PACIFIC
ENVIRONMENTAL
GROUP, INC.

FACSIMILE TRANSMITTAL

DATE: 11-14-95 PROJECT #: 360-014.1A

TO: Alameda Co. Health Svc FAX: 510-337-9335

Barney Chan

FROM: Doug Andrews

IF YOU HAVE ANY PROBLEMS RECEIVING THIS FACSIMILE, PLEASE CALL (408) 441-7500

SHEETS TO FOLLOW COVER PAGE

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COMMENTS:

Here are the analysis you requested for the former Oliver-Dee site in Oakland. Call w/ comments

Thanks

Doug

You have received this facsimile from 408-441-9102

2025 Gateway Place, Suite 440, San Jose, California 95110 (408) 441-7500 FAX (408) 441-7539

PACIFIC ENVIRONMENTAL GROUP, INC.

November 14, 1995
Project 360-014.1A

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Re: Site Assessment Work Plan
Former Dorr-Oliver Site
2901 Glascock Street
Oakland, California

Dear Mr. Chan:

Pacific Environmental Group, Inc. (PACIFIC) has prepared this letter to present the revised plan for soil analysis at the site referenced above. The revised plan was discussed during a phone conversation with you and PACIFIC on November 8, 1995. The primary purpose of this investigation is to complete site characterization with respect to various chemicals which may have been released to the soil and/or groundwater during previous site use, and to place the site on a path toward closure.

The agreed change in scope of work has decreased the amount of soil borings that will need to be drilled. The number of soil borings drilled, previously 28, will be 15 in the areas of: the southwest corner of the site, the sump found in the southwest corner of the site, and the loading ramp along the western edge of the site. Groundwater will still be investigated in the southwest corner and to the northeast of the site. PACIFIC's investigation will still be focused on: (1) delineating the extent of previously identified contaminants in the soil and groundwater, (2) identifying the presence of contaminants in known or suspected source areas, and (3) collecting data from random areas not known or suspected to be sources.

Included with this letter are the proposed soils analysis for hydrocarbons, Metals, and PCB's presented in Table 1. The locations of the proposed soil borings and monitoring wells are presented in Figure 1. Field and laboratory procedures are presented in Attachment A

If you have any questions regarding the contents of this letter please call.

Sincerely,

Pacific Environmental Group, Inc.

Douglas Andrews
Staff Geologist

Attachments: Table 1 - Proposed Soil Analyses
Figure 1 - Proposed Soil Boring and Monitoring Well Location Map
Attachment A - Field and Laboratory Procedures

Table 1
Proposed Soils Analyses

Former Dorr-Oliver Site
2901 Glascock Street
Oakland, California

Boring Number	Depth Sampled (feet)	TPH Fingerprint (ppb)	Metals (ppb)	PCB's (ppb)	Oil and Grease (ppb)	PH
B-1	1		x	x		x
	3		x*	x*		
B-2	1		x	x		x
	3		x*	x*		
B-3	1		x	x		x
	3		x*	x*		
	6	x				
B-4	1		x	x		x
	3		x*	x*		
B-5	1		x	x		x
	3		x*	x*		
B-6	1	x	x	x	x	x
	3		x*	x*		
	5	x			x	
B-7	1	x	x	x	x	x
	3		x*	x*		
	5	x			x	
B-8	5	x				
B-9	5	x				
B-10	1		x	x		x
	3		x*	x*		
B-11	1		x	x		x
	3		x*	x*		
B-12	1		x	x		x
	3		x*	x*		
B-13	5	x				
B-14	5	x				
B-15	5	x				

