

3210 Old Tunnel Road, Suite B, Lafayette, CA 94549-4157

Phone: (925) 283-6000

Fax: (925) 283-6121

202509

August 6, 2002

Mr. Daniel Shaw D&D Ventures LLC 15700 Winchester Boulevard Los Gatos, CA 95030

Subject:

Final Report

901 77th Avenue Oakland, California AEI Project No. 5388

Dear Mr. Shaw:

Enclosed is the final report for the tank removal at the above referenced site.

Please call me at (925) 283-6000 if you have any questions.

Sincerely,

Nathan Garfield

Project Manager

0.E.S.

CC: Inspector Keith Matthews, Oakland Fire Services Agency, 1605 Martin Luther King Jr. Way, Oakland, CA 94612

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UNDERGROUND STORAGE TANK REMOVAL FINAL REPORT

901 77th Avenue Oakland, California

9462-1

Project No. 5388

Prepared For

D&D Ventures LLC 15700 Winchester Boulevard Los Gatos, CA 95030

Prepared By

AEI Consultants
3210 Old Tunnel Road, Suite B
Lafayette, CA 94549
(800) 801-3224

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1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this final report to document the underground storage tank closure activities performed at 901 77th Avenue in Oakland, California (Figure 1: Site Location Map). One (1) 1,000-gallon gasoline underground storage tank (UST) was removed. The tank was located at the southwest corner of the building (Figure 2: Site Plan).

AEI was contracted to obtain all necessary permits, excavate to expose the tank, remove and dispose of residual liquids, remove and dispose the tank, perform soil sampling and analysis, backfill and resurface the excavation.

2.0 PERMITS

The City of Oakland Fire Prevention Bureau (FPB) issued a permit for the removal of the tank on July 22, 2002. Inspector Keith Matthews was assigned to represent the FPB, and observed the tank closure activities at the site. On July 18, 2002, Cal OSHA and the Bay Area Air Quality Management District (BAAQMD) were notified of the tank removal activities. The excavation areas were marked and the property representative was notified of the specific time plan.

Copies of the permit and notification documents are located in Appendix A: Permits and Notification Documents.

3.0 MOBILIZATION, EXCAVATION AND REMOVAL

On July 25, 2002, the AEI field staff was briefed and the Site Health and Safety Plan reviewed prior to the initiation of work. The Site Health and Safety Plan is located in Appendix B. Ground cover was broken and the soil above the tank was excavated. A single stockpile of the excavated soil was created adjacent to the excavation. Refer to Figure 2 for the locations of the excavation and stockpile.

Excel Environmental Services, Inc. removed 85 gallons of waste liquid from the tank prior to removal. Dry ice was introduced into the tank until the Lower Explosive Limit (LEL) and oxygen content reached acceptable levels.

The tank was removed on July 25, 2002, and was visually inspected prior to loading for transport. No obvious holes or cracks were observed in the tank. The tank was covered with an asphalt and tar wrapping which may have obscured any holes present.

The tank was loaded onto a Ecology Control Industries (ECI) truck and transported under non-hazardous waste manifest to the ECI disposal facility at 255 Parr Boulevard in Richmond, California, where the tank was triple rinsed, cut, and scrapped.



Soil samples were collected prior to backfilling. The excavation was lined with Visqueen, then backfilled with stockpiled soil and five (5) cubic yards of clean fill material to replace the volume of the tank.

The non-hazardous waste manifests for the waste liquid and tank are located in Appendix C: Transport and Disposal Documents.

4.0 SAMPLING AND ANALYSES

All samples were collected under the direction of Keith Matthews of the Oakland Fire Department. A total of six (6) soil samples were collected from the tank removal activities. One sample was collected 2 feet under either end of the tank at a total depth of eight (8) feet below ground surface (bgs). These sample were labeled EB-W-8' and EB-E-8' respectively. A total of four (4) discrete soil samples were collected from the stockpile and composited into a single sample (STKP 1-4) for analysis. Please refer to Figure 3: Sample Location Plan for the sample locations.

Native material consisted of brown sandy clay with approximately 5% gravel sized clasts. Greygreen soil staining was noted in the bottom third of the excavation. Groundwater was not encountered during the removal activities.

All soil samples were collected in brass tubes that were driven into the soil until completely full, then sealed with Teflon tape and plastic caps. The secured sample tubes were immediately placed into a cooler with ice. Chain of Custody documentation was initiated. The cooler and samples were brought to McCampbell Analytical, Inc. (State Certification #1644) of Pacheco, California on July 25, 2002 for analysis.

The samples were analyzed for Total Petroleum Hydrocarbons as gasoline (EPA 8015), Total Lead (EPA Method 6010/200), methyl-tert-butyl ether (MTBE), and benzene, toluene, ethylbenzene, and xylenes (BTEX) (EPA Method 602/8020). The analytical results are summarized in the following table:

TABLE 1 - Soil Sample Analyses

	EB-W-8'	EB-E-8'	STKP 1-4
TPH-GASOLINE (mg/kg)	4,600	310	40
MTBE (mg/kg)	<25	<2.5	<0.05
BENZENE (mg/kg)	4.5	<0.2	0.026
TOLUENE (mg/kg)	23	0.29	0.022
ETHYL BENZENE (mg/kg)	63	8.9	0.012
TOTAL XYLENES (mg/kg)	180	7.2	0.022
TOTAL LEAD (mg/kg)	16	9.1	12

mg/kg = milligrams per kilogram (ppm)



Copies of all analytical results and Chain of Custody documentation are located in Appendix D: Analytical Documentation.

