

# Canonie Environmental

Canonie Environmental Services Corp  
1825 South Grant Street  
Suite 260  
San Mateo, California 94402

Phone: 415-573-8012  
FAX: 415-573-5654

88-149-07

February 15, 1989

Mr. Larry Seto  
Alameda County Health Care Services Agency  
Hazardous Materials Management  
80 Swan Way, Room 200  
Oakland, CA 94612

Soil Sampling Report and  
Records of Correspondence with Regulatory Agencies  
Southern Pacific Transportation Company Rail Yard  
Fifth Avenue and Seventh Street  
Oakland, California

Dear Mr. Seto:

Canonie Environmental Services Corp. (Canonie) is submitting this "Soil Sampling Report and Records of Correspondence with Regulatory Agencies" for the Southern Pacific Transportation Company Rail Yard at Fifth Avenue and Seventh Street in Oakland, California. This sampling report is in addition to a Tank Excavation Work Plan, permit application, and fees submitted to your office on January 17, 1989. Attachment A contains the laboratory results for samples from the site and our field activity log. Attachment B contains copies of the City of Oakland tank removal permit; correspondence with the California Regional Water Quality Control Board--San Francisco Bay Region that allows Canonie to discharge treated ground water from the tank excavation to the storm sewer, if required; and records of telephone contacts with the California Department of Health Services Toxic Substance Control Division indicating that they do not have jurisdiction over permitting for the ground water treatment system.

On February 13, 1989, Canonie took soil samples from four locations around the perimeter of the existing tanks as shown on Figure 1. Ground water was encountered at two to four feet below ground surface. The samples were retrieved from immediately above the ground water. The samples were analyzed only for total extractable petroleum hydrocarbons (TEPH) in order to assess hydrocarbon concentrations immediately around the tanks. As shown in Attachment A, the soil samples contained from 6,200 to 16,000 parts per million TEPH. Canonie contends that because hydrocarbon compounds exist in the surrounding soil, the removal of the four tanks as described in our January 17, 1989 Tank Excavation Work Plan will not further impact the site. Any further investigation will be performed after

Mr. Larry Seto

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February 15, 1989

the tanks are removed. Then Canonie will be better able to assess site conditions and prepare an investigation plan. An expeditious review and approval of this information and issuance of a tank removal permit would be greatly appreciated.

If you have any questions regarding this plan, please call.

