CASE R TYPE: R	4250 STID 4250
PLAN REVIEW INFORMATION:	SITE NAMEROY POWLAD RESIDENCE
DEPOSIT DATE 3/29/91	ADDRESS 2239 Summet street CITY, ZIP CODE Calsland 94609
AMOUNT OF DEPOSIT 4432, DC RECEIPT # 592380	ADDITIONAL FOLDERS? YES /NO
	If YES, this FOLDER #
ADDRESS	PERIOD COVERED:
CITY, STATE, ZIP CODE DATE BY REMARKS	DATE BY REMARKS

ALAMEDA COUNTY

HEALTH CARE SERVICES

AGENCY



DAVID J. KEARS, Agency Director

July 7, 1997

Dr. Roy Powlan P.O. Box 1544 Lafayette, CA 94549 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION (LOP) 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

RE: Removal of Two Home Heating Fuel Underground Storage Tanks at 2939 Summit Street, Oakland, CA 94609 (STID # 4250)

Dear Dr. Powlan:

This office has reviewed the case file regarding the removal of two heating fuel underground storage tanks (100 gallon and 500 gallon capacity) at the above referenced site.

The 100 gallon tank was located beneath the concrete pad of the driveway and the 500 gallon tank was in the front lawn of the subject residential property. The former tanks were removed in April 1991 by Bernabe and Brinker. Contaminated soil was excavated by Exceltech, Inc. in August 1991 and disposed at Vasco Road Landfill. Confirmation soil samples showed very low levels of residual petroleum hydrocarbon which remains at the site (670 ppm TPH diesel, 0.032 ppm toluene, 0.026 ppm ethyl benzene and 0.12 ppm xylene). The subject site is considered a low risk soil case and presents no significant risk to the environment.

The former heating fuel tanks have been removed in full compliance with the requirements of Title 23, California Code of Regulations. Therefore, based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further investigation or cleanup action is required regarding the former heating fuel underground storage tanks.

If you have any questions concerning this letter, please contact me at (510) 567-6780.

Sincerely,

Susan L. Hugo

Senior Hazardous Materials Specialist

c: Mee Ling Tung, Director, Environmental Health
Gordon Coleman, Chief, Environmental Protection Division
Ravi Arunalantham, San Francisco Bay RWQCB
Kevin Graves, San Francisco Bay RWQCB
Leroy Griffin, Oakland Fire Department
SH / files



42501 Albrae Street Fremont, California 94538

FAX TRANSMITTAL FORM

	Transmission: _	6/1/92 sent, including this cover	Time:	£	, 2
TO:	Name: Company:	Susan Hug)		
	FAX No.:	2-569-475			
FROM:	Name: Company:	RESNA INDUSTRIES		······································	
	FAX No.:	(510) 651-2218	Phone No.:	(510)	440-3300

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL (510) 440-3300



WORK PLAN FOR SOIL AND GROUNDWATER INVESTIGATION AND QUARTERLY MONITORING

AT

2939 SUMMIT STREET OAKLAND, CALIFORNIA

This work plan has been prepared for the drilling of one exploratory boring and the installation of one groundwater monitoring well at the subject site in the City of Oakland, Alameda County, California (Figure 1). A program of quarterly monitoring is also proposed. It is our understanding that this work is required by the Alameda County Department of Environmental Health.

Background

The site is rectangular in shape and located near the intersection of Summit Street and 30th Avenue near downtown Oakland. The site is currently occupied by a two-story stucco structure. The lot is narrow and confined by multi-story structures on two sides. Overhead powerlines run along the sidewalk at the front of the building.

One 100-gallon and one 500-gallon underground storage tanks (USTs), formerly used for heating fuel oil, were excavated from the southside of the site by Bernabe and Brinker during April 1991. Soil samples collected from the excavation indicated the soil contained up to 1,700 parts per million (ppm) total petroleum hydrocarbons as diesel (TPHD). Stockpiled soil from excavation was sent to Vasco Road Landfill.

In August 1991, Exceltech, Inc., now RESNA Industries, over-excavated the former UST locations and removed the soil. Petroleum hydrocarbons were not detected in soil samples collected from the deepened excavations. RESNA will be placing one 20-foot exploratory boring within each tank excavation to evaluate possible soil contamination attributed to fuel oil.

Purpose and Scope of Work

To determine the impact, if any, of the fuel oil on the groundwater beneath the site, RESNA proposes to drill one exploratory boring in the approximate downgradient direction. The boring will then be converted to a groundwater monitoring well. The boring and subsequent well will determine if soil and groundwater below the site has been affected by fuel oil.

The location of the proposed boring and monitoring well is shown on Figure 2. The location of the well is somewhat constrained by property size and overhead utility lines.

Groundwater is anticipated to occur at 30 feet and the regional flow direction in the area is to the south-southwest. Given the size of the site together with physical constraints, placement of three monitoring wells is not feasible. In RESNA's opinion, one well, placed immediately downgradient of the former UST's excavation will provide the needed groundwater information and monitoring.

Permitting

Exploratory drilling and monitoring well installation permits will be required from the Alameda County Department of Health, Hazardous Materials Division and Zone 7 of the Alameda County Flood Control and Water Conservation District. RESNA will secure the permits prior to drilling and schedule the drilling date. A utilities clearance will be obtained prior to drilling.

Exploratory Drilling and Soil Sampling

One exploratory boring will be drilled and then converted to a groundwater monitoring well. The depth of the well boring is anticipated to be about 40 feet.

RESNA proposes to drill the boring with a RESNA drill rig using 4-1/4-inch-insidediameter hollow-stem continuous-flight auger. The auger will be steam-cleaned before the start of work boring to minimize the possibility of contamination.

Relatively undisturbed soil samples will be collected at 5-foot intervals using a modified California split-spoon sampler with internal 2-inch-diameter by 6-inch-long brass liners to collect the soil samples. When the boring is advanced to the desired sampling depth, the sampler will be lowered to the bottom of the hole and driven 1-1/2 feet ahead of the auger with a 140-pound, rig-operated hammer. The sampler will then be removed and disassembled.

The RESNA geologist will field-test one sample from each depth interval with a portable gas vapor photoionization detector for volatile hydrocarbons. One sample from each 5-foot interval above first encountered groundwater will be selected for laboratory analysis. The ends of the sample selected for laboratory analysis will be covered with aluminum foil and a plastic cap. The sample will then be labeled, logged on a chain-of-custody form, and placed in a chilled cooler for transport to a state-certified laboratory. The geologist will also prepare a log of the subsurface conditions encountered during drilling based on observations of the samples and soil cuttings. The geologist will classify the soil using the Unified Soil Classification System and Munsell Soil Color Charts (see attached protocol).

Drill cuttings will be placed on and covered by plastic sheeting. They will remain at the site until the stockpile soil samples are analyzed. Assuming a minimum amount of contamination in the cuttings, RESNA will dispose of the cuttings.

Groundwater Monitoring Well Construction

Upon completion of the borshole, RESNA will convert it to a groundwater monitoring well by installing 2-inchi-diameter, Schedule 40 polyvinyl chloride (PVC) blank and factory-slotted (0.02 inch) casing with flush-threaded couplings. No solvents or cements will be used during well construction. A RESNA geologist will determine the placement of the acreened interval. The well will be installed to a depth of approximately 35 to 40 feet to monitor the uppermost water-bearing stratum. Final depth and screen interval will be determined in the field.

After the casing is installed, the annular space between the casing and the wall of the boring will be filled with clean No. 2/12 sand to approximately 2 feet above the top of the screened interval. One foot of bentonite pellets will then be placed upon the top of the sand and hydrated. A cement grout seal will then be placed in the annulus to within 1 foot of the ground surface. The PVC wellhead will be installed in a traffic-rated waterproof vault box for protection. A concrete surface seal will be completed up to approximately 1/2-inch above the existing grade.

Well Development

After construction, the new monitoring well will be developed by manually surging and mechanically pumping the groundwater to (a) remove residual silts and clays left from the drilling and (b) improve the hydraulic conductivity between the well and the natural formation. After development, the well will be allowed to recharge for approximately 72 hours, enabling RESNA to collect a representative water sample (see attached protocol).

All water collected during well development will be placed in a properly labeled drum and left on-site until laboratory results are completed. The client is responsible for the disposal of all drummed water.

Groundwater Sampling

RESNA will collect a groundwater sample from the monitoring well for laboratory analysis. Before groundwater sampling, a RESNA geologist will field-check the monitoring well, using an electric interface probe, for the presence of free-floating product. If no floating product is observed, the well will be purged of at least 4 well volumes of groundwater before sampling. The samples will be (a) collected with a clean bailer, (b) transferred to appropriate laboratory-supplied bottles, (c) labeled, (d) logged on chain-of-custody forms, and (e) placed in a cooler for transport to a state-certified laboratory.

If free-phase hydrocarbons are detected, the free-phase portion will be bailed from the well and the estimated volume removed recorded. A groundwater sample will be collected if bailing reduces the amount of free-phase hydrocarbons to the point where

they are not present in the well. Well sampling will be conducted using one of the aforementioned methods depending on the formation yield. However, if free-phase hydrocarbons persist throughout bailing, then a groundwater sample will not be collected.

Laboratory Analyses

Depending on depth to water, four to six soil samples and one groundwater sample will be submitted for chemical analysis for TPHD and benzene, toluene, ethyl benzene, and total xylenes (BTEX), as recommended in the Tri-Regional Board Staff Recommendations. Normal turnaround time for sample analysis is 10 to 15 working days.

Report

At the conclusion of this investigation, RESNA will prepare a letter report presenting the field and laboratory methods, the data obtained, and brief summary of subsurface conditions. The report will be ready within four to five weeks following completion of field work. The report will contain:

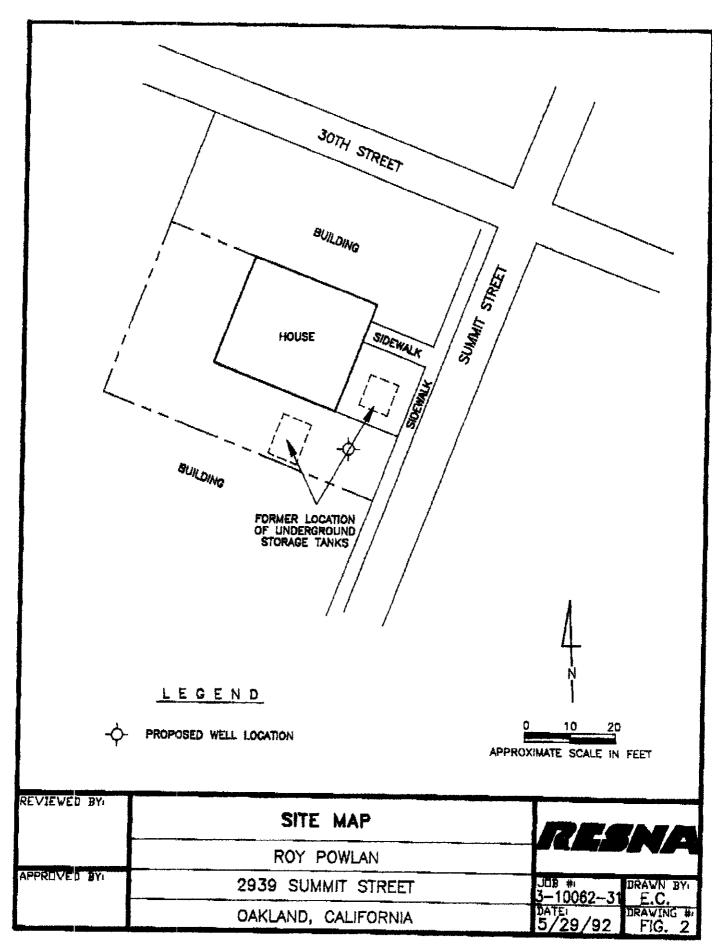
- Site geology and hydrogeology summary.
- · Lithology logs for exploratory boring.
- · Construction details of the monitoring well.
- A site map showing features relevant to the investigation.
- · Analytical data from sampling.

Quarterly Monitoring

RESNA will monitor and sample the monitoring well on a quarterly basis for three additional quarters. The well will be sampled for TPHD and BTEX using the aforementioned procedures and methods. A brief letter report of results from quarterly sampling will be submitted following sampling.

Well Destruction

At the client's discretion, the wells may be destroyed once the regulatory agency requirement to monitor ends. When groundwater at the site is found to be not detected for 4 consecutive quarters, site closure can be applied for from the regulatory agency.



LAW OFFICES

LEMPRES & WULFSBERG

PROFESSIONAL CORPORATION

KAISER CENTER

300 LAKESIDE DRIVE, 24TH FLOOR

OAKLAND, CALIFORNIA 94612-3524

TELEPHONE (510) 835-9100

DANIEL N. LEMPRES (1931-1987)

OF COUNSEL BARBARA SUZANNE FARLEY

> TELECOPIER (510) 451-2170 (510) 451-2575

9999~053 FILE NUMBER__

October 7, 1992

Alameda County Health Care Services Agency Hazardous Materials Program 80 Swan Way, Room 200 Oakland, CA 94612

Attention: Ms. Susan Hugo

2939 Summit Street, Oakland, California

Dear Ms. Hugo:

H. JAMES WULFSBERG

ROBERT L. HUGHES CHARLES W. REESE

PETER H. FERRIS JEFFREY A. SYKES

PATRICIA NICHOLS

TIMOTHY A. COL'IG ERIC J. FIRSTMAN GREGORY R. AKER CHARLES A. COBB MATTHEW D. LEMPRES

MATTHEW D. LEMPRES
MARK A. STUMP
TERRI A. KIM
CINDY LEE
DAVID A. ROSENTHAL
E. BENNETT BOLTON
RENEE C. MENDOZA
PAULETTE G. ANDREWS
MEREDITH E. BROWN
STEPHEN L. CALL
CAMERON C. WARD

CAMERON C. WARD MOLLY J. BAIER DAVID W. GINN PAUL T. GARD KEITH A. SUGAR KIP B. SHUMAN

> This law firm represents Roy Powlan, owner of the property located at 2939 Summit Street, Oakland, California. Enclosed please find the report from the soil investigation and excavation conducted by RESNA. You will note on page 3 of the report that, because of the high plasticity and low permeability of the clay layer underlying the excavation, RESNA has expressed the opinion that no further work at the site is warranted at this time.

We request that you kindly review this report and confirm your concurrence with the report's findings to this office at your earliest convenience.

Your courtesy and assistance with regard to the above is greatly appreciated.

Very truly yours,

LEMPRES & WULFSBERG

PROFESSIONAL CORPORATION

DAVID W. GINN

DWG: 1q Enclosure

9999-053\57373.1

SOIL INVESTIGATION AND EXCAVATION

AT

POWLEN PROPERTY 2939 SUMMIT STREET OAKLAND, CALIFORNIA

> Project No. E1062.11 September 1992



October 5, 1992 Project No. E1062.11

Lempres and Wulsberg Professional Corporation, Kaiser Center 300 Lakeside Drive, 24th Floor Oakland, CA 94604

Attention:

Mr. David W. Ginn

Subject:

Soil Investigation and Excavation at Powlen Property

2939 Summit Street, Oakland, California

Dear Mr. Ginn:

RESNA Industries Inc., has prepared this report describing the drilling of two exploratory borings and subsequent excavation at the subject site in the City of Oakland, Alameda County, California (Plate 1). It is our understanding that this work was required by the Alameda County Department of Environmental Health.

Background

The site is rectangular in shape and located near the intersection of Summit Street and 30th Avenue near downtown Oakland, and is currently occupied by a two-story stucco structure. The lot is narrow and confined by multi-story structures on two sides. Overhead powerlines run along the sidewalk at the front of the building.

One 100-gallon and one 500-gallon underground storage tank (UST), formerly used for home heating fuel oil, were excavated from the site by Bernabe and Brinker in April 1991. Soil samples collected from the excavation indicated the soil contained up to 1,700 parts per million (ppm) total petroleum hydrocarbons as diesel (TPHD). Soil stockpiled from the excavation was sent to Vasco Road Landfill.

In August 1991, Exceltech, Inc., now RESNA, over-excavated the former UST locations and removed the soil. Petroleum hydrocarbons were not detected in samples collected from the deepened excavations.

Purpose and Scope

The purpose of this investigation was to determine vertical extent, if any, of petroleum hydrocarbons below the excavations at the site. The work performed included the following:

- Informing the Alameda County Health department of RESNA's plans for the investigation and of any subsequent action taken in response to the findings.
- Drilling two exploratory borings and collecting soil samples for analysis.
- · Evaluation of the collected data.
- Over-excavation of areas showing elevated petroleum hydrocarbon levels.
- Preparation of this report.

Lempres and Wulsberg Project No. E1062.11 Page 2



Work Plan Approval and Permitting

RESNA submitted a work plan detailing the approach to this investigation for approval to the Alameda County Department of Health, Hazardous Materials Division (ACDH). The work plan, dated March 31, 1992, received approval from Ms. Susan Hugo of the ACDH on May 11, 1992.

A boring permit was applied for and received from the Zone 7 Alameda County Flood Control and Water Conservation District. Copies of the work plan approval and the boring permit are attached in Appendix A.

Exploratory Drilling and Soil Sampling

RESNA drilled two exploratory borings at the site on June 4, 1992. The borings; designated B-1 and B-2; were located within the areas of the fuel tank excavations, as shown on Plate 2. Due to the proximity of boring B-2 to overhead power lines, a portable drill rig was used for the drilling activities.

Relatively undisturbed soil samples were collected at 5-foot intervals in each boring using a modified California split-spoon sampler with internal 2-inch-diameter by 6-inch-long brass lines. When each boring was advanced to the desired sampling depth, the sampler was lowered to the bottom of the hole and driven 1-1/2 feet ahead of the auger with a 140-pound, manually-operated hammer. The sampler was then removed and disassembled.

The RESNA geologist field-tested one sample from each depth interval with a portable gas vapor photoionization detector for volatile hydrocarbons. One sample from each sampling interval in native material below the excavations was selected for laboratory analysis. Each end of the sample selected for laboratory analysis was covered with aluminum foil and a plastic cap. The sample was then labeled, logged on a chain-of-custody form, and placed in a chilled cooler for transport to a state-certified laboratory. A copy of RESNA's soil sampling protocol is in Appendix B. The geologist also prepared a log of the subsurface conditions encountered during drilling based on observation of the samples and soil cuttings. The geologist classified the soil using the Unified Soil Classification System and Munsell Soil Color Charts. Copies of the boring logs are attached in Appendix C.

Each borehole was completed to a depth of 21-1/2 feet and then drill cuttings were placed on and covered with grout.

Subsurface Conditions

Boring B-1 encountered 10 feet of Class II aggregate base fill material, indicating the tank excavation extended to 10 feet below grade. Two to three feet of yellowish brown clay was encountered below the excavation, grading to a silty clay at approximately 12-1/2 feet. A brown fat clay was noted at 18 to 19 feet below grade and continued to the bottom of the boring.

Class II aggregate base was observed in boring B-2 to a depth of 15 feet below grade. The fill was underlain by a yellowish brown clayey sand. A light yellowish brown fat clay similar in structure to that found at the bottom of B-1 was observed at 18 to 19 feet below grade.

Laboratory Analysis and Results: Exploratory Drilling

Five soil samples were submitted to RESNA Environmental Laboratories, in Fremont, California. RESNA's state-certified laboratory No. 1211, analyzed the soil for total petroleum hydrocarbons as diesel (TPHd) and benzene, toluene, ethyl benzene, and total xylenes (BTEX). These tests were conducted as

Lempres and Wulsberg Project No. E1062.11 Page 3



recommended by the Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites using EPA Test Methods 8015 and 8020.

Trace amounts of toluene, ethyl benzene, and total xylenes were detected in the samples collected from the 10-1/2 and 15-1/2 foot levels in B-1. TPHd was also reported in these samples, with a concentration of 670 ppm reported in the 15-1/2 foot sample. Petroleum hydrocarbon constituents were not detected in the 20-1/2-foot sample in B-1 or in any of the samples from B-2. The analytical results are summarized on Table 1. Copies of the laboratory reports and chain-of-custody documents are in Appendix D.

Excavation

Based on the analytical results, it was determined that the area around B-1 should be re-excavated; either to a depth below the occurrence of petroleum hydrocarbons or to the limits proscribed by the equipment and space limitations at the site.

A letter outlining the plan was submitted to the ACHD on August 3, 1992, and verbal approval was received from Ms. Hugo on the same day. RESNA began excavation on August 5, 1992, and continued through August 6, 1992. RESNA removed soil to a depth of 16 to 16-1/2 feet, and collected a soil sample from the bottom of the excavation. The sample was transported to RESNA laboratory for analysis.

Laboratory Analysis and Results: Excavation

The sample was transported in a chilled cooler to RESNA Laboratory for TPHd and BTEX Analysis. Petroleum hydrocarbon constituents were not reported in the sample collected at 16 feet (Table 1 and Appendix C).

Discussion and Recommendations

Information obtained from the exploratory borings placed on the Powlan property in June, 1992, indicated soil impacted by heating oil from the tank on the east side of the property had been removed during the excavation performed in August, 1991. However, up to 670 ppm diesel was detected in the area below the excavation on the southeastern portion of the site. RESNA therefore re-excavated the tank pit area and removed soil to a depth of 16 feet below grade. A soil sample collected at that depth did not contain detectable concentrations of petroleum hydrocarbon concentrations. The area was then backfilled with clean soil and Class II aggregate base.

Native material below the excavated areas appears to be a highly plastic clay with low permeability. Based on this information, RESNA does not believe further work at the site is warranted at this time.

Reporting Requirements

A copy of this report should be forwarded to the following agency in a timely manner.

Alameda County Health Care Services Agency Hazardous Materials Program 80 Swan Way, Room 200 Oakland, California 94621 Attention: Ms. Susan Hugo



Limitations

The discussion and recommendations presented in this report are based on the following:

- 1. Exploratory borings drilled at the site and in its vicinity.
- 2. Observations by field personnel.
- 3. The results of laboratory analyses performed by a state-certified analytical laboratory.
- 4. Our understanding of the regulations of the State of California, City of Oakland, and Alameda County.

It is possible that variations in the soil or groundwater conditions could exist beyond the points explored in this investigation.

The service performed by RESNA has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the City of Oakland area. Please note that contamination of soil must be reported to the appropriate agencies in a timely manner. No other warranty, expressed or implied, is made.

RESINA includes in this report chemical analytical data from a state-certified laboratory. The analytical results are performed according to procedures suggested by the U.S. EPA and State of California.

If you have any questions, please feel free to call (510) 440-3300.

Sincerely,

RESNA Industries Inc.

