R0161

PIERS
Environmental Services, Inc.

1330 S. Bascom Ave., Suite F
San Jose, CA 95128
Tel (408) 559-1248 Fax (408) 559-1224

2006 SEP 22 PM 1:01

Alameda County
SEP 25 2006
Environmental Health

September 19, 2006

Mr. Don Hwang
Alameda County Health Services Agency
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RE: Addendum to Work Plan for Additional Soil and Groundwater Investigation
And Site Conceptual Model with Preferential Pathway Study
3744 Depot Road, Hayward, CA

Dear Mr. Hwang:

Based on our telephone discussion on September 13, 2006, PIERS has prepared this addendum to our "Work Plan for Additional Soil and Groundwater Investigation And Site Conceptual Model with Preferential Pathway Study" dated July 2004, for the above-referenced site. This addendum proposes the addition of soil analyses for the previously proposed exploratory soil borings in the southern portion of the site around the former waste oil tank pit (EB-8 through EB-15). Also proposed are additional borings EB-22 through EB-25 that are located closer to the former waste oil tank pit than originally denoted. The purpose of these borings is to provide additional lateral delineation of hydrocarbons in soil and water in the vicinity of the former waste oil tank pit. The locations of the additional proposed borings are shown on revised Figure 4, see attached.

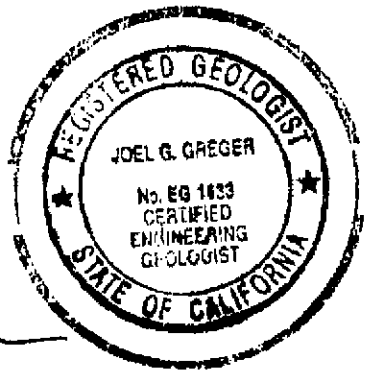
At each of the boring locations (EB-8 through EB-15 and EB-22 through EB-25), soil samples will be collected at approximately five-foot intervals, at changes in lithology, and at signs of obvious contamination, until the first encountered groundwater. As in the previous borings, it is anticipated that one soil sample will be collected at the capillary fringe, approximately 11.5 feet below grade. As stated in the work plan, the soil borings will be completed to the depth of the deepest impacted zone identified at the source. If other water-bearing zones are encountered, methods will be employed to reduce the potential for cross-contamination during drilling. "Grab" groundwater samples will also be collected. A photo-ionization detector (PID) will be utilized during drilling to determine if any soil is impacted.

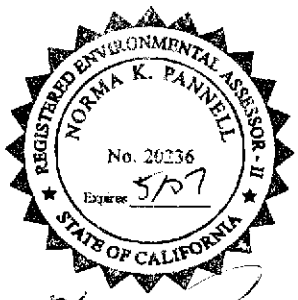
If no contamination is observed in the field, including with the PID, the shallow soil samples from the most distant borings (EB10 through EB15) will be placed on hold, and only analyzed if the analytical results of the closer borings indicate that the extent of shallow contamination remains undefined. The capillary fringe soil samples for all of these borings will be analyzed.

All of the soil and groundwater samples from the former waste oil UST pit and vicinity will be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline; TPH as diesel/motor oil; and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Methods 8015C and 8020, and for Total Recoverable Petroleum Hydrocarbons. The groundwater samples will also be analyzed for the fuel oxygenates by EPA Method 8260, and for Total Dissolved Solids.

If you have any questions regarding this work plan/proposal addendum, please do not hesitate to contact our office.

Sincerely,
PIERS Environmental Services, Inc.





