the groundwater plume.

11/22/95

Review MPDS "Quarterly Data Report"-dated October 18, 1995. Groundwater samples collected from monitoring wells U-1, U-2, U-3, U-5 and U-6 detected petroleum hydrocarbon contamination, with wells U-3 and U-6 being the most impacted of the seven (7) monitoring wells. The groundwater samples collected from monitoring well U-3 and U-6 detected 9,800 ppb and 9,500 ppb-TPHg and 600 ppb and 260 ppb-benzene, respectively. Sequoia Analytical Laboratory has potenially identified the presence of MTBE at reportable levels in the ground water sample collected from wells U-1, U-2, U-3, U-4 and U-6. Talked to SOS to determine whether a CAP or an additional off-site SWI should be requested for this site. Scott told me to look at geology of sediments in impacted wells for signs of sand or gravel stringers for possible contaminant migration pathways. Review Pacific Environmental Group, Inc. (PEG) "Soil and Groundwater Investigation Report"-dated June 21, 1995. Analytical data for the soil sample taken at a depth of 35-35.5' for boring U-6 detected TPHg-100,000 ppb, TPHd-2000 ppb, benzene-88 ppb, toluene-360 ppb, ethyl benzene-1700 ppb, and total xylenes-2400 ppb. The boring log for well U-6 reports that clay-sand stringers occur at depths of 23-25' bgs and again at 28-30' bgs. A faint product odor was reported for the clay unit (90% clay) occurring at depths of between 30 and 40.5' bgs for boring log for monitoring well U-6. Draft of letter requesting off-site SWI. Final draft of letter sent.

12/4/95

Call from/to David Camille of UNOCAL. Left message to call me back. Review file.

1/18/96

Review Pacific Environemntal Group (PEG) "Quarterly Summary Report-Fourth Quarter 1995"-dated 1/18/96.

1/22/96

Review PEG "Work Plan"-dated January 15, 1996. Proposed "Scope of Work" includes a file review at the City of San Leandro Fire and Building Departments to determine whether a former auto sales business, which was located to the immediate south of the Unocal site, had ever operated any underground storage tanks. Soil and groundwater samples will be collected from four hydropunch locations south and southwest of the site to delineate any hydrocarbons migrating downgradient and off-site. Draft work plan approval letter. Final draft of approval letter sent after BC review.

2/21/96

Review MPDS "Quarterly Data Report"-dated January 22, 1996. Monitoring wells U-3 and U-6 which are located downgradient of the pump islands detected TPHg/benzene concentrations of 10,000 ppb/520 ppb and 15,000 ppb/ 240 ppb, respectively.

- 2/28/96 Review PEG "File Review" -dated February 23, 1996. This file review was performed only for the property located at 1995 Washington Avenue. This property was suspected of contributing to the petroleum hydrocarbon contamination which was being detected in monitoring well U-6. The purpose of the review was to determine whether undergound fuel storage tanks or other potential source areas had been present on the car wash site at 1995 Washington Avenue. A permit for the installation of one (1) 4000-gallon UST was approved on 12/6/51 for a Tidewater Associated Oil Company. This site already had three (3) 1000-gallon USTs installed at the site. A permit for the removal of the four (4) USTs was approved on 12/14/66. The USTs were removed by the present property owner. The underground product piping probably remains in place at present.
- 4/30/96 Review PEG "Quarterly Summary Report First Quarter 1996"-dated April 19, 1996.
- 5/21/96 Review MPDS "Quarterly Data Report" -dated 4/16/96. Call to Timothy Ripp of PEG concerning results of the field investigation for the 1/15/96 PEG work planleft message.
- 5/23/96 Voice mail from Tim Ripp. He stated that the work had not been completed, as of yet, because they were not able to get off-site access, and were negotiating with the property owner. He will keep me informed.