5.0 SUMMARY AND CONCLUSIONS

On July 25, 2002, a 1,000-gallon gasoline UST was removed from the property located at 901 77th Avenue in Oakland, California. Prior to removal, 85 gallons of waste liquid were removed, transported and disposed off-site. The tank was transported under non-hazardous waste manifest to the Ecology Control Industries' disposal facility in Richmond, California where the tank was cleaned and disposed of as scrap metal.

A total of six (6) soil samples were collected during the tank removal activities. Concentrations of TPH-g ranged from 40 to 4,600 mg/kg. BTEX concentrations were elevated in all samples, and showed the highest concentrations in sample EB-W-8' (benzene 4.5 mg/kg). Due to the elevated concentrations of petroleum hydrocarbons detected in the soil, the Oakland Fire Department may require further investigation at the site.

6.0 REPORT LIMITATIONS AND SIGNATURES

This report presents a summary of work completed by AEI Consultants, including observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are representative of areas not sampled. All conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

All services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work.

AEI Consultants

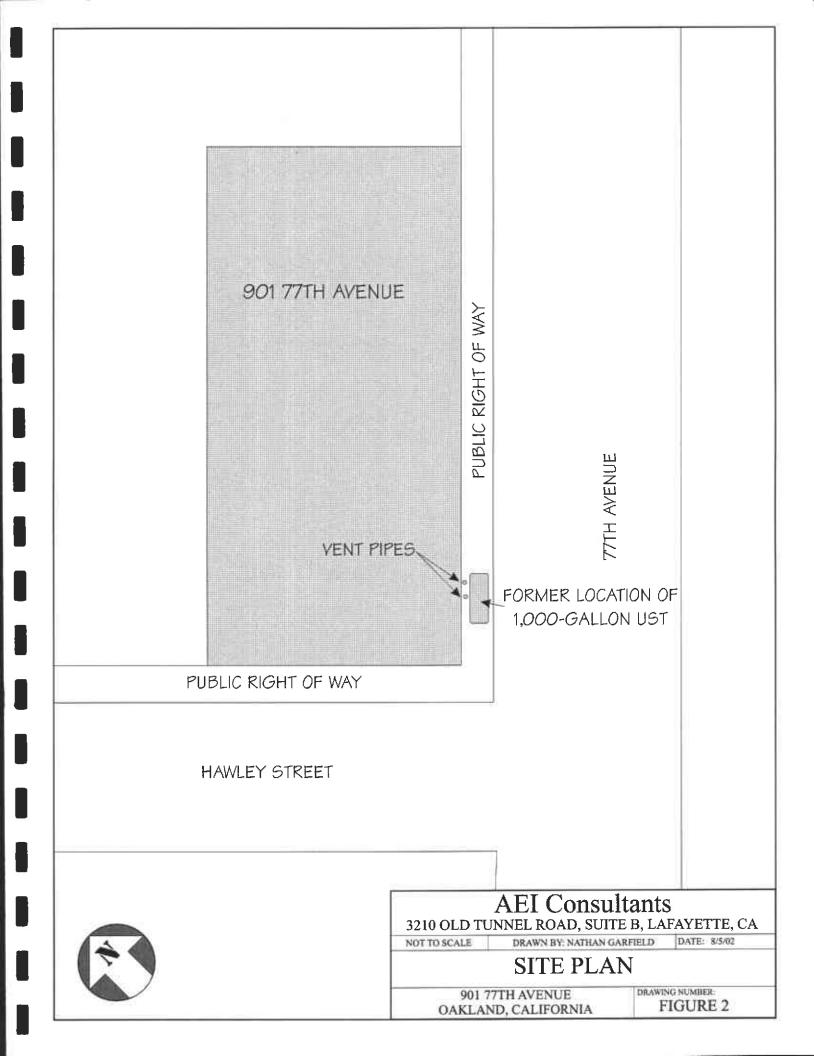
Nathan Garfield Staff Geologist

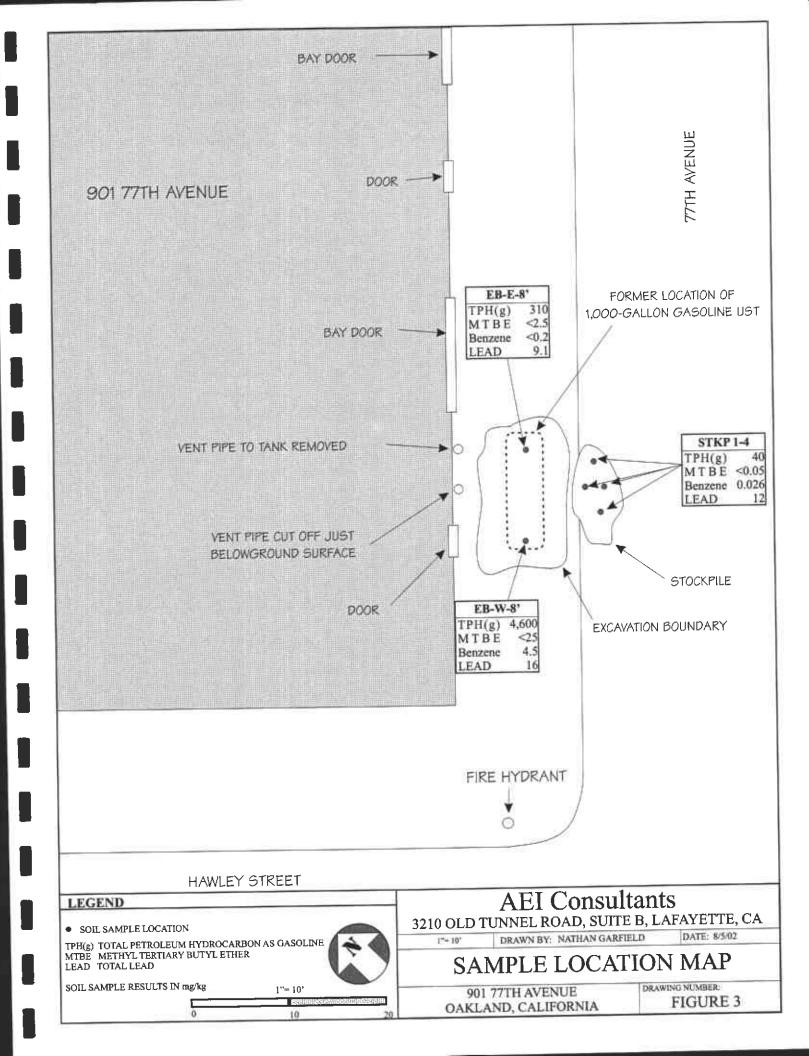


AEI CONSULTANTS 3210 OLD TUNNEL RD, STE B, LAFAYETTE, CA

SITE LOCATION MAP

901 77th AVENUE OAKLAND, CALIFORNIA FIGURE 1 PROJECT NO. 5388





APPENDIX A PERMITS AND NOTIFICATION DOCUMENTS

