

January 19, 1998

page 37
Transfer issue
clear out duplicate
Need NOK
and PSA etc.

Ms. Eva Chu
Alameda County Health Care Services Agency
Department of Environmental Health
Division of Hazardous Materials
1131 Harbor Bay Parkway
Alameda, California 94502



SUBJECT: Closure of "Tank 15" Site
West Oakland Railyard
Union Pacific Railroad
Oakland, California

STID 5354
Foot of Pine

Dear Ms. Chu:

On behalf of Union Pacific Railroad Company (UPRR), ERM-West, Inc., (ERM) is transmitting the enclosed information regarding the removal of the underground storage tank (UST) from the Southern Pacific Transportation Company (SPTCo) facility in West Oakland, California, referred to in our telephone conversation of December 19, 1997. This UST was removed by Canonie Environmental Services Corp. (Canonie) in January 1988 as part of a program to remove numerous USTs from SPTCo facilities in West Oakland. According to the Canonie report entitled *Final Site Report, Underground Storage Tank Removal, Southern Pacific Transportation Company, Oakland, California* (dated June 28, 1988), the UST was designated as "Tank 15", and described as being located near the SPTCo diesel shop. The excavation permit included in the report noted the location of the UST as at the "foot of Pine Street". The information enclosed in this letter are excerpts from the 1988 Canonie report.

According to the Canonie report, concentrations of total volatile petroleum hydrocarbons (TVPH) and benzene detected in the soil and ground water samples collected following the removal of Tank 15 were as follows:

<u>Sample No.</u>	<u>Sample Media</u>	<u>TVPH</u>	<u>Benzene</u>
SS-15E	Soil	540.0 ppm	<20 ppm high detection limit
SS-15W	Soil	230.0 ppm	<2.0 ppm
WS-15	Water	47,000 ppb	200 ppb

01 JAN 22 1998
FACILITY
TANK 15

The concentrations listed above would commonly result in a site investigation; however, based on the following conditions at the Tank 15 site, further investigation is not warranted:

- The site is located within an active railyard which is zoned for industrial use. It is anticipated that the area will remain in use as a railyard into the foreseeable future.
- The site is over 1,200 feet downgradient from residential areas and is not located upgradient of any residential area;
- It is likely that the shallow aquifer below the site contains high concentrations of total dissolved solids (TDS), and is not suitable as a source of drinking water. Concentrations of TDS in ground water samples collected from nearby sites were commonly in excess of 3000 mg/l¹;
- The grab water sample collected at the time of UST removal may not have been representative of site ground water; and
- The data referenced above represents sampling which occurred nearly ten years ago.

ERM recommends that the Tank 15 site be closed at this time, and reopened only if land use of the area changes in the future.

In regards to costs associated with review of this site by your office, please forward all invoices directly to the UPRR representative for payment:

**Mr. Craig Denny
Union Pacific Railroad Company
1416 Dodge Street, Room 930
Omaha, Nebraska 68179**

¹ 1997. *Remedial Investigation and Baseline Risk Assessment Report, I-880 Realignment Corridor, West Oakland and Desert Rail Yards, Oakland, California*. Geomatrix Consultants. Project no. 2686.01

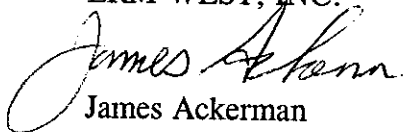
Ms. Eva Chu
January 19, 1998

Page3

Please call me at (510) 946-0455 if you have any questions or comments.

Sincerely,

ERM-WEST, INC.



James Ackerman
Project Manager

JBA/jba/8187.01

Enclosure

cc: Craig Denny, Union Pacific Railroad (with enclosure)
Doug Hodson, ERM-West, Inc. (with enclosure)

Listing of HAZMAT - FULL SITE HISTORY since 1987 for StID # 5354
as of 01/26/98 all Activity Codes

SITE NAME & ADDRESS:

SPTCo LocoFuel Plant WD01-04 -- 0 Foot Of Pine St , Oakland CA 94607

InspDat	Insp Act	InspT	StID	Proj#	COMMENTS	DailBDat
=====	====	===	=====	====	=====	=====

Archived Dailies:

Current Dailies:

InspDat	Insp Act	InspT	StID	DRPro	Comment	DailBDat
-----	-----	-----	-----	-----	-----	-----
12/19/97	EC	40	0.8	5354	37a got contact w/ j ackerman. will send canonie rpt and \$\$	01/15/98

Complete

LOP - RECORD CHANGE REQUEST FORM

printed:
03/02/98

Mark Out What Needs Changing and Hand to LOP Data Entry
(Name/Address changes go to Annual Programs Data Entry)