Respectfully submitted,

*Brian Wetzsteon*

Brian L. Wetzsteon  
Assistant Project Engineer

*Lance D. Geselbracht*  
Lance D. Geselbracht, P.E.  
Project Manager

BLW/LDG/as

Attachments

DRAWING NUMBER 88-149-B12

1-17-89

CHECKED BY

APPROVED BY

12-21-88

VZC

DRAWN BY

ADDED SOIL SAMPLE LOCATIONS

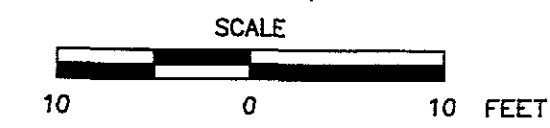
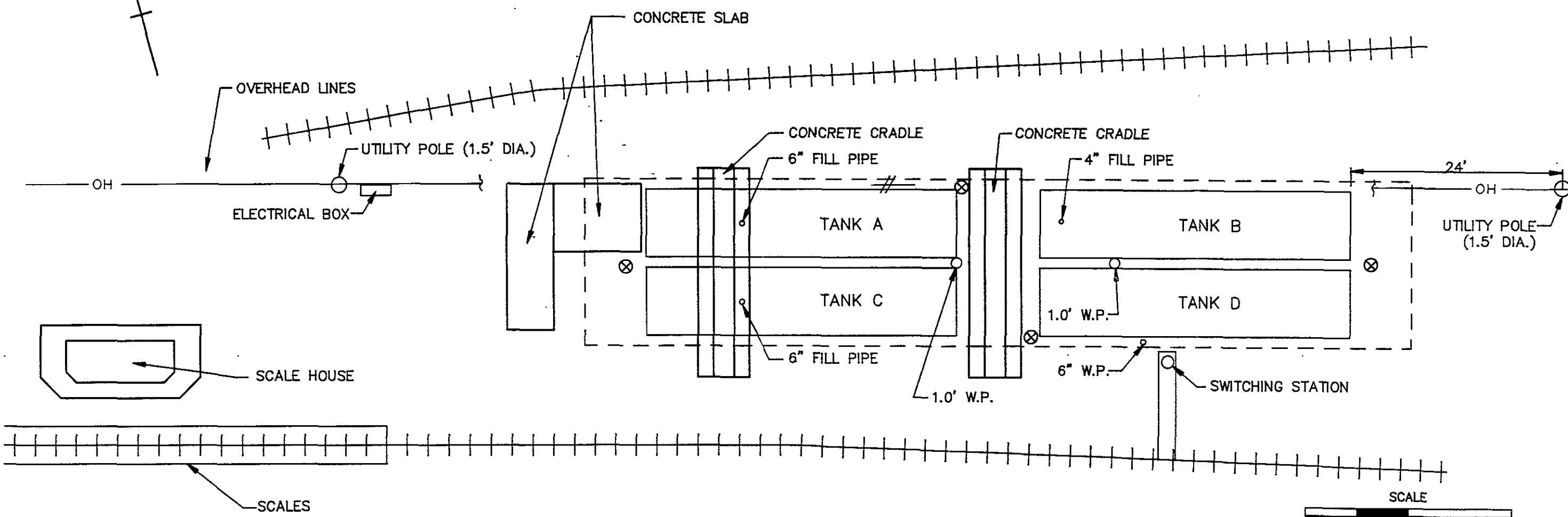
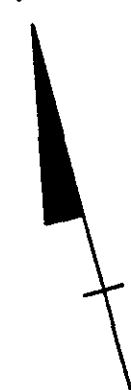
2-10-89

NO.

DATE

REVISIONS

N



**LEGEND:**

- ⊗ SOIL SAMPLE LOCATIONS
- - - - - APPROXIMATE LIMITS OF SHORING
- W.P. WOODEN PILE (EXISTING)

**NOTES:**

1. TANKS ARE UNDERGROUND

TANK LOCATION PLAN  
EAST OAKLAND, CALIFORNIA

PREPARED FOR  
SOUTHERN PACIFIC  
TRANSPORTATION COMPANY

ATTACHMENT A

# Canonie Environmental

Canonie Environmental Services Corp.  
212 Frank West Circle  
Suite A  
Stockton, California 95206  
Phone: 209-983-1340  
88-149-07-6129

February 15, 1989

Mr. Brian Wetzsteon  
Canonie Environmental  
1825 S. Grant Street, Suite 260  
San Mateo, CA 94402

Dear Mr. Wetzsteon:

Enclosed are the laboratory results for the samples submitted to the Canonie Environmental Analytical Laboratory.

Unless otherwise instructed by you samples will be returned or disposed of two weeks from the date of this letter.

If you have any questions please call John Buerger or me at (209) 983-1340.

Very truly yours,



Kenneth C. Wahl  
Director of Laboratory Services

KCW/me

Enclosure

Laboratory Report for

Mr. Brian Wetzsteon  
Canonie Environmental  
1825 S. Grant Street, Suite 260  
San Mateo, CA 94402

February 15, 1989

By

Canonie Environmental  
212 Frank West Circle, Suite A  
Stockton, CA 95206  
(209) 983-1340

88-149-07-6129

Table 1  
Codes of Samples Received  
From SPT. Co. East Oakland  
Project: 88-149-07

<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					
Sample 1-2' } ?	02-13-89	02-14-89	835229	Soil	Brass Tube
Sample 2-2' } ?	02-13-89	02-14-89	835230	Soil	Brass Tube
Sample 3-4' } ?	02-13-89	02-14-89	835231	Soil	Brass Tube
Sample 4-2' }	02-13-89	02-14-89	835232	Soil	Brass Tube

Table 2  
 Results of Total Ext. Petroleum Hydrocarbons Analysis on Soil  
 Samples Received From SPT. Co. East Oakland  
 Results in mg/kg

02-15-1989  
 88-149-07-6129  
 Page 2

Sampler ID:	Sample 1-2'	Sample 2-2'	Sample 3-4'	Sample 4-2'
Lab ID#:	<u>835229</u>	<u>835230</u>	<u>835231</u>	<u>835232</u>
<u>Analyte(s)</u>				
Total Extractable Petroleum Hydrocarbons	6200.	16000.	8900.	11000.

