Environmental
Science &
Engineering, Inc.
A CILCORP Company

March 24, 1993

Project No. 6-92-5427

Mr. Kevin Tinsley
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94021

SUBJECT: **Report of Tank Removal and Excavation at the American Red Cross Facility Located at 2017 Central Avenue, Alameda, California**

Dear Mr. Tinsley:

Environmental Science & Engineering, Inc. (ESE), environmental consultant to the American Red Cross (ARC), presents this closure report for the removal of one 250-gallon underground storage tank (UST) that had been located at the subject facility. During tank removal activities, soil impacted with petroleum hydrocarbons was observed beneath the former tank and piping locations. Impacted soil was overexcavated vertically to ground water and laterally to nonimpacted soil where possible.

SITE HISTORY

The American Red Cross owns a residential-style building located at 2017 Central Avenue, Alameda, California (See Figure 1 - Vicinity Map). ESE identified two USTs at the subject facility during a site reconnaissance conducted in October 1991 (Figure 2 - Site Plan). One 500-gallon steel tank, located in the rear of the facility, is presently used to store diesel fuel for an emergency electrical generator (Tank No. 1, Figure 2). One 250-gallon UST tank, was located beneath the front lawn near the northwest corner of the site building and reportedly used to store heating oil (Tank No. 2, Figure 2). This tank was removed and is the subject of this closure report.

In May 1992, ESE drilled three soil borings near the 250-gallon heating oil tank up to depths of 16 feet below ground surface (bgs). Results of this investigation, as presented in ESE's Site Assessment Report dated June 25, 1992, was submitted to the Alameda County Health Care Services Agency (ACHCSA). Concentrations up to 210 ppm of TPH-D were reported for soil samples collected at depths of 9.5 feet from two of the borings located near the tank. Gray discoloration and strong petroleum fuel odor was observed in the 9 to 10 foot soil interval. Ground water was observed at a depth ranging from 10 to 11 feet bgs in the borings. Medium to coarse grained sand was found from the surface to the bottom of the borings.

Figure 3 - Partial Site Plan - Tank Plan shows the location and orientation of the former 250-gallon heating oil tank and associated fuel supply lines. The dimensions of the tank were three feet in diameter and six feet in length. The depth to tank invert was 6.5 feet bgs. A remote fill riser is located in the planter area near Central Avenue.

Since subsurface soil near the former 250-gallon tank was found to be impacted with petroleum hydrocarbons, the ARC submitted a Leaking Underground Storage Tank Unauthorized Release Form to the AHCSA on December 9, 1992 (Attachment 1).

TANK CLOSURE ACTIVITIES

1. Permits for this tank removal were procured by Golden West Environmental Services (Golden West) of Livermore, California, subcontractor to ARC, from Alameda County Health Care Services Agency (ACHCSA) and the City of Alameda Fire Department. This tank closure was conducted under ACHCSA permit. Copies of these permits are presented in Attachment 2.

2. Due to the limited space at the site for stockpiling of excavated soil, ESE obtained disposal acceptance for hydrocarbon impacted soil at the Browning-Ferris Industries (BFI) Vasco Road Landfill in Livermore, California. On December 1, 1992, ESE collected soil samples from visibly stained soil near the vent riser using a hand auger. New, unused brass sleeves 2-inches in diameter and 6-inches in length were used to retain the samples. The ends of the brass sleeve were covered with Teflon sheeting, then covered with plastic end caps and sealed using duct tape. Each sample was then labeled and placed on ice in a cooler for transport under chain of custody documentation. The soil samples were submitted to Curtis & Tompkins, Ltd. (C&T), a state-certified analytical laboratory, of Berkeley, California for waste characterization. C&T analyzed the soil samples as a four-point composite for TPH-D, Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), metals, volatile organic compounds (VOCs), reactivity, corrosivity, and ignitibility (RCI), and aquatic bioassay. Soil from the subject site was accepted for disposal at BFI as non-hazardous waste. Laboratory reports and chain of custody documentation are presented in Attachment 3.

3. In December 1992, residual heating oil was evacuated from the 250-gallon tank by Evergreen Environmental Services of Newark, California, a waste oil recycler.

4. On December 22, 1992, Golden West excavated tank soil overburden to expose the top of the tank, which was located approximately three feet below ground surface. The soil was temporarily stockpiled near the excavation on plastic and later transported to BFI as non-hazardous waste.

5. The tank internal atmosphere was rendered inert by the addition of 50 pounds of dry ice. In the presence of Inspector Steven McKinley of the City of Alameda Fire Department and Mr. Kevin Tinsley of the ACHCSA, the tank was lifted from the excavation and loaded onto a flatbed truck. The tank was inspected, and while no holes were observed, minor exterior corrosion of the tank was noted. The tank was manifested as a non-RCRA hazardous waste and transported by H & H Ship Service Company of San Francisco, California to their facility where the tank was cleaned and scrapped. A copy of the tank manifest is presented in Attachment 4.

6. All piping associated with this tank was removed from the excavation during tank removal activities.

7. Golden West used a backhoe to excavate and remove soil. Field observations based on visual and olfactory indicators were used to delineate impacted soil. The excavation was conducted vertically to depths of five to 10.5 feet and horizontally to nonimpacted soil. Soil excavated from the tank pit consisted of tan to brown fine sand with minor silt. Ground water was found at a depth of 10.5 feet. Ground water was not sampled.

8. Figure 4 - Partial Site Plan - Excavation Plan shows the final limits of the excavation and the locations of soil samples collected from the base and sidewalls of the excavation. An area near the tank, with dimensions of approximately 25 feet by 12 feet, was excavated to a depth of 10.5 feet, immediately above the occurrence of ground water. An area approximately 9 feet by 12 feet was excavated to a depth of five feet in the area of the former piping located near the northern wall of the site building. A five foot deep bench was also excavated adjacent to the concrete berm and concrete driveway located northwest of the subject facility. Due to the potential of undermining the site building and the concrete driveway, the excavation activities were terminated in the northeast and northwest directions. Soil excavated from the tank pit consisted of tan to brown fine sand with minor silt. Ground water was found at an approximate depth of 10.5 feet. Visible and olfactory evidence of soil contamination was observed at a depth immediately below the bottom of the tank invert, at an approximate depth of 6.5 feet to depths of 10 feet. Dark gray to blue discolored soil with a strong petroleum hydrocarbons odor was observed beneath the former location of the tank and vent piping. No root holes or other potential contaminant pathways were observed.

9. ESE collected soil samples from beneath the tank invert (ARC-1-10') and from beneath the vent piping (ARC-3-5' and ARC-4-5'). In addition, ESE collected soil samples from the floor and sidewalls of the excavation for the purpose of verifying removal of impacted soil (Figure 4).

ESE collected a soil sample from the stockpiled soil (ARC-2-SP) which was composited by the analytical laboratory. ESE collected three additional discrete stockpile samples (ARC-12, ARC-13, and ARC-14).

The soil samples were collected during excavation activities from the backhoe bucket. The samples were collected from the selected location and depth by hand-driving the sampler into the soil near the teeth of the backhoe bucket. New, unused brass sleeves 2-inches in diameter and 6-inches in length were used to retain the samples. The ends of the brass sleeve were covered with Teflon sheeting, then covered with plastic end caps and sealed using duct tape. A mobile laboratory and fixed analytical laboratory were utilized for sample analyses. Each sample was then labeled and placed on ice in a cooler for transport under chain of custody documentation to ChromaLab Inc. (ChromaLab) for analysis. ChromaLab, a California-certified analytical laboratory, analyzed the soil samples for the following analyses:

- TPH-D using EPA Method 5030/8015 modified.
- BTEX using EPA Method 5030/8020.

10. Table 1 presents a summary of analytical results of soil samples collected from the base and sidewalls of the excavation. Copies of chain of custody documentation and analytical results are presented in Attachment 5.

11. On December 23, 1992, Golden West backfilled the excavation with gravel from the base of the excavation to an approximate depth of four feet below ground surface. Soon after, the excavation was then backfilled with clean import granular fill material to the ground surface.

DISCUSSION

Analyses of soil sample ARC-1-10', collected three feet below the tank invert at a depth of 10 feet, showed concentration of TPH-D at 1,000 ppm. With the exception of the sidewall sample ARC-7-10.5', collected northeast of the former tank and piping locations, analyses of verification samples revealed TPH-D concentrations less than 100 ppm, ranging from nondetectable at method reporting limits (ND) to 69 ppm. Analysis of sample ARC-7-10.5' reported TPH-D at a concentration of 240 ppm. Benzene, Toluene, and Total Xylenes were detected in verification soil sample ARC-8-10.5' at concentrations of 110, 300, and 330 parts per billion (ppb), respectively. BTEX was not detected in other verification soil samples collected from the excavation.