Insp: EC

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 8006619
 StID : 5354 LOC: -0-
 SITE NAME: SPT Co Loco Fuel Plant WD01-04 DATE REPORTED : 06/28/88
 ADDRESS : -0- -0 Foot Of Pine St DATE CONFIRMED: 06/28/88
 CITY/ZIP : Oakland 94607 MULTIPLE RPs : N

SITE STATUS

CASE TYPE: W CONTRACT STATUS: 2 PRIOR CODE: 2A4 EMERGENCY RESP: -0-
 RP SEARCH: S DATE COMPLETED: 01/28/98
 PRELIMINARY ASMNT: - DATE UNDERWAY: -0- DATE COMPLETED: -0-
 REM INVESTIGATION: - DATE UNDERWAY: -0- DATE COMPLETED: -0-
 REMEDIAL ACTION: - DATE UNDERWAY: -0- DATE COMPLETED: -0-
 POST REMED ACT MON: - DATE UNDERWAY: -0- DATE COMPLETED: -0-

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 01/28/98
 LUFT FIELD MANUAL CONSID: -0-
 CASE CLOSED: R DATE CASE CLOSED: 03/02/98
 DATE EXCAVATION STARTED : -0- REMEDIAL ACTIONS TAKEN: -0-

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Craig Denny
 COMPANY NAME: Union Pacific Railroad Co
 ADDRESS: 1416 Dodge St, Rm 930
 CITY/STATE: Omaha, N E 68179

INSPECTOR VERIFICATION:

NAME _____ SIGNATURE _____ DATE _____

DATA ENTRY INPUT:

Name/Address Changes Only

Case Progress Changes

ANNPGMS _____ LOP _____ DATE _____

LOP _____ DATE _____

Canonie Environmental Services Corp
1825 South Grant Street
Suite 260
San Mateo, California 94402
Phone: 415-573-2010

June 28, 1988

87-055.37

Mr. Tim Becker
Southern Pacific Transportation Company
One Market Plaza, Room 1007
San Francisco, CA 94105

Transmittal
Final Site Report
Underground Storage Tank Removal
Southern Pacific Transportation Co
Oakland, California

*(contains unclean
1) Desert Yard office
2) AST's
3) Cedar ST (Tank B)
4) ?*

Dear Tim:

Enclosed, please find the results of the underground activities performed by Canonie Environmental Service the Southern Pacific Transportation Co. (Southern Pacific) site in Oakland, California (Figure 1). This letter summarizes the underground storage tank removal activities and associated soil sampling. The work was performed between January 5, and January 26, 1988, in accord with the July 17, 1987 Engineering Agreement between Canonie and Southern Pacific. As detailed herein, Canonie considers the tank removal completed.

In response to the California Administrative Code Title 23, Waters; Chapter 3, Water Resources Control Board; Subchapter 16, Underground Tank Regulations; Canonie was retained by Southern Pacific to remove the underground storage tanks from many of their California sites. The activities at Oakland included the removal of 17 tanks and the associated soil sampling.

Tank removal activities at Oakland consisted of the following:

- o Removal of two aboveground diesel fuel tanks;
- o Removal of one aboveground waste oil tank;
- o Removal of four leaded gasoline tanks;
- o Removal of two unleaded gasoline tanks;
- o Removal of five diesel fuel tanks;
- o Removal of two lube oil tanks;
- o Removal of one unused fiberglass tank;
- o Soil and water sampling in and around the tank pits;
- o Removal and stockpiling of contaminated soil.

SF 538237

Mike Grant of
Union Pacific Railroad Co.

One Market Plaza

S.F. 94105

415/541-2838

Range area of concern probably
overexc. when tracks were
re-aligned. No definite idea
of actual location of Tank 15/16
Also RWQCB is lead Agency for case

All tanks, with the exception of the fiberglass tank, were cleaned by PFS Waste Control Services, Inc. (PFS), and disposed of as scrap. The rinsate from the oil and diesel tanks was disposed of in the on-site oil/water separator. The rinsate from the gasoline tanks was transported to a recycler. Twenty cubic yards of soil was removed and transported by PFS to Envirosafe Services of Idaho, a Class I landfill.

Attachment A contains a description of the tank removal procedures and soil sampling procedures. Attachment B contains copies of the manifests and certificates of disposal, and Attachment C contains copies of the laboratory reports. Laboratory results are summarized in Table 1.

Many tanks were located under asphalt in high-traffic areas. After the tanks were removed the backfill was compacted and brought to a level of approximately four inches below grade. Southern Pacific assumed the responsibility to resurface these areas. Barricades and yellow caution tape were placed around the depressions. All remaining tank location sites were filled to their original elevation.