City Of Oakland FIRE PREVENTION BUREAU



Permit To Excavate And Instau, Repair,

Or Remove Inflammable Liquid Tanks

250 Frank Ogawa Plaza, Ste. 3341 Oakland California 94612-2032 510,129,2951

Oakland, California

July 22, 2002

310-236-3631	Tank Permit Number:	42-02
Permission Is Hereby Granted To:		
Remove Gasoline Tan	k And Excavate Commencing: 4 Feet Inside: Curb	Line.
On The: N side of 77th Avenue, 50 feet R of H	lawley Street	
Site Address: 901 77th Avenue	Present Storage: Gasoline	
Owner: D&D Ventures LLC	Address: 15700 Winchester Bl., Los Gatos, CA, 95030 Pho	one: (408) 354-977
Applicant: AEI Consultants	Address: 3210 Old Tunnel Rd., #B., Lafayette, 94549 Pho	one: (925) 283-600
Dimensions Of Street (sidewalk) Surface To Be D	isturbed: X No. Of Tanks 1 Capacity 1,000	Gallons, Each
Remarks		
This Permit Is Granted In Accordance With Existing City Ordinan Remo	ices. Owner Hereby Agrees To Remove Tanks On Discontinuance Of Use Or When Notified By The City Authoring Or Repairing Tanks, No Open Flame To Be On Or Near Premises.	rities When Installing,
	OF TANK AND EQUIPMENT INSPECTION	
	Type Of Inspection: UST Remove	rl
	Inspected And Passed On: 25 J	uh02-
amond Dendsole MI	UST/AST Installations/modifications: By:	muko
Approved Aire Marshal	Pressure Test: Inspected By:	Date:
Inspection Fee Paid: \$540.00	Primary Piping Test: Inspected By:	Date:
Received By: ok#4687 reo#841246 MoC	Secondary Containment & Sump Testing:	:
- AMELIANT TAKEN TOTAL STAN	Inspected By:	i
	Final: Inspected By:	Date:

THIS PERMIT MUST BE LEFT ON THE WORK SITE AS AUTHORITY THEREFORE

OAKLAND FIRE DEPARTMENT, OES

	JAD 21 OH	KAGE	ANK	CLOSU	RE/REMOVAL FIELD INSPECTION REPORT					
Site Address: 90/	77+hA	ve		Name of Facility: The Marke Repair						
Inspector: AMarker	ó			Contact on site: NG+10400 GOVCF1010						
Date and Time of Arrival:	11:10	25	Talya	Contractor/Consultarit: AEI Consultariti						
C 17 ·					925 283-6000					
General Requirem	ents	Yes	No No	N/A	General Requirements Yes No	N/A				
Approved closure plan on site.				1	Site Safety Plan properly signed.	ļ				
Changes to approved plan noted.		Company		V	40B:C fire extinguisher on site.					
Residuals properly stored/transpe	rted***				"No Smoking" signs posted.					
Receipt for adequate dry ice note	d.		3.	ally sign	Gas detector challenged by inspector.					
Tank Observations	T #1	Т #2	T #3	T #4	Total Inc.	T #4				
Tank Capacity (gallons)	1500				Obvious corrosion?					
Material last stored	Fall				Obvious odors from tank?					
Dry ice used (pounds)	150		ŀ		Seams intact?					
Combustible gas concentration as		e time & s	sampling	point)	Tank bed backfill material yes					
(1)	2				Obvious discoloration?					
(2)				-	Obvious odors ex-tank bed?					
(3)	1				Water in excavation?					
Oxygen concentration as % volume	me. (Note tim		ting poin	<i>t.)</i>	Sheen/product on water?					
(1)	4				Tank tagged by transporter?					
(2)					Tank wrapped for transport? Tank plugged w/ vent cap?					
Tank Material	+ +									
Wrapping/Coating, if any					Date/time tank hauled off? No. of soil samples taken?	-				
Obvious holes?	 				Depth of soil samples (ft. bgs)					
	<u> </u>	:	<u> </u>		Dopar of son samples (in ogs)					
Piping Remova		Yes	No	N/A	General Observations Yes No	N/A				
All piping removed hauled off w/	tanks?	1.7			Leak from any tank suspected?					
Obvious holes on pipes?					"Leak Report" form given to the operator?					
Obvious odors from pipes?			17	1/2	Obviously contaminated soil excavated?					
Obvious soil discoloration in pipi	ng trench?		<u> </u>	17	Soil stockpile sampled?	1				
Obvious odors from piping trencl		1		++,-	54-1-1-1-1-1-1-10	W 50				
Water in piping trench?		-		+ 7 -	Stockpile lined AND covered? Con Water in excavation sampled?	1108				
Number & depth of soil samples	from nining to	ench?	+	 	Number/depth of water samples taken?	3				
Number & depth of water sample			+2	}	All samples properly preserved for transport?	1				
Number & deput of water sample	a nom bibing	uchen?		2	All samples properly preserved for transport?					
Additional Observa		Yes	No	N/A	SITE & SAMPLING DIAGRAM	কা, এই				
Soil/water sampling protocols acc	<u> </u>	/			17th Ave					
Sampling "chain of custody" note	ad?	NV								
Tank pit filled in or covered?	<i>i</i>	1	?.		Rather					
Tank pit fenced or barricaded?			1		1 No Portion					
Transporter a registered HW hau	ler?				(N) DI	P				
Uniform HW Manifest completes	i?	7	<u> </u>	1	1 TV 65	- }				
Contractor/Consultant reminded		-	,		Hamey L					
UST Removal Report due within		/			Tage 2					
Date/Time removal/closure opera		d? 25	JW0.	211:	≶ Ø					
OT hours or additional charges d	ue from contra	ctor?	4 <i>K</i> F	<u> </u>						
Notes/Comments: Ma	n 21776	1110	115	1-56	CI. K. thomas If & 855-llow WANTER					
MINLUTE Danige Exor	n 4.	ank	oit	Line	2 and covered Jolean +50501					
of you place in	ent o	6	wer.	owed	en back in prt					
UST Closure / Removal Inspection Report	dmg April 1998			Soll	Sangles taken the just about	Lucia				



EXCAVATION PERMIT

CIVIL ENGINEERING

PAGE 2 of 2

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

PERMIT NUMBER X 0 2 0 0 6 80	901 77 H Ave
APPROX. START DATE APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER
T117 +/20	(Permit not valid without 24-Hour number) 975-283-6000
CONTRACTOR'S LICENSE # AND CLASS 654919 H/H4Z	CITY BUSINESS TAX # 567167
ATTENTION: 1- State law requires that the contractor/owner call Underground S secured an inquiry identification number issued by USA. The U	Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has SA telephone number is 1-800-642-2444. Underground Service Alert (USA) # 3 0 5 5
2- 48 hours prior to starting work, you MUS	ST CALL (510) 238-3651 to schedule an inspection.
3- 48 hours prior to re-paving, a compaction	certificate is required (waived for approved slurry backfill).
OWNER/BUILDER	
provided that such improvements are not intended or offered for sale. If however, burden of proving that he did not build or improve for the purpose of sale). I, as owner of the property, am exempt from the sale requirements of the above performed prior to sale, (3) I have resided in the residence for the 12 months structures more than once during any three-year period. (Sec. 7044 Business an I, as owner of the property, am exclusively contracting with licensed contracting with licensed contracting the sale residence.	impensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business of property who builds or improves thereon, and who does such work himself or through his own employees, see, the building or improvement is sold within one year of completion, the owner-builder will have the over due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will a prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two d Professions Code). After the construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law to contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).
Policy # 1492513-98 Company Name	I shall not employ any person in any manner to be to be a series of the
granted upon the express condition that the permittee shall be responsible for all perform the obligations with respect to street maintenance. The permittee shall, and employees, from and against any and all suits, claims, or actions prought by	should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith ut is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This y the Director of the Office of Planning and Building.
hereby affirm that I am licensed under provisions of Chapter q of Division 3 of this permit and agree to its requirements, and that the above information is true a signature of Permittee Agent for Contractor Owner	the Business and Professions Code and my license is in full force and effect (if contractor), that I have read not correct under penalty of law. 7/8/02 Date
101	HOLIDAY RESTRICTION? LIMITED OPERATION AREA?
	A -
TOOTION	(NOV 1 - JAN 1) PYES TONO (7AM-9AM-& 4PM-6PM) PYES: ANO.