Analyses of the composite stockpile sample (ARC-2-SP) and three additional stockpile samples (ARC-12-SP, ARC-13-SP, and ARC-14-SP) resulted in detectable concentrations of TPH-D (ranging from 10 to 280 ppm), Benzene (ranging from ND to 52 ppb), Toluene (ranging from 13 to 175 ppb), Ethlybenzene (ranging from ND to 34 ppb), and Total Xylenes (ranging from ND to 105 ppb).

On December 29, 1992, approximately 108 cubic yards (six truckloads) of impacted soil was loaded and transported to the BFI Vasco Road Landfill located in Livermore, California by Golden West. Copies of the weight tickets documenting landfill disposal are presented in Attachment 6.

CONCLUSIONS AND RECOMMENDATIONS

The 250-gallon tank which had stored heating oil was excavated and removed from the subject property. Field observations and laboratory results of soil samples collected by ESE during the removal of this tank indicated petroleum hydrocarbons were present in the soil in the vicinity of the removed underground storage tank and beneath the piping. The excavation was enlarged vertically to the occurrence of ground water and horizontally to nonimpacted soil where possible. Due to the proximity of a concrete driveway located on adjacent property, the excavation was terminated along the northwest property boundary of the ARC facility. In addition, soil impacted with petroleum hydrocarbons was excavated and removed from an area beneath former piping near the site building. Verification soil samples collected from the perimeter of the final limits of the excavation showed that soil containing concentrations of petroleum hydrocarbons (TPH-D) less than 100 ppm was removed from the tank excavation except in one area immediately adjacent to the building where it was not physically possible to remove soil without damage to the building.

Based on results of analyses of verification soil samples collected from the final limits of the excavation, ESE recommends that closure be granted for the vadose zone and no further vadose zone investigation work be required. However, since ground water occurs at a shallow depth (10.5 feet) and since soil in the capillary zone immediately above the ground water surface was observed to be impacted with petroleum hydrocarbons, the ground water may be impacted by petroleum hydrocarbons. ESE recommends the installation of one ground water well in a down gradient location. Ground water monitoring activities should be conducted on a quarterly basis for a period of one year.

• • • • •

Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by other hydrogeologists and engineers practicing in this field. No other warranty, express or implied, is made as to the professional advice in this report.

If you have any questions regarding the material presented in this report, please do not hesitate to contact the undersigned at (510) 685-4053.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Kerry Lefever

Kerry Lefever
Senior Staff Geologist

Susan S. Wickham

Susan S. Wickham, RG 3851
Senior Geologist

Attachments

cc: Mr. John Watson, American Red Cross
Inspector McKinley, City of Alameda Fire Department

F:\...\5427\CLOSURE.RPT

TABLE

TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES FROM THE EXCAVATION AMERICAN RED CROSS, 2017 CENTRAL AVENUE, ALAMEDA, CALIFORNIA

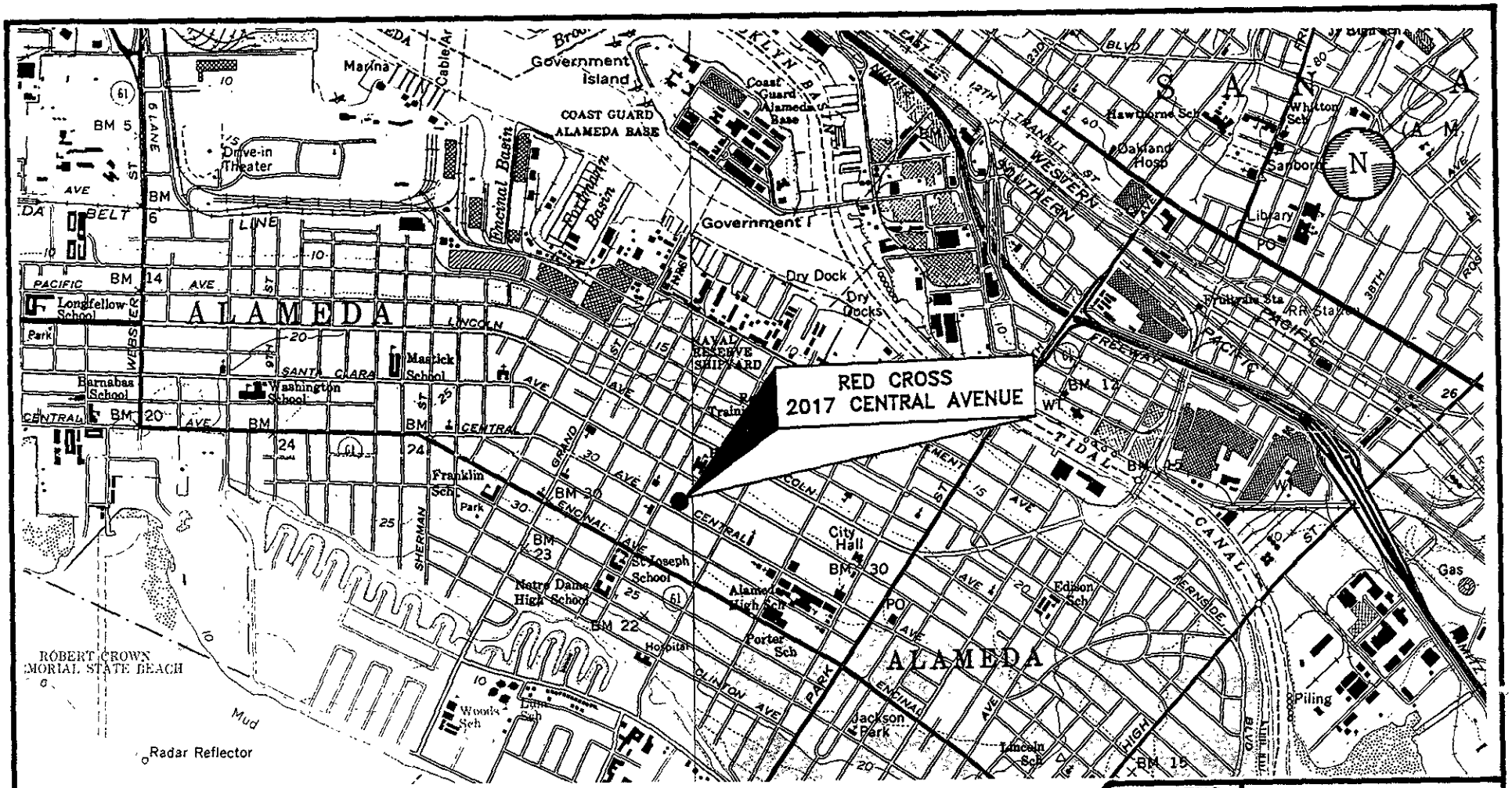
Sample Number	Location	Depth (feet)	Date	TPH-D (mg/Kg)	B	T	E	X
					(µg/Kg)			
ARC-1-10'	Floor	10	12/22/92	1000	ND<5	ND<5	ND<5	ND<5
ARC-3-5'	Floor	5	12/22/92	ND<10	ND<5	ND<5	ND<5	ND<5
ARC-4-5'	Floor	5	12/22/92	ND<10	ND<5	ND<5	ND<5	ND<5
ARC-5-4'	Sidewall	4	12/22/92	ND<10	ND<5	ND<5	ND<5	ND<5
ARC-6-10.5'	Sidewall	10.5	12/23/92	ND<10	ND<5	ND<5	ND<5	ND<5
ARC-7-10.5'	Sidewall	10.5	12/23/92	240	ND<5	ND<5	ND<5	ND<5
ARC-8-10.5'	Sidewall	10.5	12/23/92	69	110	300	ND<5	330
ARC-9-10'	Sidewall	10	12/23/92	52	ND<5	ND<5	ND<5	ND<5
ARC-10-7'	Sidewall	7	12/23/92	ND<10	ND<5	ND<5	ND<5	ND<5
ARC-11-6'	Sidewall	6	12/23/92	ND<10	ND<5	ND<5	ND<5	ND<5

NOTES:

Samples collected by Environmental Science & Engineering, Inc. (ESE)
Samples analyzed by ChromaLab, Inc., Environmental Laboratory (1094)
TPH-D = Total Petroleum Hydrocarbons as diesel
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total Xylenes
ND = Nondetectable at method reporting limits
mg/Kg = milligrams per kilogram
µg/Kg = micrograms per kilogram