Tank Removal Activities

✓ The location, limits of excavation, and sampling locations for the 12,000-gallon fiberglass tank (Tank 31) are shown on Figure 2. Tank removal activities were as follows:

- o Removed soil above and alongside the tank;
- o Removed the tank in pieces; the unexcavated soil crushed the tank;
- o Hauled the tank scrap to the rubbish pile in the desert yard;
- o Obtained soil samples from the pit (31E, 31W);
- o Transported approximately 200 cubic yards of soil to the desert yard;
- o Backfilled the tank pit with clean soil and compacted the backfill to minimize settling.

This tank had never been used for product storage and only contained water. Laboratory analyses confirmed the lack of contamination in the tank pit.

Tank D was a 12,500-gallon waste oil tank located near the oil/water separator. Tanks E and F were both 12,500-gallon fuel tanks located in East Oakland. These tanks were rinsed by PFS prior to disposal as scrap metal. No soil sampling or laboratory analyses were required as these were aboveground tanks.

✓ Tank 9 was a 2,500-gallon regular-gasoline tank in the desert yard. The location and limits of excavation are shown on Figure 3. The ground water level was very high and the tank was forced to the surface as soon as the asphalt was removed. Tank removal activities were as follows:

✓ The location of the 10,000-gallon diesel fuel tank (Tank A) near PMT Auto Transport is shown on Figure 6 along with the limits of excavation. Tank removal activities were as follows:

- o Removed the tank. No holes were seen, but soil staining was visible. Ground water was encountered. An oily sheen was noted on the water and was probably from the outer tar coating of the tank. The water sample analysis showed no petroleum hydrocarbons;
- o Obtained two soil samples (SS-AN, SS-AS) and one water sample (WS-MHR);
- o Backfilled the pit with clean soil and compacted the soil to minimize settling;
- 12 piles*
130 yds o Transported approximately 100 cubic yards of soil to the desert yard to be stockpiled. This soil had been excavated in order to remove the tank and was considered unsuitable for use as backfill.

✓ Tank 15, a 1,000-gallon regular-gasoline tank, and Tank 16, a 2,000-gallon diesel-fuel tank, were near the diesel shop. Sample locations and limits of excavation are shown on Figure 7. Removal procedures for Tank 15 were as follows.

- o Excavated the asphalt and soil from around the 1,000 gallon-gasoline tank (Tank 15). Some soil staining was visible and laboratory analysis confirmed the presence of product in the soil;
- o Obtained two soil samples (SS-15E, SS-15W) and a water sample (WS-15) from below the tank;
- o Backfilled the excavation with imported soil and compacted the backfill to minimize settling;
- 3 piles*
45 yds. o Approximately 35 cubic yards of soil were transported and stockpiled in the desert yard. This soil had been excavated in order to remove the tank and was considered unsuitable for backfill.

✓ The 2,000-gallon diesel-fuel tank (Tank 16) was partially exposed aboveground and embedded in a three-foot thick concrete slab. Therefore, it was unnecessary to remove any soil. When removing the tank with a large excavator, the slab around the tank was simultaneously removed. Removal procedures for Tank 16 were as follows:

- o The concrete was broken off of the tank with a hydraulic hammer attachment on the excavator. No holes, leaks, or evidence of overflowing were noted;

- ✓ Tank 34 and Tank 35 in East Oakland were much larger than anticipated by Southern Pacific. The tanks are located within the close confines of two railroad tracks. For economic reasons, and to avoid disruption of track use, Canonie has recommended that these tanks be closed in place.

Site Conditions

From field observations and laboratory analysis, the following statements can be made about soil and ground water conditions at the Oakland Facility:

