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Environmental and Hydrogeological Consulting
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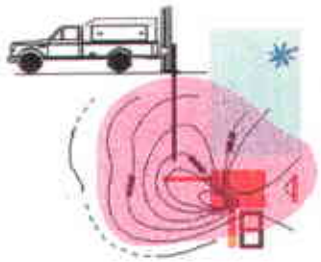


May 22, 1998

Scott Seery
Alameda County Health Care Agency
Environmental Protection Division, Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor, Room 250
Alameda, CA 94502
(510) 567-6774 Phone, (510) 337-9335 Fax

SUBJECT: WORKPLAN FOR 2ND PHASE SUBSURFACE INVESTIGATION

3815 BROADWAY, OAKLAND, CA 94611

The attached workplan is in response to the April 15, 1998 letter by Alameda County Health requiring a subsurface investigation workplan for the above facility. The proposed work will address the issues raised in the April 15, 1998 letter as well as other issues discussed during a meeting between Frank Goldman (Deppers' environmental consultant), Albert Cohen (Deppers' legal representative), Scott Seery (regulator for Alameda County), and Larry Blazer (Alameda County District Attorney) regarding offsite contamination and potential contamination contributed by the previous owner(s) of the property. The attached workplan summarizes a plan to perform a second phase subsurface hydrogeologic investigation comprised of the excavation of eleven (11) push-technology boreholes to investigate the following:

- to fill in field data gaps which remain in the vicinity of former boreholes B-6, B-9, and B-10 which are critical to supplement the data requirements of a Risk-Based Corrective Action (RBCA) evaluation.

- gasoline constituents potentially emanating from the UNOCAL service station located at 40th and Broadway, Oakland and/or from a past gasoline spill into a public utility trench excavation which was oriented

along Broadway, extending from the UNOCAL service station to the Broadway entrance of the Deppers' building

- solvents related to the existing underground storage tanks and chemicals related to stained glass manufacturing and cleaning operations at the Earl Thompson property
- the outfall from the stormdrain discharging to Echo Creek, Oakland

Sincerely,

Franklin J. Goldman

REGISTERED GEOLOGIST FRANKLIN J. GOLDMAN CERTIFIED HYDROGEOLOGIST NO. 466 STATE OF CALIFORNIA

Franklin J. Goldman
CEO/GeoSolv, LLC
Registered Geologist No. 5557
Certified Hydrogeologist No. 466

1.0 SUMMARY OF SCOPE OF WORK

The proposed work will entail an environmental audit, a subsurface investigation, and a sampling of the stormdrain outfall.

A historical environmental audit of the subject site, including a title search, Vista report, review of agency files, and review of air photos will be performed to determine offsite contamination and contamination contributed by the previous owners.

Precision Sampling, Inc. of San Rafael, CA will utilized their Envirocore Drilling Machine which has a patented continuous core conductor casing which prevents cross contamination of Dense Non-Aqueous Phase Liquids (DNAPLs)/chlorinated solvents, during soil sampling, while generating a minimal amount of soil waste cuttings. The investigation will entail the excavation of eleven boreholes (See Attached Figure for Proposed Borehole Locations).

During a recent job walk with Ken Perez of Precision Sampling, Inc., we determined that the four proposed boreholes to be placed around former borehole B-10 could be performed with a larger sampling rig (See Attached Figure of Precision's XD Series) which can access the location through the garage door entrance on Manilla Avenue, at the rear of the building. The larger rig should be able to reach the 15 foot depths with the conductor casing as indicated on the attached sampling plan. In addition, the larger rig will be used to excavate a borehole adjacent to the Earl Thompson property by accessing that location through the metal siding structure which provides an entrance to the Deppers' property on 38th Street. Also, the larger rig will be used to place a borehole in the backyard of one of the residences located just south of the Deppers' facility. The remaining five (5) boreholes will be excavated with the same rig used by Precision Sampling during the initial investigation (See Attached Figure of Precision's DA Series [hand truck]) because of its unique limited access capabilities and its proven ability to reach a depth of at least eleven (11) feet bgs, at the subject site, with its protective conductor casing.

"DA" rig drilled to only ≤7' in some locations!