F:\...\5372\TABLE

FIGURES



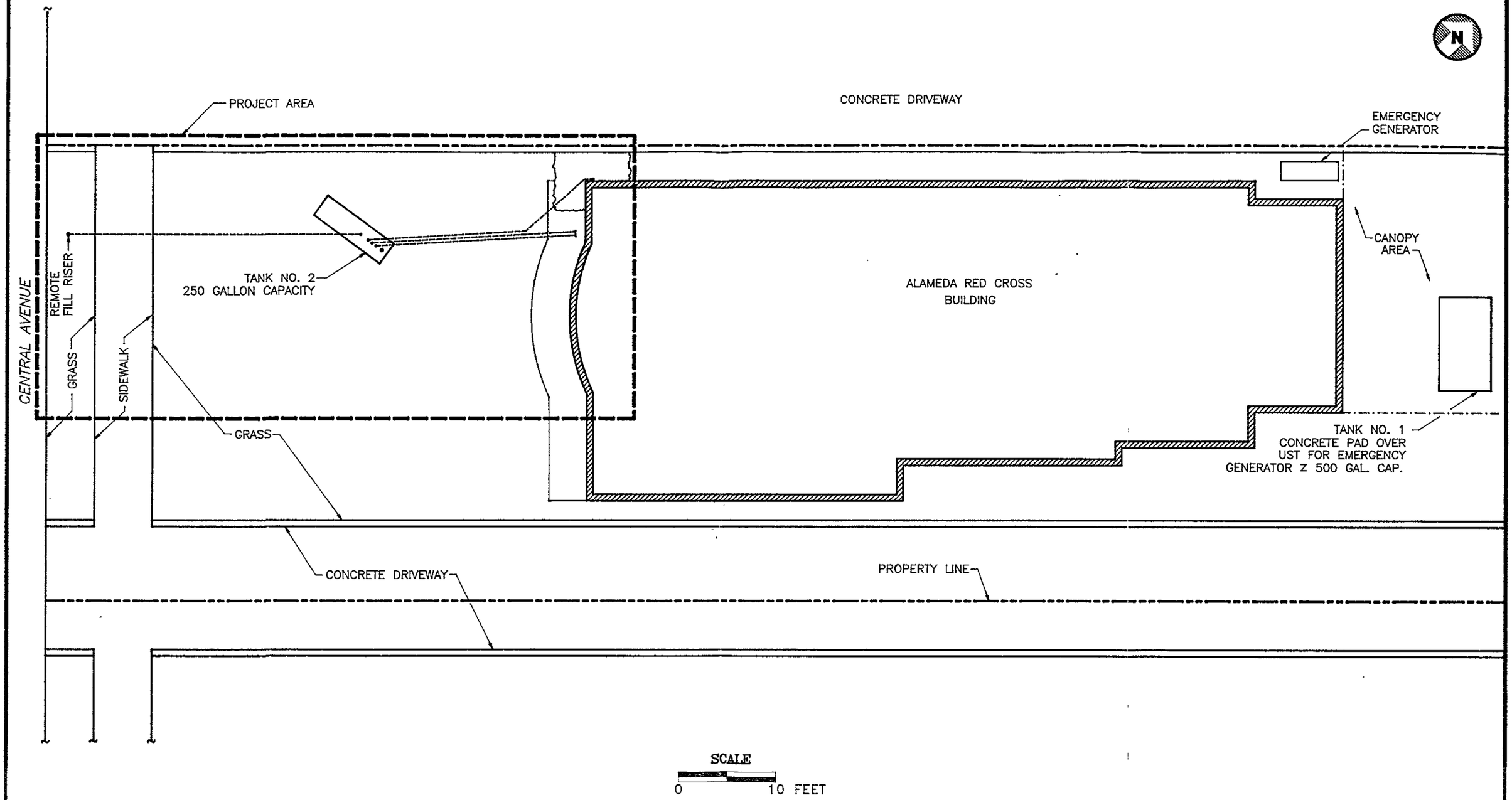
Environmental Science & Engineering, Inc.

RED CROSS
ALAMEDA, CALIFORNIA

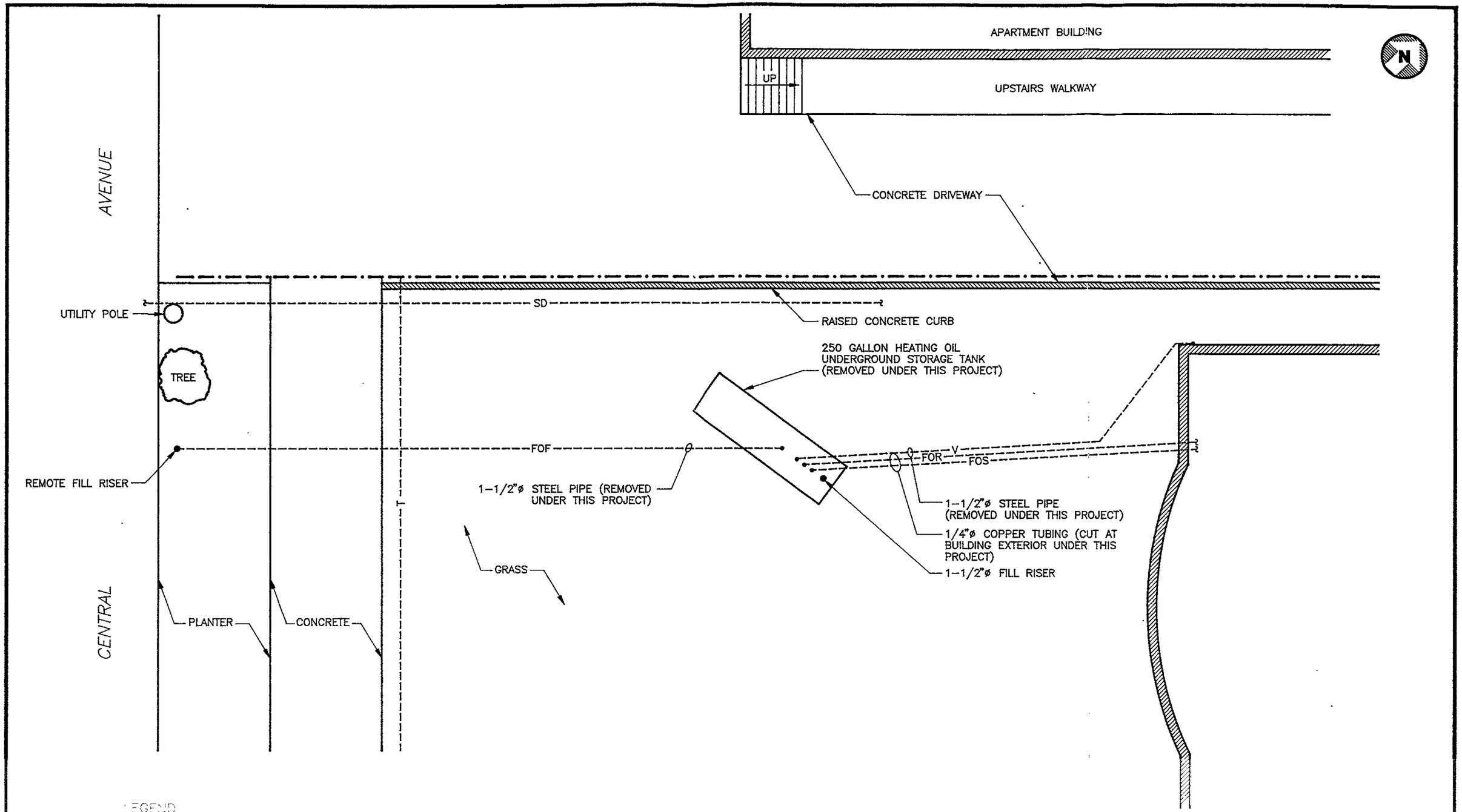
FIGURE 1
VICINITY MAP

DRAWN BY	APPROVED BY	REVISED
DWR		

DATE	FILE NAME	PROJ. NO.
6/92	53721001	6-92-5372



ESE A CILCORP Company Environmental Science & Engineering, Inc. 4090 NELSON AVENUE, SUITE J CONCORD, CA 94520	DATE 3/92	PROJ NO. 6-92-5427	RED CROSS 2017 CENTRAL AVENUE ALAMEDA, CALIFORNIA
	DRAWN BY CVS	CAD FILE 54273002	FIGURE 2 SITE PLAN
	APPROVED BY	REVISED	