Nissa J. Nack
Staff Geologist

NLN/GP/sr Attachments Gary Pischke, C.E.G. 1501 Senior Project Geologist

ERED GEO

GARY PISCHKE

Lempres and Wulsberg Project No. E1062.11 Page 4



Limitations

The discussion and recommendations presented in this report are based on the following:

- 1. Exploratory borings drilled at the site and in its vicinity.
- 2. Observations by field personnel.
- 3. The results of laboratory analyses performed by a state-certified analytical laboratory.
- 4. Our understanding of the regulations of the State of California, City of Oakland, and Alameda County.

It is possible that variations in the soil or groundwater conditions could exist beyond the points explored in this investigation.

The service performed by RESNA has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the City of Oakland area. Please note that contamination of soil must be reported to the appropriate agencies in a timely manner. No other warranty, expressed or implied, is made.

RESNA includes in this report chemical analytical data from a state-certified laboratory. The analytical results are performed according to procedures suggested by the U.S. EPA and State of California.

If you have any questions, please feel free to call (510) 440-3300.

Sincerely, RESNA Industries Inc.

Nissa L. Nack Staff Geologist

NLN/GP/sr Attachments Gary Pischke, C.E.G. 1501 Senior Project Geologist

TABLE 1 ANALYTICAL RESULTS

Sample Number	Sample Date	Sample Depth (ft)	Benzene (ppm)	Toluene (ppm	Ethyl benzene (ppm)	Total Xylenes (ppm)	TPHd (ppm)
Borings							\sim
B1-2 B1-3 B1-4	06/04/92 06/04/92 06/04/92	10-1/2 15-1/2 20-1/2	<0.005 <0.005 <0.005	0.027 0.032 <0.005	0.016 0.026 <0.005	0.073 0.12 <0.005	(22) (670) (1.0)
B2-3 B2-4	06/04/92 06/04/92	15-1/2 20-1/2	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<1.0 <1.0
Excavation	<u>n</u>						:
2	08/06/92	16	<0.005	< 0.005	<0.005	< 0.005	<1.0

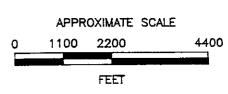
ppm TPHd

B1-B2-

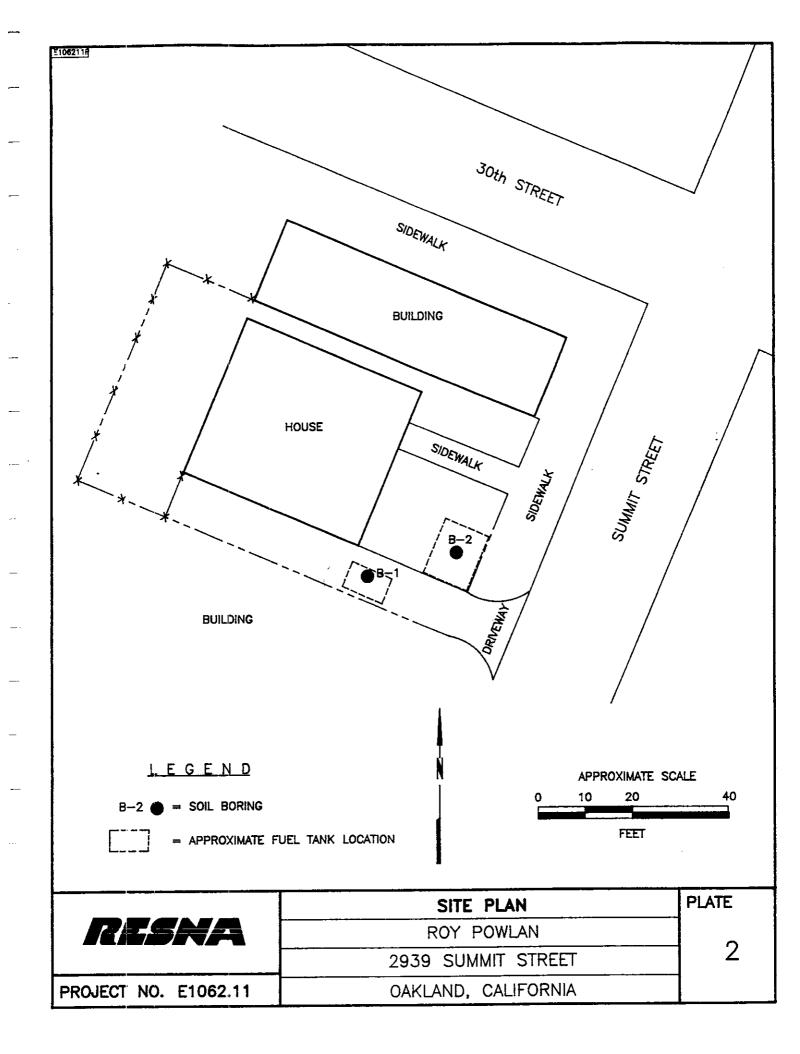
Parts per million
Total petroleum hydrocarbons as diesel
Sample collected from Boring 1
Sample collected from Boring 2
Constituent not detected at or above laboratory detection limit < 0.005



SOURCE: THOMAS BROTHER'S GUIDE ALAMEDA AND CONTRA COSTA COUNTIES 1991



	SITE LOCATION MAP	PLATE
RESHA	ROY POWLAN	
	2939 SUMMIT STREET	
PROJECT NO. E1062.11	OAKLAND, CALIFORNIA	



APPENDIX A DRILLING PERMIT WORK PLAN APPROVAL



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

6 (510) 484-2600

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT 2939 Summit Street	PERMIT NUMBER 92268 LOCATION NUMBER
CLIENT Name Key Fowlan Address P.D. B.K. 1544 Phone 510-283-1326 City Lafayette Zip 94549	PERMIT CONDITIONS Circled Permit Requirements Apply
APPLICANT Name RESA A Industrial Address 42501 Albrast Phone 510-440-3345 City Fremont Zip 94538 TYPE OF PROJECT Well Construction Geotechnical Investigation Cathodic Protection General Water Supply Contamination Monitoring Well Destruction	A. GENERAL 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date. 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects. 3. Permit is void if project not begun within 90
PROPOSED WATER SUPPLY WELL USE Domestic Industrial Other Municipal Irrigation DRILLING METHOD: Mud Rotary Air Rotary Auger Cable Other	days of approval date. B. WATER WELLS, INCLUDING PIEZOMETERS 1. Minimum surface seal thickness is two inches of cement grout placed by tremie. 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable.
DRILLER'S LICENSE NO. 623930 WELL PROJECTS Drill Hole Diameter in. Maximum Casing Diameter in. Depth ft. Surface Seal Depth ft. Number GEOTECHNICAL PROJECTS Number of Borings A Hole Diameter in. Depth 2D ft.	or 20 feet. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspecter contamination, tremied cement grout shall be used I place of compacted cuttings. D. CATHODIC. FIII hole above anode zone with concret placed by tremie. E. WELL DESTRUCTION. See attached.
ESTIMATED STARTING DATE ESTIMATED COMPLETION DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING DATE STARTING	Approved Wyman Hong Date 28 May 9
APPLICANT'S SIGNATURE MISSA Mach Date 5/18/9	2 5199

5199

RAFAT A. SHAHID, Assistant Agency Director

May 11, 1992

DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Division 80 Swan Way, Rm. 200 Oakland, CA 94621 (510) 271-4320

Ms. Nissa Nack RESNA 42501 Albrae Street Fremont, California 94538

RE: Work Plan for Soil Investigation at

2939 Summit Street, Oakland California 94609

Dear Ms. Nack:

This letter is a follow-up to our conversation of May 4, 1992 regarding the work plan submitted by RESNA concerning the soil investigation at the referenced site. The proposal for the drilling of two exploratory borings at the subject site is acceptable to this department.

Please notify this office of the schedule when the proposed work will start so a site visit can be arranged.

Should you have any questions concerning this letter, please contact me at (510) 271-4530.

Sincerely,

Susan L. Hugo

Susan & Hugo

Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Asst. Agency Director, Environmental Health Gil Jensen, Alameda County District Attorney's Office Rich Hiett, San Francisco Bay RWQCB Dr. Roy Powlen, P.O. Box 1544, Lafayette, California 94549 Files

APPENDIX B SOIL SAMPLING PROTOCOL



Soil Sampling Protocol

SOIL SAMPLING PROTOCOL

I. SOIL SAMPLING BY DRILLING RIG

- 1) Review site proposal for boring locations and special instructions. Confirm boring locations in field with client. Have Underground Service Alert (USA) mark utilities in area prior to drilling.
- Prior to initiating an exploratory boring, all equipment to be used during drilling and sampling operation is steam cleaned. Such equipment includes, but is not limited to, augers, bits, drilling rod, and soil samplers. Additionally, before each sampling event, the sampler and any sample liners are thoroughly cleaned with a dilute trisodium phosphate solution and rinsed with clean tap water or distilled water. Additional decontamination procedures are implemented as needed by specific projects.
- Each exploratory boring is drilled with a truck-mounted drilling rig using either solid flight or hollow stem augers. The boring is advanced to the desired sampling depth and the sampler is lowered to the bottom of the hole. The sampler is driven a maximum of 18 inches into the undisturbed soils ahead of the auger by a 140-pound, rig-operated hammer falling 30 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the boring log. When necessary, the sampler may be pushed by the drill rig hydraulics. In this case, the pressure exerted (in pounds per square inch) is recorded. After the sampler has penetrated the full depth, it is retrieved to the surface.
- The samplers commonly used are either a California modified sampler (3 inch or 2.5 inch O.D.) or a standard penetrometer (2 inch O.D.). The standard penetrometer does not contain sample liners and is used to determine soil strength characteristics and visually characterize the subsurface materials. If samples are collected for laboratory analysis the California modified sampler, equipped with brass liners, is used except when the analysis will include copper or zinc. In this instance, the sample should be taken with the standard penetrometer and placed in a labeled plastic bag.

Upon retrieval, the sampler is disassembled into its component parts. One or more of the liners is selected for chemical analysis. The ends of the selected liner(s) are sealed with aluminum foil or teflon tape, capped with plastic caps, labeled, logged on chain-of-custody forms and stored in a chilled ice chest for preservation in the field and during transport to the analytical laboratory. All labels are pre-written to the extent possible with indelible ink to minimize handling time.

Samples not sealed for chemical analysis are checked for the presence of contamination in the field by the geologist. Any discoloration or odor is noted on the boring log. Each sample is classified in the field by a geologist using the Unified Soil Classification System and a Munsell soil color chart. In addition, samples may also be field-screened with a photoionization detector (calibrated daily) or threshold limit value sniffer. In either case, the instrument probe is held adjacent to freshly crumbled soil and the stabilized reading value is recorded on the log. Values of volatile vapors measured in the field are reconnaissance only and are not meant to supplant chemical analysis in a certified laboratory. Other visual screening techniques include examination of the sample under hand-lens magnification as-well-as floating sheen inspection resulting from immersion in water.

Lithology logging will collect geologic data as required, using conventional geologic and hydrogeologic terminology. When rock is logged, a GSA Rock Color Chart and appropriate terminology will be employed to describe rock, fractures, bedding, etc. Soil or rock coring may be specified by the supervising geologist on a project-specific basis.

- Samples are held in the possession of RESNA personnel until transferred to the analytical laboratory. Transfer to the laboratory is accomplished with either delivery by RESNA personnel, pick-up by laboratory personnel, or transfer by a personal delivery service. Each transfer of responsibility is recorded on a chain-of-custody record that accompanies the samples.
- 7) Conditions occasionally arise when other drilling equipment are used given site-specific formation conditions. Rotary drilling may be selected if coring or bearing conditions arise. Rotary or casing hammer may be used as deep drilling, flowing sands, or formation-specific conditions require.
- 8) When drilling though an aquifer known to be contaminated, a staged drilling approach will be used. This would involve using either a temporary or

permanent conductor casing placed adjacent to the contaminated aquifer and pressed or advanced slightly into the underlying aquitard. The cased hole will be cleaned as necessary, following which, a smaller diameter drill bit/auger will be advanced to the next underlying water bearing stratum. An impermeable seal will be placed in the borehole or annular space as appropriate upon completion of exploratory boring/well construction.

II. SOIL SAMPLING BY HAND

1) Some situations require that samples be collected by hand without the assistance of a drill rig (e.g., soil stock piles, excavation sidewall sampling, etc.). When possible, soil samples will be collected using a steel core sampler equipped with clean brass liners which is advanced into the soil with a slide hammer. In other cases, the outer surface of the soil is removed and a brass liner is driven into the soil by hand or with a hammer. To avoid damaging the liner, a block of wood can be held next to the liner so that the hammer strikes the block rather than the liner. The liner is removed and handled as described above. In deep excavations where safety factors preclude the direct sampling of the bottom or side wall, soil is retrieved by a backhoe bucket and this soil is sampled.

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR I	DIVISIONS	LTR	DESCRIPTION	MAJOR	DMSIONS	LTR	DESCRIPTION
		GW	Well-graded gravels or gravel-sand mixtures, little or no fines			М	inorganic slits and very fine sands, rock flour, slity or clayey fine sands
	Gravel	GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines]	Sältte		or clayey silts with slight plasticity
	and gravelly solis	GM	Slity gravels, gravel—sand—silt mixtures		and clays Li.<50	СL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, sity clays, lean clays
Coarse— grained		GC	Clayey gravels, gravel-eand-clay mixtures	Fine- grained	_	OL	Organic sits and organic sit-clays of low plasticity
eolie		SW	Well—graded eand or gravelly eands, little or no fines	soils		мн	inorganic silts, micaceous or diatomaceous fine sandy or silty soils. Electic silts
	Sond and	SP	Poorly-graded sands or gravelly sands, little or no fines		Stite and claye LL>50	СН	inorganic clays of high plasticity, fat clays
	esndy eolle	SM	Silty sands, sand—silt mixtures		330	ОН	Organic ciays of medium to high plasticity, organic sits
		sc	Clayey sands, sand-clay mixtures		organic olia	PT	Peat and other highly organic soils

Ŧ	Depth through which sampler is driven	***************************************	Sand pack
Ŧ	Relatively undisturbed sample		Bentonite seal
X	No sample recovered	∀ ♥	Neat cement annular seal
	Static water level	\boxtimes	Caved native soil
<u>=</u>	observed in well		Blank PVC
$\frac{\nabla}{\mathbf{x}}$	Initial water level observed in boring		Machine—slotted PVC
S-10	Sample number	OVM	Organic vapor meter
SW ML	Contact, where well known	⊢ _{ML}	Contact, where approximately known

BLOWS REPRESENT THE NUMBER OF BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES TO DRIVE THE SAMPLER THROUGH EACH 6 INCHES OF AN 18-INCH PENETRATION.

DASHED LINES SEPARATING UNITS ON THE LOG REPRESENT APPROXIMATE BOUNDARIES ONLY. ACTUAL BOUNDARIES MAY BE GRADUAL LOGS REPRESENT SUBSURFACE CONDITIONS AT THE BORING LOCATION AT THE TIME OF DRILLING ONLY.

DECMA	UNIFIED SOIL CLASSIFICATION SYSTEM AND SYMBOL KEY
RESNA	POWLEN PROPERTY
	2939 SUMMIT STREET
PROJECT NO. E1062.11	OAKLAND, CALIFORNIA

Total depth of boring: 21-1/2 feet

Diameter of boring: 8 inches O.D.

Date drilled: 5-4-92

Drilling Company: RESNA Industries

Driller: Cam

Drilling method: Hollow-Stem Auger

Field Geologist: Nissa Nack

Casing diameter:	!	N/A	
Casing material:	N	I/A	·
Slot size:	N/A		
Sand size:	N/A		
Blank casing from	N/A	to	N/A
Perforated casing from	N/A	to	N/A
Annular seal from	N/A	to _	N/A
Bentonite plug from	N/A	to	N/A
Sand pack from	N/A	to _	N/A

epth	Sample No.	Blows	OVM	USCS Code	Description	Well Cons
_					Class II aggregate base (fill).	
2 -						
4 -		┨,				
8 -		2 2 2	0			
8 -						
10 -	E:1-2	₩ 9 17 20	2.8	СН	Clay, yellowish-brown (10 YR 5/6), trace sand with gray clay films, medium to high plasticity, very stiff, damp.	-
14				CL	Silty clay, mottled yellowish-brown (10 YR 6/4), trace sand, medium to low plasticity, gray staining, stiff.	
16 -	F:1-3	T 10 15 22	33.3			
18 -				\vdash \downarrow		
20 -	E14	14 22 17	0	СН	Clay, brown (10 YR 5/3), some fractures, high plasticity, very stiff, damp to slightly moist.	
22 -					Total Depth = 21=1/2 feet.	
24 -						
26 -						
28 -						
30 -						
32		ŀ				
34 -			1			
36 -						
38 -	İ					
40 -						

RESHA

LOG OF BORING B-1

POWLEN PROPERTY
2939 SUMMIT STREET

PROJECT NO. E1062.11

OAKLAND, CALIFORNIA

Total depth of boring: 21-1/2 feet

Diameter of boring: 8 inches O.D.

Date drilled: 5-4-92

Drilling Company: RESNA Industries

Driller: Cam

Drilling method: Hollow-Stem Auger

Field Geologist: Nissa Nack

Casing diameter:	ĺ	N/A	
Casing material:	N	I/A	
Slot size:	N/A		
Sand size:	N/A		
Blank casing from	N/A	to	N/A
Perforated casing from	N/A	to	N/A
Annular seal from	N/A	to	N/A
Bentonite plug from	N/A		N/A
Sand pack from	N/A	to	N/A

epth	Sample No.			OVM	USCS Code	Description								
		П				Sand/top soil (1 foot).								
2 -						Class 11 aggregate.								
4 1		Ш	4											
6 -	i31—1		4 4 4	0			1							
8 -														
10 -		Ц	3											
- 1	81-2	蒸	3 2 2	0			ŀ							
12 -														
14		П												
16	81-3	H	18 22 24	0	sc	Clayey sand, yellowish-brown (10 YR 5/4), moist, dense.]							
- 1		П	2.4											
18 -					\vdash		1							
20 -	B1-4		10 11 18	0	СН	Clay, light yellowish-brown (10 YR 8/4), some fractures, slick on sides, high plasticity, stiff, moist.								
22 -						Total Depth = 2121/2 feet.								
24 -						F								
						·								
26 -														
28 -														
30 -							1							
32 -							1							
34 -														
36 -														
38 -														
40 -							1							

LOG OF BORING B-2

POWLEN PROPERTY
2939 SUMMIT STREET
OAKLAND, CALIFORNIA

PROJECT NO. E1062.11

APPENDIX D

LABORATORY RESULTS AND CHAIN OF CUSTODY DOCUMENT



ANALYSIS REPORT

1020lab.frm 06-04-92 Date Sampled: Ms. Nissa Nack Attention: Date Received: 06-04-92 **RESNA** BTEX Analyzed: 06-10-92 42501 Albrae St. TPHg Analyzed: NR Fremont, CA 94538 TPHd Analyzed: 06-20/22-92 19513-L, Project #3-10062-ADM Project: Soil Matrix: Powlan Property

Detection Limit:	Benzene ppm 0.005	Toluene ppm 0.005	Ethyl- benzene ppm 0.005	Total Xylenes ppm 0.005	TPHg <u>ppm</u> 1.0	TPHd ppm 1
SAMPLE Laboratory Identificat	ion					
B1-2 S1206026	ND	0.027	0.016	0.073	NR	22
B1-3 S1206027	ND	0.032	0.026	0.12	NR	670
B1-4 S1206028	ND	ND	ND	ND	NR	ND
B2-3 S1206029	ND	ND	ND	ND	NR	ND
B2-4- S1206030	ND	ND	ND	ND	NR	ND

ppm = parts per million = mg/kg = milligrams per kilogram.

ANALYTICAL PROCEDURES

BTEX- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction using EPA Method 5030 followed by analysis using EPA Method 8020/602, which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID) and a flame-ionization detector (FID) in series.

TPH₅-Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are measured by extraction using EPA Method 5030, followed by analysis using modified EPA Method 8015, which utilizes a GC equipped with an FID.

TPH4-Total petroleum hydrocarbons as diesel (high boiling points) are measured by extraction using EPA Method 3550 for soils and EPA Method 3510 for water, followed by modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Laboratory Representative

June 30, 1992 Date Reported

ND : Not detected. Compound(s) may be present at concentrations below the detection limit.

NR = Analysis not requested.

CHAIN OF CUSTODY RECORD

Project	No.		Project Na	me (roperty			Test	Requ	ested		P.O. No		
3 - Sample: (Signatu	10060	A-ADM	Mack		roperto	aka	7/64	,				Lab Turnarou	RES	NA Normar
No.	Date	Time		nple Descr	iption		Q						1	Remarks
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B1-4		950		11	20 h/4								028	
Bo- 2		1115		14	1524				<u> </u>				02	
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ANALYSIS REPORT

Attention: Project:	RESI 42502 Frem 19513	l Albrae St. ont, CA 945	38 #3-10062-11	Dat BTI TPI TPI	e Sampled: e Received: EX Analyzed: Hg Analyzed: Hd Analyzed: trix:	08-06-92 08-06-92 08-06-92 NR 08-06-92 Soil	
Detection 1		Benzene ppm 0.005	Toluene ppm 0.005	Ethyl- benzene ppm 0.005	Total Xylenes ppm 0.005	TPHg <u>ppm</u> 1.0	TPHd <u>ppm</u> 1.0
SAMPLE Laboratory Io	lentificat	ion					:
2 @ 16 ft S1203053		ND	ND	ND	NĐ	NR	ND

ppm = parts per million = mg/kg = milligrams per kilogram.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

NR = Analysis not requested.

ANALYTICAL PROCEDURES

BTEX:— Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction using EPA Method 5030 followed by analysis using EPA Method 8020/602, which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID) and a flame-ionization detector (FID) in series.

TPHg-Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are measured by extraction using EPA Method 5030, followed by analysis using modified EPA Method 8015, which utilizes a GC equipped with an FID.

TPHd-Total petroleum hydrocarbons as diesel (high boiling points) are measured by extraction using EPA Method 3550 for soils and EPA Method 3510 for water, followed by modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Laboratory Representative

August 7, 1992
Date Reported



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

195340

PROJECT NO. PROJECT NAME/SITE														AN	ALYS	SIS F	EQU	EST	ED.	D P.O. #:						
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HEALTH CARE SERVICES

DAVID J. KEARS, Agency Director

AGENCY

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Division 80 Swan Way, Rm. 200 Oakland, CA 94621 (510) 271-4320

May 11, 1992

Ms. Nissa Nack RESNA 42501 Albrae Street Fremont, California 94538

RE: Work Plan for Soil Investigation at 2939 Summit Street, Oakland California 94609

Dear Ms. Nack:

This letter is a follow-up to our conversation of May 4, 1992 regarding the work plan submitted by RESNA concerning the soil investigation at the referenced site. The proposal for the drilling of two exploratory borings at the subject site is acceptable to this department.