Joel G. Greger
Senior Project Manager
CEG # EG1633, REA # 07079

Kay Pannell
Chief Operations Officer
REP #5800, REA-II #20236

Attachments
Revised Figure 4
Revised Table 1 –Rationale for Locations of Borings

ATTACHMENTS

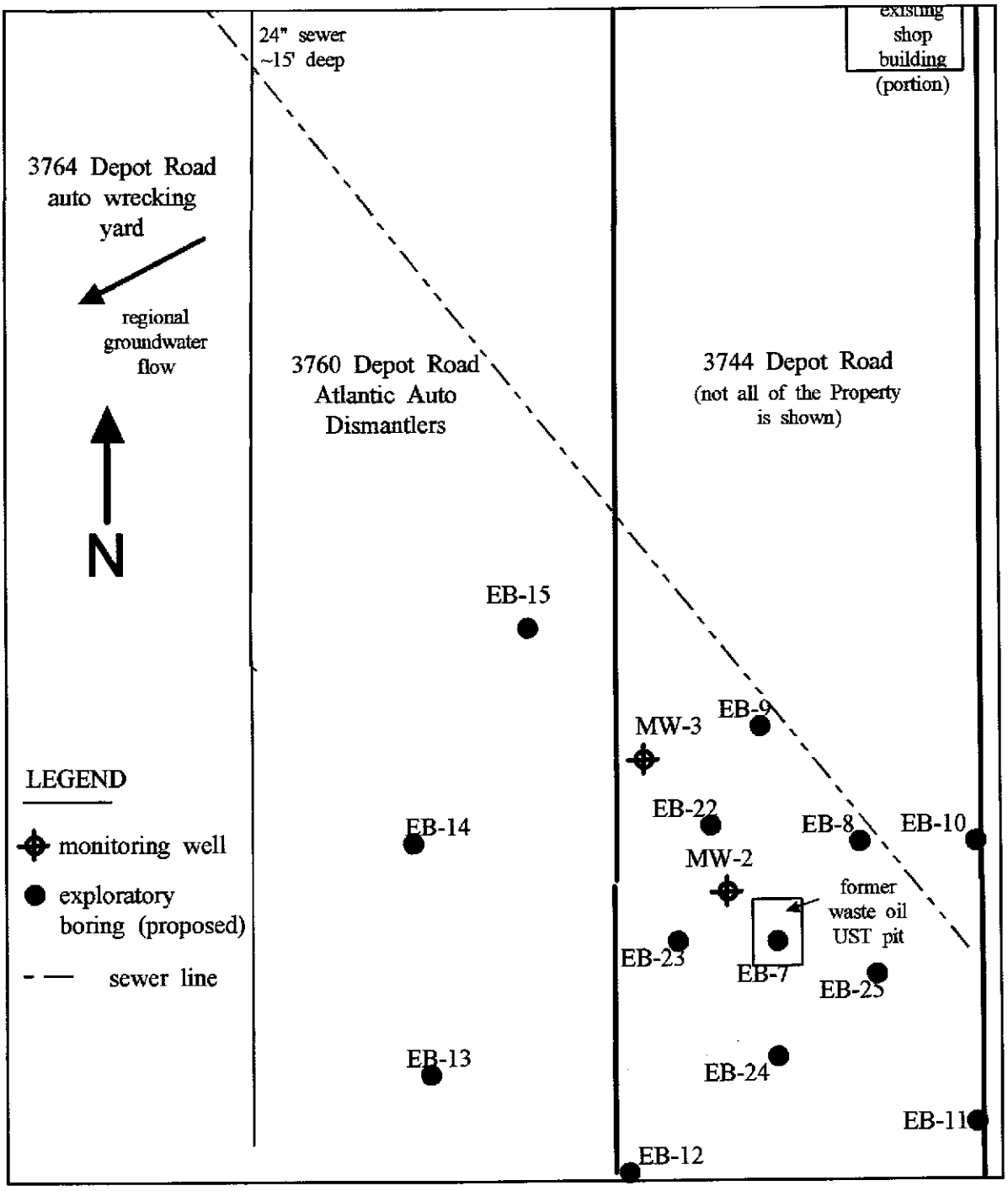


FIGURE 4 - REVISED

PROPOSED BORINGS – FORMER WASTE OIL UST PIT

3744 DEPOT ROAD
HAYWARD, CALIFORNIA

SEPTEMBER 2006
SCALE: 1" = 50'

TABLE 1 - RATIONALE FOR LOCATIONS OF BORINGS
3744 Depot Road, Hayward

Boring No.	Location	Depth	Purpose
EB-7	fmr. waste oil tank pit	20' of ND below deepest impact	vertical delineation in soil and groundwater at source
EB-8 & EB-9	adj. to 24" sewer	deepest impacted zone at EB-7	investigate potential for groundwater migration and preferential flow along sewer utility. provide lateral extent of hydrocarbon impacts in soil.
EB-10	eastern perimeter, upgradient of pit	deepest impacted zone at EB-7	upgradient delineation of groundwater impacts including potential for off-site contribution provide lateral extent of hydrocarbon impacts in soil.
EB-11	southeast of tank pit	deepest impacted zone at EB-7	lateral delineation of groundwater impacts including potential for off-site contribution provide lateral extent of hydrocarbon impacts in soil.
EB-12-15	downgradient & cross-gradient of tank pit	deepest impacted zone at EB-7	delineation of groundwater impacts down-gradient and cross-gradient provide lateral extent of hydrocarbon impacts in soil.
EB-16	fmr. gas tank pit	20' of ND below deepest impact	vertical delineation in soil and groundwater at source
EB-17	SSW of tank pit	deepest impacted zone at EB-16	lateral delineation of groundwater impacts
EB-18-20	SW to NW of tank pit	deepest impacted zone at EB-16	lateral delineation of ground water impacts, investigation of potential to migrate to utilities
EB-21	eastern perimeter, upgradient of pit	deepest impacted zone at EB-16	upgradient delineation of groundwater impacts including potential for off-site contribution
EB-22-25	around waste oil tank pit	deepest impacted zone at EB-7	provide lateral extent of hydrocarbon impacts in soil.