- o Laboratory results from water samples WS-DY and WS-9DY (tank pit 9) showed low levels of benzene, xylene, and lead;
- o Laboratory results of soil samples from tank pit 10 showed 927 ppm and 933 ppm lead. Water samples showed 0.13 ppm xylene, 2.0 ppm TVPH, and 0.016 ppm lead;
- o Laboratory analyses of soil and water samples from tank pit 15 detected levels of the tested constituents benzene, toluene, xylene, TVPH, and lead (lead was nondetectable in the water sample);
- o Soil samples from tank pit 16 (SS-16E and SS-16W) showed 740 ppm and 2000 ppm TEPH, respectively;
- o Laboratory analyses for the soil samples in tank pit 17 resulted in nondetectable levels. Water samples showed benzene, toluene, xylene, and TVPH;
- o Laboratory analyses of soil from tank pit 18 showed a level of 640 ppm TEPH in sample SS-18E; TEPH was nondetectable in sample SS-18W;
- o Laboratory analyses of soil samples from tank pits 19A and 19B (SS-19a and SS-19b) showed levels of TEPH, lead, chromium, and zinc;
- o Samples from tank pit 28 showed levels of xylene, TVPH, and lead;
- o Samples from tank pit 29 showed benzene, xylene, TEPH, and TVPH;
- o Tank pit 31 (the 12,000-gallon fiberglass tank) showed no sign of contamination. This was confirmed by laboratory analyses. Therefore, Canonie considers this site closed and no additional action at this location is recommended;
- o Tank pit A (soil samples SS-AN and SS-AS) showed 3400 ppm and 25 ppm TEPH. The water sample (WS-MHR) showed nondetectable levels of tested constituents;
- o Laboratory results for soil samples SS-SHE and SS-SHW from tank pit B were, respectively, nondetectable and 220 ppm for benzene, nondetectable and 580 ppm for toluene, 110 ppm and 990 ppm for xylene, 400 ppm and 5000 ppm for TVPH, and 55.3 ppm and 60.5 ppm for lead;

- o Laboratory results from soil samples SS-CE and SS-CW for tank pit C confirmed a lack of contamination at this site. Therefore, Canonic considers this tank site closed;
- o Tanks D, E, and F were aboveground tanks. They were cleaned and destroyed as scrap metal. No laboratory analyses were required and no additional action is considered necessary;

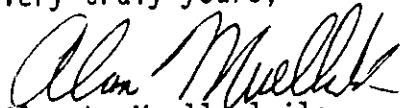
In accord with the regulations governing underground tank removals in Oakland, California; Alameda County; and CAC Title 23, Chapter 3, Water Resources Control Board, Subchapter 16, Underground Tank Regulations; copies of this letter and attachments should be forwarded to the following agencies:

Mr. Rafat A. Shahid
Alameda County Health Care Services
Department of Environmental Health
470 27th Street, Third Floor
Oakland, CA 94612

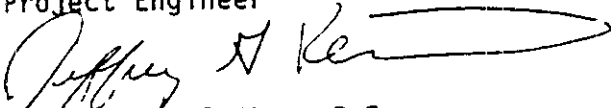
Mr. Steve Hallert
Oakland Fire Department
Underground Tank Division
One City Hall Plaza
Oakland, CA 94612

We appreciate the opportunity to have been of service to Southern Pacific on this project. Should you have any questions or comments, please call us.

Very truly yours,



Alan L. Muellerleile
Project Engineer



Jeffrey A. Klaiber, P.E.
Project Supervisor

ALM/JAK/ssm

Enclosures

DRAWING NUMBER 87-055-A 792

CHECKED BY [Signature]