R8R40FM - 6.0 - 3/1/95 - blg - #7

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 ELLIS STREET SAN FRANCISCO, CALIFORNIA 94109 (415) 771-6000

REGULATION 8, RULE 40 NOTIFICATION FORM

Check √ Removal or Replacement of Tanks

☐ Excavation of Contaminated Soil

	VI CHIOK TO THE SECOND TO THE
Site Address 901 77th Avenue	
City; State Oakland , CA	zip 9462/
Owner Name D&D Ventures	
Specific location of project worth west corner of	property
Scheduled startup date 7/25/02	Contaminated Soil Excavation Scheduled Startup Date
Vapors removed by:	Stockpiles will be covered? YesNo
☐ Water wash	Indicate below the method used to comply with Regulation 8, Rule 40, Section 402.4:
	Check (√) 8-40-301 □ 8-40-302 □ (permit required)
Indicate below if an A/C was obtained for tank replacement:	A/C or P/O #
Yes No If yes, A/C or P/O #	A/C = Authority to Construct P/O = Permit to Operate
What other public agency have you notified (e.g., Fire District, H. Agency Oakland) Fire Contact Leroy	Griffin Phone # (510:) 239 - 7759
	Contact
Name AEI Consultants	
Address 3210 Old Tunnel Road, Suite B	Phone (925) 283-6000
City, State, Zip Lafayette, CA 94549	
ODNICH PARTY OF SOUND	Ray Annon Signs and include the Park
Name same as contractor	Contact
Address	Phone ()
City, State, Zip	
DROP COSPUTED UNITED INTO THE PROPERTY OF THE	
Date Received Fax:	Date Postmarked:
Inspector No.:	Date: By
Update: Contact Name	Date: By
Update: Contact Name	Date: By
	See reverse for instructions

ACTIVITY NOTIFICATION FORM

Buildings Structures Scaffolding Falsework Demolition Trenches/Excavations

Company Name: All Environmental Inc.	
	Field Phone: <u>(925) 283-6000</u>
nnual Permit Number: 99-900632	Office Phone: (925) 283-6000
pecific Activity Location: 901 77 Avenue	Number of Employees: 3
learest Major Cross Street: Hawley	Starting Date: # 7/25 / 0 2
ty: Oakland	Anticipated Completion Date: 7/25/02
ounty: Hameda	High Voltage Lines in Proximity? NoYes
NSTRUCTIONS: The appropriate item(s) must be completed and signed by a a permit. Please fill in or check off the blanks where appropriate item(s) must be completed and signed by a	person knowledgeable about the project for each activity covered by priate.
onstruction: Building Structure Type: Steel Fr	rameTieredConcrete
ilt-up Wood Frame Liftslab Precast	Slip Form Depth No. of Stories
Description:	
(See 8 CCR 1709-30: Appendix A Plate A-2a & b)	
Scaffolding: Height Metal Wood	Wood over 60 Feet Metal over 125 Feet
Metal>1 25 Feet or Wood>60 Feet requires design by California Registered Civil E	
Description:	· · · · · · · · · · · · · · · · · · ·
Falsework/Vertical Shoring: Maximum Height Maxim	Num Coop Material
Falsework/Vertical Shoring: Maximum Height Maxim	num Span Material
	num Span Material
	num Span Material
Oescription:(See 8 CCR 1717)	
(See 8 CCR 1717) Demolition Of: Building Structure Height	No. of Stories Type: Steel Frame
(See 8 CCR 1717)	No. of Stories Type: Steel Frame
(See 8 CCR 1717) Demolition Of: Building Structure Height Vood Frame Concrete Demolition Ball	No. of Stories Type: Steel Frame
(See 8 CCR 1717) Demolition Of: Building Structure Height Vood Frame Concrete Demolition Ball Demolition Ball Oader/Tractors Other	No. of Stories Type: Steel Frame
(See 8 CCR 1717) Demolition Of: Building Structure Height Vood Frame Concrete Demolition Ball Loader/Tractors Other (See 8 CCR 1734 - 37) Trenches/Excavations: Depth Range(Min/Max) * 5 / 9	No. of Stories Type: Steel Frame Clam Explosives
Cescription:	No. of Stories Type: Steel Frame Clam Explosives Width Range(Min/Max) 5 - 20 Total Length
Cescription: (See 8 CCR 1717)	No. of Stories Type: Steel Frame Clam Explosives Width Range(Min/Max) 15 - 20 Total Length Trench Shield Professional Engineer (NORTH 1-800-642-2444/SOUTH 1-800-422-4133)
Cee 8 CCR 1717) Cemolition Of: Building Structure Height	No. of Stories Type: Steel Frame Clam Explosives Width Range(Min/Max) Total Length Trench Shield Professional Engineer
CSee 8 CCR 1717	No. of Stories Type: Steel Frame Clam Explosives Width Range(Min/Max) 15 - 20 Total Length Trench Shield Professional Engineer (NORTH 1-800-642-2444/SOUTH 1-800-422-4133)
CSee 8 CCR 1717	No. of Stories Type: Steel Frame Clam Explosives Width Range(Min/Max) 5 - 20 Total Length Trench Shield Professional Engineer (NORTH 1-800-642-2444/SOUTH 1-800-422-4133)
CSee 8 CCR 1717	No. of Stories Type: Steel Frame Clam Explosives Width Range(Min/Max) 15 - 20 Total Length Trench Shield Professional Engineer (NORTH 1-800-642-2444/SOUTH 1-800-422-4133)

APPENDIX B SITE HEALTH & SAFETY PLAN

HEALTH AND SAFETY PLAN

Prepared for:

UST Removal at 901 77th Avenue Oakland, California

A. INTRODUCTION

This Site Specific Health and Safety Plan is written for the UST Removal project located at 901 77th Avenue in Oakland, California. All job site personnel will follow CAL OSHA safe operating practices as outlined in 29 CFR 1910 and 1926, as well as established guidelines set forth by AEI Consultants or their respective companies.