Please notify this office of the schedule when the proposed work will start so a site visit can be arranged.

Should you have any questions concerning this letter, please contact me at (510) 271-4530.

Sincerely,

Susan L. Hugo

Susan & Kugo

Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Asst. Agency Director, Environmental Health Gil Jensen, Alameda County District Attorney's Office Rich Hiett, San Francisco Bay RWQCB Dr. Roy Powlen, P.O. Box 1544, Lafayette, California 94549 Files

5/4/9~

nissa nack.

Vorbal Q/C cappened WP.

notified 48hrz in advance
before deilling starts





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WORK PLAN FOR SOIL INVESTIGATION

AT

2939 SUMMIT STREET OAKLAND, CALIFORNIA

Project No. 3-10062-31 March 1992 22/2



42501 Albrae Street Fremont, California 94538 Phone: (510) 440-3300 FAX: (510) 651-2233

> March 31, 1992 Project No. 3-10062-31

Lempres & Wulfsberg Professional Corporation, Kaiser Center 300 Lakeside Drive, 24th Floor Oakland, CA 94604

Attention:

Mr. David W. Ginn

Subject:

Work Plan for Soil Investigation

2939 Summit Street, Oakland, California

Dear Mr. Gin:

RESNA Industries, Inc. (formerly Exceltech, Inc.), is pleased to submit this work plan for the drilling of two exploratory borings at the subject site in the City of Oakland, Alameda County, California. This work plan describes the investigative methods and techniques proposed to determine the possible impact of a release from two former underground storage tanks on the soil beneath the subject site.

If you have any questions, please call.

Sincerely,

RESNA Industries, Inc.

Nissa L. Nack Staff Geologist

NLN/CMP/da Enclosures Christopher M. Palmer, C.E.G. 1262 Senior Program Geologist

> № 1262 CERTIFIED ENGINEERING GEOLOGIST

> > OF CALIFO

Christophe M. Daline

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Section		Page
Backgro	und	1
Purpose	and Scope	1
Permitti	ng	1
Explora	tory Drilling and Soil Sampling	2
Laborate	ory Analyses	2
Report		3
	Figures	
	ite Location Map ite Plan	
	Appendices	
	ite Safety Plan foil Sampling Protocol	

WORK PLAN

FOR

SOIL INVESTIGATION 2939 SUMMIT STREET OAKLAND, CALIFORNIA

This work plan has been prepared for the drilling of two exploratory borings at the subject site in the City of Oakland, Alameda County, California (Figure 1). It is our understanding that this work is required by the Alameda County Department of Environmental Health as outlined in their letter dated February 28, 1992. A copy of our site safety plan for this site is attached.

Background

The site is rectangular in shape and located near the intersection of Summit Street and 30th Avenue near downtown Oakland. The site is currently occupied by a two-story stucco structure. The lot is narrow and confined by multi-story structures on two sides. Overhead powerlines run along the sidewalk at the front of the building.

One 100-gallon and one 500-gallon underground storage tanks (USTs), formerly used for home heating fuel oil, were excavated from the site by Bernabe and Brinker during April 1991. Soil samples collected from the excavated indicated the soil contained up to 1,700 parts per million (ppm) total petroleum hydrocarbons as diesel (TPHD). Stockpiled soil from excavation was sent to Vasco Road Landfill.

In August 1991, Exceltech, Inc., now RESNA Industries, over-excavated the former UST locations and removed the soil. Petroleum hydrocarbons were not detected in samples collected from the deepened excavations.

Purpose and Scope

RESNA proposes to drill two exploratory borings, one in the approximate center of each UST excavation. The borings will determine if the soil below the excavations has been affected by fuel oil. The locations of the proposed borings are shown on Figure 2. Soil samples will be collected every 5 feet from these boreholes, and will be used to ascertain depth of contaminant penetration. Borings are anticipated to be around to about 20 to 25 feet

Permitting

Approval of this work plan will be required from the Alameda County Department of Health, Hazardous Materials Division. RESNA will secure approval and coordinate a

drilling date with the Alameda County inspector. A utilities clearance will be obtained prior to drilling.

Exploratory Drilling and Soil Sampling

Two exploratory boring will be drilled to a depth of 20 feet within the approximate center of each UST excavation.

RESNA proposes to drill the borings with a RESNA truck-mounted drill rig using 4-1/4-inch-inside-diameter hollow-stem continuous-flight auger. The auger will be steam-cleaned before the start of each boring to minimize the possibility of cross-contamination.

Relatively undisturbed soil samples will be collected at 5-foot intervals in each boring using a modified California split-spoon sampler with internal 2-inch-diameter by 6-inch-long brass liners to collect the soil samples. When the boring is advanced to the desired sampling depth, the sampler will be lowered to the bottom of the hole and driven 1-1/2 feet ahead of the auger with a 140-pound, rig-operated hammer. The sampler will then be removed and disassembled.

The RESNA geologist will field-test one sample from each depth interval with a portable gas vapor photoionization detector for volatile hydrocarbons. One sample from each 5-foot interval above first encountered groundwater will be selected for laboratory analysis. The ends of the sample selected for laboratory analysis will be covered with aluminum foil and a plastic cap. The sample will then be labeled, logged on a chain-of-custody form, and placed in a chilled cooler for transport to a state-certified laboratory. The geologist will also prepare a log of the subsurface conditions encountered during drilling based on observations of the samples and soil cuttings. The geologist will classify the soil using the Unified Soil Classification System and Munsell Soil Color Charts.

Drill cuttings will be placed on and covered by plastic sheeting. The boreholes will be backfilled with grout upon completion. They will remain at the site until the submitted soil samples are analyzed. It is the Client's responsibility to dispose of all drill cuttings.

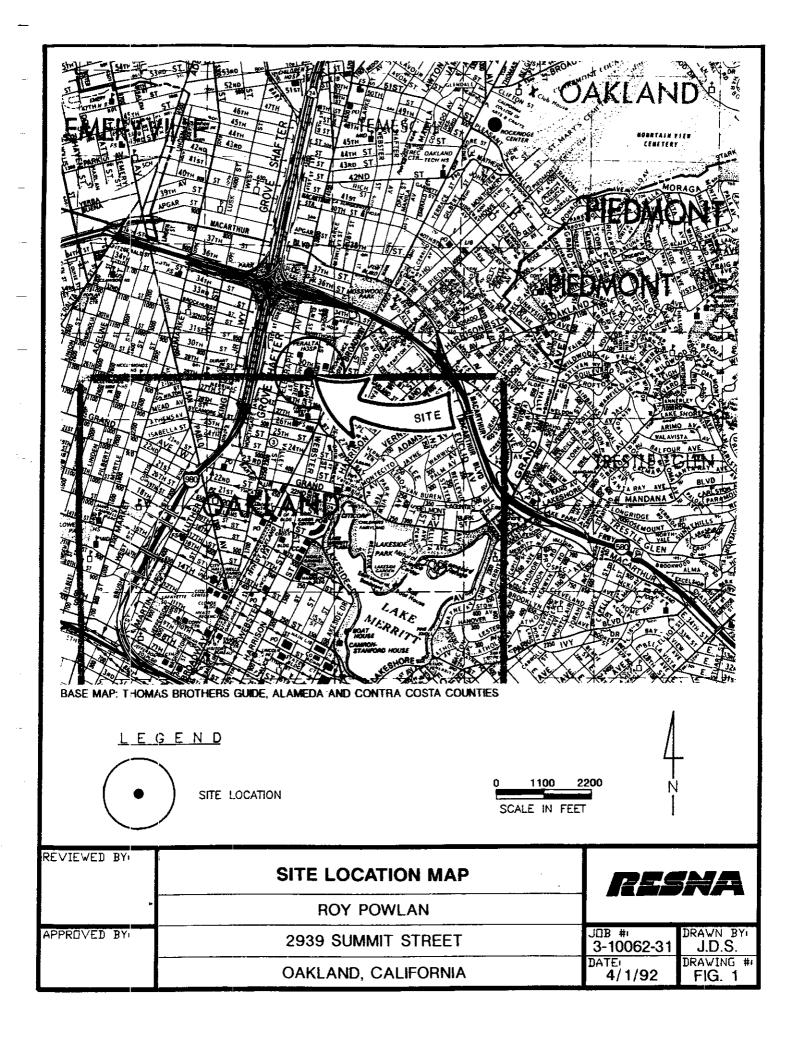
Laboratory Analyses

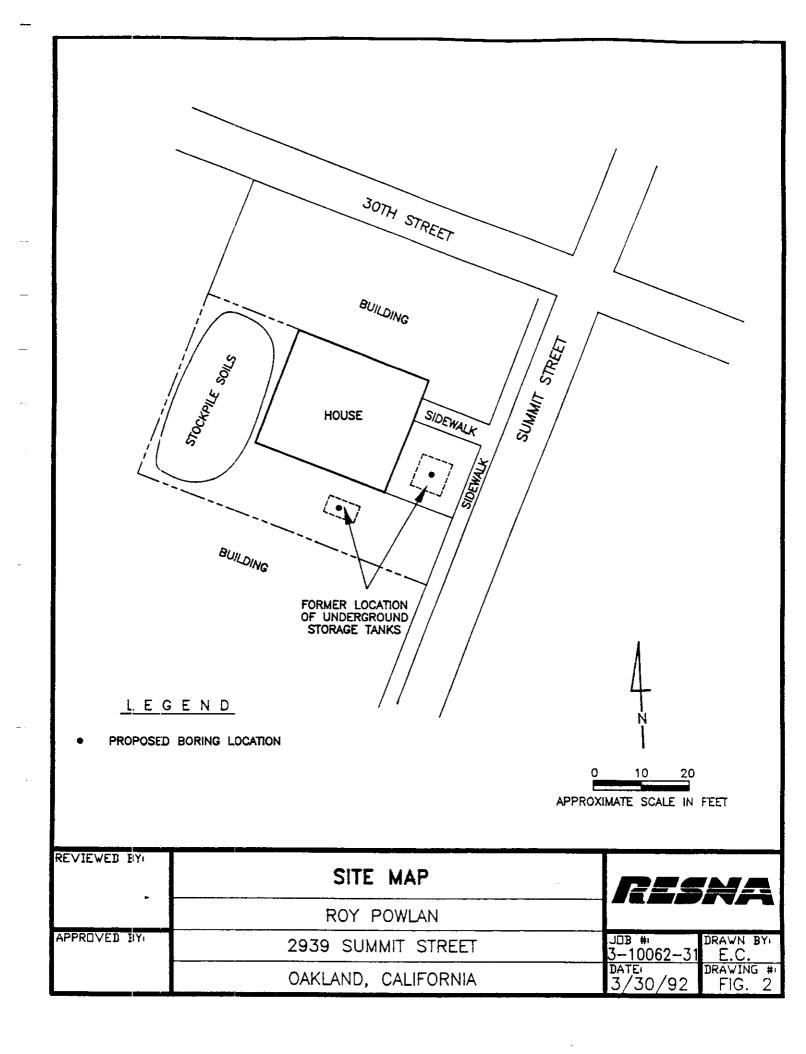
Up to 8 soil samples will be submitted for chemical analysis for TPHD and benzene, toluene, ethyl benzene, and total xylenes, as recommended in the Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites. Normal turnaround time for sample analysis is 10 to 15 working days.

Report

At the conclusion of this investigation, RESNA will prepare a letter report presenting the field and laboratory methods, the data obtained, and brief summary of subsurface conditions. The report will be ready within four to five weeks following completion of field work. The report will contain:

- Summary of subsurface conditions.
- · Lithology logs for exploratory borings.
- A background summary of site tank removal and excavation.
- Documentation of excavation as off-site removal of excavated soils.
- A site map showing features relevant to the investigation.
- · Analytical data from sampling.





APPENDIX A SITE SAFETY PLAN

SITE SAFETY AND HEALTH PLAN

FOR

POWLAN PROPERTY 2939 SUMMIT STREET OAKLAND, CALIFORNIA

Project No. 3-10062-31 April 1992

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Key Safety Personnel and Responsibilities	11
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Site Safety Plan

Job Name:	Powlan Property
Job Location:	2939 Summit Drive, Oakland, California
Client Name:	Powlan Property
Project Numl	per: 3-10062-31 Date: April 2, 1992
SSP Prepared	•
Site Safety O	fficer: Nissa L. Nack
employees duri by all on-site e safe work pract and apply to all. The provisions employees and working for R Compliance Ag from the safety safety require modifications to or working con this SSP will	and health plan (SSP) must be kept on-site and accessible to all on-site ng all phases of site operations. The SSP must be reviewed and signed imployees, subcontractors, and visitors prior to entering the site. General tices are identified in the RESNA Injury and Illness Prevention Manual RESNA work sites. set-forth in this SSP shall apply to RESNA Industries Inc. (RESNA) any subcontractors working for RESNA at the job site. All personnel RESNA at the job site must read this SSP, and sign the attached greement before entering the work area. Field personnel may deviate provisions set-forth in this SSP, but only to upgrade or increase the ments. RESNA personnel may suspend work if unauthorized to the safety provisions set-forth in this SSP are made. If changes in site ditions require changes in safety procedures, appropriate amendments to be provided by the RESNA project manager or supervisor, with the all of a RESNA branch safety officer or the RESNA Health and Safety
WORK PLAN	I
	Drill two borings on-site. Proposed boring locations are shown on Figure 2.
Task Two:	

JOB HAZARD ANALYSIS AND SUMMARY

Chemical Health Hazards

Task(s)	Chemical	TWA/IDLH	Soil/Water, Known Concentration	Signs/Symptoms
1	Benzene	1.0 ppm/3000 ppm	Unknown	irritation of eyes, nose,
				respiratory track, nausea
	<u> </u>			
1	Toluene	100 ppm/2000 ppm	Unknown	weakness, confusion,
				dialated pupils
	Ethyl benzene	100 ppm/2000 ppm	Unknown	irritation to eyes, nose,
				respiratory track, nausea
1	Total xylenes	100 ppm/1000 ppm	Unknown	Dizziness, excitement,
				drowsiness, incoherence
	Diesel		Unknown	
	Dicoo			

Attach Additional Pages as Necessary

TWA: Time-weighted average concentrations for up to a 10-hour work day during a 40 hour work week.

IDLH: Immediately dangerous to life or health concentrations

Physical Hazards

Task(s)	Hazard	Mitigation Measure
11	Trip/Fall	Keep work area free of potential trip hazards
1	Underground Utilities	Call USA, use underground locator service, check City of
		Santa Clara Records
1	Overhead Utilities	Work at least 10 feet from overhead lines. Use skid rigs
		if necessary

Fire	and	Explosion	Hazards
------	-----	-----------	---------

List Flammable or Combustible materials on-site. Keep sources of ignition away from these materials.

Flarnmable (Flash Point <100 °F)	Combustible (Flash Point <200 °F)
List oxidizers on-site. Keep away from fla	mmable or combustible materials.
Type and Location of Fire Extinguishers (S	how on map for large projects)
Type and Location of Fire Extinguishers (S) Geology Truck	how on map for large projects)
-	how on map for large projects)
Geology Truck	how on map for large projects)
Geology Truck	how on map for large projects)
Geology Truck Drill Rig	how on map for large projects)
Geology Truck Drill Rig Other Hazards (Check if applicable)	how on map for large projects)
Geology Truck Drill Rig Other Hazards (Check if applicable)	

Symptoms:

Heat Cramps:

Muscular pains and spasms.

Heat Exhaustion:

Cool, pale, moist skin; heavy sweating; dilated pupils, headache nausea, dizziness, vomiting, near normal body

temperature

Heat Stroke:

Hot, red skin; very small pupils; high body temp.,

reduced sweating

Mitigation: Cool p

Cool place for breaks:

Whenever ambient temperatures exceed 80°F, or whenever semipermeable or impermeable protective clothing is worn and ambient temperatures exceed 70°, monitoring the worker:

• Heart rate. Count the radial pulse during a 30-second period as early as possible in the rest period.

If the heart rate exceeds 110 beats per minute at the beginning of the rest period, shorten the next work cycle by 1/3 and keep the rest period the same. If the heart rate still exceeds 110 beats per minute at the next rest period, shorten the following work cycle by 1/3 (12).

• Oral temperature. Use a clinical thermometer (3 minutes under the tongue) or similar device to measure the oral temperature at the end of the work period (before drinking).

If oral temperature exceeds 99.6°F (37.6°C), shorten the next work cycle by 1/3 without changing the rest period. If oral temperature still exceeds 99.6°F (37.6°C) at the beginning of the next rest period, shorten the following work cycle by 1/3 (12). Do NOT permit a worker to wear a semi-permeable or impermeable garment when his/her oral temperature exceeds 100.6°F (38.1°C) (12).

Take frequent breaks in shaded area. Unzip or remove PPE during breaks. Provide drinking water and/or electrolyte replacement drink. Record the time and duration of all breaks. Heat stroke victims must receive emergency medical care.

Hypothermia/Frostbite

Symptoms:

Hypothermia:

Shivering, apathy, loss of consciousness, decreasing

pulse and breathing rate.

Frostbite:

white, then grayish yellow progressing to grayish blue

skin. cold, numb part.

Mitigation: Wear multilayer cold weather outfits covered by a wind resistant fabric. Take frequent breaks in a warm, sheltered area. Provide warm non-alcoholic drinks. For frostbite victims warm injured part gradually, do not rub! Warm hypothermia victims and transport to emergency medical

care.

Underground/Overhead Utilities — show location of utilities on site map
How were underground utilities identified?
Describe mitigation measures: Contact USA, City of Oakland Public Works Department, underground locators
Confined Space Entry — follow RESNA's Confined Space Entry Procedures
Other — explain hazard and mitigation

EXPOSURE MONITORING

All sample results will be recorded in the RESNA exposure log. Log copies are filed in the job file, and in all site personnel's medical file. and maintained in the job file. All sampling instruments will be calibrated per the manufacturers instructions on a daily basis.

* Note calibration gas and any unusual calibration settings in the "monitoring equipment" column.

_ , _ , _ , _ , _ ,					
** Include	monitoring	for health	hazards.	explosion	hazards, etc.

Monitoring Equipment	Hazard Monitored	Sample Location	Sample Frequency	Action Level	Action
OVM.	втех	Work area	Every hour or as needed	150 ppm per period of 15 min.	Upgrade to modified Level C

Identify sample locations on site map

PERSONAL PROTECTIVE EQUIPMENT

Mark Evacuation route(s) on site map

As a minimum Level D protection is required on all RESNA worksites. Level D includes: steel toed boots, safety glasses and a hard hat. For each task on this project, identify additional protective garments as required, include the conditions (exposure levels, etc.) under which the level of PPE would be modified for each task.

				Y
Task(s)	Condition	P	ersonnel	Garment(s)
1		All		Level C: tyvek, nitrile gloves,
				respirator with organic vapor
				cartridges; Modified Level C:
				respirator with organic vapor
				cartridges
The buddy Site will be	secured as follo	ows:	RESNA hazardo	us waste sites.
Mark Work	Zones on site	тар	Check when	n done
On-site con	nmunications:	Radio Other	√ Verbal	Hand Signals
Off-site cor	nmunications:	Radio Other	√ Telephone	
The specific	c signal for an e	emergency is:		
The specific	c signal for an e	evacuation is:		
Evacuation	assembly point	is:		

Check when done

SANITATION AND	DECONTAMINATIO)N					
	tion Procedure: Hands a		vashed before smoking,				
Location of Wash Wate	ation of Wash Water: Water on Geo-truck						
Location of Toilet:	A restroom is loo	A restroom is located within the building.					
Location of Drinking W	later: Support truck	ter: Support truck					
Mark Location of Eyew	ash and Shower drench o	n site map	Check when done				
Attach Decontamination	a Line chart if applicable		Check when done				
Equipment Decontamin Solution.		Equipment will be	e cleaned with Alconox				
Decontamination Equip	ment/Supplies needed:						
EMERGENCY RESI In case of an emergence or his/her alternate will branch safety officer, a	y the site safety officer notify outside emergency and the project supervised reports to local, state, a	nust be notified. y response agencor/manager. The	The site safety officer ies (ER) as needed, the branch safety officer sies. Other emergency				
ER Agency:	Fire and Police	Phone	911				
ER Agency:	Providence Hospital	Phone	510-835-4500				
Site Safety Officer:	Nissa L. Nack	On-site Phone Pager #					
Branch Safety Officer:	Madhulla Logan	Office Phone Pager #	510-440-3300				
Project Manager:	Gary Della Vecchia	Office Phone Pager #	510-440-3300				

Employees may only fight small fires which have not spread beyond the original source. Spills should be cleaned up as outlined in the RESNA spill response procedure. Spills may cleaned up by properly prepared personnel as follows.

Spilled Material	Neutralizer	PPE	Monitoring

Emergency Medical Treatment

All RESNA field personnel must be CPR and first aid trained. At a minimum personnel who inhale hazardous materials must be removed to fresh air. Personnel who are contaminated with hazardous materials by contact should rinse the area of contact for a minimum of 15 minutes. The site safety officer or his/her alternate will determine if injured personnel require further emergency medical attention.

Unusual first aid procedures:	N/A
Location of first aid kit:	Geology vehicle
Nearest emergency medical facility	r: Providence Hospital, 3100 Summit Street, Oakland
Directions from work site:	One block north on Summit Street
Attach a map which shows the route fr $\sqrt{}$ Check when done.	om the work site to the nearest emergency medical facility.
SPECIAL E	MERGENCY DIRECTIONS

TRAINING AND MEDICAL SURVEILLANCE

This table shows the *dates* of latest training or medical surveillance as applicable to this project. Additionally, the site safety officer will maintain records of the daily "tailgate" safety meetings.

Personnel	HAZWOPER	Respirator	CPR/First Aid	Annual Physical						
Nissa L. Nack	5/91	5/91	1/92	4/91						
Gene Nunes	3/91	11/90	1/92	8/91						
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KEY SAFETY PERSONNEL AND RESPONSIBILITIES

All personnel working for RESNA at the job site are responsible for project safety. The operational and health and safety responsibilities of pertinent RESNA personnel are identified below.

Corporate Safety Director: Marilyn Moots

The Corporate Safety Director is responsible for establishing and directing the RESNA Health and Safety program. In this capability she sets policies with respect to SSPs and ensures that the requirements are implemented company-wide. The Corporate Health and Safety Director reports to the company president, Mr. George Barsom. Ms. Moots can be reached at (602) 961-0777.

Branch Safety Officer: Madhulla Logan

The Branch Safety Officer is responsible for disseminating requirements with respect to SSPs, for monitoring training related to SSPs, and for submitting specified SSPs to the Corporate Safety Director for approval. The Branch Safety Officer report to the Corporate Safety Director.