The three (3) boreholes proposed to be located at former boreholes B-10, B-9, and B-6 will be used to supplement the data requirements of a RBCA risk evaluation. Also, the three (3) three proposed boreholes to be located north, south, and west of former borehole B-10 will be used to define the vertical and lateral extent of chlorinated solvents previously identified at B-10. The proposed borehole to be placed in the backyard of the adjacent residences will be used to determine the potential health risk to residential receptors and off-site contamination from the Earl Thompson property. The Earl Thompson property still contains six or seven stoddard solvent USTs and a stained glass manufacturing operation which may have discharged a wide variety of solvent and metal contaminants to the subsurface. The borehole to be placed adjacent to the stormdrain conduit will be used to identify heavy oil and gasoline ranged contaminants, adjacent to the main breach in the structure, which have been identified flowing into the stormdrain from offsite. The eleven (11) foot and fifteen (15) foot boreholes to be placed adjacent to, and northwest of, the Earl Thompson property, are for determining if solvents and gasoline ranged constituents are migrating from the Earl Thompson property. The

where is this?

borehole to be placed in the northeast corner of the site will be used to further establish the trend of MTBE in groundwater migrating from the UNOCAL site which has confirmed high levels of MTBE in groundwater or from the public utility trenches which were flooded by a gasoline leak along Broadway to the east of the site in front of the east entrance to the Depper building and property.

not so

when ?

Groundwater "grab" samples will be collected and analyzed from each borehole based on the same rationale as applied to the soil analyses. Groundwater samples will be collected from inside the protective conductor casing to prevent cross contamination.

The storm drain outfall which discharges into Echo Creek, downflow from the subject and adjacent sites, will be sampled and analyzed for assorted hydrocarbons, metals, and solvents to determine if discharges from sites, up-flow from the creek are entering the concrete storm drain conduit and posing an ecological risk.

NO

The data collected from this investigation, in conjunction with groundwater monitoring will be used to supplement the information requirements of a Risk-Based Corrective Action (RBCA) evaluation to determine site specific target levels, for a site mitigation/remedial action plan.

2.0 PROPOSED WORK ACTIVITIES

2.1 Schedule of Activities

The following activities will proceed according to the following schedule:

1. Initiate this work plan after concurrence from Alameda County.
2. Obtain well permits.

(925) 798-9504 x0

3. Notify Underground Service Alert at (800) 227-2600, 48 hours prior to initiation of site work to have the site marked for underground utility obstructions to drilling.
4. Notify Alameda County and the responsible party 72 hours prior to initiation of site work.
5. Drill eleven (11) push-technology, continuous core, soil borings to depths ranging between 8 and 15 feet bgs and collect soil samples at the depths specified on the sampling plan.
6. The inside of the conductor casing will then be measured for water levels, and then sampled with a steel bailer to obtain a groundwater grab sample.
7. The conductor casing will be removed and each borehole will be properly grouted from the bottom up by the tremmie method.
8. The soil and groundwater sampling will only produce approximately six five-gallon buckets of drill cuttings and approximately 15 gallons of rinseate

water. The rinseate will be stored on-site in a DOT approved 55-gallon drum. The waste soil and water will be left onsite pending laboratory analysis to be manifested to a legal point of disposal.

9. A report will be prepared and submitted to Alameda County Health and the State Regional Board which will present data obtained (e.g. original laboratory data sheets with QA/QC, laboratory summary tables, boring logs), summaries and interpretations of all findings, and will provide conclusions and recommendations based on a risk assessment perspective.

2.2 Drilling and Sampling

All push-technology soil borings will be drilled using an appropriate drill rig utilizing a drilling contractor who possesses a C-57 drilling license. All borehole logging will be performed by a State Certified Hydrogeologist who will keep a detailed hydrostratigraphic log of each borehole, noting lithologic changes, hydrogeological characteristics and sample locations. Soil and groundwater sampling will be performed on the day of the subsurface investigation.

Twenty-four (24) soil samples will be collected, sealed, labeled, and placed in an ice chest at a temperature of four (4) degrees Celsius, and submitted to a State-Certified laboratory, under a proper Chain-of-Custody.

Laboratory analyses for soil samples will be comprised of 14 stoddard solvent TPH(ss) EPA Method 8015 Modified, 21 chlorinated solvents EPA Method 8010 for purgeable halocarbons, 6 gasoline TPH(g)/BTEX/MTBE by EPA Method 8015 Modified, and 1 heavy oil TPH(mo) by EPA Method 8015 Modified tests.

Two (2) representative soil samples will be analyzed for fraction of organic carbon (foc), moisture content, porosity and bulk dry density of soil for future fate and transport and health risk assessment analyses.