*- assume TPH*

lis      DS  
 Analyst    Checked by

Note:  
 ND X denotes none detected to a level of X.  
 #ND X denotes none detected to a level of X due to an interfering peak.



Project # 88-149-07-6129  
Date Completed 2-15-1989

Reference Methods

Total Extractable Hydrocarbons

	<u>Preparation</u>	<u>Analysis</u>
Water	<input type="checkbox"/> EPA 3510 <input type="checkbox"/> EPA 3520	<input checked="" type="checkbox"/> Guidelines for Addressing Fuel Leaks <sup>1</sup>
Soil	<input type="checkbox"/> EPA 3540 <input checked="" type="checkbox"/> EPA 3550	

- 1) Eisenberg, Don M., et al, "Guidelines for Addressing Fuel Leaks", California Regional Water Quality Control Board, San Francisco Bay Region, Sept. 1985.

ANALYST BTS

PROJ NO		PROJECT NAME	NO OF CONTAINERS	ANALYSIS TEPH															REMARKS						
LP NO		SAMPLERS (Signature)																							
DATE	SAMPLE ID																								
88-149-07	SPTC <sub>6</sub> -EAST OAKLAND																								
	Brian Wetstone																								
2-13-89	SAMPLE 1-2'		1	X																					BRASS TUBE
2-13-89	SAMPLE 2-2'		1	X																					BRASS TUBE
2-13-89	SAMPLE 3-4'		1	X																					BRASS TUBE
2-13-89	SAMPLE 4-2'		1	X																					BRASS TUBE
Relinquished by (Signature)	Date/Time	Received by: (Signature)	Remarks																						
Brian Wetstone	2-13-89 2 PM	[Signature]	24 HR TAT REPORT RESULTS TO BRIAN WETZSTEON IN SAN MATEO ASAP.																						
Relinquished by (Signature)	Date/Time	Received by: (Signature)																							
Relinquished by (Signature)	Date/Time	Received for Laboratory by. (Signature)																							
Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206																									

835229-835232

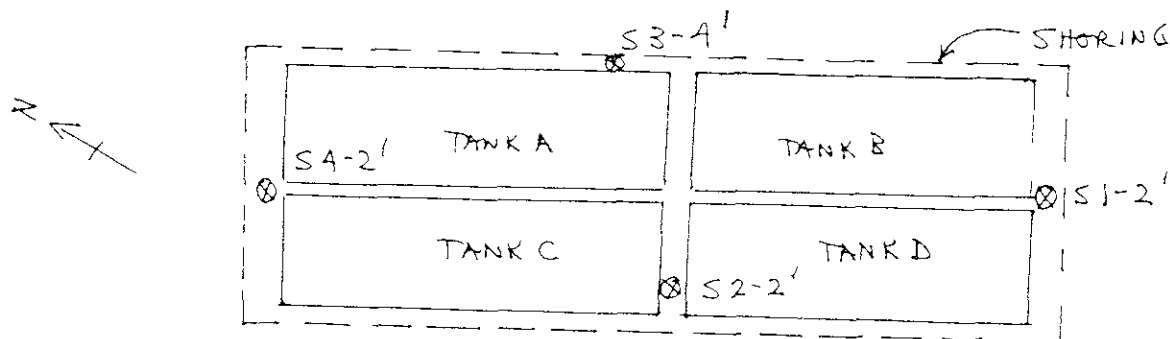
PROJ NO	PROJECT NAME	NO. OF CON- TAINERS	ANALYSIS TEPH										REMARKS			
LP NO	SAMPLERS (Signature)												<i>Walwin</i>			
DATE	SAMPLE ID															
88-149-07	SPT Co - EAST OAKLAND															
<i>6629</i>	<i>Brian Wetstone</i>															
2-13-89	SAMPLE 1-2'	<i>29</i>	1	X												
2-13-89	SAMPLE 2-2'	<i>30</i>	1	X												
2-13-89	SAMPLE 3-4'	<i>31</i>	1	X												
2-13-89	SAMPLE 4-2'	<i>32</i>	1	X												
Relinquished by (Signature)	Date/Time	Received by: (Signature)	Remarks													
<i>Brian Wetstone</i>	<i>2-13-89 2 PM</i>	<i>[Signature]</i>	24 HR TAT REPORT RESULTS TO BRIAN WETSTONE IN SAN MATEO ASAP.													
Relinquished by (Signature)	Date/Time	Received by: (Signature)														
Relinquished by (Signature)	Date/Time	Received for Laboratory by: (Signature)														
<i>[Signature]</i>	<i>2/14/89 10:30</i>	<i>[Signature]</i>														
Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206																