Project Manager: Gary Della Vecchia

The Project Manager is responsible for the provisions and submittal of this SSP to the Site Safety Officer (SSO) and for advising the SSO on health and safety matters. She/He has the authority to provide for the auditing of compliance with the provisions of this SSP, suspend or modify work practices, and to recommend disciplinary action for individuals whose conduct does not meet the provisions presented in this SSP. The Project Manager is also responsible for ensuring that Medical Surveillance Exams and Training Programs are current for all personnel working on-site. The Project Manager reports to the Branch Safety Officer.

Site Safety Officer: Nissa L. Nack

The SSO is responsible for the dissemination of the information contained in this SSP to all RESNA personnel working at the job site, and to the responsible representative(s) of each subcontractor firm working for RESNA at the job site. The SSO is responsible for ensuring the following items are adequately addressed: Safety Supplies and Equipment Inventory; Accident/Incident Reporting Procedures; Decontamination/Contamination Reduction Procedures; General Safe Work Practices. Perform air monitoring as required, direct emergency response activities as described in the SSP.

The SSO has the authority to suspend work anytime he/she determines the safety provisions set-forth in this SSP are inadequate to ensure worker safety. The SSO shall also inform the Project Manager of individuals whose conduct does not meet the safety provisions of this SSP. The Site Safety Officer reports to the Project Manager. A SSO or the alternate must be present during the field work operations.

TAILGATE MEETING

All field personnel from RESNA and the subcontractors must attend a safety orientation meting before commencing the field work. The meeting will be scheduled and conducted by the Site Safety Officer and is to include an overview of the site history, the potentially hazardous compounds, their potential mode of ingress into the body, protective equipment requirements, and emergency response equipment. All individuals who do not have respirators and who may be required to wear them, will not be allowed on the site until they are provided with and fit tested for respirators by their respective employers.

A tailgate meeting will be held every morning before the start of work and is to be attended by all personnel on-site. The purpose of the meeting is to discuss the days work, potential hazards, and specific health and safety procedures to be utilized during the day. The minutes of the meeting will be prepared by the Site Safety Officer.

VISITOR CLEARANCE

Visitors to the site must inform the Site Safety Officer or the Project Manager upon their arrive on the site and must be informed of the contents of this report and fully equipped before entry is permitted. Visitors will be required to be escorted in the exclusion zone and must comply with escort directions at all times. Non-compliance with escort directions will not be tolerated, and violators will be required to leave the restricted access zones immediately.

Branch Safety Officer

Sign-Off Page I have read the Site Safety Plan and fully understand the hazards associated with the following job: I will comply with the minimum safety requirements set forth in the Site Safety Plan. I agree to notify the responsible employee of RESNA should any unsafe acts be witnessed by me while I am on this site.								
						Print Name	Signature	Date
Safety Plan approved by:								

Project Supervisor

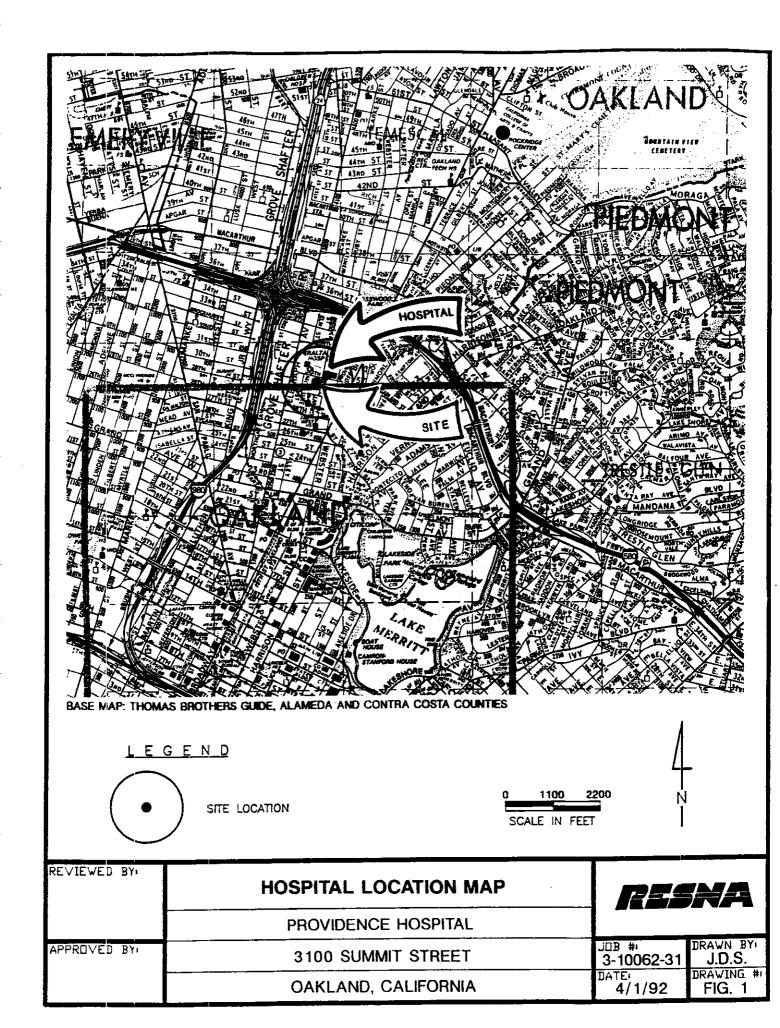
Additional Page for Chemical or Physical Hazards

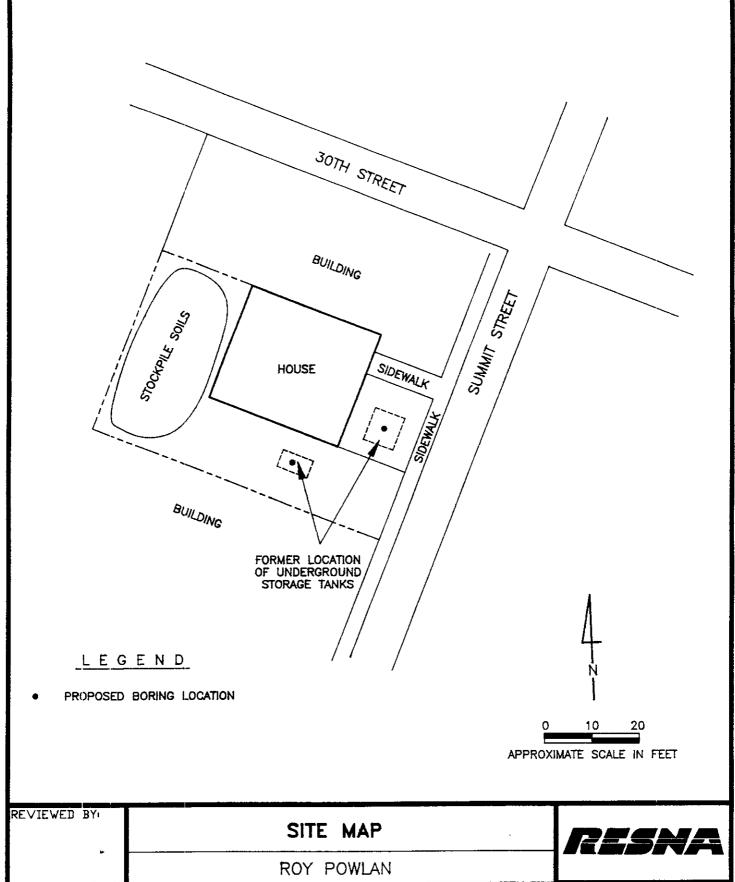
Chemical Hazards

Task(s)	Chemical	PEL/Ceiling/IDLH (soil, water, air, etc.)	Known Concentration	Signs/Symptoms

Physical Hazards

Task(s)	Hazard Mitigation Measure		
	<u> </u>		





REVIEWED BY:	SITE MAP	RESNA
	ROY POWLAN	
APPROVED BY:	2939 SUMMIT STREET	JOB #1 DRAWN BY1 3-10062-31 E.C.
	OAKLAND, CALIFORNIA	DATE: DRAWING #: 3/30/92 FIG. 2

APPENDIX B SOIL SAMPLING PROTOCOL



Soil Sampling Protocol

SOIL SAMPLING PROTOCOL

I. SOIL SAMPLING BY DRILLING RIG

- 1) Review site proposal for boring locations and special instructions. Confirm boring locations in field with client. Have Underground Service Alert (USA) mark utilities in area prior to drilling.
- Prior to initiating an exploratory boring, all equipment to be used during drilling and sampling operation is steam cleaned. Such equipment includes, but is not limited to, augers, bits, drilling rod, and soil samplers. Additionally, before each sampling event, the sampler and any sample liners are thoroughly cleaned with a dilute trisodium phosphate solution and rinsed with clean tap water or distilled water. Additional decontamination procedures are implemented as needed by specific projects.
- Each exploratory boring is drilled with a truck-mounted drilling rig using either solid flight or hollow stem augers. The boring is advanced to the desired sampling depth and the sampler is lowered to the bottom of the hole. The sampler is driven a maximum of 18 inches into the undisturbed soils ahead of the auger by a 140-pound, rig-operated hammer falling 30 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the boring log. When necessary, the sampler may be pushed by the drill rig hydraulics. In this case, the pressure exerted (in pounds per square inch) is recorded. After the sampler has penetrated the full depth, it is retrieved to the surface.
- 4) The samplers commonly used are either a California modified sampler (3 inch or 2.5 inch O.D.) or a standard penetrometer (2 inch O.D.). The standard penetrometer does not contain sample liners and is used to determine soil strength characteristics and visually characterize the subsurface materials. If samples are collected for laboratory analysis the California modified sampler, equipped with brass liners, is used except when the analysis will include copper or zinc. In this instance, the sample should be taken with the standard penetrometer and placed in a labeled plastic bag.

Upon retrieval, the sampler is disassembled into its component parts. One or more of the liners is selected for chemical analysis. The ends of the selected liner(s) are sealed with aluminum foil or teflon tape, capped with plastic caps, labeled, logged on chain-of-custody forms and stored in a chilled ice chest for preservation in the field and during transport to the analytical laboratory. All labels are pre-written to the extent possible with indelible ink to minimize handling time.

Samples not sealed for chemical analysis are checked for the presence of contamination in the field by the geologist. Any discoloration or odor is noted on the boring log. Each sample is classified in the field by a geologist using the Unified Soil Classification System and a Munsell soil color chart. In addition, samples may also be field-screened with a photoionization detector (calibrated daily) or threshold limit value sniffer. In either case, the instrument probe is held adjacent to freshly crumbled soil and the stabilized reading value is recorded on the log. Values of volatile vapors measured in the field are reconnaissance only and are not meant to supplant chemical analysis in a certified laboratory. Other visual screening techniques include examination of the sample under hand-lens magnification as-well-as floating sheen inspection resulting from immersion in water.

Lithology logging will collect geologic data as required, using conventional geologic and hydrogeologic terminology. When rock is logged, a GSA Rock Color Chart and appropriate terminology will be employed to describe rock, fractures, bedding, etc. Soil or rock coring may be specified by the supervising geologist on a project-specific basis.

- Samples are held in the possession of RESNA personnel until transferred to the analytical laboratory. Transfer to the laboratory is accomplished with either delivery by RESNA personnel, pick-up by laboratory personnel, or transfer by a personal delivery service. Each transfer of responsibility is recorded on a chain-of-custody record that accompanies the samples.
- Conditions occasionally arise when other drilling equipment are used given site-specific formation conditions. Rotary drilling may be selected if coring or bearing conditions arise. Rotary or casing hammer may be used as deep drilling, flowing sands, or formation-specific conditions require.
- 8) When drilling though an aquifer known to be contaminated, a staged drilling approach will be used. This would involve using either a temporary or

permanent conductor casing placed adjacent to the contaminated aquifer and pressed or advanced slightly into the underlying aquitard. The cased hole will be cleaned as necessary, following which, a smaller diameter drill bit/auger will be advanced to the next underlying water bearing stratum. An impermeable seal will be placed in the borehole or annular space as appropriate upon completion of exploratory boring/well construction.

II. SOIL SAMPLING BY HAND

1) Some situations require that samples be collected by hand without the assistance of a drill rig (e.g., soil stock piles, excavation sidewall sampling, etc.). When possible, soil samples will be collected using a steel core sampler equipped with clean brass liners which is advanced into the soil with a slide hammer. In other cases, the outer surface of the soil is removed and a brass liner is driven into the soil by hand or with a hammer. To avoid damaging the liner, a block of wood can be held next to the liner so that the hammer strikes the block rather than the liner. The liner is removed and handled as described above. In deep excavations where safety factors preclude the direct sampling of the bottom or side wall, soil is retrieved by a backhoe bucket and this soil is sampled.



Laboratory Procedures

LABORATORY PROCEDURES

Selection of the Laboratory

The laboratories selected to perform the analytical work are certified by the California State Department of Health Services (DHS) as being qualified to perform the selected analyses. The selected laboratories are reviewed by RESNA Industries, Inc., to assure that they are certified by the State of California and maintain an adequate in-house quality control program. When a laboratory is selected by a client for RESNA's use, a check is made regarding current DHS certification.

Chain-of-Custody Control

The following procedures are used during sampling and analytical activities to provide chain-of-custody control during transfer of samples from collection through delivery to the laboratories. Record keeping activities used to achieve chain-of-custody control are:

- Contact made by sampling organization with facility supervisor and laboratory prior to sampling to alert them of dates of sampling and sample delivery.
- Well location map with well identification number(s) prominently displayed.
- Field log book for documenting sampling activities in the field.
- · Labels for identifying individual samples.
- Chain-of-custody record for documenting transfer and possession of samples.
- Laboratory analysis request sheet for documenting analyses to be performed.

Field Filtration of Samples

Samplers will refrain from filtering TOC, TOX, or other organic compound samples as the increased handling required may result in the loss of chemical constituents of interest. Allowing the samples to settle prior to analysis followed by decanting the sample is preferable to filtration of these substances. If filtration is necessary for the determination of extractable organic compounds, the filtration should be performed in the laboratory. It may be necessary to run parallel sets of filtered and unfiltered samples with standards to establish the recovery of hydrophobic compounds when sample must be filtered. All the materials' precautions used in the construction of the sampling train should be observed for filtration apparatus. Vacuum filtration of groundwater samples is not recommended.

Water samples for dissolved inorganic chemical constituents (e.g., metals, alkalinity, and anionic species) will be filtered in the field.

Sample Containers

Sample containers vary with each type of analytical parameter. Selected container types and materials are non-reactive with the sample and the particular analytical parameter being tested. Appropriate containers for volatile organics are glass bottles of at least 40 milliliters in size, fitted with teflon-faced silicon septa. Sample containers are properly cleaned and sterilized by the certified laboratory according to the Environmental Protection Agency (EPA) protocol for the individual analysis. RESNA uses laboratory-prepared sample containers for the sampling and analysis desired. Containers prepared by one laboratory are not sent to a different laboratory.

Sample Preservation and Shipment

Various preservatives are used by the certified laboratory to retard changes in samples. Sample shipment from RESNA to laboratories performing the selected analyses routinely occurs within 24 hours of sample collection. If an overnight delivery service is required, samples are shipped at the end of each day.

Analytical Procedures

The analysis of groundwater samples is conducted in accordance with accepted quantitative analytical procedures. The following six publications are considered the primary references for groundwater sample analysis, and the contracts with the

laboratories analyzing the samples stipulate that the methods set out in these publications be used. Please note that procedures used are periodically updated by federal and state agencies, and the certified laboratories amend analysis as required by the update.

- Standard Methods for the Examination of Water and Wastewater, 16th Ed., American Public Health Association, et al., 1985, and later revisions.
- Methods for Chemical Analysis of Water and Wastes, U.S. EPA, 600/4-79-020, March 1979, and later revisions.
- Test Methods for Evaluation of Solid Waste: Physical/Chemical Methods, U.S. EPA SW-846, 1982, and later revisions.
- Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA, 600/4-82-057, 1982, and later revisions.
- Practical Guide for Groundwater Sampling, EPA, 600/2-85/104, September 1985.
- RCRA Ground-Water Monitoring Technical Enforcement Guidance Document, EPA, September 1986.

Analytical Methods

The analytical methods used by the selected laboratories are those required by the type of analysis (fuels, metals, etc.). These methods are those currently approved by the State Regional Water Quality Control Board (RWQCB). Additional information regarding chemical analyses are contained in the RWQCB Leaking Underground Fuel Tank(LUFT) Manual; Tri-Regional Board guidance dated August 2, 1988; policy letters on guidance offered at irregular intervals; or analytical procedures selected for site-specific project needs.

white -env.health yellow -facility pink -flles

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200 Oakland, CA 94621 (415) 271-4320

Hazardous Materials Division Inspection Form

	Site ID#	Site Name	Roy Powler Too	day's Date $\frac{299}{11}$
	Site Address	2939	Summit	EPA ID#
	city Oukla	ind	Zip <u>94 609</u> Phon	ıe
=			Inspection Categories:	
	MAX Amt. Stored > 500lbs Hazardous Waste generate		Y NI, Haz. Mat/Waste GENERATOR/TI	≀ANSPORTER ; Materials
=	The marked Items represe	nt violations	of the Callf, Administration Code (CAC) or the Health 8	Safety Code (HS&C)
=			4	
I.A	GENERATOR (Title 22)	* 66471	UCT Removal - found.	
	2. EPA ID 3. > 90 dcys 4. Label cates	66472 66508 66508	- 500 3ml 1161 Hea	ling full out
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Manifes	6. Records 7. Солес:: 8. Copy sent	66492 66484 66492	4/26/19/1	
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*	23. Condition 24. Compatibility 25. Mainterlance	67241 67242 67243		
<u>.</u>	26. Inspection 27. Buffer Zone	67244 67246		
	28. Tank inspection 29. Containment	67259 67245		
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ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200 Oakland, CA 94621 (415) 271-4320

Hazardous Materials Inspection Form

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10. Registration Form Fied 25533(d 11. Form Complete 25533(b 12. RMPP Conjents 25534(d 13. Implement Sch. Regid? (Y/N)	III. Underground Tanks
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SITE SAFETY PLAN

FOR

SITE CLOSURE SERVICES

ROY POWLAN 2939 SUMMIT STREET OAKLAND, CALIFORNIA

Project No. 3-10062-11 August 1991

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SITE SAFETY PLAN

SITE CLOSURE SERVICES 2939 SUMMIT STREET OAKLAND, CALIFORNIA

This Site Safety Plan delineates the basic safety requirements for the removal, disposal, and site restoration of petroleum hydrocarbon contaminated soil at 2939 Summit Street, Oakland, California.

The provisions set forth in this Plan will apply to the employees of Exceltech, Inc., and their subcontractors working on this project. The subcontractors working on this project may elect to modify these provisions, but only to upgrade or increase the safety requirements, and only with Exceltech's written concurrence.

This Site Safety Plan addresses the expected potential hazards that may be encountered for this project. Field activities for this phase are planned to begin on August 9, 1991. If changes in site or working conditions occur as the activities progress, Exceltech will provide amendments to this Plan.

SITE HISTORY AND BACKGROUND

2939 Summit Street is a rental property located in a residential section of Oakland, California. Previously, two fuel tanks were removed (by others) from the front yard and driveway of the property. Initial soil testing (by others) indicated elevated levels of gas and diesel contamination. Exceltech has been contracted to overexcavate both pits in an attempt to reduce total petroleum hydrocarbons as gasoline (TPHG) and total petroleum hydrocarbons as diesel (TPHD) to below 100 parts per million (ppm).

1.1 Work Plan

Exceltech's work plan consists of the following tasks:

A. Soil Excavation and Testing

1. Site Preparation

Block the sidewalk up and down hill from the driveway, re-route pedestrian traffic to the other side of Summit Street, and delineate the work zone using yellow caution tape.

2. Excavation and Sampling

Excavate existing pits to a maximum depth of 16 feet. Excavated soil will be loaded into a dump truck and hauled to the parking area behind the building where it will be placed on and covered with plastic pending analytical test results.

Sampling will consist of three soil samples from each of the two cavities and four from the stockpiled soil. The four stockpile samples will be composited by Applied Analytical Laboratory, Fremont, California, into two samples for testing. At the completion of the day's activities, the excavation will be covered with plywood and fenced.

3. Site Restoration

Exceltech will backfill the two excavations with clean import material upon receipt of laboratory reports verifying that the contamination levels are below 100 ppm. Stockpiled soil will be disposed of at a Class III landfill if test results register below 100 ppm. If results register above 100 ppm, on-site biological treatment or Class II disposal will become necessary.

4. Report Preparation

Exceltech will prepare a final report summarizing its activities, findings, and conclusions including, if warranted, any recommendations for additional work.

Accompanying the final report will be:

- Site map showing features relevant to the project.
- A detailed project background (analytical reports by others will be included).
- Copies of permit applications, analytical reports, chain-of-custody documentation, and manifests.

PROJECT SAFETY AUTHORITY

2.1 Personnel

Personnel responsible for project safety are:

Corporate Safety Officer:

Lisa Nelowet

Office Safety Officer(s):

Dan Nechkash/Jeff Welch

Project Supervisor: Project Foreman:

Joe Brosnan
Boyd Anderson

Exceltech's commitment to project safety includes the provision of complete in-house training for all field and construction employees. These regularly scheduled training programs comply with Occupational Safety and Health Administration (OSHA) Standard 29CFR 1910.120. Exceltech personnel have extensive experience in the safe conduct of hazardous waste and construction services.

- The Corporate Safety Officer: Ms. Lisa Nelowet is responsible for establishing and directing the Exceltech Health and Safety program. In this capability he sets policies with respect to SSPs and ensures that the requirements are implemented company-wide. Ms. Nelowet can be reached at (415) 659-0404.
- The Office Safety Coordinator(s): Mr. Dan Nechkash/Jeff Welch are responsible for disseminating requirements with respect to SSPs, for monitoring training related to SSPs, and for submitting specified SSPs to the Corporate Safety Officer for approval. The Office Safety Officers report to the Corporate Safety Officer. Mr. Nechkash or Jeff Welch can be reached at (415) 659-0404.
- Project Supervisor: Joseph Brosnan, has over 25 years of experience supervising construction and engineering projects. He has managed several complex asbestos abatement programs emphasizing control, scheduling, and contract administration. Mr. Brosnan specializes in both engineering and business. He holds a B.S. in Engineering Management and Civil Engineering, from the University of Missouri and a M.B.A. from Breach School of Business in Springfield, Missouri.

