



Subsurface Consultants, Inc.

R. William Rudolph, P.E.
President

January 9, 1997
SCI 133.005

Jonathan Redding, Esq.
Fitzgerald, Abbott & Beardsley LLP
1221 Broadway, 21st Floor
Oakland, California 94612

**Transmittal
Data Gap Study
Port of Oakland
Oakland, California**

97 JAN 10 AM 10:09

Dear Mr. Redding:

Pursuant to our discussions with Mr. Barney Chan of the Alameda County Environmental Health Services Department on Wednesday, January 8, 1997, Subsurface Consultants, Inc. (SCI) is transmitting herein the scope of a Data Gap Study. The investigation will include the items of further study outlined in the attached Table A. The scope presented should not be considered comprehensive. Study areas may be added or deleted, and points of investigation may be relocated as additional information becomes available. The attached Plate 2 shows approximate locations of proposed study areas and points of investigation.

Yours very truly,

Subsurface Consultants, Inc.

Jeriann N. Alexander
Civil Engineer 40469 (exp. 3/31/99)
Registered Environmental Assessor 03130 (exp. 6/30/97)

MM:JNA

Attachments: Table A - Preliminary Investigation of Data Gaps
Plate 2 - Site and Utility Location Plan

TABLE A - PRELIMINARY INVESTIGATION OF DATA GAPS

NINTH AVENUE TERMINAL
 Port of Oakland, California
 SCI 133.005
 December 1996

ITEMS OF FURTHER STUDY	DATA COLLECTION							SAMPLE ANALYSES										BRIEF STATEMENT OF OBJECTIVES/RATIONALE/COMMENTS ^{1,2}
	Site Reconnaissance	Collect Soil Samples	Collect GW Sample	Excavate Test Pit	Geophysical Survey	Data loggers and Pressure Transducers	Potholing by Saf R Dig	Gas/BTEX EPA 8015	Extended Diesel - Oil Range EPA 8015	Volatile Organics EPA 8240	Semi-Volatile Organics EPA 8270	PCB's EPA 8080	Heavy Metals EPA 6000/7000	Lead EPA 7240	Leachability Testing for Ecological Assessment	Chromium 6+	pH, Sulfite, Sulfate, Chloride	
1. Former plating facility within H-232 OK	1	4	4					8	8			8			8	8	8	A plating facility was operated for several years along the southern wall of H-232. Various chemicals including heavy metals, chromium 6+, cyanide solutions, caustics, acids, hypochlorites, sulfites and sulfates and waste oils. The facility had floor sumps and a sanitary sewer connection. Previous studies in the area have not evaluated potential impacts to soil or groundwater.
2. Geophysical Anomaly near area of H-232 Oil tanks OK	1						1											A metallic anomaly was identified during a previous geophysical survey.
3. Oil tank area below new KOT office OK	1						1											Two fuel oil tanks are suspected of being beneath the location of the new KOT offices situated to the west of H-232.
4. Patch in SW corner of former H-213 OK	1	2		1				2										An irregularly shaped patch exists in the SW corner of the former H-213 building footprint. Free floating petroleum product was identified in test borings drilled near this corner. SC-2-35 ?
5. Southern wall of former H-213 OK	1	4	2	2	1			6	6									Elevated concentrations of petroleum hydrocarbons have been detected in the area along the southern wall. Pipelines may exist in this area.
6. Solvent investigation at Lakeside Metals	1	2	2					4	4		2	2						The source of solvents has not been defined in the area of SCIMW-7. Solvents may have been used or stored at this site. This study is not currently regulatory driven. Additional study including the installation of monitoring wells may be required in the area of SCIMW-7. <i>? - found it steady</i>

- These should not be considered to be an exhaustive list of objectives, rationale, and comments.
- Scope presented should not be considered comprehensive. Arcas may be added, deleted, or relocated as additional information becomes available.