PROJECT No. 88-149-07DATE 2-13-89PAGE 1 OF 1PROJECT NAME SPTCO - EAST OAKLAND (547<sup>th</sup> streets)FIELD ACTIVITY SUBJECT SOIL SAMPLINGWEATHER SUNNY LOGGED BY RLW

## DAILY ACTIVITIES AND EVENTS:

10 AM • BRIAN WETZSTEON AND BILL YOUNG TRAVEL TO E. OAKLAND SITE TO TAKE SOIL SAMPLES AROUND TANKS TO SATISFY ALAMEDA COUNTY AND RECEIVE OUR PERMIT.

- USED PICK AND SHOVEL TO DIG 4 HOLES DOWN TO WATER AND SAMPLE SOIL AT THIS DEPTH.
- HIT WATER AT 2 FEET DEEP IN HOLES 1, 2, AND 4.
- HIT WATER AT 4 FEET DEEP IN HOLE 3.
- ALL HOLES HAD VISIBLE PRODUCT FLOATING ON THE WATER AND SMELLED OF HYDROCARBONS
- SENT SAMPLES TO CANONIE LAB - TEST ONLY FOR TEPH TO PROVE TO ALAMEDA COUNTY THAT EXCAVATING SOIL FROM INSIDE THE TANKS WILL NOT IMPACT SOIL OUTSIDE THE TANKS.
- REQUESTED 24 HR T.A.T. ON SAMPLES.
- ALL SAMPLES WERE TAKEN OUTSIDE OF THE TANKS BUT INSIDE OF THE SHORING LIMITS.



ATTACHMENT B

Excavation Permit Granted \_\_\_\_\_ No. \_\_\_\_\_

# CITY OF OAKLAND

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks. Tank Permit No. 9209

Oakland, California, \_\_\_\_\_ February 8, 1989

PERMISSION IS HEREBY GRANTED TO ~~XXXX~~ remove ~~XXXX~~ Gasoline tank and excavate commencing \_\_\_\_\_ feet inside property line

on the \_\_\_\_\_ side of \_\_\_\_\_ Street Avenue \_\_\_\_\_ feet of \_\_\_\_\_ Street Avenue

House No. 5th Avenue & East 7th Street Present Storage \_\_\_\_\_

Owner Southern Pacific Trans. Co. Address One Market Plaza, Rm. 1007 Phone 541-2385

Applicant Canonie Environmental Address San Francisco, CA 94105 Phone 573-8012

Dimensions of street (sidewalk) surface to be disturbed \_\_\_\_\_ X \_\_\_\_\_ Number of Tanks 4 Capacity 7000 Gallons, each

Remarks: The tanks are well away from sidewalks and within Southern Pacific property

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.

RECEIVED  
FEB 9 1989

	N	
W		E
	S	

## 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#03466 rec#609799  
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.**



City of Oakland  
CASH RECEIPT

Cash Receipt # 609799

Cash Receipt Voucher # CR

Cash   
Check

Payment Received from: *Carson Environmental*

DIRECT CASH CREDITS

Item	Remarks	Fund/SF	Organization	Account	Proj/Grant/ Cost Ctr/WO	Yr	Loc	Task	Dept Specific	Fixed Asset No	Trans ID	Revenue Source	Amount
	<i>U T Tanks</i>	<i>10100</i>	<i>20310</i>	<i>42412</i>		<i>9</i>							<i>50.00</i>
<b>SUBTOTAL</b>												<i>50.00</i>	

Auxiliary Receipt Reference #/Explanation:

*Remove 4-7000 gal. Tanks  
@ Southern Pacific*

ACCOUNTS RECEIVABLES

Item	Customer Name/Description	Batch Number	Check Number	Customer Number	Invoice Number	Amount
<b>SUBTOTAL</b>						
<b>TOTAL</b>						<i>50.00</i>

<p><i>Fire Prevention</i> Collecting Department</p> <p><i>Winnie M. Johnson 216189</i> Received by</p>	Received by:	Entered by:
	Treasury Section	
	RRCC or Grant Fiscal Affairs	

January 5, 1989

Canonie Environmental Services Corp.  
1825 South Grant Street  
Suite 260  
San Mateo, California 94402  
Phone: 415 573 8012

88-149-07

Ms. Lisa McCann  
California Regional Water Quality Control Board  
San Francisco Bay Region  
1111 Jackson Street, Room 6040  
Oakland, CA 94607

Information on Underground Tank Removal  
Southern Pacific Transportation Company Railyard  
Oakland, California

Dear Ms. McCann:

Following up on our telephone conversation on December 29, 1988, we wish to provide you with the following information prior to initiating the underground tank removal project.