2.2 On-Site Project Safety

The Project Supervisor is responsible for the provisions of this Plan. He has the authority to provide for the auditing of compliance with the provisions of this Plan,

suspend or modify work practices, and to administer disciplinary actions for individuals whose conduct does not meet the requirements set forth herein. He will raise any policy issues needing attention to one of the office safety coordinators for discussion with and resolution by the Corporate Safety Officer. The Project Supervisor is responsible for the dissemination of the information contained in this Plan to all Exceltech personnel assigned to the project, and to the responsible representative of each subcontractor firm working under Exceltech on the project.

The senior Exceltech representative (supervisor, foreman, or technician) on-site will be the Site Safety Officer. The Site Safety Officer will ensure that the work is conducted safely.

2.3 Specific Responsibilities

Corporate Safety Officer: establishes our Corporate Health and Safety Policy and oversees all company activities related to the following:

- Safety supplies and equipment inventory.
- Medical surveillance program/physical examinations.
- · Training programs/hazard communications
- Health surveillance of all Exceltech employees.
- Assuring that safety procedures in effect are in compliance with all appropriate federal, state, and company regulations (following the most stringent of the standards).
- Assuring appropriate personal protective equipment is adequate for actual hazards of on-site conditions.

Office Safety Coordinators:

- Review Site Safety Plan and submit to Corporate Safety Officer as appropriate.
- Oversee office medical surveillance files.
- Oversee office training files and arrange for needed training.
- Review all accident/incident reports filed.

Project Supervisor:

- Accident/incident reporting procedures.
- Decontamination/contamination reduction procedures.
- Coordination of health emergency plans with local medical clinic.
- Coordination of evacuation plans with local authorities.
- Coordination of fit testing for all respiratory protective devices to be used onsite.
- Investigation of all incidents and accidents and report in writing to Corporate Safety Officer.

Site Safety Officer:

- Ensure that all personnel implement the requirements of the Site Safety Plan.
- · Conduct daily tailgate safety meetings.
- Maintain personnel exposure monitoring records.
- · Assure appropriate hazard areas are identified and marked.
- Assure all personnel entering hazard area are in appropriate levels.
- Conduct any required personnel hazard exposure surveillance through personal air sampling devices.
- Establish and supervise first aid station.
- Assure that adequate supplies of personal protective equipment are maintained.
- Assure that all supplied-air equipment is functioning properly.
- Establish site-specific safety procedures for problems encountered on-site.
- Obtain acknowledgement from all on-site personnel on sign-off page of the Site Safety Plan.

In addition to his safety responsibilities, the Project Supervisor will be responsible for all work activities on the site. The Project Foreman who reports directly to the Project Supervisor, is responsible for all activities on the site in the absence of the Project Supervisor.

JOB HAZARD ANALYSIS

3.1 Chemical Hazards

The major contaminants that may be encountered are gasoline and its hazardous components and diesel.

The primary routes of expose for the petroleum hazard are inhalation and ingestion. These hazards will be mitigated by air monitoring and avoiding dust. The air will be monitored by an organic vapor meter during excavation of any heavily contaminated areas. If the action level, as noted in the table on page 3-2, is exceeded, the site will be vacated until the levels are reduced.

Water will be applied to control the dust if visible levels of dust reach the property boundary.

3.2 Physical Hazards

Physical hazards associated with the project include: 1) the hazards associated with heavy equipment, which are primarily physical contact accidents and noise, 2) blowing dust associated with excavating, 3) a fall and confined space hazard associated with the excavation pit and; 5) heat stress.

All heavy equipment used on this project will be in good working order and operated in accordance with recognized industry standards and Cal-OSHA Title 8, Subchapter 4, Construction Safety Orders. All backhoes will use side bracing when in operation to secure against lateral movement. Bracing will have secure footing. Personnel will not be allowed under an excavated load at any time.

All equipment operators and ground crews working in close proximity of heavy equipment will be supplied with ear protection.

The dust hazard will be mitigated as noted in the chemical hazard section above.

No personnel will be allowed to enter the pit if deeper than 5 feet.

All personnel will take due caution when working within 5 feet of the excavation edge.

Some signs and symptoms of heat stress are presented below:

- · Heat rash may result from continuous exposure to heat or humid air.
- Heat cramps are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include:
 - muscle spasms
 - heavy sweating
 - dizziness
 - nausea
 - fainting
- Heat exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Signs and symptoms include:
 - pale, cool, moist skin
 - heavy sweating
 - dizziness
 - nausea
 - fainting
- Heat stroke is the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury and death occurs. Competent medical help must be obtained. Signs and symptoms are:
 - red, hot, usually dry skin
 - lack of or reduced perspiration
 - nausea
 - dizziness and confusion
 - strong, rapid pulse
 - coma

To avoid heat stress, the Site Safety Officer will keep a supply of drinking water on-site at all times and call frequent work breaks during hot periods.

CHEMICALS AND CHARACTERISTICS

Chemical	Symptoms	UELa /LELb	PELc	Action Level ^d
Benzene	Irritant to eyes, nose, respiratory system, giddiness, headaches, nausea, staggered gait, fatigue, lassitude, dermatitis, bone marrow depression, abdominal pain; CARCINOGEN	7.1%/1.3%	1 ppm	IСе
TPH as Gasoline	Irritant to eyes and lungs, causes cough, conjunctive irritation, hallucinations, dermatitis, blistering, central nervous system depression	7.6%/1.4%	300 ppm	150 ppm
TPH as Diesel	(Matugenic data, no toxic data)	N/A/N/A	N/A	200 ppm
Toluene	Fainting, weakness, confusion, headache, insomnia, dizziness, and dilated pupils	7.1%/1.3%	100 ppm	IC
Ethyl- Benzene	Irritant to eyes, nose, throat, skin and mucous membranes, dizziness, constriction in the chest	6.7%/1.0%	100 ppm	IC
Xylene	Dizziness, excitement, drowsiness, incoherence, irritant to eyes, nose, and throat	6.0%/1.0%	100 ppm	IC

a UEL = Upper Explosive Limit b LEL = Lower Explosive Limit

c PEL = Permissible Exposure Limit (OSHA)

d Action Level = Level above which respiratory protection is required

e IC = Use indicator contaminant - TPHG

JOB HAZARD SUMMARY

Risk to the environment and the public is forecast to be at a minimum. Dust from heavy equipment usage will be kept to a minimum with misting from existing water services on-site. Public access will be prohibited by a fence around the excavation. Workers will be briefed on all potential signs of danger as outlined in Section 3.

EXPOSURE MONITORING

During excavation of the most heavily contaminated areas the air will be monitored with an organic vapor meter to determine if Level C personal protective equipment is required.

Dust hazards will be monitored visually.

When temperatures exceed 85 °F, workers will monitor each other for heat stress after every work period. Flushed skin or the lack of sweating will be noted. Fatigue, flushed skin, decreased concentration and movement, lightheadedness, nausea, and loss of manual dexterity are all possible physical reactions to excess heat.

PROTECTIVE EQUIPMENT REQUIREMENTS

6.1 Introduction

It is important that personal protective equipment and safety requirements be appropriate to protect against the potential hazards at the site. Protective equipment has been selected based on the contaminant type(s), concentration(s), and routes of entry. In situations where the type of materials and possibilities of contact are unknown or the hazards are not clearly identifiable, a more subjective determination will be made on-site by the Site Safety Officer of the personal protective equipment.

Field personnel and visitors are required to wear the following clothing and equipment, as a minimum, while on site:

- Hard hat (field personnel and visitors)
- Steel-toed boots (field personnel)
- Safety glasses (field personnel)

6.2 Level of Protection

The scope and nature of this work qualifies the project to be in Level D based upon the criteria of 29 CFR, "Level D protection should be used when:..." This is based on no airborne hazards and will be confirmed by air monitoring.

Level C personal protective equipment will be maintained on-site. Level C protection will be required for continued activity when air concentrations exceed the action levels noted in Section 3.

Leve. D and C personal protective equipment is defined as follows for this project:

Level D

- · Hard Hat
- Steel Toed Boots
- Safety Glasses

Level C

- · Hard Hat
- Steel Toed Boots
- Safety Glasses (when an eye hazard is imminent)
- Standard Tyvek Suit
- Half face respirator with Organic Vapor Cartridges
- Chemical Resistant Gloves

WORK ZONE

7.1 General

The site will be controlled to reduce the possibility of exposure to any contaminants present and their transport by personnel or equipment from the site.

The possibility of exposure or translocation of contaminants will be reduced or eliminated in a number of ways, including:

- Setting up security or physical barriers to exclude unnecessary personnel from the general zone.
- Establishing work zones within the site.
- Conducting operations in a manner to reduce the exposure of personnel and equipment as noted in Section 3.
- Minimizing the airborne dispersion of contaminants as noted in Section 3
- Implementing appropriate decontamination procedures.

7.2 Field Operations Work Area

Work areas (zones) will be established based on anticipated contamination. Within these zones prescribed operations will occur utilizing appropriate personal protective equipment. The planned zones are:

- 1. Exclusion Zone
- 2. Contamination Reduction Zone; and,
- 3. Support Zone (non-contaminated).

These zones are identified on Diagram 1, Page 7-3.

7.2.1 Exclusion Zone

The exclusion zone is the innermost zone and is considered dirty or "hot." The excavation will be considered the exclusion zone. No personnel will enter the exclusion zone.

7.2.2 Contamination Reduction Zone

Between the Exclusion Zone and the Support Zone is the Contamination Reduction Zone. The areas within 20 feet of the excavation and the stockpiled soil area will be considered the contamination reduction zone.

7.2.3 Support Zone

The Support Zone is considered a non-contaminated or clean zone. The Support Zone is all other zones within the property boundaries.

DECONTAMINATION PROCEDURES

To prevent or reduce the physical transfer of contaminants by equipment, the excavation equipment buckets will be visually inspected at the completion of excavation activities. If any petroleum contamination exists in the buckets, the buckets will be washed with a trisodium phosphate solution and the solution placed in 55-gallon drums for appropriate disposal.

When Level C personal protective equipment (PPE) is worn, personnel will doff their contaminated PPE before leaving the contamination reduction zone. Contaminated PPE will be collected in plastic bags for appropriate disposal.

GENERAL PROJECT SAFETY REQUIREMENTS

The project operations shall be conducted with the following minimum safety requirements employed:

- 9.1 Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand to mouth transfer and ingestion of materials is prohibited during excavation activities.
- 9.2 Hands must be thoroughly washed before eating, drinking, smoking, or any other activities transpire.
- 9.3 Legible and understandable precautionary labels shall be prominently affixed to containers of decontamination solution.
- 9.4 Removal of materials from protective clothing or equipment by blowing, shaking, or any other means which may disperse materials into the air is prohibited.
- 9.5 Daily inspections of excavations shall be made. If there is evidence of possible cave-in or slides that impact safe operations, all work in the excavation shall cease until the necessary safeguards have been taken.
- 9.6 All trenching and excavation work will comply with regulatory agency rules.
- 9.7 The walls and spaces of all excavations and trenches more than 5 feet deep and into which employees will enter shall be guarded by shoring, sloping of the ground (1:1), or some other equivalent means.
- 9.8 All entries by workers into trenches or excavations greater than 5 feet deep are subject to the provisions of the Exceltech Confined Space Entry Procedures.
- 9.9 All trenches shall be backfilled as soon as practical after work is completed and all associated equipment removed following receipt of analytical results.
- 9.10 Field operations personnel shall be cautioned to inform each other of non-visual symptoms of the presence of toxics, such as:
 - Headaches
 - Dizziness
 - Nausea

- Blurred Vision
- Cramps
- Irritation of eyes, skin, or respiratory tract
- Changes in complexion or skin discoloration
- Changes in apparent motor coordination
- Changes in personality or demeanor
- Excessive salivation or changes in pupillary response
- Changes in speech ability or pattern
- 9.11 Exceltech personnel on-site are to be thoroughly briefed on the anticipated hazards, equipment requirements, safety practices, emergency procedures and communications methods, standard operating procedures for all equipment, initially and in daily briefings.
- 9.12 Any skin contact with excavated soil or groundwater shall be avoided.
- 9.13 The ambient temperature will be monitored as specified previously and the necessary controls to reduce employee heat or cold stress will be implemented.
- 9.14 A multi-purpose portable fire extinguisher shall be located on each piece of heavy equipment and in on-site Exceltech pick-up trucks.
- 9.15 The Site Safety Officer will be responsible to take necessary steps to ensure that employees are protected from physical hazards, which could include,
 - Falling objects such as tools or equipment
 - Falls from elevations
 - Tripping over hoses, pipes, tools, or equipment
 - Slipping on wet or oily surfaces
 - Insufficient or faulty protective equipment
 - Insufficient or faulty operations, equipment, or tools

SANITATION

A restroom is located in the maintenance building. Potable water is also available in that building.

STANDARD OPERATING PROCEDURES

Exceltech will use the heavy equipment operating procedures, heavy equipment operator check list, and truck operating procedures that follow.

11.1 Heavy Equipment Operating Procedures

- a. All employees shall be clear of equipment before starting. Equipment operators shall perform a complete walk-around inspection before starting equipment.
- b. All engines shall be shut down prior to refueling.
- c. No adjustments, cleaning, or repairs shall be made to equipment while the equipment is running. All exposed gears, sprockets, chain drives, and belt and pulley drives shall have guards replaced directly following repairs, lubrication, cleaning, or similar operations.
- d. Only trained employees are permitted to operate equipment.
- e. No equipment shall be left with the engine running on an inclined surface.
- f. All four wheels will be kept on the ground during loading.
- g. Material piles shall only be approached at a speed necessary to fill the bucket.
- h. The bucket or blade shall be grounded when equipment is to be left unattended, even if for a short time.
- i. No eating, reading, or daydreaming while engaged in the operation of heavy equipment. Equipment shall not be operated if the operator is physically unfit to do so.
- j. Hand signals shall only be recognized by the operator from the person supervising the lift or the unloading. Operating signals must follow the approved standard.
- k. Clearances and other environmental conditions shall be checked when working near electrical wires, guy lines, or structures. Avoid contact of boom or cables with lines, electrical wires, and structures. At no time will

- equipment booms operate within 10 feet of high voltage overhead power lines.
- 1. Operators will inspect equipment daily to ensure that it is in good working order, and all safety equipment is operational. This includes brakes, horn, alarms, etc.
- m. Gasoline shall not be stored on the equipment.
- n. All equipment shall be kept clean and orderly. Cabs shall be routinely inspected for cleanliness by the operator and the supervisor.
- o. Load limits of the equipment shall be strictly observed.
- p. The operator will be the only person allowed on the equipment. NO PASSENGERS.

11.2 Heavy Equipment Operator Check List

- 1. Check for oil or water drippings on machine or onto ground.
- 2. Check engine oil and water level.
- 3. Check fan belts, tire pressure, and loose lug nuts.
- 4. Look for sabotage or damage done to machine the previous day.
- 5. Start engine and check oil pressure.
- 6. Inspect all gauges.
- 7. Inspect all controls.
- 8. Inspect cutting edge for wear and loose bolts.
- 9. Inspect all safety equipment seat belts, back-up alarm, brakes, canopy and windshield.
- 10. Contact foreman or your shop if any adjustments or repairs are needed to be done to your piece of equipment.

11.3 <u>Truck Operating Procedures</u>

- a. Oil, water, and the brakes shall be checked before starting the engine.
- b. Before moving any truck, a check for clearance around the vehicle from any obstructions or personnel shall be performed. Walk around the truck.
- c. Drivers shall, unless specifically instructed, exit the cab when the truck is being loaded.
- d. Overloading of trailers shall be prohibited.
- e. Passengers are not to ride on the running boards.
- f. Always set the hand brakes and lock ignition before leaving the truck at the end of the shift.
- g. All regulations and traffic laws shall be strictly obeyed.

CONTINGENCY PLAN AND EMERGENCY RESPONSE PROCEDURES

12.1 Site Emergency Warning System

The warning systems that will be utilized depending on the work site conditions or emergency involved:

- · Hand signals
- · Verbal communications
- · Radio communications
- Vehicle horns

Verbal instructions with or without assistance are used to deal with specific incidents.

Radio communications are used between the site and the Fremont office.

Vehicle horn signals are used to signify an emergency warning. One long blast is used on-size to signify emergency evacuation of the immediate work area to a predetermined location upwind, where a head count will be taken and further instructions given.

12.2 Emergency Equipment

The following equipment comprises the basic emergency equipment list, of which all shall be available at the work site:

- Fire extinguishers dry chemical
- First kits (including chemical burn kit)

12.3 General Emergency Procedures

In case of an emergency or hazardous situation, the team member that observes this condition shall immediately sound the alarm.

Upon hearing an alarm, all non-emergency communications will cease and the member giving the alarm will proceed to give the Site Safety Officer all pertinent information. This information will also be provided the Project Supervisor as soon as feasibility.

Actions to be taken will be dictated by the emergency condition as directed by the Site Safety Officer.

Power equipment will be shut down and operators will stand by for instruction.

Injured personnel will be transported to the appropriate medical facility

The Exceltech Fremont office will be notified immediately.

In case of a fire, explosion, or hazard alarm, personnel will immediately proceed to assigned pre-arranged safe locations: along the site perimeter.

Upon arrival at the safe locations, a complete head count will be given to the Site Safety Officer and personnel will stay at the safe locations until the area is secured.

12.4 Personal Injury

If an injury occurs due to an accident or exposure to a hazardous substance, the Exceltech Fremont office will be notified. The Site Safety Officer will be given all appropriate information concerning the nature and cause of the injury so that treatment preparations can be initiated. The injured person will be transported to the Support Zone where appropriate first aid and treatment can begin. The Project Supervisor will be informed and will investigate the cause of the injury and make any necessary changes in work procedures.

12.5 Ambient Monitoring Contingencies

When organic vapor monitoring on the downwind edge of the Contamination Reduction Zone indicates higher than action levels of any contaminants, the Site Safety Officer will warn unprotected personnel to evacuate.

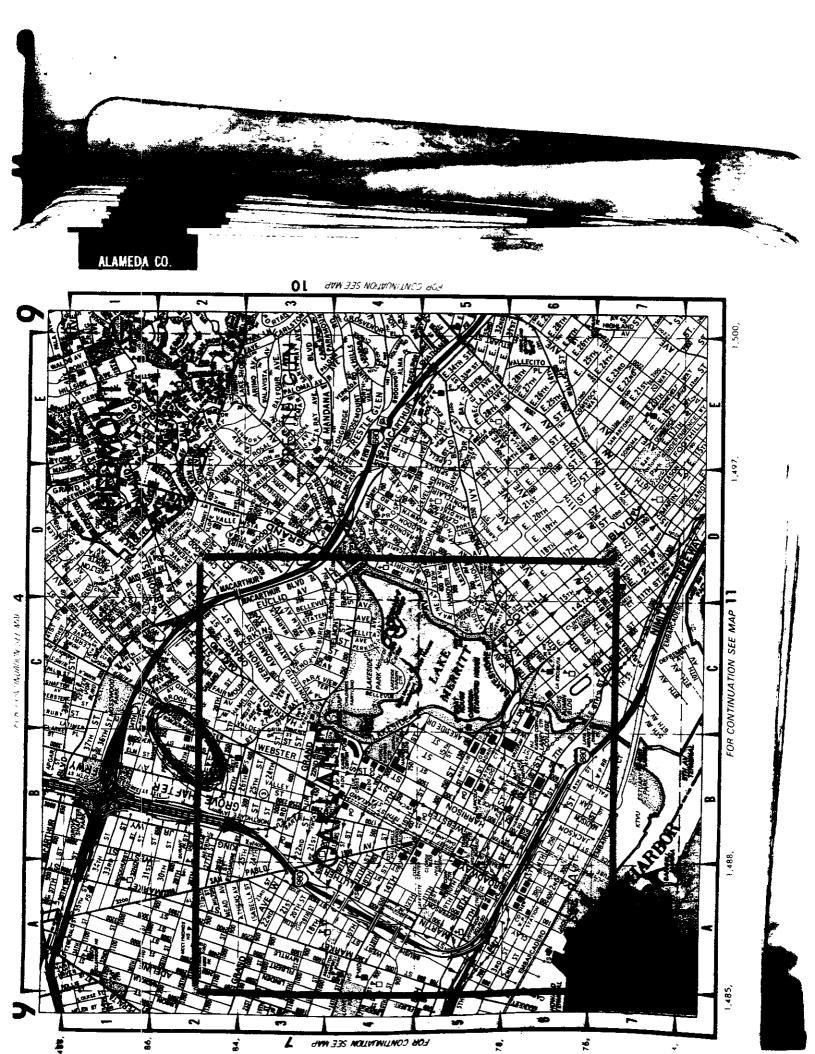
12.6 Emergency Contact Listing

In the event of an accident resulting in physical injury, first aid will be administered, and the injured worker will be transported to the Providence Hospital for emergency treatment. A physician's attention is required regardless of the severity of the injury.

In the event of fire, explosion, or property damage at the site, Mr. Roy Paulan (283-4623) will be immediately notified. If necessary, local fire or response agencies will be called.

Emergency Telephone Numbers:

Fire and Police	. 911
Providence Hospital	. (415) 835-4500
Directions to Hospital: Go one block west on Summit Street.	
Additional Contingency Telephone Numbers:	
Mr. Dan Nechkash, Office Safety Coordinator	
Mr. Lisa Nelowet, Corporate Safety Officer Exceltech, Inc., Fremont, California	. (415) 659-0404
Occupational Health and Safety Group	. (408) 253-6300



SAFETY/ORIENTATION TRAINING

Field personnel from Exceltech will attend a project-specific training program for safety issues and project work task review before beginning work. The meeting will be conducted by the Project Supervisor.

13.1 Formal Training

All Exceltech field personnel are trained in accordance with all applicable OSHA regulations pertaining to personal safety and hazardous materials handling and decontamination. Exceltech's health and safety program is in full compliance with 29 CFR, Part 1910, including the OSHA interim ruling which amends CERCLA and sets specific standards for medical surveillance and training. Copies of training documentation are available on request by notifying Mr. Dan Nechkash in our Fremont office at (415) 659-0404.

Exceltech field personnel have extensive knowledge of various construction work and the tools in which to do their work. Personnel are trained in the hazards of heavy equipment, open excavation, and various other earth moving hazards.

This formal training is supplemented by daily tail-gate safety briefings and additional site-specific training as required.

MEDICAL SURVEILLANCE

Exceltech personnel and subcontractors engaged in project operations shall be participants in the Medical Surveillance program, and must be cleared by the examining physician(s) to wear respiratory protection devices and protective clothing for working with hazardous materials. The applicable requirements under CAC Title 8, Section 5216 are available in the Fremont office and will be observed.