2.2a Method of Drilling and Sampling of Soil

The borings will be continuously cored, by compressive force, in four foot vertical increments, with an Enviro-core drilling rig equipped with a two-inch inner diameter core sampler containing, a clear, disposable, four foot long, acetate liner. Soil samples will be collected over the entire length of each borehole. Soil samples of six or more inches in length, will be cut with a hack saw through the acetate liner, and covered with Teflon sheets at each end of the cylinder, and capped with plastic caps at each end to hermetically seal the samples. The soil samples will be labeled with a non-toxic ink field marker as to the depth and location each sample was collected, the sample number, and the project name. The chain of custody will be similarly designated and will also include date and time the sample was collected. The samples will be inserted into a plastic, zip lock freezer bag and then placed in an ice chest for transport back to the laboratory. The soil samples will be selected at specific vertical intervals based on the location of the capillary fringe, at significant changes in lithology, and/or at contact with noticeable ~~hydrocarbon~~ contamination. Excess soil cuttings will be placed in five (5)-gallon buckets with plastic lids, sealed with duct tape, and properly labeled for transport to a legal point of disposal.

The sampler will be decontaminated before and after each use by a steam cleaner or by use of an Alconox solution wash and fresh tap water rinse. All rinseate water will be stored in a 55 gallon DOT approved drum. The drum will be properly labeled and stored onsite until sampling is authorized to establish a legal point of disposal.

2.2b Sampling of Groundwater

A minimum of one groundwater sample will be collected and analyzed from each borehole within the conductor casing with a steel check valve bailer.

Eleven (11) groundwater samples will be collected, sealed, labeled, and placed in an ice chest at a temperature of four (4) degrees Celsius, and submitted to a State-Certified laboratory, under a proper Chain-of-Custody.

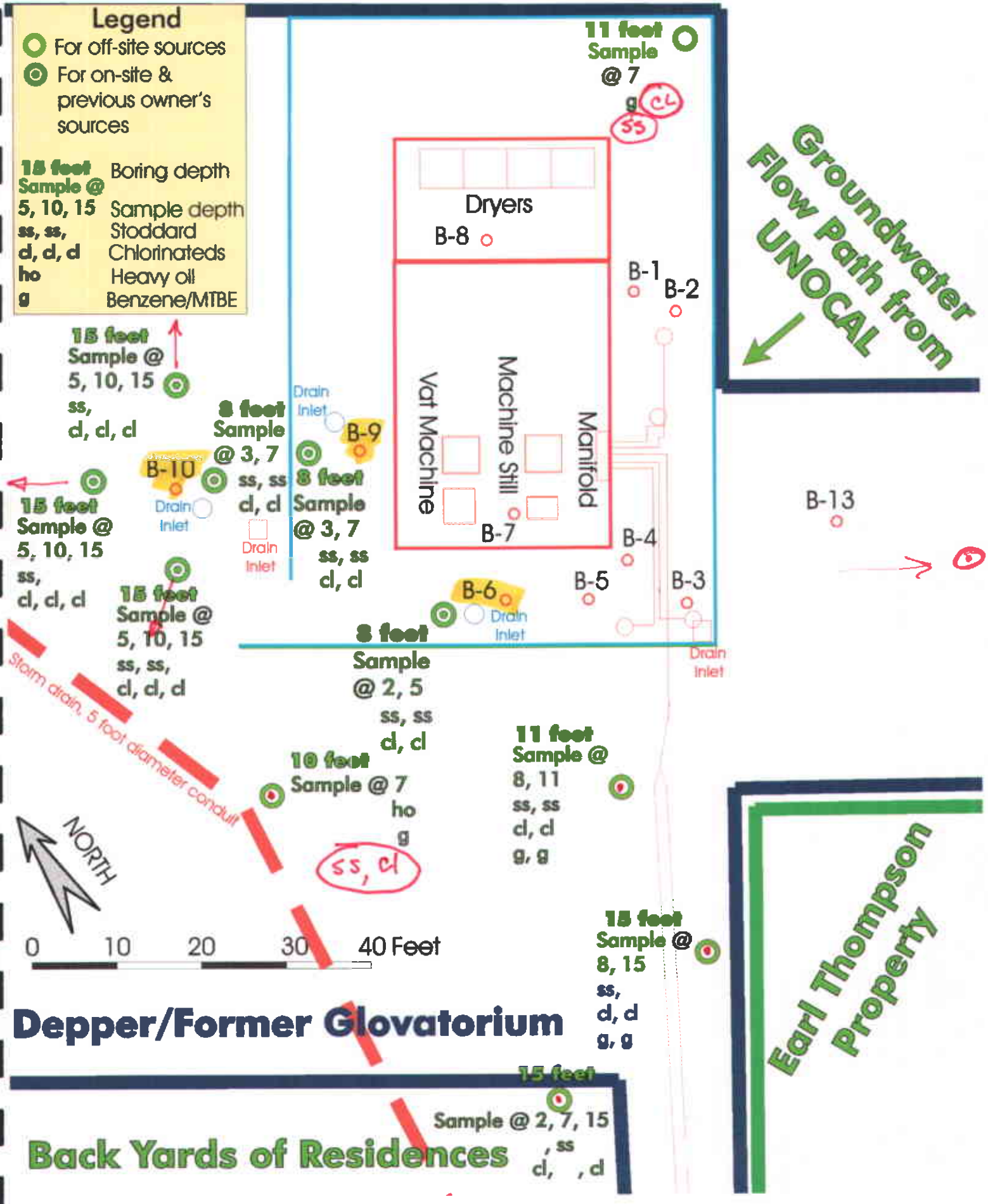
Laboratory analyses will be comprised of 9 stoddard solvent TPH(ss), 9 chlorinated solvent EPA Method 8010 for purgeable halocarbons, 4 gasoline TPH(g)/BTEX/MTBE, and one for heavy oil TPH(mo). which ones?