Canonie Environmental Services Corp. (Canonie) has been contracted by Southern Pacific Transportation Company (SPTCo.) to remove several underground storage tanks from their railyard in Oakland, California. Due to the elevated ground water level in the area at this time of year, we anticipate that the excavation may contain water. In order to investigate the surrounding soil at the time of tank removal, we may want to dewater the excavation. We have been informed by SPTCo. that the tanks' former content was diesel fuel. It is our intention to pump this water into a holding tank modified as an oil separation unit. This water will be decanted and then filtered through a granular activated carbon (GAC) unit. We consider such a system adequate to treat dissolved components of diesel fuel and anticipate that the level of volatile organic compounds (VOCs) of the treated water will be nondetectable. The treated water will then be discharged into the storm sewer system provided that it meets RWQCB requirements (VOCs less than 0.5 ppb and PCBs nondetectable).

The water will be tested prior to treatment using EPA Method 8080.3 to ascertain that the contents of the tank do not include PCBs. (If PCBs are detected, a revised treatment/discharge plan will be forwarded prior to initiating extraction. This sample will also be analyzed for diesel fuel using Methods 3510 and GCFID; and for benzene, toluene, xylene, and ethylbenzene (BTX&E) using Method 8020 (in accordance with the RWQCB's June 2, 1988 recommendations).

After several hundred gallons of water have been treated, a water sample will be collected to verify performance. These samples will be analyzed for diesel fuel and for BTX&E. During sample analyses (24-hour turnaround) the system will not be operated. The results of the analyses will be



Ms. Lisa McCann

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January 5, 1989

verbally transmitted to the RWQCB, and the system will begin treatment operations upon receiving permission to continue. Other water samples will be analyzed periodically during the system's operation to verify that performance is maintained.

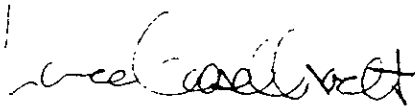
It is anticipated that less than 20,000 gallons of water will require treatment. We have attached a copy of the design calculations showing the required amount of GAC for system operation.

If you have any questions, please call us.

Very truly yours,



Alan L. Muellerleile  
Project Engineer



Lance D. Geselbracht, P.E.  
Project Manager

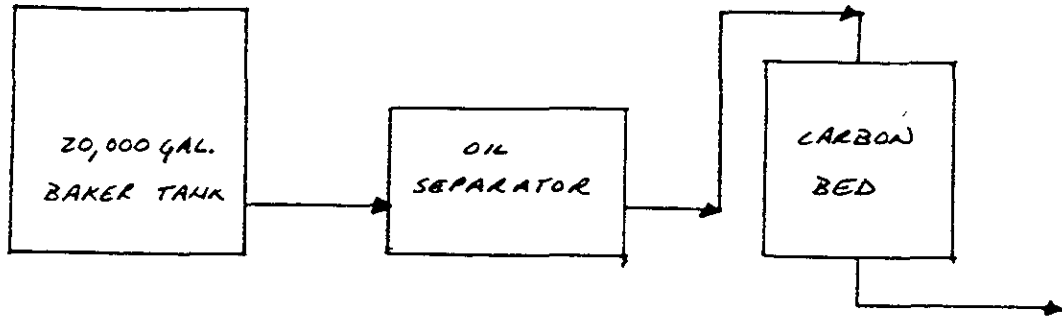
ALM/LDG/as

Attachments

By PGL Date 1/3/88 Subject SOUTHERN PACIFIC Sheet No. 1 of 1

Chkd. By \_\_\_\_\_ Date \_\_\_\_\_ Proj. No. 88-149-07

1 1/4" X 1 1/4"



ASSUME: RESIDUAL DIESEL FROM SEPARATOR -- 100 mg/L  
 CARBON ADSORPTION CAPACITY FOR DIESEL -- 100 mg/kg  
 CARBON WT. - 30 lbs/ft<sup>3</sup>