LEGEND

— · — · —	PROPERTY LINE
FOF	FUEL OIL REMOTE FILL LINE
FOR	FUEL OIL RETURN LINE
FOS	FUEL OIL SUPPLY LINE
SD	STORM DRAIN LINE
T	TELEPHONE LINE
V	FUEL OIL VENT LINE

SCALE
0 5 FEET

ESE A CELCORP Company
Environmental Science & Engineering, Inc.
4090 NELSON AVENUE, SUITE J
CONCORD, CA 94520

DATE 3/92	PROJ NO 6-92-5427
DRAWN BY CVS	CAD FILE 54271003
APPROVED B	REVISED

RED CROSS
2017 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

FIGURE 3
PARTIAL SITE PLAN
TANK PLAN

APARTMENT BUILDING

UP

UPSTAIRS WALKWAY

N

CONCRETE DRIVEWAY

AVENUE

UTILITY POLE

SD

TREE

64 ppm TPHd 160 ppb Benzene DEPTH = 5'

ARC–8–10.5'

ARC–3–5'

DEPTH = 10.5'

1,000 ppm D

740 ppm

ARC–11–6'

ARC–1–10'

ARC–7–10.5'

ARC–4–5'

FOF

ARC–9–10'

FOR

V

FOS

ARC–5–4'

ARC–10–7' X X ARC–6–10.5'

CENTRAL

PLANTER

CONCRETE

GRASS

LEGEND

PROPERTY LINE

LIMIT OF EXCAVATION

X SOIL SAMPLE LOCATION

SCALE

0 5 FEET

ESE A CELCORP Company

Environmental Science & Engineering, Inc.

4090 NELSON AVENUE, SUITE J
CONCORD, CA 94520

DATE	PROJ. NO
3/92	6-92-5427
DRAWN BY	CAD FILE
CVS	54271004
APPROVED BY	REVISED

RED CROSS
2017 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

FIGURE 4
PARTIAL SITE PLAN
EXCAVATION PLAN

ATTACHMENT 1

UNAUTHORIZED RELEASE FORM

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☐ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFTY CODE.
SIGNED _____ DATE _____

REPORT DATE: 06/17/92 CASE #:

REPORTED BY
NAME OF INDIVIDUAL FILING REPORT: John Watson
PHONE: (510) 535-2830
SIGNATURE:
REPRESENTING ☒ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER _____
COMPANY OR AGENCY NAME: American Red Cross - Bay Area
ADDRESS: 2111 East 14th Street (STREET) Oakland (CITY) CA (STATE) 94606 (ZIP)

RESPONSIBLE PARTY
NAME: American Red Cross - Bay Area ☐ UNKNOWN
CONTACT PERSON: John Ramsey
PHONE: (510) 522-7711
ADDRESS: 2017 Central Avenue (STREET) Alameda (CITY) CA (STATE) (ZIP)

SITE LOCATION
FACILITY NAME (IF APPLICABLE): Red Cross
OPERATOR: John Ramsey
PHONE: (510) 522-7711
ADDRESS: 2017 Central Avenue (STREET) Alameda (CITY) Alameda (COUNTY) (ZIP)
CROSS STREET: Chestnut
TYPE OF AREA ☐ COMMERCIAL ☐ INDUSTRIAL ☐ RURAL ☒ RESIDENTIAL ☐ OTHER _____
TYPE OF BUSINESS ☐ RETAIL FUEL STATION ☐ FARM ☒ OTHER Charity

IMPLEMENTING AGENCIES
LOCAL AGENCY / AGENCY NAME: Alameda County Dept. of Environmental Health Hazardous Materials Division
CONTACT PERSON:
PHONE: (510) 271-4320
REGIONAL BOARD: San Francisco Bay
PHONE: (510) 464-1255

SUBSTANCES INVOLVED
(1) NAME: Heating Oil — QUANTITY LOST (GALLONS): _____ ☒ UNKNOWN
(2) _____ ☐ UNKNOWN

DISCOVERY/ABATEMENT
DATE DISCOVERED: 06/09/92
HOW DISCOVERED ☐ TANK TEST ☐ INVENTORY CONTROL ☒ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK REMOVAL ☐ OTHER _____
DATE DISCHARGE BEGAN: __/__/__ ☒ UNKNOWN
HAS DISCHARGE BEEN STOPPED? ☐ YES ☒ NO IF YES, DATE __/__/__
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☒ REMOVE CONTENTS ☐ REPLACE TANK ☒ CLOSE TANK ☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURE ☐ OTHER _____

SOURCE/CAUSE
SOURCE OF DISCHARGE: ☒ TANK LEAK ☐ UNKNOWN ☐ PIPING LEAK ☐ OTHER
TANKS ONLY/CAPACITY: 1,000 GAL; AGE _____ YRS; ☒ UNKNOWN
MATERIAL: ☐ FIBERGLASS ☐ STEEL ☐ OTHER _____
CAUSE(S): ☒ OVERFILL ☐ RUPTURE/FAILURE ☐ CORROSION ☒ UNKNOWN ☐ SPILL ☐ OTHER _____

CASE TYPE
CHECK ONE ONLY
☐ UNDETERMINED ☒ SOIL ONLY ☒ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONE ONLY
☒ SITE INVESTIGATION IN PROGRESS (DEFINING EXTENT OF PROBLEM) ☐ CLEANUP IN PROGRESS ☐ SIGNED OFF (CLEANUP COMPLETED OR UNNECESSARY) ☐ NO ACTION TAKEN ☐ POST CLEANUP MONITORING IN PROGRESS ☐ NO FUNDS AVAILABLE TO PROCEED ☐ EVALUATING CLEANUP ALTERNATIVES

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)
☐ CAP SITE (CD) ☒ EXCAVATE & DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (IT)
☐ CONTAINMENT BARRIER (CB) ☐ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS)
☐ TREATMENT AT HOOKUP (HU) ☐ NO ACTION REQUIRED (NA) ☐ OTHER (OT) _____

COMMENTS

HSC 05 (4/87)

ATTACHMENT 2

TANK REMOVAL PERMITS

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
PHONE NO. 510/271-4320

eb-91-87

ACCEPTED
DEPARTMENT OF ENVIRONMENTAL HEALTH
470 - 27th Street, Third Floor
Oakland, CA 94612
Telephone: (415) 874-7237

These plans have been reviewed and found to be acceptable and essentially meet the requirements of State and local health laws. Changes to your plans indicated by this Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction.

One copy of these accepted plans must be on the job and available to all contractors and craftsmen involved with the removal.

Any change or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspection Department to determine if such changes meet the requirements of State and local laws.

Notify this Department at least 48 hours prior to the following required inspections:

_____ Removal of Tank and Piping
_____ Sampling
_____ Final Inspection

Issuance of a permit to operate is dependent on compliance with accepted plans and all applicable laws and regulations.

THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS.

Refer to corrective letter KS 12/14/92

RECEIVED
DEC 16 1992

ACCEPTED

DEPARTMENT OF ENVIRONMENTAL HEALTH

UNDERGROUND TANK CLOSURE PLAN

*** * * Complete according to attached instructions * * ***

The Department must witness removal of all underground tanks, and all State and County requirements must be met. By [signature] Date 12/16/92

1. Business Name Golden West Environmental Services
   Business Owner D.B. Neff, President
2. Site Address 2017 Central Avenue
   City Alameda Zip 94501 Phone 510-535-2882
3. Mailing Address 567 Exchange Court
   City Livermore Zip 94550 Phone 510-447-2484
4. Land Owner American Red Cross
   Address 2111 E. 14th St City, State Oakland, CA Zip 94606
5. Generator name under which tank will be manifested
   Red Cross
   EPA I.D. No. under which tank will be manifested CAC000781688

12-9-92 ; Phone call to Pat Cealvin of E.S.E. to send a copy of Contractors Haz. Mat. certificate and Wakman's comp. insurance certificate. Will also send initial site assessment which shows Contamination and lab. report. 12/11/92 Copies Rec'd.