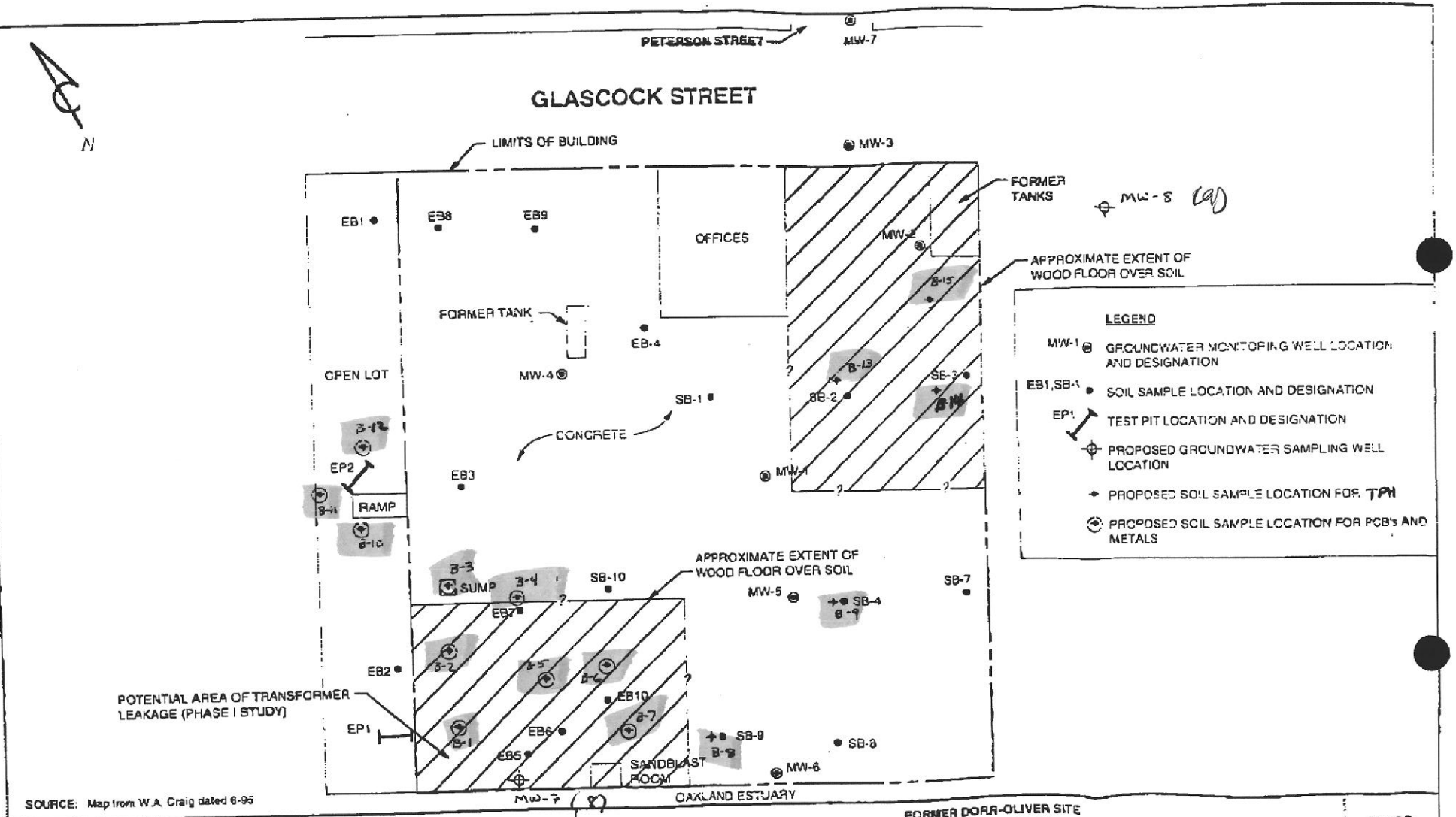
*= 3' sample will be held to determine if necessary for analysis
TPH= Total Petroleum Hydrocarbons fingerprinted
Metals= LUFT metals (Cd, Cr, Ni, Pb, Zn)
PCB's= Polychlorinated Biphenyls

rationale

the TPH + O+G will likely be N.D. is this correct premise?

S/B lower depth. SB-9 @12½' high atmo

SB-4 @8', atmo ~ 400 ppm



SOURCE: Map from W.A. Craig dated 6-95

PACIFIC ENVIRONMENTAL GROUP, INC.

