## **RECEIVED**



2:25 pm, Nov 16, 2007

Alameda County Environmental Health

# REVISED ADDENDUM SUPPLEMENTAL SOURCE AREA INVESTIGATION WORK PLAN

327 34<sup>th</sup> Street, Oakland, California

November 15, 2007

Prepared for

**Strough Family Trust** 

Prepared by

LRM Consulting, Inc. 1534 Plaza Lane, #145 Burlingame, CA 94010



November 15, 2007

#### **MEMORANDUM**

To:

Ms. Donna Drogos

Alameda County Health Care Services Agency

1131 Harbor Bay Parkway

Alameda, California 94502-6577

From:

Mehrdad Javaherian and Ramkishore Rao

LRM Consulting, Inc.

Re:

Revised Addendum to The Supplemental Source Area Investigation Work

Plan

Former Val Strough Chevrolet 327 34<sup>th</sup> Street, Oakland, California Site ID #3035, RO #0000134

This Memorandum summarizes revisions to the addendum to the Supplemental Source Area Investigation Work Plan prepared by LRM Consulting, Inc. (LRM) in September, 2007 for the above referenced site. The revisions to the addendum stem from comments provided by the Alameda County Health Care Services Agency (Alameda County) via a telephone conversation with Ms. Donna Drogos of Alameda County on November 15, 2007. Scheduling for the field implementation is underway and it is understood that formal approval of these revisions will be provided via an electronic mail from Ms. Drogos.

Per the items discussed during the referenced telephone conversation, the following additions to the original work plan will be made:

#### Soil Sampling

To clarify the soil sampling approach outlined in the original Work Plan and subsequent addendum, the soil sampling at the proposed boringlocations will be conducted based on the following rationale:

- Soil samples will be collected in the proposed borings at observed changes in lithology;
- Soil samples will be collected in the proposed borings at the soil-groundwater interface;
- Soil samples will be collected at locations where visual signs of contamination, including PID readings, have been noted; and
- Should the lithology reflect homogeneous conditions such as sands, soil sampling will be conducted at 5-foot depth intervals.



## **Grab Groundwater Sample SB-10**

Per the request of Alameda County, soil boring SB-10 will be moved from the immediate vicinity of MW4 to a location between previously proposed borings SB-12 and SB-13 to close the gap between these two borings. Consistent with borings SB-11 through SB-13, the sampling at the new location of SB-10 will consist of a grab groundwater sample at the water table (see Figure 1). The sample nomenclature will be changed in the field and presented accordingly in the report documenting this investigation.

#### **Grab Groundwater Sampling Protocols**

Grab groundwater samples are typically collected using a Hydropunch or an open-hole piezometer. The Hydropunch sampler consists of an expendable drive point, a drive head, a protective sheath, a 3 or 4-foot long inner stainless steel screen (or polyvinyl chloride [PVC]) and an O-ring seal. Once the desired depth is achieved, the rods will be retracted to expose the Hydropunch screen to groundwater. Grab sampling with the open-hole piezometer consists of installing a small-diameter PVC well casing with 5 feet of 0.010-inch slotted well screen in the open boring. This method is typically used for shallow (i.e, at water table) grab water samples. Groundwater samples may then be collected with a bailer, peristaltic pump, bladder pump or inertial pump.

To ensure the integrity of the 40-foot bgs samples, the DT22 Geoprobe® system consisting of a 2.25 in. (57 mm) OD probe rods as an outer casing and Geoprobe® Light-Weight Center Rods for the inner rod string will be used. A DT22 cutting shoe is threaded into the leading end of the rod string. When driven into the subsurface, the cutting shoe shears a 1.125 in. (29 mm) OD soil core, which is collected inside the casing in a clear PETG liner.

The <u>Light-Weight Center Rods</u> hold the liner in place while collecting the soil core, and also provide a means of retrieving the liner once the sample is collected. The 2.25 in. probe rods provided a cased hole through which to sample. Correspondingly, this approach provides the advantage of not having side slough to contend with and that of the outer casing which effectively seals the probe hole when sampling deeper formations. These factors mean that sample cross contamination is eliminated.



#### **CLOSING**

We appreciate your assistance with this project. If you have any questions or require further information, please contact LRM Consulting, Inc. at 650-343-4633.

Mehrdad Javaherian Principal-in-Charge

Ramkishore Rao, PE Senior Engineer



## **ATTACHMENTS**

Figure 1 – Proposed Location of Soil Borings

cc: Greggory Brandt, Esq., Wendel, Rosen, Black & Dean, 1111 Broadway, 24th Floor,
Oakland, California 94607
Strough Family Trust of 1983, 2 Sea View Avenue, Piedmont, California 94611