12-14-92 You must call for an inspector from this office to be on site during removal. Request must be rec'd 48 hours prior to starting

THIS CARD MUST BE POSTED ON THE PREMISES AND
PLACED SO AS TO BE SEEN FROM THE STREET

City of Alameda

ELEC. PERMIT # _____
MECH. PERMIT # _____
PLBG. PERMIT # _____

DATE 12/22/92 VALUATIONS $ 10,000 BLDG. PERMIT # B92-1789

JOB Tumble Removal
ADDRESS 2017 Central Ave
OWNER American Red Cross
CONTRACTOR Golden West Enviros

ROBERT L. WARNICK BY _____
BUILDING OFFICIAL

FORMS _____
REQUIRED BEFORE POURING CONCRETE

VAULT TOILET _____

PRELIMINARY GROUND PLUMBING _____

FINAL GROUND PLUMBING _____

ROUGH ELECTRIC _____

ROUGH PLUMBING _____

ROUGH HEATING & VENTILATING _____

SUB FLOOR _____

FRAME _____

INSULATION _____

INTERIOR LATH _____
REQUIRED BEFORE PLASTERING OR TAPING

EXTERIOR LATH _____
REQUIRED BEFORE STUCCO

DESIGN REVIEW _____

INSULATION CERTIFICATE _____

TRACT CONDITIONS _____

P.U.D. CONDITIONS _____

FINAL ELECTRIC _____

FINAL - FIRE DEPT. _____

FINAL PLUMBING _____

FINAL HEATING & VENTILATING _____

FINAL BUILDING _____

ABOVE APPROVALS REQUIRED BEFORE INTERIOR LATHING OR COVERING

DO NOT CALL FOR FINAL INSPECTION UNTIL OTHER ITEMS HAVE BEEN ISSUED

DO NOT OCCUPY STRUCTURE UNTIL CERTIFICATION OF OCCUPANCY HAS BEEN ISSUED.
FOR CERTIFICATE OF OCCUPANCY TO BE ISSUED, A COPY OF HARD CARD WITH ALL FINALS
NEEDS TO BE FILED WITH THE CENTRAL PERMIT OFFICE.

REMARKS _____

FOR INSPECTIONS CALL 24 HOURS IN ADVANCE:
ELECTRICAL — 348-3995 OR 748-3996 (8:00-10:00 A.M.)

ATTACHMENT 3

ANALYTICAL RESULTS AND CHAIN OF CUSTODY DOCUMENTS

WASTE CHARACTERIZATION FOR SOIL DISPOSAL

DUPLICATE

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

DATE RECEIVED: 12/01/92
DATE REPORTED: 12/16/92

LABORATORY NUMBER: 109394

CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING

PROJECT ID: 6-92-5427

LOCATION: RED CROSS-ALAMEDA

RESULTS: SEE ATTACHED

Reviewed by

Reviewed by

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109394-1
CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING
PROJECT ID: 6-92-5427
LOCATION: RED CROSS-ALAMEDA
SAMPLE ID: RCA-SCI

DATE SAMPLED: 12/01/92
DATE RECEIVED: 12/01/92
DATE ANALYZED: 12/07-08/92
DATE REPORTED: 12/15/92

Title 26 Metals in Soils & Wastes
Digestion Method: EPA 3050

METAL	RESULT mg/Kg	REPORTING LIMIT mg/Kg	METHOD
Antimony	ND	3	EPA 6010
Arsenic	ND	3	EPA 7060
Barium	70	0.5	EPA 6010
Beryllium	0.2	0.1	EPA 6010
Cadmium	0.7	0.3	EPA 6010
Chromium (total)	26	0.5	EPA 6010
Cobalt	4.5	0.9	EPA 6010
Copper	10	0.5	EPA 6010
Lead	60	10	EPA 7420
Mercury	0.2	0.1	EPA 7471
Molybdenum	ND	0.7	EPA 6010
Nickel	17	2	EPA 6010
Selenium	ND	3	EPA 7740
Silver	ND	0.5	EPA 6010
Thallium	ND	3	EPA 7841
Vanadium	18	0.5	EPA 6010
Zinc	550	1	EPA 6010

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	RPD,%	RECOVERY,%		RPD,%	RECOVERY,%
Antimony	7	94	Mercury	<1	101
Arsenic	3	113	Molybdenum	1	98
Barium	<1	103	Nickel	<1	100
Beryllium	<1	106	Selenium	1	100
Cadmium	9	101	Silver	<1	100
Chromium	<1	102	Thallium	<1	108
Cobalt	1	100	Vanadium	<1	101
Copper	<1	99	Zinc	<1	96
Lead	5	88			

Curtis & Tompkins Ltd

Client: **Environmental Science & Engineering Laboratory Login Number: 109394**

Project Name: Red Cross-Alameda Report Date: 15 December 92
Project Number: 6-92-5427

ANALYSIS: pH

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	Method	Analyst	QC Batch
109394-001	RCA-SCI	Soil	01-DEC-92	01-DEC-92	07-DEC-92	7.2	SU *	EPA 9045	TR	7662

* Soil pH measured as water

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Environmental Science & Engineering Laboratory Login Number: 109394
Project Name: Red Cross-Alameda Report Date: 15 December 92
Project Number: 6-92-5427

ANALYSIS: pH **QC Batch Number: 7662**

Calibration Verification Results

Sample	Result	TV	Difference	Limit	Analyzed
ICV	10.02	10.00	.02	< 0.10	07-DEC-92
CCV	7.02	7.00	.02	< 0.10	07-DEC-92
CCV	7.00	7.00	.00	< 0.10	07-DEC-92

Sample Duplicate Results

Sample	Duplicate	RPD	Analyzed
7.74	7.74	0%	07-DEC-92

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109394
CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING
PROJECT ID: 6-92-5427
LOCATION: RED CROSS-ALAMEDA

DATE SAMPLED: 12/01/92
DATE RECEIVED: 12/01/92
DATE EXTRACTED: 12/04/92
DATE ANALYZED: 12/06/92
DATE REPORTED: 12/15/92

Extractable Petroleum Hydrocarbons in Soils & Wastes
California DOHS Method
LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	MOTOR OIL RANGE (mg/Kg)
109394-1	RCA-SCI	**	320	ND(30)

ND = Not Detected at or above reporting limit.

* Reporting limit applies to all analytes.

** Quantitated as diesel range.

QA/QC SUMMARY: LABORATORY CONTROL SAMPLE

RECOVERY, %	98

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109394-1
CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING
PROJECT ID: 6-92-5427
LOCATION: RED CROSS-ALAMEDA
SAMPLE ID: RCA-SCI

DATE SAMPLED: 12/01/92
DATE RECEIVED: 12/01/92
DATE ANALYZED: 12/07/92
DATE REPORTED: 12/15/92

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES

COMPOUND	Result ug/Kg	Reporting Limit (ug/Kg)
Chloromethane	ND	50
Bromomethane	ND	50
Vinyl chloride	ND	50
Chloroethane	ND	50
Methylene chloride	ND	100
Acetone	ND	100
Carbon disulfide	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
cis-1,2-Dichloroethene	ND	25
trans-1,2-Dichloroethene	ND	25
Chloroform	ND	25
Freon 113	ND	25
1,2-Dichloroethane	ND	25
2-Butanone	ND	50
1,1,1-Trichloroethane	ND	25
Carbon tetrachloride	ND	25
Vinyl acetate	ND	50
Bromodichloromethane	ND	25
1,2-Dichloropropane	ND	25
cis-1,3-Dichloropropene	ND	25
Trichloroethene	ND	25
Dibromochloromethane	ND	25
1,1,2-Trichloroethane	ND	25
Benzene	ND	25
trans-1,3-Dichloropropene	ND	25
Bromoform	ND	25
2-Hexanone	ND	50
4-Methyl-2-pentanone	ND	50
1,1,2,2-Tetrachloroethane	ND	25
Tetrachloroethene	ND	25
Toluene	ND	25
Chlorobenzene	ND	25
Ethyl benzene	ND	25
Styrene	ND	25
Total xylenes	ND	25

ND = Not detected at or above reporting limit

QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	110 %
Toluene-d8	110 %
Bromofluorobenzene	90 %

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 109394 DATE ANALYZED: 12/07/92
CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING DATE REPORTED: 12/15/92
PROJECT ID: 6-92-5427
LOCATION: RED CROSS-ALAMEDA
SAMPLE ID: METHOD BLANK

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES

COMPOUND	Result ug/Kg	Reporting Limit (ug/Kg)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
cis-1,2-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
Chloroform	ND	5
Freon 113	ND	5
1,2-Dichloroethane	ND	5
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
Vinyl acetate	ND	10
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	5
Trichloroethene	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Benzene	ND	5
trans-1,3-Dichloropropene	ND	5
Bromoform	ND	5
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5
Tetrachloroethene	ND	5
Toluene	ND	5
Chlorobenzene	ND	5
Ethyl benzene	ND	5
Styrene	ND	5
Total xylenes	ND	5

ND = Not detected at or above reporting limit

QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	104 %
Toluene-d8	104 %
Bromofluorobenzene	91 %

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 109394-1
CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING
PROJECT ID: 6-92-5427
LOCATION: RED CROSS-ALAMEDA
SAMPLE ID: RCA-SCI

DATE SAMPLED: 12/01/92
DATE RECEIVED: 12/01/92
DATE ANALYZED: 12/02,07/9
DATE REPORTED: 12/15/92

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
Releasable Cyanide	ND	mg/Kg	1	SW-846 Section 7.3.3.2
Releasable Sulfide	ND	mg/Kg	1	SW-846 Section 7.3.4.1
Ignitability	Does Not Ignite			SW-846 Section 7.1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	RPD, %	RECOVERY, %
Cyanide	<1	97
Sulfide	<1	74

AQUATIC
BIOASSAY &
CONSULTING
LABORATORIES, INC.

TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

December 08, 1992

Ms. Teresa Marrison
Curtis & Tompkins, Ltd
2323 Fifth St.
Berkeley , CA 94710

Dear Ms. Marrison:

In accordance with Chain of Custody dated December 01, 1992, we are pleased to present the enclosed bioassay report, Lab No.C&T 1222.966, for the sample labeled 109394-1 and received in this laboratory on December 03, 1992 at 1050. The test was conducted in freshwater, utilizing fathead minnows (Pimephales promelas). Results were as follows:

Sample I.D.	109394 - 1
Date Received	December 03, 1992
96 hr LC50	>750 mg/L
95% Conf. Int. =	N/A

Respectfully submitted,

Thomas (Tim) Mikel
Laboratory Director

29 NORTH OLIVE STREET, VENTURA, CA 93001 • (805) 643-5621

SAMPLE AND BIOASSAY INFORMATION

ABC Laboratories
29 North Olive Street
Ventura, Ca. 93001
(805) 643-5621

CLIENT NAME: Curtis & Tompkins, Ltd. PROJECT ID: 6-92-5427 DATE: 12/03/92
CLIENT ID: RCA-SCI 1005
SAMPLE ID: 109394 - 1 LAB.NO: C&T1222.966

TEST TYPE: Screening FLOW: Static TANK VOLUME: 10 Liters

DILUTION WATER: Reconstituted Fresh HARDNESS: 40 mg/l ALKALINITY: 23 mg/l
END: 43 END: 25
AERATION: Single bubble aeration in all tanks ACCL.TEMP: 20.0 deg.C

ORGANISM: Fathead Minnow SPECIES: Pimephales promelas SOURCE: Thomas Fish Co.

CARRIER: Greyhound Bus Co. DATE REC'D: 11/20/92 AVG.LNGTH: 32 mm AVG.WT.: .35g

NUMBER ORGANISMS PER TANK: 10

	Initial	24 Hour	48 Hour	72 Hour	96 Hour
Date:	12/04/92	12/05/92	12/06/92	12/07/92	12/08/92
Time:	1030	1100	1100	1100	1030

Conc. mg/l	Initial DO	Dg.C	pH	24 Hour DO	Dg.C	pH	#M	48 Hour DO	Dg.C	pH	#M	72 Hour DO	Dg.C	pH	#M	96 Hour DO	Dg.C	pH	#M	Tot. #M
0 (Con.)	8.1	19.8	7.3	8.1	19.0	7.3	0	8.1	19.7	7.3	0	7.8	19.8	7.4	0	7.9	19.2	7.4	0	0
750 (A)	8.5	19.7	7.4	8.3	18.9	7.5	0	7.9	19.3	7.4	0	7.9	19.6	7.3	0	7.8	19.7	7.3	0	0
750 (B)	8.5	19.6	7.4	8.1	19.2	7.5	0	8.0	19.4	7.3	0	7.8	19.6	7.3	0	7.8	19.6	7.3	0	0
400 (A)	8.3	19.5	7.4	8.1	19.2	7.5	0	8.0	19.4	7.3	0	7.9	19.5	7.3	0	7.9	19.6	7.3	0	0
400 (B)	8.5	19.6	7.4	8.3	19.3	7.9	0	7.9	19.4	7.4	0	7.9	19.5	7.3	0	7.9	19.6	7.3	0	0

96 HOUR LC50 >750 mg/L 95% CONFIDENCE INTERVAL = N/A

CALCULATION METHOD: Binomial Test ANALYST: _____ DATE: 12/08/92
Martha Meyer, Chief Biologist

REMARKS: Beginning Sample Hardness: 41 mg/L (CACO3) Alkalinity: 23 mg/L
Ending Sample Hardness: 42 mg/L (CACO3) Alkalinity: 26 mg/L

109394

CHAIN OF CUSTODY RECORD

DATE 12/1/92 PAGE 1 OF 1

PROJECT NAME Red Cross Alameda

ADDRESS 2017 Central Ave
Alameda CA

PROJECT NO. 6112547

SAMPLED BY Steve Willetts

LAB NAME Curtis & Thompkins

ESE Environmental Science & Engineering, Inc.
4080 Nelson Avenue
Suite J
Concord, CA 94520
(415) 685-4053
Fax (415) 685-5121

SAMPLE #	DATE	TIME	LOCATION	ANALYSES TO BE PERFORMED: TPH-Diesel/Extractable EPA 5215	VOC. EPA 8240.	Aquatic Toxicity	Metals (CAM-17) TTLC only	RCT.	MATRIX: MATRIX	NUMBER OF CONTAINERS	REMARKS (CONTAINER, SIZE, ETC.)
RCA-SC1	12/1/92	10:34 am to 10:35 am	Red Cross Alameda	X	X	X	X	X	Soil (sand)	3	Brass Rings

RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	date	time		
1. [signature]	[signature]	12-1-92	1520	3	TOTAL NUMBER OF CONTAINERS
2.				REPORT RESULTS TO: Pat Galvin	SPECIAL SHIPMENT REQUIREMENTS: keep cold
3.					
4.					SAMPLE RECEIPT
5.					CHAIN OF CUSTODY SEALS:
					REC'D GOOD CONDTN/COLD: ✓
					CONFORMS TO RECORD: ✓

INSTRUCTIONS TO LABORATORY (handling, analyses, storage, etc.):
Hold samples for 60 days

DUPLICATE

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

DATE RECEIVED: 12/01/92
DATE REPORTED: 12/21/92

LABORATORY NUMBER: 109536

CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING

PROJECT ID: 6-92-5427

LOCATION: RED CROSS-ALAMEDA

RESULTS: SEE ATTACHED

Teresa C. Morrison
Reviewed by

Reviewed by

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 109536-1
CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING
PROJECT ID: 6-92-5427
LOCATION: RED CROSS-ALAMEDA
SAMPLE ID: RCA-SCI

DATE SAMPLED: 12/01/92
DATE RECEIVED: 12/01/92
DATE EXTRACTED: 12/16/92
DATE REPORTED: 12/21/92

STLC METALS
EXTRACTION BY WASTE EXTRACTION TEST: CCR TITLE 26 SECTION 22-66700

ANALYSIS	RESULT	UNITS	REPORTING LIMIT	METHOD
CHROMIUM	70	ug/L	50	EPA 6010
MERCURY	ND	ug/L	2	EPA 7470
LEAD	ND	ug/L	1000	EPA 6010
VANADIUM	90	ug/L	50	EPA 6010
ZINC	32,000	ug/L	100	EPA 6010

QA/QC SUMMARY	ANALYSIS DATE	RPD,%	RECOVERY,%
CHROMIUM	12/21/92	1	103
MERCURY	12/21/92	5	105
LEAD	12/21/92	14	104
VANADIUM	12/21/92	<1	101
ZINC	12/21/92	2	100

ATTACHMENT 4

TANK DISPOSAL DOCUMENT

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-94)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAC000781688 Manifest Document No. 0001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
AMERICAN RED CROSS
2111 East 14th Street, Oakland, CA. 94606cc, CA. 94163

A. State Manifest Document Number 92219564

4. Generator's Phone (510) 535-2882 Attn: John Watson

B. State Generator's ID

5. Transporter 1 Company Name
H & H Ship Service Company

6. US EPA ID Number CAD004771168

C. State Transporter's ID 300936.1

D. Transporter's Phone (415) 543-4835

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
H & H Ship Service Company
220 China Basin Street
San Francisco, CA. 94107

10. US EPA ID Number CAD004771168

G. State Facility's ID

H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
RESIDUE HEATING OIL TANK NON-RCRA HAZARDOUS WASTE SOLID	001	TP	00500	P
RESIDUE ASSOCIATED PIPING NON-RCRA HAZARDOUS WASTE SOLID	001	BA	00100	P
c.				
d.				