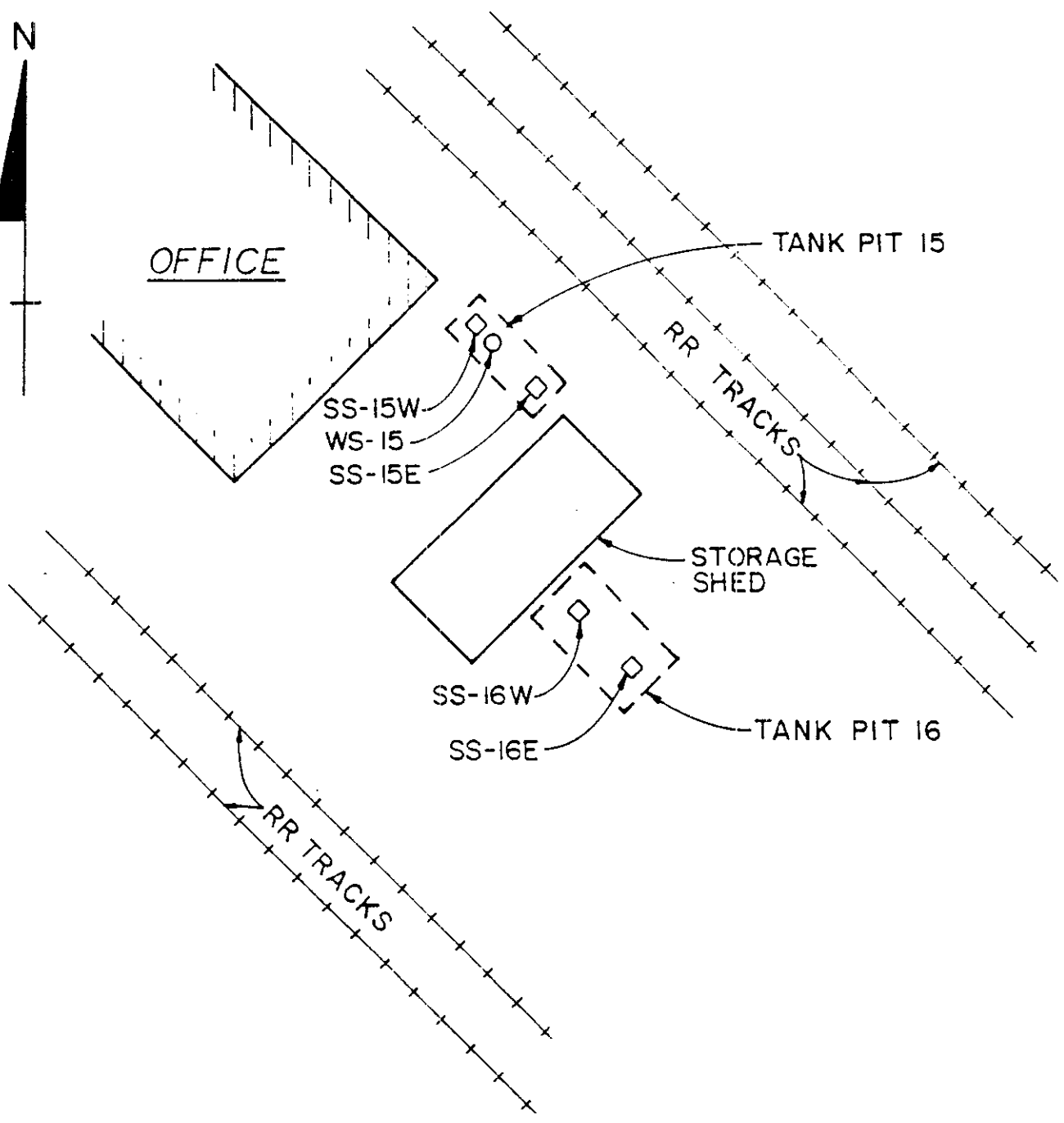
APPROVED BY [Signature]

J.L.W. 6-8-88

DR. BY

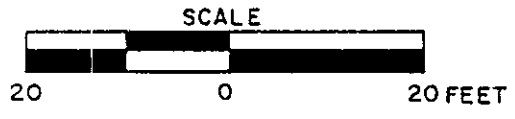
REVISION NO. DATE

REVISION NO. DATE



LEGEND:

- LIMITS OF EXCAVATION
- SOIL SAMPLE LOCATION
- WATER SAMPLE LOCATION



SITE PLAN
DIESEL SHOP
OAKLAND, CALIFORNIA

PREPARED FOR

SF 538256

SOUTHERN PACIFIC
TRANSPORTATION COMPANY
Canonie Environmental

DATE: 6-8-88
SCALE AS SHOWN

FIGURE 7

DRAWING NUMBER
87-055-A 392

Excavation Permit Granted _____ No. _____

CITY OF OAKLAND

Tank Permit No. 9029

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks.

Oakland, California, November 2, 19 87

PERMISSION IS HEREBY GRANTED TO ~~XXXXX~~ remove ~~XXXXX~~ Gasoline tank and excavate commencing _____ feet inside property line

on the _____ side of _____ Street Avenue _____ feet _____ of _____ Street Avenue

House No. Foot of Pine Street Present Storage _____

Owner Southern Pacific Trans. Co. Address #1 Market Plaza Rm. 1007 S.F. 94105 Phone 541-2385

Applicant Canonie Environmental Address 1825 S. Grant St. Ste. 260 San Mateo 94402 Phone 573-8012

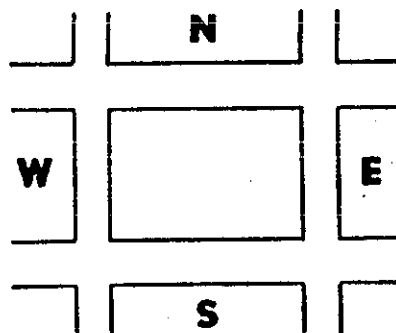
Dimensions of street (sidewalk) surface to be disturbed X Number of Tanks _____ Capacity _____ Gallons, each.

Remarks: The tanks are well away from sidewalks and within fenced S. P. Property. 1 - 550 gallon
1 - 500 gallon

This Permit is granted in accordance with existing City Ordinances.
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
When installing, removing or repairing tanks, no open flame to be on or near premises.

Approved _____ Fire Marshal

Approved _____ Drainage Division Engineering Dept.



EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 6-2.04

_____ square feet of digging or removal granted.

The receipt of \$ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on _____ 19 _____

By _____ Fire Marshal

Inspection Fee Paid - - - - - \$ 50.00 ck#001475 rec#122708

Received by G.M. Johnson
FIRE PREVENTION BUREAU

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.
When ready for inspection notify Fire Prevention Bureau, 273-3851

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.

538-69 (6-87)

SF 538269

TANKS 23/297

SOURCE, Address & Location Oakland Harbor Oakland, California	Date <u>01/11/88</u>
	Consignment No. _____

CONSIGNOR OF MATERIAL, Name & Address Southern Pacific Transportation Co 1 Market Plaza Room 1007 San Francisco, Ca 94105 Telephone No. (415) 541-2385	TRANSPORTER, Name & Address AS Mason Trucking 3110 Gibson Bakersfield, Ca 93308 Telephone No. (805) 324-9631
--	--

DESCRIPTION OF CONSIGNMENT

(1) 2000 Gallon Triple Rinsed Underground Storage Tank / Port Of Oakland
 (1) 1000 Gallon Triple Rinsed Underground Storage Tank / Port Of Oakland
 (1) 8000 Gallon Triple Rinsed Underground Storage Tank / Port Of Oakland

CONSIGNOR'S CERTIFICATION

I hereby declare that the contents of this consignment are fully and accurately described above. It does not conform to the definitions listed here:

- (a) a 'hazardous waste' as defined in accordance with 40 CFR 261.8 of the Federal Reg's.
- (b) a 'hazardous material' in accordance with 49 CFR 171.8 of the Federal Regulations
- (c) a 'hazardous material' in accordance with 49 CFR 171.8 of the Federal Regulations
- (d) does not contain void space (s) in which the atmosphere contains components in excess of 5% of the LOWER EXPLOSIVE LIMIT

I further declare that the consignment is in all respects in the proper condition for transport by highway according to applicable international and national government regulations without a hazardous waste manifest or shipping papers.

In the event that the consignment certified hereon is not as represented and any liability might accrue by reason of the misrepresentation Consignor will save and hold harmless the Consignee

PRINTED NAME PFS WASTE CONTROL SERVICES Frank Allen Thomsay, JR	SIGNATURE <i>Frank Thomsay</i>	DATE 4-26-88
---	-----------------------------------	-----------------

CONSIGNEE FOR MATERIAL, Name & Address

Valley Tree & Construction Company
4233 Quinn Road
Bakersfield, California

FINAL DISPOSITION, method & place

Tanks ventilated in accordance with the Uniform Fire Code, sheared and crushed.

Shipped to Sierra Iron & Metal Company under one or more of the following invoices:

Invoices# 15781
15791
16139

PRINTED NAME Arthur W. Jones	SIGNATURE <i>Arthur W. Jones</i>	DATE 05-11-88
---------------------------------	-------------------------------------	------------------

SF 538290

Table 1
 Codes of Samples Received
 From SP - Oakland
 Project: 87-055

<u>Sampler ID</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Lab ID#</u>	<u>Sample Type</u>	<u>Container</u>
Analysis: BTX					
SS-10E	01-11-88	01-13-88	801238	Soil	Brass Tube
SS-10W	01-11-88	01-13-88	801239	Soil	Brass Tube
SS-15E	01-11-88	01-13-88	801243	Soil	Brass Tube
SS-15W	01-11-88	01-13-88	801242	Soil	Brass Tube
SS-28E	01-08-88	01-13-88	801261	Soil	Brass Tube
SS-28W	01-08-88	01-13-88	801260	Soil	Brass Tube
SS-SHE	01-11-88	01-13-88	801241	Soil	Brass Tube
SS-SHW	01-11-88	01-13-88	801240	Soil	Brass Tube
SS-17E	01-12-88	01-13-88	801234	Soil	Brass Tube
SW-17W	01-12-88	01-13-88	801235	Soil	Brass Tube
WS-10	01-12-88	01-13-88	801250	Water	40ml Vial
			801251	Water	40ml Vial
			801252	Water	40ml Vial
WS-15	01-12-88	01-13-88	801253	Water	40ml Vial
			801236	Water	40ml Vial
WS-17	01-12-88	01-13-88	801237	Water	40ml Vial
			801246	Water	40ml Vial
WS-DY	01-12-88	01-13-88	801247	Water	40ml Vial
			801248	Water	40ml Vial
Analysis: Ethylene Dibromide					
SS-10E	01-11-88	01-13-88	801238	Soil	Brass Tube
SS-10W	01-11-88	01-13-88	801239	Soil	Brass Tube
SS-15E	01-11-88	01-13-88	801243	Soil	Brass Tube
SS-15W	01-11-88	01-13-88	801242	Soil	Brass Tube
SS-SHE	01-11-88	01-13-88	801241	Soil	Brass Tube