14.1 Examination Requirements

All Exceltech personnel on-site shall have successfully completed a pre-placement or periodic medical examination in accordance with established Exceltech policies and procedures, and consistent with the provisions of the OSHA carcinogen standards. This examination includes a complete medical and occupational history, physical examination, and selected biological sampling. Laboratory studies include a complete blood count (CBC), urinalysis, chemistry panel (SMAC), pulmonary function (FEV and FVC), chest X-ray, audiometer, and vision screening. Additional testing is conducted as deemed appropriate by the occupational physician. Ongoing medical consultation and post-project testing is also provided. Exceltech Medical Surveillance Program records are available in the Fremont office for review.

14.2 Emergency Medical Treatment

Emergency facilities and contact agencies (which include local hospital facilities, state highway patrol, local fire/paramedics, and local law enforcement agencies) have been established in Section 12, and arrangements have been made with those organization as appropriate. These facilities and agencies will be utilized in the event of an employee injury or illness requiring emergency medical care beyond the capabilities of on-site first aid trained personnel.

RECORDKEEPING

15.1 General

Recordkeeping shall be consistent with OSHA regulations in all respects. The following permanent records will be maintained in the Exceltech offices and at the site:

- · Safety Inspection Reports
- Personnel Exposure Monitoring Records (spiral or bound permanent log books will be used)
- OSHA 200 Current to within 5 days
- Accident reports consistent with the established Exceltech procedures
- Tailgate safety meetings (held daily before start of work)

15.2 Medical Records

Permanent medical records are maintained in confidential files as part of Exceltech's Medical Surveillance Program.

Office Safety Coordinator

SECTION 16

SIGNOFF PAGE

I have read the Site Safety Plan and fully understand the hazards associated with the site closure services at 23939 Summit Street, Oakland, California.

I will comply with the minimum safety requirements set forth in the Site Safety Plan. I will implement the Site Safety Plan requirements and agree to notify the Site Safety Officer or the Project Supervisor should any unsafe acts be witnessed by me while I am on this site.

Print Name	Signature	Date
		· · · · · · · · · · · · · · · · · · ·
* ****		
	, Maria	·····
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

Project Supervisor

Roy Y. Powlan, M.D. Box 1544 Lafayette, Ca. 94549

283-1326

November 7, 1991

Ms. Susan L. Hugo Alameda County Dept. of Enviornmental Health 80 Swan Way #200 Oaklard, Ca. 94521

Dear Ms. Hugo:

I enclose a Closure Report, provided to me by Exceltech Company, for your review.

In view of the small size of the tanks and their placement, relatively close to the surface, the over excavation, as described in the report, was able to achieve a complete removal of all signs of any contamination in the soil, at the bottom and sides of the excavations. Additionally, this site is at the highest elevation of the "Medical Hill" area of Oakland.

I would appreciate hearing from you at your earliest convenience regarding closure of the site.

Yours truly,

Roy Y. Powlan, M.D.

RYP/k

INSTRUCTIONS

EMERGENCY

Indicate whether emergency response personnel and equipment were involved at any time. If so, a Hazardous Material Incident Report should be filed with the State Office of Emergency Services (OES) at 2800 Meadowview Road, Sacramento, CA 95832. Copies of the OES report form may be obtained at your local underground storage tank permitting agency. Indicate whether the OES report has been filed as of the date of this report.

LOCAL AGENCY ONLY

To avoid duplicate notification pursuant to Health and Safety code Section 25180.7, a designated government employee should sign and date the form in this block. A signature here does not mean that the leak has been determined to pose a significant threat to human health or safety, only that notification procedures have been followed if required.

REPORTED BY

Enter your name, telephone number, and address. Indicate which party you represent and provide company or agency name.

RESPONSIBLE PARTY

Enter name, telephone number, contact person, and address of the party responsible for the leak. The responsible party would normally be the tank owner.

SITE LOCATION

Enter information regarding the tank facility. At a minimum, you must provide the facility name and full address.

IMPLEMENTING AGENCIES

Enter names of the local agency and Regional Water Quality Control Board involved.

SUBSTANCES INVOLVED

Enter the name and quantity lost of the hazardous substance involved. Room is provided for information on two substances if appropriate. If more than two substances leaked, list the two of most concern for cleanup.

DISCOVERY/ABATEMENT

Provide information regarding the discovery and abatement of the leak.

SOURCE/CAUSE

Indicate source(s) of leak. Check box(es) indicating cause of leak.

CASE TYPI

Indicate the case type category for this leak. Check one box only. Case type is based on the most sensitive resource affected. For example, if both soil and ground water have been affected, case type will be "Ground Water". Indicate "Drinking Water" only if one or more municipal or domestic water wells have actually been affected. A "Ground Water" designation does not imply that the affected water cannot be, or is not, used for drinking water, but only that water wells have not yet been affected. It is understood that case type may change upon further investigation.

CURRENT STATUS

Indicate the category which best describes the current status of the case. Check one box only. The response should be relative to the case type. For example, if case type is "Ground Water", then "Current Status" should refer to the status of the ground water investigation or cleanup, as opposed to that of soil. Descriptions of options follow:

No Action Taken - No action has been taken by responsible party beyond initial report of leak.

Leak Being Confirmed - Leak suspected at site, but has not been confirmed.

<u>Preliminary Site Assessment Workplan Submitted</u> - workplan/proposal requested of/submitted by responsible party to determine whether ground water has been, or will be, impacted as a result of the release.

<u>Preliminary Site Assessment Underway</u> - implementation of workplan.

<u>Pollution Characterization</u> - responsible party is in the process of fully defining the extent of contamination in soil and ground water and assessing impacts on surface and/or ground water.

Remediation Plan - remediation plan submitted evaluating long term remediation options. Proposal and implementation schedule for appropriate remediation options also submitted.

Cleanup Underway - implementation of remediation plan.

Post Cleanup Monitoring in Progress - periodic ground water or other monitoring at site, as necessary, to verify and/or evaluate effectiveness of remedial activities.

<u>Case Closed</u> - regional board and local agency in concurrence that no further work is necessary at the site.

IMPORTANT: THE INFORMATION PROVIDED ON THIS FORM IS INTENDED FOR GENERAL STATISTICAL PURPOSES ONLY AND IS NOT TO BE CONSTRUED AS REPRESENTING THE OFFICIAL POSITION OF ANY GOVERNMENTAL AGENCY

REMEDIAL ACTION

Indicate which action have been used to cleanup or remediate the leak. Descriptions of options follow:

<u>Cap Site</u> - install horizontal impermeable layer to reduce rainfall infiltration.

<u>Containment Barrier</u> - install vertical dike to block horizontal movement of contaminant.

 $\underline{\mathtt{Excavate}}$ and $\underline{\mathtt{Dispose}}$ - remove contaminated soil and dispose in approved site.

Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming).

Remove Free Product - remove floating product from water table.

Pump and Treat Groundwater - generally employed to remove dissolved contaminants.

Enhanced Biodegradation - use of any available technology to promote bacterial decomposition of contaminants.

Replace Supply - provide alternative water supply to affected parties.

Treatment at Hookup - install water treatment devices at each dwelling or other place of use.

Vacuum Extract - use pumps or blowers to draw air through soil.

Vent Soil - bore holes in soil to allow volatilization of contaminants.

No Action Required - incident is minor, requiring no remedial action.

COMMENTS - Use this space to elaborate on any aspects of the incident.

SIGNATURE - Sign the form in the space provided.

DISTRIBUTION

If the form is completed by the tank owner or his agent, retain the last copy and forward the remaining copies intact to your local tank permitting agency for distribution.

- 1. Original Local Tank Permitting Agency
- State Water Resources Control Board, Division of Loans and Grants, Underground Storage Tank Program, P.O. Box 944212, Sacramento, CA 94244-2120
- 3. Regional Water Quality Control Board
- 4. County Board of Supervisors or designee to receive Proposition 65 notifications.
- 5. Owner/responsible party.

Request of 139-2300 (916) 139-2300 Birchine Leadings from Sione Married for Ma



42501 Albrae Street Premont, California 94538 Phone: (510) 440-3300 PAX: (510) 651-2233

> August 3, 1992 Project No. 3-10062-32

Department of Environmental Health Hazardous Materials Division 80 Swan Way, Rm. 200 Oakland, California 94621

Attention:

Susan L. Hugo

Senior Hazardous Materials Specialist

Subject:

2939 Summit Street, Oakland, California

Dear Ms. Hugo:

As discussed by you and Ms. Nissa Nack on July 31 and August 3, 1992, analytical results from the soil investigation conducted on June 4, 1992 indicate petroleum hydrocarbon constituents may exist below the former underground storage tank on the south side of the subject site. Based on observations by workers during the initial excavation of this tank pit, RESNA believes the hydrocarbons to be in a limited area.

RESNA therefore proposes re-excavating the tank pit in the area of the boring. Continued excavation of the area will proceed based on visual observation of possible contamination, and the restrictions posed by the proximity of the building and the retaining wall to the excavation. One sample will be collected from the bottom of the excavation according to RESNA's sampling protocol (please refer to Appendix B of the March, 1992 Work Plan) and transported to RESNA Environmental Laboratory for analysis.

Excavation will continue until either the soil below the newly excavated area is shown to contain less than 100 parts per million petroleum hydrocarbon constituent, or it is apparent that further excavation will result in damage to either the building or the retaining wall. Clean fill material will then be used to backfill the excavation.

Should you have any questions concerning this letter, please contact Ms. Nack at (510) 440-3345.

Sincerely,

RESNA Industries, Inc.

Gary Della Vecchia Operations Manager



42501 Albrae Street Fremont, California 94538

FAX TRANSMITTAL FORM

Date of	Transmission: _	8/3/92	Time:	
Total nur	mber of pages	sent, including this cover	r page:	2
TO:	Name:	Susa Hugh		
	Company:	Alameda Cou	tylkelth	
	FAX No.:	569-4757	1	
FROM:	Name:	N. SER /	rek	
	Company:	_RESNA_INDUSTRIE	S INC.	
	FAX No.:	(510) 651-2218	Phone No.:	(510) 440-3300

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL (510) 440-3300

CLOSURE REPORT FOR

MR. ROY POWLAN 2939 SUMMIT STREET OAKLAND, CALIFORNIA

> Project No. 3-10062 October 1991

October 23, 1991

Mr. Roy Powlan P.O. Box 1544 Lafayette, CA 94549

Subject:

Closure Report for 2939 Summit Street, Oakland, California

Exceltech Project No. 3-10062

Dear Mr. Powlan:

Exceltech is pleased to provide you with this letter report regarding closure activities at 2939 Summit Street in Oakland, California. Exceltech was contracted to complete work previously started by Bernabe and Brinker Incorporated, a licensed contractor. A site map is attached as Figure 1.

Bernabe and Brinker's field activities took place in April 1991. On April 26, 1991, they removed one approximately 100-gallon underground fuel oil tank and on April 29, 1991, they removed another approximately 100-gallon underground tank, this one presumed also to have held heating oil fuel. After removal of the tanks, Tank Protect Engineering, an environmental management firm took the required samples.

Analytical data reported May 15, 1991 and May 20, 1991 by Sequoia Analytical show hydrocarbon contaminants in the soil. The analytical results, as well as chain-of-custody records, are attached in Appendix A.

On July 9, 1991, Roy Powlan contracted with Exceltech to do further excavation work to remove contaminants, sample the excavation to confirm removal, backfill the excavation upon confirmation with clean import fill, and dispose of all excavated soils.

On August 14,1991, Exceltech crews mobilized and over-excavated previous tank locations. Removed soils were placed on and covered with Visqueen®. At completion of the soil excavation, one sample was taken from each of the excavations and four samples were taken from the stockpiled softs. The four stockpiled samples were composited by the laboratory into one sample. These samples were taken with the bucket of a backhoe, placed in glass jars, and sealed. Samples were then placed on ice for transport to Applied Analytical, a state-certified laboratory. Proper chain-of-custody followed the samples.

Analytical data reported August 23, 1991, showed non-detectable levels of hydrocarbon contamination both excavation and stockpile soils. Lead concentrations were also non-detectable. These results are attached as Appendix B.

Mr. Roy Powlan Project No. 3-10062 Page 2

After reviewing these results, Exceltech crews backfilled the excavation and profiled the stockpile to BFI Waste Systems, a Class III disposal. On October 4, 1991, these soils were transferred to Vasco Road Landfill. The non-hazardous special waste manifests are attached as Appendix C.

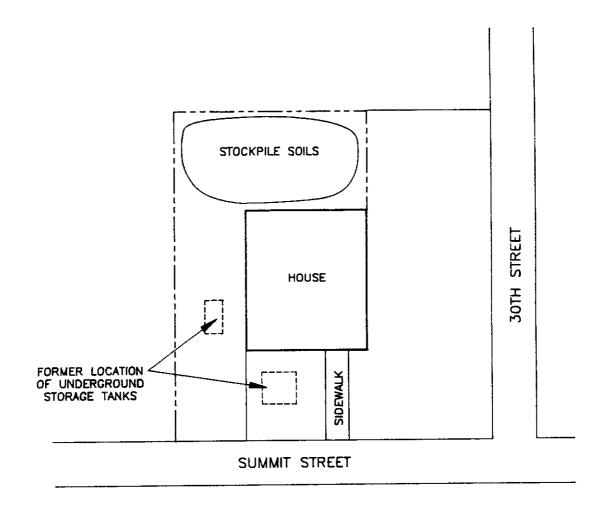
Based upon visual inspection of the site, as well as analytical data reported, Exceltech believes no further activities are needed to close this site. If you have any questions or comments, regarding this report, please call me at (510) 659-0404.

Thank you. Exceltech, Inc.

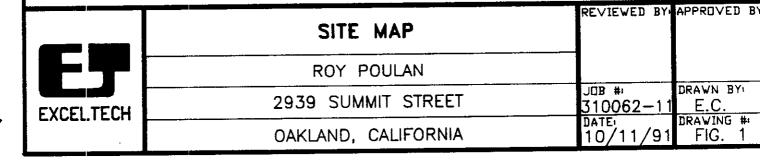
Gary L. Della Vecchia Field Service Manager

Garagh Della Vechia

GLD/da Attachments



NOT TO SCALE



Attachment A

Analytical Data from Sequoia Analytical and Chain-of-Custody Records



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520 (415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: #162A-042691

2821 Whipple Road Union City, CA 94587

Attention: Lyle Travis

QC Sample Group: 1040957-59

Reported: May 20, 1991

QUALITY CONTROL DATA REPORT

ANALYTE			Ethyl		
	Benzene	Toluene	Benzene	Xylenes	
Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	
Analys::	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha	
Reporting Units:	ppm	ppm	ppm	ppm	
Date Analyzed:	May 10, 1991	May 10, 1991	May 10, 1991		
QC Sample #:	104-0292	104-0292	104-0292	104-0292	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc.					
Added:	0.40	0.40	0.40	1.2	
Conc. Matrix					
Spike:	0.39	0.37	0.39	1.2	
Matrix Spike % Recovery:	98	92	98	100	
A HEODYCLY.	30	32	30	100	
Conc. Matrix					
Spike Dup.:	0.39	0.37	0.38	1.2	
Matrix Spike					
Duplicate					
% Recovery:	98	92	95	100	
Datativa					
Relative % Difference:	-0	. 0	2.6	0	
/ Dilici chec.	• •	. U	2.0	U	

SEQUOIA ANALYTICAL

Julia R. Maierste n Project Manager

% Recovery:	Conc. of M.S Conc. of Sample	x 100
	Spike Conc. Added	•
Relative % Difference:	Conc. of M.S Conc. of M.S.D.	x 100
-	(Cong of M.C. Cong of M.C.D.) /2	•

1040957.TPE <3>



Union City, CA 94587

Attention: Lyle Travis

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520 (415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: 2821 Whipple Fload

#162A-042691 Matrix Descript:

Soil

Analysis Method: EPA 5030/8015/8020 First Sample #: 104-0958

Received: Analyzed: Reported:

Sampled:

Apr 26, 1991 Apr 29, 1991

May 10, 1991 May 20, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
104-0958	SP-1	6.1	N.D.	N.D.	0.0081	0.037
104-0959 AE	SP1-1&2	16	0.012	0.025	0.022	0.082

Detection Limits: 1.0 0.0050 0.0050 0.0050 0.0050

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

ioject Manager

1040957.TPE <2>



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520 (415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: 2821 Whipple Road

Matrix Descript:

#162A-042691 Soil

Sampled: Received: Apr 26, 1991 Apr 29, 1991

Union City, CA 94587

Analysis Method:

EPA 5030/8015/8020

Analyzed:

May 10, 1991

Attention: Lyle Travis

First Sample #:

104-0957

Reported:

May 20, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample	Sample	Low/Medium B.P.	Ethyl			
Number	Description	Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
104-0957	SBT-1	280	0.19	0.62	0.49	2.0

Detection Limits: 5.0 0.025 0.025 0.025 0.025

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL



1900 Bates Avenue ● Suite LM ● Concord, California 94520 (415) 686-9600 ● FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: #162A-043091

2821 Whipple Road Union City, CA 94587 Attention: Lyle Travis

QC Sample Group: 1050010-11

Reported: May 15, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	
	Diesel
Method: Analyst:	EPA 8015 J.R. Malerstein
Reporting Units:	mg/kg
Date Analyzed:	May 7, 1991
QC Sample #:	BLK050391
Sample Conc.:	N.D.
Spike Conc. Added:	10
Added:	10
Conc. Matrix	
Spike:	8.0
Matrix Spike	
% Recovery:	80
Conc. Matrix	
Spike Dup.:	7.5
Matrix Spike	
Duplicate	
% Recovery:	75
. Relative	
% Difference:	6.5

SEQUOIA ANALYTICAL

Julia R. Malerstein Project Manager % Recovery: Conc. of M.S. - Conc. of Sample x 100
Spike Conc. Added

Relative % Difference: Conc. of M.S. - Conc. of M.S.D. x 100

(Conc. of M.S. + Conc. of M.S.D.) / 2

1050010.TPE <5>

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520

(415):686:9600 PFAX (415):686:9689

Tank Protect ∠rigineering of N. Calif Client Project ID: #162A-043091

2821 Whipple Road Union City, CA 94587 Attention: Lyle Travis Matrix Descript: Soil
Analysis Method: EPA

Analysis Method: EPA 3550/8015 First Sample #: 105-0011 Sampled: Apr 29, 1991 Received: May 1, 1991

Extracted: May 3, 1991 Analyzed: May 7, 1991

Reported: May 15, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Sample High B.P.
Number Description Hydrocarbons mg/kg (ppm)

105-0011 STP-1 700

Detection Limits:

50

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Julia R. Malerstein Project Manager

1050010.TPE <4>

Tolk para what

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520

(415):686-9660: * FAX:(415):686-9689:::: #162A-043091

Tank Protect Engineering of N. Calif Client Project ID: 2821 Whipple Road

Soil Matrix Descript:

Analysis Method: Union City, CA 94587 First Sample #: Attention: Lyle Travis

EPA 3550/8015

105-0010

Sampled: Apr 29, 1991

Received: May 1, 1991 Extracted: May 3, 1991

May 7, 1991 Analyzed: Reported: May 15, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample High B.P. Sample Number Description **Hydrocarbons** mg/kg (ppm) 1,700 105-0010 SM-1

Detection Limits:

100

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard. Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

ia R. Malerstein Project Manager

1050010.TPE <3>



(415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: #162A-043091

2821 Whipple Fload Union City, CA 94587 Attention: Lyle Travis

QC Sample Group: 1050010-11

Reported: May 15, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	· · · · · · · · · · · · · · · · · · ·		Ethyl	
	Benzene	Toluene	Benzene	Xylenes
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8015/8020 J. Fontecha mg/lkg May 13, 1991 105-0127	EPA 8015/8020 J. Fontecha mg/lkg May 13, 1991 105-0127	PA 8015/802 J. Fontecha mg/lkg May 13, 1991 105-0127	PA 8015/8020 J. Fontecha mg/lkg May 13, 1991 105-0127
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.40	0.40	0.40	1.2
Conc. Matrix Spike:	0.37	0.35	0.36	1.1
Matrix Spike % Recovery:	92	88	90	92
Conc. Matrix Spike Dup.:	0.38	0.36	0.37	1.1
Matrix Spika Duplicate % Recovery:	9 5	90	92	92
Relative % Difference:	. 2.7	2.8	2.7	0

SEQUOIA ANALYTICAL

Julia R. Malerstein Project Manager

% Recovery:	Conc. of M.S Conc. of Sample	x 100	• *
_	Spike Conc. Added	-	
Relative % Difference:	Conc. of M.S Conc. of M.S.D.	x 100	
-	(Conc. of M.S. + Conc. of M.S.D.) / 2	•	

1050010.TPE <2>



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520 (415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: 2821 Whipple Road

Matrix Descript:

#162A-043091 Soil

Sampled: Received: Apr 29, 1991 May 1, 1991

Union City, CA 94587 Attention: Lyle Travis

Analysis Method: First Sample #:

EPA 5030/8020

Analyzed:

May 12, 1991

105-0010

Reported:

May 15, 1991

BTEX DISTINCTION (EPA 8020)

Sample Number	Sample Description	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
105-0010	SM-1	N.D.	N.D.	N.D.	N.D.
105-0011	STP-1	N.D.	N.D.	N.D.	N.D.

0.050 **Detection Limits:** 0.050 0.050 0.050

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Julia R. Malerstein Project Manager

1050010.TPE <1>

4152834Ø65→

ENGINEERING
dil EMBINEERING
· \
Environmental Management

PROJECT NO.

587-1

SPI

581-1

501-7

TANK PROTECT ENGINEERING

2021 UNIPPLE ROAD UNION CITY, CA 94507 (415)429-8888 (800)523-80AB FAX(415)429-8089

SB1-1@ 75

SPI G STOCK PILE

SPI-16 STOCK PILE

SPI-JE STOCK PILE

SITE HAME & ADDRESS

CHKLAND, CA

2821 URIPPLE 8040, SHICH CITY, CA 94587 (415) 429-8088

ID NO. | DATE | TIME | SOIL | WATER | SAMPLING LOCATION

SAMPLER NAME, ADDRESS AND TELEPRONE NUMBER CYLE THEORYS EN TRAVIS TANK PROTECT ENEMCERINE.

412ch 1140

1145

/20C

176

DO30 SUMMIT STREET,

LAB:	<u>ं (क्रिक्र</u>	GERRA		
TURNA	AROUND:	NORMAL		

P.O. #: 207

CHAIN OF CUSTODY

TYPE OF COM-

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ENGINEERING
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PROJECT NO.