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
JOB #11930
24 Hr. Emergency Contact: H & H #(415) 543-4835
APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR

JOB SITE: AMERICAN RED CROSS
2017 Central Avenue
Alameda, California

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the 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 federal, state and international laws.

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.

Printed/Typed Name	Signature	Month	Day	Year
J. WATSON	J. Watson	12	22	92

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
FRED EDWARD MOGAN JR.	Fred Mogan	12	22	92

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

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

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	12	22	92

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550

ROTARENG 92219564

DTSC 8022A (12/91)
EPA 8700—22

[illegible] SEE SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To: P.O. Box 3000, Sacramento, CA 95812

ATTACHMENT 5

ANALYTICAL RESULTS AND CHAIN OF CUSTODY DOCUMENTS

VERIFICATION SOIL SAMPLES AND STOCKPILE SOIL SAMPLES

CHROMALAB, INC.

Environmental Laboratory (1094)

DUPLICATE

5 DAYS TURNAROUND

December 31, 1992 ChromaLab File No.: 1292263

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Attn: Patrick Galvin

RE: Two soil samples for Diesel analysis

Project Name: AMERICAN RED CROSS
Project Number: 6925427
Date Sampled: Dec. 22-23, 1992 Date Submitted: Dec. 23, 1992
Date Extracted: Dec. 29, 1992 Date Analyzed: Dec. 29, 1992

RESULTS:

Sample I.D.	Diesel (mg/Kg)
ARC-10 @ 7'	N.D.
ARC-11 @ 6'	N.D.
BLANK	N.D.
SPIKE RECOVERY	94%
DUP SPIKE RECOVERY	81%
DETECTION LIMIT	1.0
METHOD OF ANALYSIS	3550/8015

ChromaLab, Inc.

Yiu Tam
Analytical Chemist

Eric Tam
Laboratory Director

do

2239 Omega Road,#1 • San Ramon, California 94583
(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

December 31, 1992 ChromaLab File No.: 1292263

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Attn: Patrick Galvin

RE: Two soil samples for BTEX analysis

Project Name: AMERICAN RED CROSS
Project Number: 6925427
Date Sampled: Dec. 22-23, 1992 Date Submitted: Dec. 23, 1992
Date Analyzed: Dec. 29, 1992

RESULTS:

Sample I.D.	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl Benzene (µg/Kg)	Total Xylenes (µg/Kg)
ARC-10 @ 7'	N.D.	N.D.	N.D.	N.D.
ARC-11 @ 6'	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	109%	117%	112%	111%
DUP SPIKE RECOVERY	111%	116%	115%	111%
DETECTION LIMIT	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	8020	8020	8020	8020

ChromaLab, Inc.

Billy Thach
Analytical Chemist

Eric Tam
Laboratory Director

cc

2239 Omega Road,#1 • San Ramon, California 94583
(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

DUPLICATE

Environmental Laboratory (1094)

5 DAYS TURNAROUND

December 24, 1992 ChromaLab File No.: 1292257

ENVIRONMENTAL SCIENCE & ENGINEERING

Attn: Patrick Galvin

RE: Four soil samples for Diesel analysis

Project Name: AMERICAN RED CROSS
Project Number: 6925427
Date Sampled: Dec. 22-23, 1992 Date Submitted: Dec. 23, 1992
Date Extracted: Dec. 23, 1992 Date Analyzed: Dec. 23, 1992

RESULTS:

Sample I.D.	Diesel (mg/Kg)
ARC-12-SP	280
ARC-13-SP	130
ARC-14-SP	19
ARC-1-10'	1000
BLANK	N.D.
SPIKE RECOVERY	83%
DUP SPIKE RECOVERY	89%
DETECTION LIMIT	1.0
METHOD OF ANALYSIS	3550/8015

ChromaLab, Inc.

Yiu Tam
Analytical Chemist

Eric Tam
Laboratory Director

do

2239 Omega Road,#1 • San Ramon, California 94583
(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

December 24, 1992 ChromaLab File No.: 1292257

ENVIRONMENTAL SCIENCE & ENGINEERING

Attn: Patrick Galvin

RE: Four soil samples for BTEX analysis

Project Name: AMERICAN RED CROSS
Project Number: 6925427
Date Sampled: Dec. 22-23, 1992 Date Submitted: Dec. 23, 1992
Date Analyzed: Dec. 23, 1992

RESULTS:

Sample I.D.	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl Benzene (µg/Kg)	Total Xylenes (µg/Kg)
ARC-1-10	N.D.	N.D.	N.D.	N.D.
ARC-12-SP	N.D.	19	9.9	59
ARC-13-SP	N.D.	34	N.D.	N.D.
ARC-14-SP	N.D.	13	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	94%	94%	96%	98%
DUP SPIKE RECOVERY	90%	94%	93%	95%
DETECTION LIMIT	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	8020	8020	8020	8020

ChromaLab, Inc.

Billy Thach
Analytical Chemist

Eric Tam
Laboratory Director

do

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CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

December 24, 1992 ChromaLab File No.: 1292263

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Attn: Patrick Galvin

RE: Eight soil samples for Diesel analysis

Project Name: AMERICAN RED CROSS
Project Number: 6925427
Date Sampled: Dec. 22-23, 1992 Date Submitted: Dec. 23, 1992
Date Extracted: Dec. 23, 1992 Date Analyzed: Dec. 23, 1992

RESULTS:

Sample I.D.	Diesel (mg/Kg)
Arc 3-5	N.D.
ARC 4-5	N.D.
ARC 5-4	N.D.
ARC 6-10.5	N.D.
ARC 7-10.5	240
ARC 8-10.5	69
ARC 9-10.0	52
ARC SP2 COMP	25
BLANK	N.D.
SPIKE RECOVERY	102%
DUP SPIKE RECOVERY	103%
DETECTION LIMIT	10.0
METHOD OF ANALYSIS	3550/8015

ChromaLab, Inc.

Eric Costa
Analytical Chemist

Eric Tam
Laboratory Director

do

2239 Omega Road,#1 • San Ramon, California 94583
(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

December 24, 1992 ChromaLab File No.: 1292263

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Attn: Patrick Galvin

RE: Eight soil samples for BTEX analysis

Project Name: AMERICAN RED CROSS
Project Number: 6925427
Date Sampled: Dec. 22-23, 1992 Date Submitted: Dec. 23, 1992
Date Analyzed: Dec. 23, 1992

RESULTS:

Sample I.D.	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl Benzene (µg/Kg)	Total Xylenes (µg/Kg)
ARC 3-5	N.D.	N.D.	N.D.	N.D.
ARC 4-5	N.D.	N.D.	N.D.	N.D.
ARC 5-4	N.D.	N.D.	N.D.	N.D.
ARC 6-10.5	N.D.	N.D.	N.D.	N.D.
ARC 7-10.5	N.D.	N.D.	N.D.	N.D.
ARC 8-10.5	110	300	N.D.	330
ARC 9-10	N.D.	N.D.	N.D.	N.D.
ARC SP 2 COMP	52	175	34	105
BLANK	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	99.3%	97.4%	98.8%	100.2%
DUP SPIKE RECOVERY	99.4%	104%	97.6%	103.3%
DETECTION LIMIT	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	8020	8020	8020	8020

ChromaLab, Inc.

Eric Costa
Analytical Chemist

Eric Tam
Laboratory Director

do

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(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

223

CHROMALAB FILE # 1292257
ORDER # 8981

DOHS 1094

Chain of Custody

DATE 12/23/92 PAGE 1 OF 1

PROJ. MGR. Patrick Galvin
COMPANY Environmental Science & Eng.
ADDRESS 4000 Nelson Avenue, Ste J
Concord CA 94520
510 685-4053 (PHONE NO.)
SAMPLERS (SIGNATURE) Patrick Galvin

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
ARC-12-SP	12/22/92	12:10	Soil			X	X	PRIORITY																	1
ARC-13-SP	12/23/92	12:10				X	X																		1
ARC-14-SP	12/23/92	12:10				X	X																		1
ARC-1-10'	12/22/92	12:00				X	X	~~REGULAR~~					~~T.A~~ PA												1

PROJECT INFORMATION

PROJECT NAME: American Red Cross
PROJECT NUMBER: 692542 7
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	3
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT: STANDARD 5-DAY | | | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:
Priority ASAP
12/24/92 Am please
Fax Results ~~[illegible]~~ 685-5323

RELINQUISHED BY	1.	2.	3.
(SIGNATURE)	1330	13:40	1800
(PRINTED NAME)	Patrick Galvin	Eric Costa	Patrick Galvin
(DATE)	12/23/92	12/23/92	12/23/92
(COMPANY)	ESE	Chromalab	ESE

RECEIVED BY	1.	2.	3.
(SIGNATURE)	13:30	12:48	
(PRINTED NAME)	Eric Costa	Patrick Galvin	
(DATE)	12/23/92	12/23/92	
(COMPANY)	Chromalab	ESE	(LAB)

CHROMALAB, INC.