TABLE A - PRELIMINARY INVESTIGATION OF DATA GAPS

NINTH AVENUE TERMINAL

Port of Oakland, California

SCI 133.005

December 1996

ITEMS OF FURTHER STUDY	DATA COLLECTION							SAMPLE ANALYSES											BRIEF STATEMENT OF OBJECTIVES/RATIONALE/COMMENTS ^{1,2}
	Site Reconnaissance	Collect Soil Samples	Collect GW Sample	Excavate Test Pit	Geophysical Survey	Dataloggers and Pressure Transducers	Potholing by Saf R Dig	Gas/BTEX EPA 8015	Extended Diesel - Oil Range EPA 8015	Volatile Organics EPA 8240	Semi-Volatile Organics EPA 8270	PCB's EPA 8080	Heavy Metals EPA 6000/7000	Lead EPA 7240	Leachability Testing for Ecological Assessment	Chromium 6+	pH, Sulfite, Sulfate, Chloride	Cyanide	
7. Rail spur alignment near RMA-22 <i>not get provider</i>	1	4	2	2	1			6	6										Elevated concentrations of petroleum hydrocarbons and floating petroleum product have been detected in groundwater samples from RMA-22. Pipelines may exist in this area.
8. Harbor Forklift materials storage area <i>ok</i>	1	4						2	4	2	2			2					Surface staining and deteriorated pavement was observed in this area. Chemicals and fuels are stored in roll-off bins in this area.
9. Former location of H-302 <i>ok</i>	1	1	1	1	1		1	2	2					2					Lease records indicate that a gasoline pump and possibly an UST may have been associated with this structure. The building no longer exists.
10. Geophysical Anomaly near area of H-227 yard tank <i>ok</i>	1			1															A metallic anomaly was identified during a previous geophysical survey in an area where a 10,000 gallon UST was previously shown to exist.
11. Preliminary Assessment of Leachability Along Shoreline <i>OK</i>	1	4	4											8					It is necessary to preliminarily evaluate the potential leachability of impacted soils along the shoreline.
12. Comprehensive Monitoring Event <i>then come up w/a schedule for com. then monitoring</i>			22					22	22	22	22		22						Another complete round of groundwater data will further assist in evaluating risks and remedial response. Analysis to be performed using marine quality detection limits.
13. Geophysical Anomaly near area of H-229 tanks <i>ok</i>	1			1															A metallic anomaly was identified during a previous geophysical survey in an area where two USTs were previously shown to exist.

1. These should not be considered to be an exhaustive list of objectives, rationale, and comments.
2. Scope presented should not be considered comprehensive. Areas may be added, deleted, or relocated as additional information becomes available.

TABLE A - PRELIMINARY INVESTIGATION OF DATA GAPS

NINTH AVENUE TERMINAL
 Port of Oakland, California
 SCI 133.005
 December 1996

ITEMS OF FURTHER STUDY	DATA COLLECTION							SAMPLE ANALYSES										BRIEF STATEMENT OF OBJECTIVES/RATIONALE/COMMENTS ^{1,2}	
	Site Reconnaissance	Collect Soil Samples	Collect GW Sample	Excavate Test Pit	Geophysical Survey	Dataloggers and Pressure Transducers	Potholing by Saf R Dig	Gas/BTEX EPA 8015	Extended Diesel - Oil Range EPA 8015	Volatile Organics EPA 8240	Semi-Volatile Organics EPA 8270	PCB's EPA 8080	Heavy Metals EPA 6000/7000	Lead EPA 7240	Leachability Testing for Ecological Assessment	Chromium 6+	pH, Sulfite, Sulfate, Chloride		Cyanide
14. Former material conveyor transformer <i>ok</i>	1	1	1					2			2	2							A transformer previously existed in the area of a conveyor. Given the age and use of the conveyor it is possible that PCB laden oils may have been used in the transformer.
15. AST in area of H-303 <i>ok</i>	1	2	2		1			4	4					4					Records appear to indicate that an AST may have existed in the area of H-303. Localized impacts may exist in the area of the AST.
16. Metal recycling facility at H-314 <i>ok</i>	1																		Records indicate that an UST may have existed at this site. Interviews and surveys to date have not revealed the location of the UST.
17. Rail Loading <i>ok</i>	1	2	2		1			4	4	4	4	4	4						This area experienced long term use as rail loading. Reports by others indicate contaminated soil was removed alongside Bldg. H-232.
18. Marine Terminals Storage Area <i>ok</i>	1	2		2	1			2	2					2					Past Port permit and lease information indicate possible presence of USTs/ASTs.
19. American Bitumuls <i>ok</i>	1	3	3	2	1				6	6	6								An area consisting of a fueling facility which has not been fully investigated.
20. Bay City Fuel/East Bay Oil and Truck Repair Area <i>ok</i>	1	4		4	1			4	4	4				4					This area experienced long use as a repair facility and as a location for fueling/processing of bulk fuels. It likely contains unknown UST/AST pipeline locations.

1. These should not be considered to be an exhaustive list of objectives, rationale, and comments.
2. Scope presented should not be considered comprehensive. Areas may be added, deleted, or relocated as additional information becomes available.

TABLE A - PRELIMINARY INVESTIGATION OF DATA GAPS

NINTH AVENUE TERMINAL

Port of Oakland, California

SCI 133.005

December 1996

ITEMS OF FURTHER STUDY	DATA COLLECTION								SAMPLE ANALYSES								BRIEF STATEMENT OF OBJECTIVES/RATIONALE/COMMENTS ^{1,2}		
	Site Reconnaissance	Collect Soil Samples	Collect GW Sample	Excavate Test Pit	Geophysical Survey	Dataloggers and Pressure Transducers	Potholing by Saf R Dig	Gas/BTEX EPA 8015	Extended Diesel - Oil Range EPA 8015	Volatile Organics EPA 8240	Semi-Volatile Organics EPA 8270	PCB's EPA 8080	Heavy Metals EPA 6000/7000	Lead EPA 7240	Leachability Testing for Ecological Assessment	Chromium 6+		pH, Sulfite, Sulfate, Chloride	Cyanide
21. Data Summary Report																			A summary report will be required by ACHCSA.

1. These should not be considered to be an exhaustive list of objectives, rationale, and comments.
2. Scope presented should not be considered comprehensive. Areas may be added, deleted, or relocated as additional information becomes available.