B. WORK DESCRIPTION

Prepared by: Nathan Garfield

Site Manager: Dusty Roy

Address: 901 77th Avenue

Oakland, California

Scope of Work: AEI Consultants (AEI) will remove (one (1)) 1,000-gallon-gallon gasoline underground storage tank located at the above address. The tank will be emptied, removed, and disposed of according to federal, state and local regulations. two (2) soil sample(s) will be taken from the native material beneath each tank. One composite sample will be made from 4 discrete soil samples from the excavated material.

C. SITE/WASTE CHARACTERISTICS

Hazard Level: Serious: Low: XXX

Moderate: XXX Unknown:

Waste Type: Solid: Underground Storage Tank

Sludge:None

Liquid: Remaining Product Inside Tank

Gas: None

Hazard Characteristics: Combustible, Toxic

There will be a three feet boundary surrounding the excavation pit and the stockpiled material. The area within this boundary is considered an exclusion zone and only qualified personnel will be allowed to enter. All personnel arriving or departing the site should log in before entering the exclusion zone. All activities on site must be cleared through the Site Manager.

D. HAZARD EVALUATION

Potential chemical hazards include skin and eye contact or inhalation exposure to potentially toxic concentrations of hydrocarbon vapors. The potential toxic compounds that may exist at the site are listed below with descriptions of specific health effects of each. The list includes the primary potential toxic constituents that may be found at sites which previously handled petroleum hydrocarbons, including home heating diesel fuel.

1. Benzene

- a. Colorless to light yellow, flammable liquid with an aromatic odor.
- b. Toxic hazard by inhalation, adsorption, ingestion and skin and/or eye contact.
- c. Exposure may irritate eyes, nose and respiratory system and may cause acute restlessness, convulsions, nausea, or depression. Benzene is carcinogenic.*
- d. Permissible exposure level (PEL) for a time weighted average (TWA) over an eight hour period is 1.0 ppm.

2. Toluene

- a. Colorless liquid with a sweet, pungent, benzene like odor.
- b. Toxic hazard by inhalation, adsorption, ingestion and skin and/or eye contact.
- c. Exposure may cause fatigue, weakness, confusion, euphoria, dizziness, headaches, dilated pupils, lacrimation, nervousness, insomnia, paresthesia, and dermatitis.
- d. Permissible exposure level for a time weighted average over an eight hour period is 100 ppm.

3. Xylene

- a. Colorless liquid with an aromatic odor.
- b. Toxic hazard by inhalation, adsorption, ingestion and skin and/or eye contact.
- c. Exposure may irritate eyes nose and throat and may cause dizziness, excitement, drowsiness, incoordination, corneal vacuolization, anorexia, nausea, vomiting, and dermatitis.
- d. Permissible exposure level for a time weighted average over an eight hour period is 100 ppm.

4. Ethylbenzene

- a. Colorless liquid with an aromatic odor.
- b. Toxic hazard by inhalation, ingestion, and skin and/or eye contact. Ethylbenzene is carcinogenic.*
- c. Exposure may irritate eyes and mucous membrane and may cause headaches, dermatitis, narcosis and loss of consci ousness.
- d. Permissible exposure level for a time weighted average over an eight hour period is 100 ppm.

^{*} Known to the State of California to cause cancer.

5. Lead

- a. A heavy ductile soft grey metal.
- b. Toxic hazard by inhalation, ingestion, and skin and/or eye contact.
- c. Exposure may cause weakness, nausea, lassitude, diarrhea, insomnia, anorexia, inflamed mucous membranes and abdominal pains. Lead is carcinogenic.*
- d. Permissible exposure level for a time weighted average over an eight hour period is .05 ppb (in vapor).

6. Diesel

- a. Colorless to dark brown, combustible liquid with an aromatic odor
- b. Toxic hazard by inhalation, ingestion, skin and/or eye contact.
- c. Inhalation of vapors may depress the central nervous system, increasing reaction times, and decreasing pulse rate and blood pressure. Skin irritant.
- d. Occupational exposure limit 5.0 ppm (in vapor).

7. Gasoline

- a. Colorless liquid with a strong aromatic odor. Highly volatile and extremely flammable.
- b. Toxic hazard by inhalation, adsorption, ingestion and skin and/or eye contact.
- c. Inhalation of vapors can cause depression of the central nervous system with symptoms such as headache, dizziness, nausea and loss of coordination. Skin contact can cause defatting of the skin, skin irritation and dermatitis. Benzene is a major constituent of gasoline.
- d. Permissible exposure level for a time weighted average over an eight hour period is 300 ppm.

8. Waste Oil

- a. Toxic hazard by ingestion and possibly inhalation.
- b. Prolonged contact may cause skin irritation and dermatitis. Waste oil may be carcinogenic.*
- Waste oil may contain metals or toxic organics from thermal breakdown of the oil.
 In some cases, chlorinated solvents may be present.
- d. Permissible exposure level for a time weighted average over an eight hour period is 5 ppm (in vapor).

^{*} Known to the State of California to cause cancer.

Dusty Roy has been designated to coordinate access control and security on site. All work will strictly follow OSHA guidelines. A safe perimeter has been established at a three feet radius surrounding the site. These boundaries are identified by yellow caution tape and orange safety cones. Personnel shall maintain the maximum distance from the pit while performing their duties. No one shall enter an excavation pit that is greater than five feet in depth unless the excavation is shored or sloped and no one shall climb on the stockpiled material except to cover it with plastic. Additional hazards on site include heavy equipment and overhead lifting equipment. Heavy equipment used for performing the tank removal project may include a backhoe, an excavator, or a crane for lifting the tank out of the excavation. Only 40 hour trained personnel will operate equipment or perform any duty associated with this project. A hard hat and steel toed boots are mandatory for all personnel associated with the tank removal.