DOHS 1094

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798

CHROMALAB FILE # 129226B
ORDER # 8987

DATE 12/23/92 PAGE 1 OF 1

PROJ. MGR. Pat Galvin
COMPANY ESE
ADDRESS 4990 Nelson, Ste J.
Concord, CA 94520

SAMPLERS (SIGNATURE) S. Wrbham (PHONE NO.) 510-685-4053

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	~~TPH - Gasoline (EPA 5030, 8015)~~	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
ARC-10 @ 7'	12-23-92	9:50	soil			X	✓																		1
ARC-11 @ 6'	12-23-92	9:55	"			X	✓																		1

PROJECT INFORMATION

PROJECT NAME: American Red Cross
PROJECT NUMBER: 692542.7
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	2
HEAD SPACE	
REC'D GOOD CONDITION/COLD	OK
CONFORMS TO RECORD	

TAT: STANDARD 5-DAY | | | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:
5 day TAT please

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) 1320 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Patrick Galvin 12/23/92 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) ESE	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3.**
(SIGNATURE) 1320 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Eric Costa 12/23/92 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) Chromalab	(COMPANY)	(LAB)

File 1210945
Order# 8987

CHROMALAB, INC.

DOHS 1094

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798

Chain of Custody

DATE Dec 23, 1992 PAGE 1 OF 1

PROJ. MGR. Patrick Galvin
COMPANY Env. Sci. + Eng. Inc
ADDRESS 4090 Nelson Ave, Ste J
Concord, CA 94520

SAMPLERS (SIGNATURE) Pat M. Galvin (PHONE NO.) (510)685-4053

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	~~TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)~~	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
ARC-2-SP	12/22/92	12:20	Soil			X	X																COMPOSITE		4
ARC-3-5'	" "	13:45				X	X																		1
ARC-4-5'	" "	13:45				X	X																		1
ARC-5-4'	" "	13:45				X	X																		1
ARC-6-10.5'	12/23/92	9:29				X	X																		1
ARC-7-10.5	"	9:40				x	x																		1
ARC-8-10.5	"	9:50				x	x																		1
ARC-9-10'	"	10 am				x	x																		1

PROJECT INFORMATION

PROJECT NAME: American Red Cross
PROJECT NUMBER: 692542 7
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	11
HEAD SPACE	
REC'D GOOD CONDITION/COLD	✓
CONFORMS TO RECORD	✓

TAT: STANDARD 5-DAY | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:
Mobile Laboratory — Samples Completed ON SITE

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) (TIME) Pat Galvin 12/23/92	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) (DATE) E&S: E. Inc	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3.**
(SIGNATURE) (TIME) 12:38	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) (DATE) Eric Costa 12/23/92	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) Chromalab	(COMPANY)	(LAB)

ATTACHMENT 6

LANDFILL WEIGHT TICKETS

A DIVISION OF BFI BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(510) 447-0491

Ticket : A59704 12/29/92 I: 10:17 am
Customer: GOLDEN WEST BUILDERS
Account : 1001775 LMS# 775 O: 10:17 am
Truck : 2
Manifest: 1873
P.O. No : 19920
Checker : RAYMOND

Volume		Contents	Rate	Charge
18.00	yd	SPECIAL	22.00	396.00
TOTAL			$	396.00

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Niños deben de permanecer en los carros a todas horas.

No se permite llevar cosas del dumpe absolutamente.

HAVE A NICE DAY!!!

64,220
31,50

COMPUTERAC/SNS – CA: (408) 734-6930 • AZ: (602) 586-3338

DRIVER

OFFICE

VASCO ROAD SANITARY LANDFILL No: 449844

A DIVISION OF BFI BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(510) 447-0491

Ticket : A59758 12/29/92 I: 12:52 pm
Customer: GOLDEN WEST BUILDERS
Account : 1001775 LMS# 775 O: 12:53 pm
Truck : 2
Manifest: 1877
P.O. No : 19920
Checker : MARK

Volume		Contents	Rate	Charge
18.00	yd	SPECIAL	22.00	396.00
TOTAL			$	396.00

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Niños deben de permanecer en los carros a todas horas.

No se permite llevar cosas del dumpe absolutamente

HAVE A NICE DAY!!!

73580
31780

COMPUTERAC/SNS – CA: (408) 734-6930 • AZ: (602) 586-3338

DRIVER

OFFICE

VASCO ROAD SANITARY LANDFILL No: 449903

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 945[illegible]
(510) 447-0491

Ticket : A59817 12/29/92 I: 04:32 pm
Customer: GOLDEN WEST BUILDERS
Account : 1001775 LMS# 775 O: 04:33 pm
Truck : 2
Manifest: 1878
P.O. No : 19920
Checker : MARK

Volume		Contents	Rate	Charge
18.00	yd	SPECIAL	22.00	396.00
TOTAL			$	396.00

HAVE A NICE DAY!!!

60,340
31,500

WARNING: Transporting any unauthoriz hazardous waste to this facility for disposa prohibited by law. Persons violating th prohibition are subject to civil and crimin prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Ninôs deben de permanecerán en los carr a todas horas.

No se permite llevar cosas del dom absolutamente.

COMPUTERACSNS – CA: (408) 734-5930 • AZ: (602) 585-3338

DRIVER

OFFICE

VASCO ROAD SANITARY LANDFILL No: 449787

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(510) 447-0491

Ticket : A59702 12/29/92 I: 10:15 am
Customer: GOLDEN WEST BUILDERS
Account : 1001775 LMS# 775 O: 10:16 am
Truck : 2
Manifest: 1874
P.O. No : 19920
Checker : RAYMOND

Volume		Contents	Rate	Charge
18.00	yd	SPECIAL	22.00	396.00
TOTAL			$	396.00

HAVE A NICE DAY!!!

70,020
31,280

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Ninôs deben de permanecerán en los carro a todas horas.

No se permite llevar cosas del dompe absolutamente.

COMPUTERACSNS – CA: (408) 734-5930 • AZ: (602) 585-3338

DRIVER

VASCO ROAD SANITARY LANDFILL No: 449788

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 945
(510) 447-0491

Ticket : A59703 12/29/92 I: 10:16 am
Customer: GOLDEN WEST BUILDERS
Account : 1001775 LMS# 775 O: 10:16 am
Truck : 2
Manifest: 1875
P.O. No : 19920
Checker : RAYMOND

Volume	Contents	Rate	Charge
18.00 yd	SPECIAL	22.00	396.00
TOTAL		$	396.00

HAVE A NICE DAY!!!

57,880
29,500

WARNING: Transporting any unauthori. hazardous waste to this facility for disposa prohibited by law. Persons violating t prohibition are subject to civil and crim. prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Niños deben de permaneceren en los carr a todas horas.

No se permite llevar cosas del dom: absolutamente.

COMPUTERACISNS – CA: (408) 734-5930 • AZ: (602) 545-3338

DRIVER

OFFICE

VASCO ROAD SANITARY LANDFILL No: 449848

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 9455(
(510) 447-0491

Ticket : A59762 12/29/92 I: 12:57 pm
Customer: GOLDEN WEST BUILDERS
Account : 1001775 LMS# 775 O: 12:57 pm
Truck : 2
Manifest: 1876
P.O. No : 19920
Checker : MARK

Volume	Contents	Rate	Charge
18.00 yd	SPECIAL	22.00	396.00
TOTAL		$	396.00

HAVE A NICE DAY!!!

65,040
29,500

WARNING: Transporting any unauthorize hazardous waste to this facility for disposal prohibited by law. Persons violating th prohibition are subject to civil and crimin prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Niños deben de permaneceren en los carr a todas horas.

No se permite llevar cosas del dom: absolutamente.

COMPUTERACISNS – CA: (408) 734-5930 • AZ: (602) 545-3338

DRIVER