- CARBON REQUIRED TO TREAT 20,000 GALLONS

$$(20 \times 10^3 \text{ GAL}) (3.785 \text{ L/GAL}) (100 \text{ mg/L}) (2.2 \text{ lb/kg}) / (100 \text{ mg/gm}) (30 \text{ lb/ft}^3) (\frac{7.48 \text{ gal}}{1 \text{ cu ft}})$$

$$= 5.55 \text{ ft}^3 = 42 \text{ GALLONS OF CARBON}$$

- ACTUAL CARBON-USE ASSUMED TWICE CALCULATED, USE 2 - 55 GAL PRE-FAB CARBON BEDS.

- MAX. FLOW RATE FOR 30 MINUTE EMPTY BED CONTACT TIME

$$(110 \text{ GAL}) / (30 \text{ MIN}) = 3.7 \text{ GPM}$$

- TIME OF DISCHARGE  $(20,000 \text{ GAL}) (\text{DAY}/1440 \text{ MIN}) / (3.7 \text{ GPM}) = 4 \text{ DAYS}$

TELEPHONE  
CALL  
RECORD

DATE 1/9/89 TIME 11:15 PROJECT NO. 88-149-07

NAME E. Oakland TELEPHONE NO. \_\_\_\_\_

TO A. M. OF \_\_\_\_\_

FROM Lisa McCann OF RWQCB

She says work plan is OK  
but requests location map of  
cross-street I.D.

TELEPHONE  
CALL  
RECORD

DATE 2/14/89 TIME 8:30 PROJECT NO. 88-149-07

NAME SP Tanks-Oakland TELEPHONE NO. \_\_\_\_\_

2-14-89 PROJECT # 88-149-07  
P  
WATER DISCHARGE

TO A. Muellerleile OF Canonie

FROM Lisa McCann OF RWQCB

- We spoke about RWQCB approval of our water discharge plan in Oakland
- I told her that Alameda Co. was requesting letter stating approval
- She says this is not done and she does not want to set precedent
- She will call Mary Jo Meyers of Ala. Co. Hlth. Dept. and tell her that RWQCB approves our plan
- I asked about DHS involvment in water discharge - Lisa said that if there are no hazardous levels, DHS will not be involved - DHS levels are generally higher than RWQCB. She said she would mention this to Alameda Co.

TELEPHONE  
CALL  
RECORD

DATE 2/14/89 TIME 9:25 PROJECT NO. 88-149-07

NAME SPTCo-E. Oakland TELEPHONE NO. (415)540-3401

TO Steve Belluomini OF DHS Toxic Substances Control Division

FROM Brian Wetzsteon OF Canonie

- I told Steve we are removing underground fuel storage tanks in Oakland and there may be water from the excavation which contains hydrocarbons. In order to dewater the excavation we want to pump into a tank, separate the product from the water, and polish the water with carbon ( if necessary) before discharge to the storm drain.
- I asked if we need a permit from the DHS for any of this work.
- Steve said that the tanks are not covered by RCRA and the groundwater treatment and discharge is under the Regional Water Quality Control Board's jurisdiction.

The DHS is not interested in any part of this project.

TELEPHONE  
CALL  
RECORD

DATE 2/14/89 TIME 3:20 PROJECT NO. 88-149-07

NAME SPTCo. - E. Oakland TELEPHONE NO. (415)540-3401

TO Robert Feather OF DoHS Toxics Division

FROM Brian Wetzsteon OF Canonie

Robert Feather is the permitting officer of the DHS toxic substance control division.

I asked if we need a permit to treat hydrocarbon contaminated groundwater before discharge to the storm drain from DHS. He said as far as he knew only the RWQCB will regulate that kind of activity. He said he will look into it further and call back.

TELEPHONE  
CALL  
RECORD

DATE 2/15/89 TIME 9:00 PROJECT NO. 88-149-07

NAME SPTCo. - E. Oakland TELEPHONE NO. (415)540-3401

TO Brian Wetzsteon OF Canonie

FROM Robert Feather OF DHS Toxic Substances Control Division

Mr. Feather called to say that he checked with the permitting people in his office and with the DHS Alternative Technology Division in Sacramento. All of these people said the RWQCB has jurisdiction in this case and DHS does not want anything to do with permitting this water treatment system.