SF 538345

TABLE 1
 SUMMARY OF LABORATORY RESULTS
 SOUTHERN PACIFIC TRANSPORTATION COMPANY
 OAKLAND RAIL YARD FACILITIES

Tank Designation	Sample I.D.	Benzene (ppm)	Toluene (ppm)	Xylene (ppm)	TEPH (ppm)	TVPH (ppm)	Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Zinc (mg/kg)	EDB (ppm)
9	WS-DY	.037	ND	0.49		6.4	ND				ND
	WS-9DY						ND				
10	WS-10	ND	ND	0.13		2.0	ND				ND
	SS-10E	ND	ND	ND		ND	933.0				ND
	SS-10W	ND	ND	ND		ND	927.0				ND
	WS-10MJ						0.016				
	10TP	ND	ND	ND		ND	10.7				ND
15	SS-15E	ND	ND	91.0		540.0	ND				ND
	SS-15W	ND	2.0	9.0		230.0	10.4				ND
	WS-15	0.2	0.16	1.8		47.0	ND				ND
16	SS-16E				2000.0						
	SS-16W				740.0						
17	SS-17E	ND	ND	ND		ND	ND				ND
	SS-17W	ND	ND	ND		ND	ND				ND
	WS-17	4.6	5.9	12.0		130.0					
18	SS-18E				640.0						
	SS-18W				ND						
19A	SS-19A				700.0		18.8	ND	29.3	98.3	
19B	SS-19B				ND		26.3	ND	38.5	82.8	
28	SS-28E	ND	ND	ND		ND	16.4				
	SS-28W	ND	ND	ND		ND	11.6				
	28-IMS	ND	ND	5.0		220.0	19.0				ND

SF 538241

Table 1 (Cont.)
 Codes of Samples Received
 From SP - Oakland
 Project: 87-055

<u>Sampler ID</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Lab ID#</u>	<u>Sample Type</u>	<u>Container</u>
Analysis: Ethylene Dibromide					
SS-SHW	01-11-88	01-13-88	801240	Soil	Brass Tube
SS-17E	01-12-88	01-13-88	801234	Soil	Brass Tube
SW-17W	01-12-88	01-13-88	801235	Soil	Brass Tube
WS-10	01-11-88	01-13-88	801250	Water	40ml Vial
			801251	Water	40ml Vial
WS-15	01-11-88	01-13-88	801252	Water	40ml Vial
			801253	Water	40ml Vial
WS-DY	01-11-88	01-13-88	801246	Water	40ml Vial
			801247	Water	40ml Vial
			801248	Water	40ml Vial
Analysis: Lead					
WS-10	01-11-88	01-13-88	801250	Water	40ml Vial
			801251	Water	40ml Vial
WS-15	01-11-88	01-13-88	801252	Water	40ml Vial
			801253	Water	40ml Vial
WS-DY	01-11-88	01-13-88	801249	Water	40ml Vial
Analysis: Southern Pacific Inorganics					
SS-19A	01-08-88	01-13-88	801262	Soil	Brass Tube
SS-19B	01-08-88	01-13-88	801263	Soil	Brass Tube
Analysis: Total Ext. Petroleum Hydrocarbons					
SS-16E	01-08-88	01-13-88	801257	Soil	Brass Tube

SF 538346

Table 1 (Cont.)
 Codes of Samples Received
 From SP - Oakland
 Project: 87-055

<u>Sampler ID</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Lab ID#</u>	<u>Sample Type</u>	<u>Container</u>
Analysis: Total Ext. Petroleum Hydrocarbons					
SS-16W	01-08-88	01-13-88	801256	Soil	Brass Tube
SS-18E	01-11-88	01-13-88	801244	Soil	Brass Tube
SS-18W	01-11-88	01-13-88	801245	Soil	Brass Tube
SS-19A	01-08-88	01-13-88	801262	Soil	Brass Tube
SS-19B	01-08-88	01-13-88	801263	Soil	Brass Tube
SS-29E	01-08-88	01-13-88	801259	Soil	Brass Tube
SS-29W	01-08-88	01-13-88	801258	Soil	Brass Tube
SS-AN	01-08-88	01-13-88	801255	Soil	Brass Tube
SS-AS	01-08-88	01-13-88	801254	Soil	
Analysis: Total Lead					
SS-10E	01-11-88	01-13-88	801238	Soil	Brass Tube
SS-10W	01-11-88	01-13-88	801239	Soil	Brass Tube
SS-15E	01-11-88	01-13-88	801243	Soil	Brass Tube
SS-15W	01-11-88	01-13-88	801242	Soil	Brass Tube
SS-17E	01-11-88	01-13-88	801234	Soil	Brass Tube
SS-17W	01-11-88	01-13-88	801235	Soil	Brass Tube
SS-SHE	01-11-88	01-13-88	801241	Soil	Brass Tube
SS-SHW	01-11-88	01-13-88	801240	Soil	

