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CALIFORNIA REGIONAL WATER
APR 0 9 1990
QUALITY CONTROL BOARD

April 6, 1990

Mr. Lester Feldman
Regional Water Quality Control Board
San Francisco Bay Region
1800 Harrison Street
Oakland, CA 94607

Dear Mr. Feldman:

CONSTRUCTION OF WELLS W-13 and W-14 ON EMERY BAY MARKETPLACE PROPERTY, EMERYVILLE, CA

This letter is in response to your request that McLaren determine whether wells W-13 and W-14 on the Emery Bay Marketplace property are adequately constructed to evaluate whether free product may be present on the groundwater surface in the vicinity of these wells. These wells were constructed in August 1989 to evaluate the downgradient extent of the petroleum hydrocarbon free product plume observed in well W-5 (Reported in "Results of the Hydrogeologic Investigation Conducted at the Marketplace/Nielsen Properties", September 11, 1989"). The boring logs for wells W-13 and W-14 are attached to this letter.

Wells W-13 and W-14 were both constructed as follows: sand filter pack from 4 to 11 feet; screened interval from 5 to 10 feet; bentonite pellet seal from 3 to 4 feet; neat cement with 5% bentonite from the ground surface to 3 feet; and a christie box sealed to the asphaltic pavement with concrete. When the wells were drilled, groundwater was first encountered at 7 feet below grade. The screened interval was placed from 5 to 10 feet so that the water table would cross the screened interval. The well was not screened at a shallower depth because of our concern for potential surface water infiltration and the need to place an adequate sanitary seal above the sand pack.

The measured depth to groundwater in these two wells between August 1989 and February 1990 has ranged from approximately 4.2 to 5 feet below the ground surface. Water level data indicate that the water level has varied over 2 feet since these wells were constructed in August 1989. The water level is now above the screened interval, but within the sand pack portion of the well.

We understand your concern that these wells may not be adequately constructed to monitor the potential presence of petroleum free product in groundwater if the water table does not cross the screened interval at the time the well is sampled. However, we believe that wells W-13 and W-14 are still adequate to monitor the downgradient edge of the plume for the following reasons:

- The water table has remained within the sand pack interval, and if floating product were present, then dissolved constituents would be present and detected in samples. No BETX or TPH has been detected in water samples from wells W-13 and W-14..

- If the water table is above the sand pack and floating product is present, then the product would be drawn into the wells by purging during sampling. To date, there has been no evidence of floating product during and after each of the sampling rounds.

We are currently in the process of installing 5 new wells both on-and off-site. To ensure that the stabilized water level crosses the screened interval, these new wells are being constructed with the screened interval up to 3 feet below the ground surface and with a 2 foot thick sanitary seal. Please do not hesitate to call if you would like to discuss this matter in greater detail.

Sincerely,

Julie S. Menack, RG 4440
Supervising Geologist
McLaren

Patrick J. Sheehan, Ph.D.
Supervising Toxicologist
ChemRisk Division
McLaren

Attachment

cc: Larry Seto, Alameda County

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