A FIRST AID KIT AND A 40 POUND BC FIRE EXTINGUISHER WILL BE AVAILABLE ON SITE.

EMERGENCY SERVICES ARE AVAILABLE BY DIALING 911 ON THE TELEPHONE LOCATED IN THE SITE MANAGER'S VEHICLE. THIS VEHICLE WILL BE ON SITE AT ALL TIMES.

E. PERSONAL PROTECTIVE CLOTHING

Based on evaluation of potential hazards, level "D" protective clothing has been designated as the appropriate protection for this project. The level of protective clothing will be upgraded if the organic vapor levels in the operator's breathing zone exceeds 5 ppm above background levels continuously for more than five minutes, or if any single reading exceeds 25 ppm. If this occurs then level C protection will be used. If the organic concentration in the operator's breathing zone exceed's 200 ppm for 5 minutes and/or the organic vapor concentration two feet above the excavation exceeds 1,000 ppm or 10% of the lower explosive limit, then the equipment will be shut down and the site evacuated. If organic vapor concentrations exceed 200 ppm and work continues then level B protection will be required.

"EPA Standard Operating Safety Guidelines" defines the levels of protective clothing as follows:

LEVEL A:

Fully encapsulating suit / SCBA / Hard hat / Steel toe boots / Safety gloves.

LEVEL B:

Splash resistant suit / SCBA / Hard Hat / Steel toe boots / Safety gloves.

LEVEL C:

Half face respirator / Hard hat / Safety glasses / Steel toe boots / Coveralls / Gloves.

LEVEL D:

Coveralls / Hardhat / Safety Glasses / Steel toe boots / Gloves.

If air purifying respirators are authorized, organic vapor w-filter is the appropriate canister for use with the involved substances and concentrations. A competent individual has determined that all criteria for using this type of respiratory protection have been met.

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE COMPANY SAFETY OFFICER, JOHN ORMEROD.

F. MONITORING INSTRUMENTS

The following environmental monitoring instruments shall be used on site at specified intervals.

Lower Explosive Limit (LEL) Meter that will also check the tank for Oxygen levels will be used to check the tank for removal and transportation.

G. EMERGENCY HOSPITAL

The closest hospital with an emergency room is:

Alameda County Medical Center- Highland Campus Emergency 911 (510) 437-4701

DIRECTIONS FROM THE JOB SITE:

EXIT JOBSITE AND GO:

RIGHT (NORTH) ON HAWLEY ST.
CONTINUE ONTO HEGENBERGER ROAD
CONTINUE ONTO 73RD AVENUE
TURN LEFT (NORTH) ON BANCROFT
TURN RIGHT (NORTH) ON CAMDEN
CONTINUE ON MACARTHUR BLVD
TURN LEFT ONTO I-580 WEST
EXIT 14TH AVENUE
TURN LEFT ON 14th
TURN RIGHT ON E 31st
HOSPITAL IS ON LEFT AT 1411 E 31st STREET

APPENDIX C TRANSPORT AND DISPOSAL DOCUMENTS

State of California—Environmental Protection Agency Form Approved OMB No. 2050-0039 (Expires 9-30-99) See Instructions on back of page 6. Department of Taxic Substances Control Please print or type. Form designed for use on elite (12-pitch) typewriter. Sacramento, Colifornia 2. Page 1 Manifest Document No. Information in the shaded areas **UNIFORM HAZARDOUS** is not required by Federal law. WASTE MANIFEST αf olololo A. State Manifest Document Number 21183385 3. Generator's Name and Mailing Address the Horder and رون (جور) رق B. State Generator's ID CALL 1-800-852-7550 C 95030 4. Generator's Phone (1) 5. Transporter 1 Company Name 6. US EPA ID Number C. State Transporter's ID [Reserved.] D. Transporter's Phone 7. Transporter 2 Company E. State Transporter's ID [Reserved.] F. Transporter's Phone Designated Facility Name and Site Address 10. US EPA ID Number G. State Facility's ID murround Oil lian tr 7 7 14 Unit 13. Total 12. Containers 11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) Wt/Val . Waste Number No. Quantity Type State EPA/Other G E State E EPA/Other R A T State EPA/Other d. State EPA/Other RESPONSE K. Handling Codes for Wastes Listed Above J. Additional Descriptions for Materials Listed Above d. CALL THE NATIONAL 15. Special Handling Instructions and Additional Information Ewactuca 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 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 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 faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. ő Printed/Typed Name Signature Month Day Year Transporter I Acknowledgement of Receipt of Materials Signature Printed/Typed Name Day nowledgement of Receipt of Materials 18. Transporter 2 Ackn Day Year Printed/Typed Name Manth Signature

DO NOT WRITE BELOW THIS LINE.

Signature

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

A

19. Discrepancy Indication Space

Printed/Typed Name

Day

Year

Month

19. Discrepancy Indication Space

Printed/Typed Name

DO NOT WRITE BELOW THIS LINE.