SF 538347

Table 2
Results of BTX Analysis on Soil
Samples Received From SP - Oakland
Results in mg/kg

01-18-1988
87-055-3403
Page 4

Sampler ID:	SS-10E	SS-10W	SS-15E	SS-15W	SS-28E
Lab ID#:	<u>801238</u>	<u>801239</u>	<u>801243</u>	<u>801242</u>	<u>801261</u>
<u>Analyte(s)</u>					
Benzene	ND 0.2	ND 0.2	ND 20.	ND 2.	ND 0.2
Toluene	ND 0.2	ND 0.2	ND 20.	2.	ND 0.2
Xylene	ND 0.2	ND 0.2	91.	9.	ND 0.2
Total Volatile Petroleum Hydrocarbons	ND 1.0	ND 1.0	540.	230.	ND 1.0

SA/GA YMT
Analyst Checked by

Note:

ND X denotes none detected to a level of X

Table 3
 Results of BTX Analysis on Water
 Samples Received From SP - Oakland
 Results in mg/l

01-18-1988
 87-055-3403
 Page 6

Sampler ID:	WS-10	WS-15	WS-17	WS-DY
Lab ID#:	<u>801250</u>	<u>801252</u>	<u>801236</u>	<u>801246</u>
<u>Analyte(s)</u>				
Benzene	ND 0.005	0.20	4.6	0.037
Toluene	ND 0.005	0.16	5.9	ND 0.005
Xylene	0.13	1.8	12.	0.49
Total Volatile Petroleum Hydrocarbons	2.0	47.	130.	6.4

SA/GA MT
 Analyst Checked by

SF 538350

Note:
 ND X denotes none detected to a level of X.

Table 4
 Results of Ethylene Dibromide Analysis on Soil
 Samples Received From SP - Oakland
 Results in mg/kg

01-18-1988
 87-055-3403
 Page 7

Sampler ID:	SS-10E	SS-10W	SS-15E	SS-15W	SS-SHE
Lab ID#:	<u>801238</u>	<u>801239</u>	<u>801243</u>	<u>801242</u>	<u>801241</u>
Analyte(s) Ethylene Dibromide	ND 0.020	ND 0.020	ND 2.0	ND 0.20	ND 2.0

SJA/GA MT
 Analyst Checked by

SF 538351

Note:
 ND X denotes none detected to a level of X

Table 5
Results of Ethylene Dibromide Analysis on Water
Samples Received From SP - Oakland
Results in mg/l

01-18-1988
87-055-3403
Page 9

Sampler ID:	WS-10	WS-15	WS-DY
Lab ID#:	<u>801250</u>	<u>801252</u>	<u>801246</u>
<u>Analyte(s)</u> Ethylene Dibromide	ND 0.005	ND 0.05	ND 0.005

SAGA SMT
Analyst Checked by

Note:
ND X denotes none detected to a level of X

Table 6
 Results of Lead Analysis on Water
 Samples Received From SP - Oakland
 Results in mg/l

01-18-1988
 87-055-3403
 Page 10

Sampler ID:	WS-10	WS-15	WS-DY
Lab ID#:	<u>801250</u>	<u>801252</u>	<u>801249</u>
<u>Analyte(s)</u> Total Lead	ND 0.05	ND 0.05	ND 0.05


 Analyst


 Checked by


9F53835A


Note:
 ND X denotes none detected to a level of X

Table 9
Results of Total Lead Analysis on Soil
Samples Received From SP - Oakland
Results in mg/kg

01-18-1988
87-055-3403
Page 14

Sampler ID:	SS-10E	SS-10W	SS-15E	SS-15W	SS-17E
Lab ID#:	<u>801238</u>	<u>801239</u>	<u>801243</u>	<u>801242</u>	<u>801234</u>
<u>Analyte(s)</u> Total Lead	933.	927.	ND 5.0	10.4	ND 5.0


Analyst


Checked by

SF 538358

Note:
ND X denotes none detected to a level of X

#5354

EChu P 143 588 411

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to Craig Denny	
Union Pacific RR Co.	
Street Number 1416 Dodge St., Rm 930	
Post Office, State, & ZIP Code Omaha NE 68179	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800 April 1995