SM-1

STP-1

TANK PROTECT ENGINEERING

2021 VHIPPLE ROAD UNION CITY, CA 94507 (415)429-6000 (800)523-8000 FAK(415)429-6009

SITE HAKE & ADDRESS

AHMAD SHITH TANK PROTECT ENGINEERING

DATE TIME | SOIL | TATER | SAMPLING LOCATION

2821 UNIPPLE ROAD, UNION CITY, CA 94587 (415) 429-8088

SAMPLER MANE, AUDRESS AND TELEPHONE NUMBER

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CHAIN OF CUSTODY

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Attachment B

Analytical Data from Applied Analytical and Chain-of-Custody Records

APPLIEU ANALYTICAL

Environmental Laboratories

42501 Albree St., Suite 100 Fremont, CA 94538 Bua: (415) 623-0775 Fex: (415) 651-8647

ANALYSIS REPORT

Attention:	Mr. Joe Brosnan Exceltech 41674 Christy St.	Date Sampled: Date Received: BTEX Analyzed:	1020lah.frm 08-14/15-91' 08-15-91 08-23-91
Project:	Fremont, CA 94536 19513-L, Project #3-10062-11 Powlan	TPHg Analyzed: TPHd Analyzed: Matrix:	08-23-91 08-23-91 Soil

Detection Limit:	Benzene ppm 0.005	Toluene ppm 0.005	Ethyl- benzene ppm 0.005	Total Xylenes ppm 0.005	TPHg ppm 1.0	TPHd ppm 10
SAMPLE Laboratory Identificat	ioz					
1108285	ND	ND	ND	ND	ND	ND
1A \$1108286	ND	ND	ND	ND	ND	ND
(2-6) \$1108287	ND	ND	ИD	ND	ND	300

ANALYTICAL PROCEDURES

BYEK.- Benzene, tolusse, ethythensene, and total sylene isomers (BTEX) are measured by entractice using EPA Method 5030 followed by analysis using EPA Method 8020/602, which utilizes a gas chromatograph (GC) equipped with a photoionisation detector (PID) and a flame-ionization detector (PID) in series.

TPHg-Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are measured by extraction using EPA Method 5030, followed by analysis using modified EPA Method 8015, which utilizes a GC equipped with an FID.

TPRId—Total petroleum hydrocarbons as diesel (high boding points) are measured by extraction using EFA Method 2550 for soils and EFA Method 2510 for water, followed by modified EFA Method 2015 with direct example injection into a GC equipped with an FID.

Laboratory Representative

August 7, 1991 Date Reported

ppm = parts per million = mg/kg = milligrams per kilogram.

ND = Not detected. Compresse(s) may be present at concentrations below the detection limit.

NR = Analysis not requested.

APPLIED ANALYTICAL

Environmental Laboratories

42501 Albrae St., Suite 100 Fremont, CA 94538 Bus: (415) 623-0775 Fax: (415) 651-8647

ANALYSIS REPORT

			1020tab.frm
Attention:	Dale Hemstad	Date Sampled:	08-15-91
	Exceltech	Date Received:	09-24-91
	41674 Christy St.	Date Extracted:	09-24-91
	Fremont, CA 94538	Date Reported:	09-26-91
Project:	AGS 19513-L, Project #3-10062-11	Batch No.:	0013
•	Roy Powlan	Matrix:	Leachate
	•		

Lab ID Number	Client ID Number	Concentration (mg/L)
S1108285	1-1A COMP	ND
S1108287	2-6 COMP	ND)

Reporting Limits*:		0.50
_	<u> </u>	

Analysis Report: TCLP Pb: EPA Method 6010.
*Unless otherwise indicated within parentheses.

ND - Not Detected at or above indicated Reporting Limit.

Laboratory Representative

September 26, 1991
Date Reported

5 DAYS TURNAROUND

CHROMALAB, INC.

Analytical Laboratory (E694)

September 25, 1991

ChromaLab File No.: 0991190

APPLIED ANALYTICAL

Attn: Laura Kuck / Dale Hensted

RE: Two rush soil samples for Reactivity, Corrosivity, and Ignitability analyses

Project Name: ROY POWLAN Project Number: 3-10062-11

Date Sampled: Aug. 15, 1991

Date Submitted: Sept. 25, 1991

Date Analyzed: Sept. 25, 1991

RESULTS:

Sample I.D.	Reactivity	Corrosivity	Ignitability
1,1A-COMPOSITE	No	pH 5.9	No
2,6A-COMPOSITE	No	pH 6.2	No
BLANK METHOD OF ANALYSIS	No SEC. 66705	pH 7.0 SEC.66708	No SEC.66702

ChrcmaLab, Inc.

David Duong

Chief Chemist

Effic Tam

Laboratory Director

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FORM DATED 3-27-90



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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Attachment C Non-Hazardous Special Waste Manifests

Oriver Signature Site Name Address hereby certify that the above		Phone No. Phone	ue and accurate.
Site Name			
Driver Signatur		DESTINATION	
Oriver Signature			
		Delver Signature	Delivery Date
- 1/20 m	<u>্</u> য	PTO Sty Ferrell 110	0491
hereby certify that the about the generator site listed a	ove named material was picked t above.	I hereby certify that the above named material was out incident to the destination listed below.	as delivered with-
HERMO	WT (A. 945	Vehicle Certification	
Address 10, 50	0x /89/	Vehicle License No./State	<u> </u>
Fransporter Name	DIEKKING	Driver Name (Print) RAFERRE	حرر
Fruck No. C23°		Phone No. (510) 475-07	773
		TRANSPORTER	
Generator Authorized Agent Name	Signature	Nemark 10047	
state law, is not a haz classified and rackage	ardous waste as defined by 40	CFR Part 261 or any applicable state law, has been transportation according to applicable regulations.	
I hereby certify that the	e shove named material dose no	ot contain free liquid as defined by 40 CFR Part 260:10 on	
			P - Pounds Y - Yards
ji (10000000 0000		B - Bag T - Truck
BFI Waste Code	Description of Waste	Quantity Units No. 7	D - Drum C - Carton
Phone No/ /		Phone No Containe	ers Type
<u> </u>	-283-1623		
Address <u>2937</u>		Address	<u></u>
		Generating Location Some	: X
Generator Name			
		GENERATOR	

10/86

BF1260-720

Landa (M. Palo Sal Del I
ntainers Type D - Drum
C - Carton
B-Bag T-Truck
P - Pounds
Y - Yards
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rial was delivered with-
1003911
Delivery Date
is true and accurate.
Receipt Date
BF1260-720

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Generator Name	- ST	Generating Location
OAKLANO C	A	
Phone No. 4/5-28	3141612131	Phone No.
BFI Waste Code Description	on of Waste AMINATED Sox	Quantity Units No. Type D - Drum C - Carton B - Bag
		T - Truck P - Pounds Y - Yards G - Other
state law, is not a hazardous wa	aste as defined by 40 CFR Pa	in free liquid as defined by 40 CFR Part 260. As ance and ance and applicable state law, has been retained according to applicable regulations.
Generator Authorized Agent Name	Signature	SPORTER
	1 14 12 14 15	
Truck No. 0.239	TRANS	(K) 1/75-0762
Truck No	TRuck.wb	Phone No
2 0 =		Phone No. (5/6) 475-0793
Transporter Name	TRyck.nb- 7897 /	Phone No. 475-0793 Driver Name (Print) FERRE (C
Address hereby certify that the above named at the generator site listed above.	TRucking of the 1897 The Congress was placed up	Phone No. (\$15)475-0793 Driver Name (Print) GFERECC Vehicle License No./State FLYN 01)
Address hereby certify that the above named at the generator site listed above.	TRucking 17897 TON 94837	Phone No
Address hereby certify that the above named at the generator site listed above. Driver Signature	7897 - Ch. 9483	Phone No. 475-0793 Driver Name (Print) FERECC Vehicle License No./State FL Vehicle Certification I hereby certify that the above named material was delivered without incident to the destination listed below.
Address hereby certify that the above named at the generator site listed above.	7897 - Ch. 9483	Phone No. State FLY OF Vehicle License No./State FLY OF Vehicle Certification I hereby certify that the above named material was delivered without incident to the destination listed below. Driver Signature Delivery Date
Address hereby certify that the above named at the generator site listed above. Driver Signature	7897 - Ch. 9483	Phone No. State FLO TO TO THE PROPERTY OF THE
Transporter Name Address hereby certify that the above named at the generator site listed above. Driver Signature Site Name	7897 T CA, 9483	Phone No. State FLO TO TO THE PROPERTY OF THE
Transporter Name Address hereby certify that the above named at the generator site listed above. Driver Signature Site Name	7897 T CA, 9483	Phone No. State FAMO Phone Pho

PASS CODE.

BF1260-720

-10/86





June 4, 1991

Ms. Susan L. Hugo Alameda County Health Care Services Agency Hazardous Materials Division 80 Swan Way, Room 200 Oakland, CA 94621

Re: Analytical Results for 2939, Summit Street, Oakland, CA 94609

Dear Mrs. Hugo:

Attached are copies of analytical reports, chain-of-custody documentation, Unauthorized Release(Leak)/Contamination Site Report, and site plan for the subject site.

If you have any question please contact our office.

Sincerely,

TANK PROTECT ENGINEERING

98:1117 S-1111:38



1900 Bates Avenue • Suite LM • Concord, California 94520 (415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: 2821 Whipple Road

Matrix Descript: Analysis Method:

#162A-043091 Soil EPA 5030/8020

Attention: Lyle Travis First Sample #:

Union City, CA 94587

105-0010

Sampled:

Reported:

Apr 29, 1991

Received: May 1, 1991 Analyzed:

May 12, 1991 May 15, 1991

BTEX DISTINCTION (EPA 8020)

Sample Number	Sample Description	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
105-0010	SM-1	N.D.	N.D.	N.D.	N.D.
105-0011	STP-1	N.D.	N.D.	N.D.	N.D.

Detection Limits: 0.050 0.050 0.050 0.050

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Project Manager

1050010.TPE <1>



(415) 686-9600 ◆ FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: #162A-043091

2821 Whipple Road Union City, CA 94587 Attention: Lyle Travis

QC Sample Group: 1050010-11

Reported: May 15, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	<u></u>		Ethyl		
	Benzene	Toluene	Benzene	Xylenes	
Method: Analyst: Reporting Units:	EPA 8015/8020 J. Fontecha mg/lkg	EPA 8015/8020 J. Fontecha mg/lkg	PA 8015/802 J. Fontecha mg/lkg	PA 8015/8020 J. Fontecha mg/lkg	
Date Analyzed: QC Sample #:	May 13, 1991 105-0127	May 13, 1991 105-0127		May 13, 1991 105-0127	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	0.40	0.40	0.40	1.2	
Conc. Matrix Spike:	0.37	0.35	0.36	1.1	
Matrix Spike % Recovery:	92	88	90	92	
Conc. Matrix Spike Dup.:	0.38	0.36	0.37	1.1	
Matrix Spike Duplicate % Recovery:	95	90	92	92	
Relative % Difference:	2.7	2.8	2.7	0	

SEQUOIA ANALYTICAL

Julia R. Malerstein Project Manager

% Recovery:	Conc. of M.S Conc. of Sample	x 100	
	Spike Conc. Added		
Relative % Difference:	Conc. of M.S Conc. of M.S.D.	x 100	
	(Conc. of M.S. + Conc. of M.S.D.) / 2		

1050010.TPE <2>



1900 Bates Avenue • Suite LM • Concord, California 94520

(415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: #162A-043091

2821 Whipple Road Matrix Descript: Soil

Union City, CA 94587 Analysis Method: EPA 3550/8015 Extracted: May 3, 1991
Attention: Lyle Travis First Sample #: 105-0010 Analyzed: May 7, 1991

Reported: May 15, 1991

Apr 29, 1991

May 1, 1991

Sampled:

Received:

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Sample High B.P.
Number Description Hydrocarbons mg/kg (ppm)

105-0010 SM-1 1,700

Detection Limits:

100

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Julia R. Malerstein Project Manager



1900 Bates Avenue • Suite LM • Concord, California 94520

(415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: #162A-043091

2821 Whipple Roac

Union City, CA 94587 Attention: Lyle Travis

Matrix Descript:

Soil Analysis Method: EPA 3550/8015

First Sample #:

Sampled:

Apr 29, 1991

Received: May 1, 1991 Extracted: May 3, 1991

May 7, 1991 Analyzed:

Reported: May 15, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

105-0011

Sample Sample High B.P. Number Description Hydrocarbons mg/kg (ppm) 700 105-0011 GTP-1

Detection Limits:

50

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard. Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Project Manager

1050010.TPE <4>



(415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: #162A-043091

2821 Whipple Road Union City, CA 94587 Attention: Lyle Travis

QC Sample Group: 1050010-11

Reported: May 15, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	·
	Diesel
3.6 - 411	
Method: Analyst:	EPA 8015 J.R. Malerstein
Reporting Units:	mg/kg
Date Analyzed:	May 7, 1991
QC Sample #:	BLK050391
Sample Conc.:	N.D.
	•
Spike Conc.	
Added:	10
Conc. Matrix	
Spike:	8.0
Matrix Spike	0.5
% Recovery:	80
Conc. Matrix	7.5
Spike Dup.:	7.5
Matrix Spike	
Duplicate	mag yan
% Recovery:	75
Relative	

SEQUOIA ANALYTICAL

. 6.5

Julia R. Malerstein Project Manager

% Difference:

% Recovery: Conc. of M.S. - Conc. of Sample

Spike Conc. Added

x 100

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

(Conc. of M.S. + Conc. of M.S.D.) / 2

1050010.TPE <5>

Environmental Management

TANK PROTECT ENGINEERING

2821 UHIPPLE ROAD UNION CITY, CA 94587 (415)429-8088 (800)523-8088 FAX(415)429-8089

LAB:	<u> </u>	11	

TURNAROUND: NERWAL

P.O. #: 214

CHAIN OF CUSTODY

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1900 Bates Avenue ◆ Suite LM ◆ Concord, Califora (415) 686-9600 ◆ FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: #162A-042691 Sampled: Apr 26, 1991 2821 Whipple Road Matrix Descript: Soil Received: Apr 29, 1991 Union City, CA 94587 Analysis Method: EPA 5030/8015/8020 Analyzed: May 10, 1991 Attention: Lyle Travis First Sample #: 104-0957 Reported: May 20, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample	Sample	Low/Medium B.P.	•		Ethyl	
Number	Description	Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
104-0957	SBT-1	280	0.19	0.62	0.49	2.0

Detection Limits: 5.0 0.025 0.025 0.025

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

1040957.TPE <1>



1900 Bates Avenue • Suite LM • Concord, California 94520 (415) 686-9600 • FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID:

2821 Whipple Road

Union City, CA 94587 Attention: Lyle Travis

Matrix Descript:

Analysis Method:

Soil EPA 5030/8015/8020

First Sample #: 104-0958

Sampled: Received:

Reported:

Apr 26, 1991

Apr 29, 1991 Analyzed: May 10, 1991

May 20, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

#162A-042691

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
104-0958	€.P-1	6.7	N.D.	N.D.	0.0081	0.037
104-0959 AB	\$P1-1&2	16	0.012	0.025	0.022	0.082

			0.0050	0.0050	
Detection Limits:	1.0	0.0050	0.0050	0.0050	0.0050

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

ject Manager

1040957.TPE <2>



(415) 686-9600 ● FAX (415) 686-9689

Tank Protect Engineering of N. Calif Client Project ID: #162A-042691

2821 Whipple Road Union City, CA 94587 Attention: Lyle Travis

QC Sample Group: 1040957-59

Reported: May 20, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	·		Ethyl	
	Benzene	Toluene	Benzene	Xylenes
Method Analyst Reporting Units Date Analyzed QC Sample #	EPA8015/8020 J. Fontecha ppm May 10, 1991 104-0292	EPA8015/8020 J. Fontecha ppm May 10, 1991 104-0292	J. Fontecha ppm	EPA8015/8020 J. Fontecha ppm May 10, 1991 104-0292
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.40	0.40	0.40	1.2
Conc. Matrix Spike:	0.39	0.37	0.39	1.2
Matrix Spike % Recovery:	98	92	98	100
Conc. Matrix Spike Dup.:	0.39	0.37	0.38	1.2
Matrix Spike Duplicate % Recovery:	98	92	95	100
Relative % Difference:	. 0	0	2.6	0

SEQUOIA ANALYTICAL

Julia R. Malerstein Project Manager % Recovery:

Conc. of M.S. - Conc. of Sample x 100

Spike Conc. Added

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D. x 100

(Conc. of M.S. + Conc. of M.S.D.) / 2

1040957.TPE <3>

Environmental Management

TANK PROTECT ENGINEERING

2021 WHIPPLE ROAD UNION CITY, CA 94587 (415)429-8088 (800)523-8088 FAX(415)429-8089

LAB: Seque	?(A
TURNAROUND: _	NORMAL
P.O. #: 207	

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PROJECT IC JA - C	NAME THEY THEY THEY THE TO ALL THEY PLE ROAD	ADDRESS FS CO.	S AND T TEA DE CITY	ELEPHOHI VIS CA 941	HUKBER	(1) TYPE OF CON- TAINER	POTA REPORTS	1			REMARKS
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DATE	:	

PROPERTY LINE Х SP-1 X SP1-1 SP1-2 BUILDING LOCATION OF FORMER UNDERGROUND TANKS SUMMIT STREET

LEGEND

X SP-1 SOIL SAMPLE NAME AND LOCATION



SITE PLAN
2939 SUMMIT STREET
OAKLAND, CALIFORNIA

HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Division 80 Swan Way, Rm. 200 Oakland, CA 94621 (510) 271-4320

February 28, 1992

Dr. Roy Powlen P.O. Box 1544 Lafayette, CA 94549

RE: 2939 Summit Street, Oakland CA 94609 Underground Tank Removals

Dear Mr. Powlen:

This letter is a follow-up to our conversation of February 11, 1992 and February 25, 1992 regarding the underground tank removals at the above referenced site and to clarify the additional investigation/remediation work required before the site can be recommended to the Regional Water Quality Control Board (RWQCB) for case closure.

As you know, two underground heating fuel oil tanks were removed from the above referenced site on April 26, 1991 and April 29, 1992. Soil samples collected from the excavation pit showed contamination as high as 1700 ppm total petroleum hydrocarbon as diesel.

This department is in receipt of the following documents for the referenced site:

- * Closure Report (October, 1991) and the Site Safety Plan for Site Closure Services (August, 1991) submitted by Exceltech
- * Analytical reports and the unauthorized leak report submitted by Tank Protect Engineering
- * Uniform Hazardous Waste Manifest for the two underground tanks that you submitted to this office

This office has reviewed all the reports and documents pertaining to the referenced site and before case closure can be recommended to RWOCB the following issues need to be address:

- * The workplan submitted by Exceltech stated the collection of three verification soil samples from each excavation pit. However, the report showed only one soil sample was collected from each excavation pit.
- * The extent of over-excavation, both vertically and laterally that was performed at the site was not mentioned in the report. The location where the verification samples were taken must be provided to this office. The removal of all contaminated soil from the ground must be fully documented.

Mr. Roy Powlen

RE: 2939 Summit, Oakland 94609

February 28, 1992

Page 2 of 3

- * The analytical data showed that stockpiled soil had 300 ppm of total petroleum hydrocarbon as diesel and was not " non-detectable level" as stated in the closure report.
- * Because of the degree of contamination found at the site, Tri-Regional Water Quality Control Board's Guideline (August, 1990) requires that impact to groundwater of the unauthorized release associated with the former underground tanks must be investigated. Specifically, a groundwater monitoring well must be installed within ten feet of the former tank location. This well must be located in a down gradient direction relative to groundwater flow. The guidelines state that groundwater flow gradient must be determined by data derived from three wells.

Based on these findings and to make progress toward case closure, a workplan must be developed in accordance with Attachment A. The workplan must be submitted to our office within 30 days of the date of this letter and must contain a timetable for the completion of the workplan elements.

Our office will be the lead agency overseeing the investigation and cleanup activities at this site. The San Francisco Bay RWQCB is currently unable to oversee the large number of underground tank cases within Alameda County and has delegated the handling of this case to our Division. We will be in contact with the RWQCB in order to provide you with guidance concerning RWQCB's investigation requirements. However, you must keep the RWQCB apprised of all actions taken to characterize and remediate the contamination at this site as the Board retains the ultimate responsibility for ensuring protection of the waters of the State. Please be aware that you are responsible for performing diligent actions to protect the waters of the State.

A report must be submitted within 30 days after completion of this investigation. Subsequent reports must be submitted **quarterly** until the site can be recommended for RWQCB's "sign off". All reports and proposals must be submitted under seal of a California Registered Geologist or Registered Civil Engineer. Copies of reports and proposal must also be submitted to:

Eddy So San Francisco Bay RWQCB 2101 Webster Street, Fourth Floor Oakland, CA 94612 Mr. Roy Powlen

RE: 2939 Summit, Oakland 94609

February 28, 1992

Page 3 of 3

Please be aware that request for technical reports is pursuant to California Water Code Section 13267 (b) and any extensions of stated deadlines or changes in the workplan must be confirmed in writing and approved by this agency.

Should you have any questions concerning this letter, please contact me at (510) 271-4530.