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Day

APPENDIX D ANALYTICAL DOCUMENTATION

d	McCampbe	ll Analy	tical Inc.			Telephone	use South, #D7, Pach :: 925-798-1620 F ampbell.com E-mail	ax : 925-798-16	22	
All Env	ironmental, Inc	c.	Client Pro	ent Project ID: #5388; D&D Date Samp				07/25/02		
321 0 O	ld Tunnei Rd.,	Ste. B				Ī	Date Received:	07/25/02		<u> </u>
Lafavat	te, CA 94549-4	1157	Client Cor	ntact: Nathan		Į	Date Extracted	07/25/02	:	
Larayou	10, CA 34,145-	+137	Client P.O).:		[Date Analyzed	07/27/02	:	
Extraction m	Gasoli ethod: SW5030B	ine Rang	e (C6-C12) Va	olatile Hydroca Analytical n	rbons as G		ith BTEX and		Work Orde	r: 020737
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	EB-W-8'	S	4600,b,m	ND<25	4.5	23	63	180	500	#
002A	STUP1-4	S	40,ե,ո	- ND	0.026	0.022	0.012	0.022	1	#
003A	EB-E-8'	s	310,b,m	ND<2.5	ND<0,2	0.29	8.9	7.2	50	116
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ND means	Limit for DF =1; not detected at or reporting limit	W	50	5.0 0.05	0.5 0.005	0.5 0.005	0.5	0.5 0.005		y/L /Kg

^{*}water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe, and TCLP extracts in ug/L.

[#] cluttered chromatogram; sample peak coefutes with surrogate peak.

⁺The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; c) TPH pattern that does not appear to be derived from gasoline (stoddard solvent); f) once to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

McCa	mpbell Analy	tical Inc.		110 2nd Avenue South, #D7, Pacheco, CA Telephone: 925-798-1620 Fax: 925-7 http://www.mccampbell.com F-mail: main@m	30 /ፋጎግ				
All Environmen	ital, Inc.	Client Pr	oject ID: #53	00 505					
3210 Old Tunne	el Rd., Ste. B			Date Received: 07/2:		·			
Lafayette, CA 9	4549-4157	Client Co	ontact: Nathan						
Zainy one, On y		Client P.	0.:	Date Analyzed: 07/26					
Extraction method: SW	3050В			by ICP* methods: 6010C					
Lab ID	Client ID	Matrix	Extraction	Lead	Work Order: 020	07373 6 SS			
0207373-001A	EB-W-8'	S	TILC	16	1 1	116			
0207373-002A	STUPI-4	S	TTLC			117			
0207373-003A	EB-E-8'	S	TTLC	9.1		118			
Reporting Lim ND means not above the rep	detected at or	W S	TTLC	NA 3.0	mg/L mg/Kg				

* water samples are reported in mg/L, soil/sludge/solid/product samples in mg/kg, wipes in ug/wipe and all TCLP / STLC / DISTLC / SPI.P extracts in mg/L,

ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

Analytical Methods: EPA 6010C/200.7 for all elements except: 200.9 (water-Sb. As, Pb, Se, Tl); 245.1 (Hg); 7010 (sludge/soil/solid/oil/product/wipes -As, Sc, T1); 7471B (Hg)

DISTLC extractions are performed using STLC methodology except that deionized water is substituted for citric acid buffer as the extraction fluid. DISTLC results are not applicable to STLC regulatory limits.

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations; z) reporting limit raised due to matrix interference.



McCampbell Analytical Inc.

110 Second Avenue South, #D7 Pacheco, CA 94553-5560 (925) 798-1620

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0207373

Client:

All Environmental, Inc. 3210 Old Tunnel Rd., Ste. B Lafayette, CA 94549-4157 TEL: FAX; (925) 283-6000

FAX: (925) 283-6121 ProjectNo: #5388; D&D

PO:

25-Jul-02

Sample ID	ClientSamplD	Matrix	Collection Date	Bottle		8021B/8015		
0207373-001	EB-W-8'	Soil	7/25/02		Α	 A		
0207373-002	STUP1-4	Soil	7/25/02		А	A	Additionary and the second sec	
0207373-003	E.B-E-8'	Soil	7/25/02		A	A		

Comments:

	Date/Time		Date/Time
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
	COLUMN TO THE STATE OF THE STAT	* WALL STATE OF THE	

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

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Analytical,

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AEI Consultants / All Environmental, Inc. OF 3210 Old Tunnel Road, Suite B 0201313 Lafayette, CA 94549 TAT: RUSH / 24 hr / 48 hr / 6 day / (925) 283-6000 Fax: (925) 283-6121 TPH(d), BTEX, MTBE

SOL, EN, SONGENIN, 6020

SOL, EN, SONGENIN, 602

SOL, EN, SONGENIN, 602

WATER EN, SONGENIN, 602

SOL, EN, 603

SOL, CONTAINERS FT 5 METALS EI PROJECT MANAGER Nathan TOTALLEAD (TTLC)
SOIL BOSOLED 2392 (AA) ROJECT NAME 78 P OTAL # OF CONTAINERS. ROJECT NUMBER 5388 4 5 6 OF. CVD. GOOD CONDITION/COLD MATRIX TIME DATE PRESENTION RECEIVED BY RELINQUISHED BY REGEMED BY RELINQUISHED BY... OMMENTS / INSTRUCTIONS SIGNATURE SIGNATURE SIGNATURE PRINTED NAME McCampbell Analytical, Inc. PRINTED NAME PRINTED NAME NALYTICAL LABORATORY 110 2nd Avenue S, #D7 COMPANY \DDRESS DATE 7/25/02 TIME 5.43 COMPANY Pacheco, CA 94553 DATE 125/10 DATE 5:51 DATE TIME DATE HONE 925/798.1620 FAX 925/798.1622

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