APPROXIMATE SCALE
0 40 80 FEET

FORMER DORR-OLIVER SITE
2901 Glascock Street
Oakland, California

PROPOSED SOIL BORING AND MONITORING WELL LOCATION MAP

FIGURE: 1

PROJECT: 360-014.1A

ATTACHMENT A

FIELD PROCEDURES

ATTACHMENT A
FIELD PROCEDURES

Soil Borings and Soil Sample Preservation

Soil borings will be hand augered to depths of 1, 3, and 5 feet. Soil samples will be collected by driving a brass liner into the soil at the appropriate depths. Each soil sample will be logged by a Pacific Environmental Group, Inc. geologist using the Unified Soil Classification System and standard geologic techniques. Soil samples for chemical analysis will be retained in brass liners, capped with Teflon® squares and plastic end caps, taped, and sealed in clean zip-lock bags. The samples will be placed on ice for transport to the laboratory accompanied by chain-of-custody documentation. All down-hole sampling equipment will be steam-cleaned following the completion of the soil boring. Down-hole sampling equipment will be washed in a tri-sodium phosphate solution between samples.

Groundwater Monitoring Well Installation

The groundwater monitoring wells will be drilled using 8-inch hollow-stem auger drilling equipment. During drilling soil samples for logging will be collected at 5-foot depth intervals using a California-modified split-spoon sampler from the hollow-stem auger drilling equipment. The split-spoon sampler will be driven a maximum of 18 inches using a 140-pound hammer with a 30-inch drop. The wells will be completed by installing 2-inch diameter, flush-threaded, Schedule 40 PVC casing with 0.020-inch factory-slotted screen. Approximately 15 to 20 feet of screen will be placed in the bottom of the boring. An RMC 2 x 12 sand pack will be placed in the annular space across the entire screened interval, and will extend approximately 3 feet above the top of the screen for the well. A bentonite and Portland cement seal will extend from the sand pack to the ground surface.

Following well completion, the vault box elevation and the elevation of the top of the PVC well casing of the monitoring wells will be surveyed to the nearest 0.01 foot, relative to mean sea level, by a licensed surveyor. The boring logs will show well construction details and the well head elevations.

Organic Vapor Procedures

Soil samples collected will be analyzed in the field for ionizable organic compounds using the HNU Model PI-101 (or equivalent) photo-ionization detector (PID) with a 10.2 eV lamp. The test procedure will involve measuring approximately 30 grams from an undisturbed soil sample, placing this subsample in a clean glass jar, and sealing the jar with aluminum foil secured under a ring-type threaded lid. The jar will be warmed for approximately 20 minutes (in the sun), the foil pierced, and the head-space within the jar tested for total organic vapor, measured in parts per million as benzene (ppm; volume/volume). The instrument will be calibrated prior to drilling using a 100-ppm isobutylene standard (in air) and a sensitivity factor of 55 which relates the photo-ionization potential of benzene to that of isobutylene at 100 ppm. The results of the field testing will be noted on the boring logs. PID readings are useful for indicating relative levels of contamination, but cannot be used to evaluate hydrocarbon levels with the confidence of laboratory analyses.

Well Development and Groundwater Sampling

The groundwater monitoring wells will be developed and sampled a minimum of 24 hours after completion of the wells. Well development procedure will include swabbing and bailing and/or pumping. Water will be removed from the well until relatively turbid free water is produced, or until a minimum of ten casing volumes have been removed. The groundwater sampling procedure will consist of first measuring the water level in the well, and checking it for the presence of separate-phase hydrocarbons (SPH) using an MMC oil-water interface probe. If no SPH are present, the well will then be purged of a minimum of five casing volumes of water. During purging, temperature, pH, and electrical conductivity will be monitored until stable to document that a representative sample is collected. After the water level recovers, a sample will be collected from each well using a Teflon bailer and placed into appropriate EPA-approved containers. The samples will be labeled, logged onto a chain-of-custody document, and transported on ice to the laboratory.

Rinsate, Purge, and Development Waters, and Soil Cuttings Storage and Disposal

Waters produced during field activities will be transported via a purge trailer and disposed of at a state-certified treatment and disposal facility. When necessary, waters will temporarily be stored on site in DOT-approved 55-gallon drums pending transport and disposal.

Soil cuttings generated during drilling will be placed on visqueen and covered with plastic. Samples of the cuttings will be collected and sent to a state-certified laboratory for analysis. Pending analytical results, the soil cuttings will be hauled by a state-certified waste hauler to a state-certified treatment and disposal facility.