Sincerely,

Susan L. Hugo

Senior Hazardous Materials Specialist

attachment

Rafat A. Shahid, Asst. Agency Director, Environmental Health Gil Jensen, Alameda County District Attorney's Office Eddy So, San Francisco Bay RWQCB Howard Hatayama, State Department of Health Services Gary Della Vechia, Exceltech - 41674 Christy St., Fremont California 94536

Files

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY

DEPART	MENT OF ENVIRONM	ENTAL HEALTH			М	FR Sent			
		API	PLICATIO	N FORM	1		(da	ate)	
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Owner/A _l		Street ARNO		City			Phone (510)42
		f corporation, also show	w name of corpora	ation president		P	hone		
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SEND BII	LLING TO ADDRESS:), B (circle one)							
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Owner/Ap	<i>.</i>	1 1/2 -		Phon(5/0)2	Dat		10-		
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400-WA-1-4/87

WHITE—BILLING

YELLOW—OFFICE

PINK-APPLICANT

To Susan Hugo: Here are the forms your requested. Roy Powlay

See Instructions on Back of Page 6 and Front of Page 7

Department of Health Services
Toxic Substances Control Division
Sacramento, California

and Front of Page 7 Sacramento, California Please print or type. Form designed for use on elite (12-pitch typewriter). 1. Generator's US EPA ID No. Manifest 2. Page 1 UNIFORM HAZARDOUS Information in the shaded areas 0 8 8 0 0 0 0 0 0 10 10 13 C A C 0 0 0 5 7 6 of 1 is not required by Federal law. WASTE MANIFEST A. State Manifest Document Number 9054 3. Generator's Name and Mailing Address HR. ROY POWLEN P. O. Box 1544, Lafayette, Ca. 94549 B. State Generator's ID 4. Generator's Phone (415) 283-1326 200510 5. Transporter | Company Name US EPA ID Number C. State Transporter's ID 1-800-852-7550 H & H Ship Service Company ₁C₁A₁D₁O₁O₁4₁7₁7₁1₁1₁6₁8 D. Transporter's Phone (415) 543-4835 E. State Transporter's ID 7. Transporter 2 Company Name F. Transporter's Phone 9. Designated Facility Name and Site Address US EPA ID Number G. State Facility's ID H & H Ship Service Company C₁A₁D₁O₁O₁4₁7₁7₁1₁1₁6₁8₁ 220 China Basin Street H. Facility's Phone C A D 0 0 4 7 7 1 1 1 6 8 San Francisco, CA 94107 (415) 543-4835 12. Containers 13. Total Quantity Holt Waste No. 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) No. Туре WI/Vo State 512 RESIDUE HEATING OIL TANK **3U5** CENTER 1-800-424-8802; WITHIN EPA/Other NON RCRA HAZARDOUS WASTE SOLID 0 | 0 | 1 | T | P | 0 | 0 | 5 | 0 | 0 EPA/Other State. EPA/Other d. EPA/Other CALL THE NATIONAL RESPONSE J. Additional Descriptions for Materials Listed Above K. Hendling Codes for Wastes Listed Above b. PUMPED OUT 500 gallon tank last containing 01/03 heating oil. Tank contains 400 gallons of solids. Tank inerted with dry ice for transport. PROFILE #A0753 15. Special Handling Instructions and Additional Information JOB #7432 JOB SITE: ROY POWLEN 24 Hr. Emergency Contact: H & H #(415) 543-4835 2939 Summitt Street APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR. Oakland, California GENERAT OR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and SPILL, national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be accromically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the EMERGENCY OR present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. Printed/Typed Name Year Signature : PEONAME EXUESTO 17. Transporte: 1 Acknowledgement of Receipt of Materials Ž Signature Printed/Typed Name DAVID E. RIGSBY 9:9:1 Ö 18. Transporter 2 Acknowledgement of Receipt of Materials Signature Month Day Year Printed/Typed Name 19. Discrepancy Indication Space AC 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Ţ Month Day Year Signature Printed/Typed Name

DHS 8022 A

Do Not Write Below This Line

See Instructions on Back of Page 6 and Front of Page 7

Department of Health Services
Toxic Substances Control Division
Sacramento, California

Please print or type. Form designed for use on elite (12-pitch typewriter). Manifest 2. Page 1 1. Generator's US EPA ID No. Information in the shaded areas UNIFORM HAZARDOUS Document No is not required by Federal law. WASTE MANIFEST CIA (CI010101517161018 010101011 3. Generator's Name and Mailing Address A. State Manifest Document Number MR. ROY POWLEN B. State Generator's ID P. O. Eox 1544, Lafayette, Ca. 94549 4. Generator's Phone (415) 283-1326 US EPA ID Number C. State Transporter's ID 5. Transporter 1 Company Name 200510 CALL 1-800-852-7550 D. Transporter's Phone |C|A|D|0|0|4|7|7|1|1|6| & H Ship Service Company E. State Transporter's ID US EPA ID Number 7. Transporter 2 Company Name 8. F. Transporter's Phone US EPA ID Number G: State Facility's ID 9. Designated Facility Name and Site Address claininini41 H & H Ship Service Company 220 China Basin Street ICIAID[0]0]4|7|7|1|1|6|8 415) 543-4 San Francisco. CA 94107 13. Total 12. Containers Unit Wasta No. Quantity 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) Wt/Vol No. Type 512 RESIDUE HEATING OIL TANK EPA/Other <u>ololi riplololilolo</u> NON RCRA HAZARDOUS WASTE SOLID EPA/Othe State CENTER EPA/Other RESPONSE K. Handling Codes for J. Additional Cescriptions for Materials Listed Above PUMPED OUT 300 gallon tank last containing heating oil. Tank inerted with dry ice for transport. NATIONAL PROFILE #A0753 15. Special Hundling Instructions and Additional Information JOB #7474 JOB SITE: ROY POWLEN 품 24 Hr. Emergency Contact: H & H #(415) 543-4835 2939 Summitt Street APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR Oakland California CALL 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and SPILL, national deverament regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good falth effort to minimize my waste E generation and select the best waste management method that is available to me and that I can afford EMERGENCY Month Day Printed/Typec Name 17. Transporter 1 Acknowledgement of Receipt of Material Dav Month Ž Signate Printed/Typed Name ANSPOR LANCE D. SMITH 01412161911 Р 18. Transporter 2 Acknowledgement of Receipt of Materials CASE Dav Printed/Typed Name Signature 19. Discrepancy Indication Space A L 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Signature Month Day Printed/Typed Name

DHS 8022 A

EPA 8700-22

(Rev. 6-89) Previous editions are obsolete.

white '-env.health yellow -facility pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200 Oakland, CA 94621 (415) 271-4320

Hazardous Materials Division Inspection Form

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ROY Y. POWLAN, M.D., J.D.

2000 SUMMIT STREET

DAKLAND CALIFORNIA 94600

PO BOX 1544

Lefyth Ga

4549

Alamba 6. Deft of Environmental Hoth

Att: Swan Hugo.

80-Swan Way, Oakland, Ca. 94621

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ACCEPTED



ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH HAZARDOUS MATERIALS DIVISION

80 SWAN WAY, ROOM 200

to the the and making if such this tell house. CA 94621 415/271-4320 OAKLAND, CA
PHONE NO: 415/27 Fee Paid

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

1.	Business Name _	N-A		
	Business Owner	ROY POWLEN		
2.	Site Address			
				Phone
3.	Mailing Address			
	City LAFAYET	TE	Zip 94549	Phone 415-283-1326
4.	Land Owner ROY	POWLEN		
	Address P.O.B	OX 1544	City, State _	LAFAYETTE, CA.Zip 94549
5.	EPA I.D. No. CA			
	Contractor BER		R,INC	
		-30th STREET		poper 549-5222
				Phone 4 15 - 451 - 3482
	-	A-HAZARDOUZ		
7.	Consultant BE		ER, INC	
•	Address 1281			
		, CA. 94608	Phone $\frac{4}{2}$	15-451-3482

8.	Name ERNESTO F. BERNABE JR	Title
	Phone 415-451-3482	
9.	Total No. of Tanks at facility	1
10.	Have permit applications for all toffice? Yes []	anks been submitted to this No $[X]$
11.	State Registered Hazardous Waste T	ransporters/Facilities
	a) Product/Waste Tranporter	
	Name H AND H	EPA I.D. No. 94-1151921
	Address 220 CHINA BASIN	
	City SAN FRANCISCO	State CA Zip 94107
	b) Rinsate Transporter	
	Name	EPA I.D. No.
	Address	
	City	State Zip
	c) Tank Transporter	
	Name H AND H	EPA I.D. No. 94-1151921
	Address 220 CHINA BASIN	
	city SAN FRANCISCO	State CA. Zip 94107
	d) Tank Disposal Site	
	Name H AND H	EPA I.D. No. 94-1151921
	Address 220 CHINA BASIN	•
		State CA Zip 94107
	e) Contaminated Soil Transporter	
	Name	EPA I.D. No
	Address	
	a:	State 7in

3 3 3	ny TANK PROTECT ENGINEE 2821 WHIPPLE ROAD		
	UNION CITY Sta	CA g:- 9458	37 Phone 415-429-808
			Phone
3. Samplir	ng Information for each	tank or area	
	Cank or Area	Material sampled	Location & Depth
apacity	Historic Contents (past 5 years)		
300 GALLON	EMPTY Heating fueloil	NONE SOI	SOUTHEST SIDE OF T DRIVEWAY tank and - no duyer 2 fels below the to
Ine rom	LEMPTY Heating field by soil tely could by place in decaring	and groundwall	Kallom.
If yes	, describe.		
If yes	ethods used for renderi		
If yes			
If yes	losion proof combustible nertness.		
If yes An exp tank i	losion proof combustible nertness.		
If yes An exp tank i 6. Labora Name	losion proof combustible nertness.		

17. Chemical Methods to be used for Analyzing Samples

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Number
TPH-DV BTXGE	GCFID (3553) 8020 or 8240	3550 8020 N 8240
The follo be met TPH BTX	-D-1.0 gen (soil)- eE-5.0 get (soil)	- so. oggo (water) - 0.5 ppb (water)

- 18. Submit Site Safety Plan
- 19. Workman's Compensation: Yes [X] No [X]

 Copy of Certificate enclosed? Yes [] No [X] IT'S BEEN MAILED

 Name of Insurer STATE WORKMENS COMP.
- 20. Flot Plan submitted? Yes [X] No []
- 21. Deposit enclosed? Yes [X] No []
- 22. Please forward to this office the following information within 60 days after receipt of sample results.
 - a) Chain of Custody Sheets
 - b) Original Signed Laboratory Reports
 - c) TSD to Generator copies of wastes shipped and received
 - d) Attachment A summarizing laboratory results

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true. I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Saftey and Health Administration) requirements concerning personnel and safety.

I will notify the Department of Environmental Health at least two (2) working days (48 hours) after approval of this closure plan in advance to schedule any required inspections. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Signature of Contractor
Name (please type)
Signature Sille Smale
Date 3.18-91
Signature of Site Owner or Operator
Name (please type)
Signature
Date 3-[8-9]

NOTES:

- 1. Any changes in this document must be approved by this Department.
- 2. Any leaks discovered must be submitted to this office on an underground storage tank unauthorized leak/contamination site report form within 5 days of its discovery.
- 3. Three (3) copies of this plan must be submitted to this Department. One copy must be at the construction site at all times.
- 4. After approval of plan, notification of at least two (2) working days (48 hours) must be given to this Department prior to removal of tank(s).
- 5. A copy of your approved plan must be sent to the landowner.
- 6. Triple rinse means that:
 - method 8020 for soil, or EPA method 602 for water) or Diesel (EPA method 418.1). Other methods for halogenated volatile organics (EPA method 8010 for soil, EPA method 601 for water) may be required. The composition of the final rinse must be demonstrated by an original or facsimile report from a laboratory certified for the above analyses.
 - b) Tank interior is shown to be free from deposits or residues upon a visual examination of tank interior.
 - c) Tank should be labelled as "tripled rinsed; laboratory certified analysis available upon request" with the name and address of the contractor.

If all the above requirements cannot be met, the tank must be transported as a hazardous waste.

7. Any cutting into tanks requires local fire department approval.

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

ATTACHMENT A

SAMPLING RESULTS

Tank or Area	Contaminant	Location & Depth	Results (specify units)
		-	

INSTRUCTIONS

- 2. SITE ADDRESS
 Address at which closure or modification is taking place.
- 5. EPA I.D. NO.
 This number may be obtained from the State Department of Health Services, 916/324-1781.
- 6. CONTRACTOR
 Prime contractor for the project.
- 7. OTHER List professional consultants here.
- 12. SAMPLE COLLECTOR
 Persons who are collecting samples.
- 13. SAMPLING INFORMATION
 Historic contents the principal product(s) used in the last 5 years.

Material sampled - i.e., water, oil, sludge, soil, etc.

- 16. LAFORATORIES
 Laboratories used for chemical and geotechnical analyses.
- 17. CHEMICAL METHODS:
 All sample collection methods and analyses should conform to EPA or DHS methods.

Contaminant - Specify the chemical to be analyzed.

Sample Preparation Method Number - The means used to prepare the sample prior to analyses - i.e., digestion techniques, solvent extraction, etc. Specify number of method and reference if not an EPA or DHS method.

Analysis Method Number - The means used to analyze the sample - i.e., GC, GC-MS, AA, etc. Specify number of method and reference if not a DHS or EPA method.

NOTE: Method Numbers are available from certified laboratories.

A plan outlining protective equipment and additional specialized personnel in the event that significant amount of hazardous materials are found. The plan should consider the availability of respirators, respirator cartridges, self-contained breathing apparatus (SCBA) and industrial hygienists.

19. ATTACH COPY OF WORKMAN'S COMPENSATION

20. PLOT PLAN

The plan should consists of a scaled view of the facility at which the tank(s) are located and should include the following information:

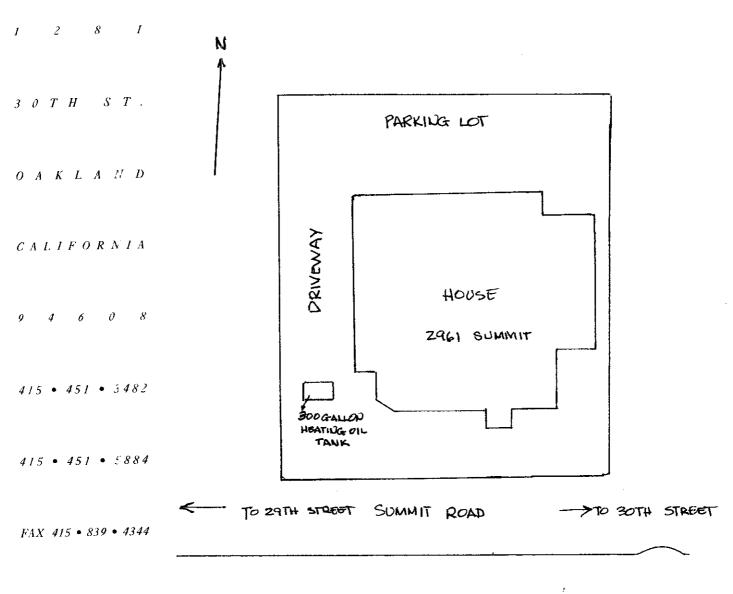
- a) Scale
- b) North Arrow
- c) Property Line
- d) Location of all Structures
- e) Location of all relevant existing equipment including tanks and piping to be removed
- f) Streets
- g) Underground conduits, sewers, water lines, utilities
- h) Existing wells (drinking, monitoring, etc.)
- i) Depth to ground water
- j) All existing tanks in addition to the ones being pulled

rev. 9/88 mam

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BERNABE AND BRINKER INCORPORATED



LIGENSE #A587322

GASOLINE STATION CONSTRUCTION

MAINTENANCE

BERNABE & BRINKER, INC. SITE SAFETY PLAN

Site 2939 SUMMI	T,OAKLAND	Project#	
Original Site	-	- · ·	
			Date
Plan Approved	by JIM BRINKER	· · · · · · · · · · · · · · · · · · ·	Date 3-26-91
Please respond Where an item			ely as possible. e mark "N/A."
1. KEY PERSONN	EL AND RESPONS	IBILITIES	
(Include name, responsibiliti responsible for Project Manage	es, i.e., proj r supervision	ect manage of all site	r - Joe Smith -
	григсто г	аврилав	JR
Site Safety Ma	nager	JAMES E	RDINKED
Alternate Site	Safety Manage	r	DICTIONEL
Field Team Memi	bers WILLIE BO	WEN, GABRII	EL LAGOS
S		l:(F), Stat	the following te:(S), Local:(L),

2. JOB HAZARD ANALYSIS: Hazard Level: High() Moderate() Low(X) Unknown () Hazard Type: Liquid(X) Solid() Sludge() Vapor/Gas(X) Known or suspected hazardous materials present on site: HEATING OIL Characteristics of hazardous materials included above: (Complete for each chemical present:) Toxic() MATERIAL #1: Corrosive() Ignitable(X) Reactive() Volatile() Radioactive() Biological Agent() Exposure Routes: Inhalation(X) Ingestion(X) Contact(X) Toxic() MATERIAL #2: Corrosive() Ignitable() Reactive() Volatile() Radioactive() Biological Agent() Exposure Routes: Inhalation() Ingestion() Contact() Ignitable() Toxic() MATERIAL #3: Corrosive() Reactive() Volatile() Radioactive() Biological Agent() Exposure Routes: Inhalation() Ingestion() Contact() MATERIAL #4: Corrosive() Ignitable() Toxic() Reactive() Volatile() Radioactive() Biological Agent()

Exposure Routes: Inhalation() Ingestion()

Contact()

e following additional hazards are expected on te (i.e., snake-infested area, extreme heat, c.):								
Measures to minimize the effects of the additional hazards are:								
NG PLAN								
) Air Monitoring Plan tion levels for implementation of air nitoring. Action levels should be based on blished data available on contaminants of ncern. Action levels should be set by persons perienced in industrial hygiene.								
Action Taken ppm) (i.e., commence perimeter monitoring) NA								

	If air monitoring is not to be implemented for to site, explain why:
_	WE ARE NOT GOING INTO THE TANK, WE ARE JUST
	REMOVING AND DISPOSING THE TANK
_	
_	
_	Sampling Monitoring

B&B SITE SAFETY

(b) Equ	ipments used fo	r sampling		
				<u> </u>
<u>,</u>		······		
(c) Mai	ntenance and ca	libration of	equipments_	
Equipmo	AL PROTECTIVE EQuation of the conduction of the	oyees for th	e site task: cific (i.e.	, hard
glove,	etc.).			
RUBBEF	GLOVES, EAR PL	UGS, RUBBER E	BOOTS, SAFET	Y GLA
PROTEC	TIVE CLOTHING,H	ARD HATS		
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6. DECONTAMINATION PROCEDURE

List the procedures and specific steps to be taken to decontaminate equipment and PPE.

ALL EQUIPMENTS HAS TO BE WASH, SOAP AND RINSE.

PROTECTIVER CLOTHING THAT HAD BEEN CONTAMINATED

HAS TO BE DISPOSE OF PROPERLY.

7. TRAINING REQUIREMENTS

Prior to mobilization at the job site, employees will be attend a safety briefing. The briefing will include the nature of the wastes and the site, donning personal protection clothes and equipment, decontamination procedures and emergency procedures.

- 8. MEDICAL SURVEILLANCE REQUIREMENTS
 - If any task requires a very high personnel protection level, personnel shall provide assurances that they have received a physical examination and they are fit to do the task. Also, personnel will be instructed to look for any symptom of heat stress, heat stroke, heat exhaustion, or any other unusual symptom. If there is any report of that, it will be immediately be followed through, and appropriate action will be taken.
- 9. STANDARD OPERATION PROCEDURES
 Bernabe & Brinker, Inc. is respon

Bernabe & Brinker, Inc. is responsible for all Bernabe & Brinker, Inc. employees on the site. Each contractor shall provide all the equipment necessary to meet safe operation practices and procedures for their personnel on site, and be responsible for the safety of their workers.

A. "Three Warning" system is utilized to enforce compliance with Health and Safety procedures practices which will be implemented at the site for worker safety:

*Eating, drinking, chewing gum, or tobacco, and smoking will be allowed only in designated areas.

- *Wash facilities will be utilized by workers in the work areas before eating, drinking, or use of toiled facilities.
- *Containers will be labeled, identifying them as waste, debris, or contaminated clothing.
- *All excavation/drilling work will comply with regulatory agencies requirement.
- *All site personnel will be required to wear hard hats and advised to take adequate measures for self-protection.
- *Any other action which is determined to be unsafe by the site safety officer.
- 10. CONFINED SPACE ENTRY PROCEDURES

 No one is allowed to enter any confined space operation without proper safety measures. Specifically, in case of an excavated Tank Pit no one should enter at no time.
- 11. EMERGENCY RESPONSE PLAN
 Fire extinguisher(s) will be on site prior to
 excavation. Relevant phone numbers are:

	Person	Title	Phone Number
ERNESTO	BERNABE	Project Manager	415-451-3482
	OAKLAND	Fire	911 or 444-1616
	OAKLAND	Police	911 or 273-3211
	ACME	Ambulance	911 or 653-6622
ACME		Poison Control Center	(800) 523-2222 NONE
		Site Phone	NONE
		Nearest Off-Site Number	415-5191654
		Medical Advisor	
ROY POW	LEN	Client Contact	415-283-1326

U.S. EPA - ERT(201)	321-6660
Chemtrec(800)	424-9300
Night	329-3311 : 329-2888
National Response Center(800)	
Superfund/RCRA Hotline(800)	424-8802
TSCA Hotline(800)	424-9065
National Pesticide Information Services(800)	845-7633
Bureau of Alcohol, Tobacco, and Firearms(800)	424-9555

HEALTH AND SAFETY COMPLIANCE STATEMENT

I, ERNESTO F. BERNABE JR , have received and read a copy of the project Health and Safety Plan.

I understand that I am required to have read the aforementioned document and received proper training under the occupational Safety and Health Act (29 CFR, Part 1910.120) prior to conducting site activities at the site.

MARCH	25,199

NEAREST HOSPITAL PERALTA HOSPITAL TEL.NO. 420-6091



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P.O. BOX 807, SAN FRANCISCO, CA 94101-0807

91 MAR 22 Mill: 08

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

MARCH 21, 1991

POLICY NUMBER: 1183362 - 91 CERTIFICATE EXPIRES:

3-1-92

ALAMEDA COUNTY HEALTH SERVICES AGENCY DEPT. OF ENVIRONMENTAL HEALTH, HAZARDOUS MATERIAL DIVISION 80 SHAN WAY #200 CAKLAND, CA 94621

JOB: 2939 SUMMIT ST. CAKLAND, CA 94609

This is to certify that we have issued a valid Workers' Compensation insurance policy in a form approved by the California Insurance Commissioner to the employer named below for the policy period indicated.

This policy is not subject to cancellation by the Fund except upon ten days' advance written notice to the employer.

We will also give you TEN days' advance notice should this policy be cancelled prior to its normal expiration.

This certificate of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

PRESIDENT

EMPLOYER

ERNESTO F. BERNAEE JR. - GLORIA F. BRINKER DEA: B & B ASSOCIATED SERVICES (C. 1281 - 3CTH ST. CAKLAND LCA 94608

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91 MAY 29 MAIL: 16 IN REPLY REFER TO:

MAY 17, 1991

COUNTY OF ALAMEDA ATTN: HEALTH CARE 80 SWAN WAY, ROOM 200 **OAKLAND** CA 94621

> CERTIFICATE OF WORKERS* COMPENSATION INSURANCE CANCELLATION NOTICE

RE: CERTIFICATE DATED MARCH 26, 1991.

THE WORKERS' COMPENSATION INSURANCE POLICY FOR THE EMPLOYER NAMED BELOW HAS BEEN CANCELLED EFFECTIVE JUNE 3, 1991 AT 12:01 A.M.

IF YOU HAVE ANY QUESTIONS REGARDING THIS NOTICE, PLEASE CONTACT THE EMPLOYER NAMED BELOW

EMPLOYER:

BERNABE AND BRINKER, INC. 1281 - 30TH ST OAKLAND 94608 CALIF., 1183362 - 91

CUSTOMER SERVICES UNIT DAKLAND DISTRICT OFFICE (415) 577-3000

> 1275 Market Street • San Francisco, CA 94103-1410 Mailing Address: P.O. Box 807 • San Francisco, CA 94101-0807

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