

## Zarling, Gary (MPCA)

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**From:** Pennino, Jim (MPCA)  
**Sent:** Wednesday, September 28, 2011 9:05 AM  
**To:** Zarling, Gary (MPCA)  
**Subject:** Sinclair 22020, Leak 17952

I have completed a review of the "Investigation Report Form", dated August 18, 2011, submitted by Carlson McCain.

The site is a former gas station which has been removed along with tanks, piping and hydraulic lifts. The site is a former leak site, No. 2643. The report indicates that the release is from the former leak site, probably a combination of releases from dispensers, tanks, pipes, and hydraulic lifts. The soils beneath the site consist of silty sand to at least 30 feet below the surface. Groundwater was found in some borings at 12 to 16 feet. Soil and groundwater contamination are negligible. Surface soil contamination is covered by pavement. There are no groundwater or surface water receptors near the site. The source area vapor intrusion sample from probe VP-4 had very high petroleum compound concentrations, but probes in the direction of receptors were below 10 times the ISV, except for 1,3-butadiene and tetrachloroethene. However, none of the receptors are within 100 feet of the contaminated groundwater. The site is not within a Drinking Water Supply Management Area. The site structures have been removed, but the figures included in the report do not indicate where the subsurface utilities are or were located.

I think the Phase II geoprobe GP-3, was actually drilled through the tank basin that existed during the Leak 2643 investigation. This is close to the location of well MW-3, installed for the investigation of leak 2643. Phase II geoprobe GP-3 groundwater concentrations (installed and sampled in 2010) were much higher than those of MW-3 when the site was closed in 2000. There is some evidence, based on Phase II probe GP-3 that additional LNAPL has been released at the site. Phase II geoprobe GP-4 showed contaminated soil, but no groundwater sample was collected from this boring. LSI geoprobe GP-5, west of Phase II geoprobe GP-4, showed groundwater contamination downgradient of the source areas. Contaminated groundwater is not defined to the south. I would prefer to install monitoring wells to confirm the extent of groundwater contamination. Therefore, I recommend a monitoring well at the location of Phase II geoprobe GP-3 and another monitoring well south of Phase II geoprobe GP-4, preferably on the south side of Larpenteur Ave. A third monitoring well should be installed on the south side of Larpenteur Ave at the former location of MW-6 installed during the Leak 2643 investigation. Also, provide a map showing former and existing utilities on the site and adjacent to the site.