

**Agenda  
for  
Meeting with Alameda County Health Care Services Agency  
2 May 1996**

Lots 1 and 5  
Marina Village  
Alameda, California

- 1.0 Site Development Plan**
- 2.0 Site Background and Historical Data**
- 3.0 Groundwater Monitoring Program Results**
- 4.0 Site Closure Based on RWQCB "Low Risk Soil Case" Guidelines**

- Sheet piles - metal + interlocking. There since 1920s. About 50' deep. However, gradient indicates that there is still flow from site into harbor.
- 2 additional wells will be analyzed for lead + four surficial soil samples (2 from Parcel 1 + 2 from parcel 5) will be analyzed for lead.
- They will check to see whether creosote issue, related to the wood fragments, has already been addressed through 8270 analysis.
- Will look at risk assessment from other sites Bldg. 4 + 5. (talk to Madhalla about this case)
- Will look into risk discussion (e.g. potential contact during utility trenching, etc.)

*Subst Shins*

NOTES *for mtg on 5/2/96*  
Northwest Area  
Marina Village  
Alameda

- o The October '88 report states that the observed product and oil staining in soil was associated with abundant wood debris. Shouldn't *creosol* be analyzed for? *Will look into.*  
LF-6 which didn't have wood fragments in boring also didn't contain contamination.

Groundwater Depths and Screened Intervals

- o Depth of 1989 test pits were 4.5- to 9-feet bgs (4 initial test pits and 15 subsequent test pits).
- o Wells LF-6 to LF-10 installed in 1988 and screened from 5 to 15-feet bgs.  
Wells LF-11 and LF-12 screened from 4 to 14-feet bgs. Well LF-13 screened from 3 to 13-feet bgs.
- o The October 1988 report states that water was observed in pits at approximately 4 to 5-feet bgs, which would imply that some of the wells are not screening perfectly.
- o Although product was noted in RR9, the "grab" groundwater sample from this pit did not detect any TPH.

Tidal Study and Sheet Pile Barriers

- o It appears that a tidal study has not been conducted. It is somewhat important because it would indicate whether there is a significant hydraulic connection between the harbor and the site, even with the existence of the sheet piles.
- o What is the construction of the sheet piles?

Contaminants Identified and Sought

- o If in fact there is fill material at the site, then they should look for other contaminants before building a park. So far, soil samples have been analyzed for 8010, 8270, 8240, and 8015. One sample was analyzed for lead whose results exceeded 500 ppm.
- o **Chlorinateds** : 0.038ppm TCE identified in test pit soil sample NWPIT4-9'-10' in 1988. "Grab" groundwater sample collected from test pit RR9 identified 3ppb chloroform and 1 ppb PCE.

*↑ PRGs = 1.1 ppb tap water*

*↑ PRGs → Tap water = 0.16 ppb*

- o Soil sample from 5NW4 was analyzed for PCBs and metals, in addition to TPH in 1989. No PCBs were identified but 520ppm lead was identified. Sample from 5NW6 was also analyzed for metals, but no significant metal concentrations were identified.
- o Petroleum identified at site is combination of diesel fuel (#2,4, and 6), diesel oil, waste oil, and crude oil.
- o Up to 62,000 ppb dissolved TPHd in LF8 and 6 inches of product identified in LF-8. Up to 79,000 ppb TPHd and 67,000 ppb TPHmo identified in LF-9 and attenuating levels observed in LF-10 from 43,000 ppb in 1988 down to 70 ppb, possibly due to silica gel cleanup. Up to 13,000 ppb TPH identified in boring 5NW3, along harbor breakwater, in February and March 1989.
- o Amount of crude oil appears to be increasing in LF-8. Why is that?

#### Delineation of Plume

- o The extent of the plume seems to have been delineated. Although no wells west of LF-10, WEB (test pit) did not pick up soil contamination at the groundwater/soil interface.

#### Friedman and Bruya Fuel Fingerprinting

- o Friedman and Bruya characterized soil sample from LF-13 and found it to be diesel 4 and 6 and a smaller amount of heavy oil. (Diesel 4 is kerosene-like which has been documented to have genotoxic effects in rats, prokaryotic organisms, etc)

Friedman and Bruya also characterized product from LF-8 as crude oil

#### Additional Required Work

- o Continued monitoring of boundary wells on a semi-annual/annual basis. -
- o Deed notification
- o Surficial soils, above 3-feet, were not analyzed for metals of TPH constituents. These analysis need to be done if site is to be used as a park. Possibly a WET analysis should be conducted on soils, due to the over 500ppm identified in the only soil sample previously analyzed for lead.
- o Groundwater should be analyzed for lead.
- o Risk Assessment?