Groundwater samples will be collected by placing a stainless steel bailer down the center of each well head to allow for an in-situ water sample collection. Water will flow freely into the stainless steel bailer and will then be removed to capture water to be placed in an appropriate sample media. The stainless steel bailer will be decontaminated with an Alconox solution and tap water rinse prior to each use. Water samples will be collected so that no air bubbles are trapped in the 40 ml VOA vials which contain a small amount of HCl preservative. Water samples to be colleted for stoddard solvent will be contained in one liter amber bottles.

2.2c Borehole Abandonment

After soil and groundwater samples are collected, the open boreholes will be backfilled using a Type II Portland cement/bentonite grout mixture to the surface.

2nd Phase Soil Sampling Plan for Depper
3815 Broadway, Oakland, CA



PRECISION

PRECISION'S VIBRA-PUSH™ RIGS

Precision's Vibra-Push™ rigs come in all sizes, from small compact rigs that can fit in a small closet to our new 33,000-pound Super Duty Series capable of collecting samples to 200 feet. We design and build rigs capable of tackling almost all environmental subsurface investigations. Below is a summary of rigs we manufacture and use. The rigs are listed by size, with the largest, most powerful rig series shown at the top and the most compact rigs shown at the bottom. At the bottom of this page is a table of rig specifications.

SD Series
Our newest rig series – the world's largest DP rigs equipped with vibratory push and percussion advancing methods. These are the rigs to use in very difficult soil conditions, cobbles, and partially-cemented soil. Capable of sampling to depths to 200 feet.

XD Series
The work horse of the fleet. All-terrain rig mounted on a skid loader with tracks or on a 4WD loader. This is our most versatile rig, capable of handling most projects with ease. These rigs are suitable for semi-difficult access – inside warehouses or around tight corners, on the beach – even at the water's edge. This rig commonly pushes sampling tools to 80 feet.

DA Series (Hand-truck)
This the rig to use when the access is very limited. As you see in this photo -- getting into small spaces is no problem for this rig. The power unit is connected to the rig by a long hydraulic hose. Fits through commercial doorways. Capable of angle borings to 35 degrees. Although small in size, these rigs can core soil to 50 feet.

PRECISION'S RIG SPECIFICATIONS

SPECIFICATIONS	SD Series	XD Series	MD Series	DA-1 Series	DA-2 Series	DA-2 off carrier	DA-3
Rig Length (feet)	25	13	10	3	11	3	4
Rig Width (feet)	8	6	4	32 inches	4	3	3
Rig Height (feet)	10	7.5	6.5	6.5	11	6	6
Min. Overhead Clearance (feet)	13	10	7	6.7	11	9	9
Rig Weight (pounds)	33,000	8,000	3,700	450	4,600	600	1,100
Fits through Std. Doorway	No	No	No	Yes	No	Yes	Yes
Maximum Core Angle (degrees)	35	30	30	37.5	35	0	0
Minimum Work Area	30 X 8	16 x 6	12 x 4	6 x 4	4 x 14	3 x 8	3 x 8
Hammer Force (ft-pounds)	500	250	135	135	135	135	500
Pull-Down Force (pounds)	20,000	3,000	1,000	250	1500	18,000*	18,000*
Extraction Force (pounds)	50,000	25,000	37,000	13,000	25,000	25,000	25,000
Vibratory Head	Yes	Yes	No	No	No	No	Yes

* Bolt-down version, limited to strength of concrete.

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