

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737
(510) 540-3724



April 23, 1996

Mr. Ace Forsen, Chief
Project Development/Benicia-Martinez Bridge
Caltrans
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

**REMEDIAL ACTION COMPLETION REPORT, FORMER J & A TRUCK REPAIR
(AKA SMILO CHEMICAL), 500 KIRKHAM STREET, CYPRESS
RECONSTRUCTION PROJECT, OAKLAND**

The Department of Toxic Substances Control (DTSC) received the Remedial Action Completion Report, dated February 12, 1996, prepared by Jonas & Associates, SOMA Corporation and Performance Excavators, Inc. on behalf of Caltrans. The report, received by DTSC on March 19, 1996, documents the activities that were taken to remediate the former J & A Truck Repair Site. The report was reviewed and DTSC's comments are enclosed. All comments must be satisfactorily addressed before DTSC can approve the report.

If you have any questions regarding this letter, please contact Lynn Nakashima at (510) 540-3839.

Sincerely,

A handwritten signature in cursive script that reads "Barbara J. Cook".

Barbara J. Cook, P.E., Chief
Site Mitigation Branch

Enclosure

cc: See next page

Mr. Ace Forsen
April 23, 1996
Page Two

cc: Mr. Sum Arigala
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Mr. Joel Howie
Caltrans
Environmental Engineering
P.O. Box 23660
Oakland, California 94623-0660

Ms. Kathleen Leigh
Caltrans
Cypress Construction Office
1545 Willow Street
Oakland, California 94607

Mr. Frank Cannizzaro
Caltrans
Cypress Construction Office
1121 7th Street
Oakland, California 94607

J&A TRUCK REPAIR
COMMENTS ON THE REMEDIAL ACTION COMPLETION REPORT

The Department has completed review of the five volume Remedial Action Completion Report dated February 12, 1996 and submitted March 19, 1996. In general, the report does not provide sufficient documentation of the activities conducted. This is further discussed below.

GENERAL COMMENTS

1. Remedial Action Completion Reports must be certified, signed and stamped by a registered engineer who oversaw the remedial activities.
2. A more detailed description of the following activities must be included:
 - o handling of the excavated soil. The procedures used for handling the excavated soils and loading it into the trucks must be discussed. The procedures used to decontaminate the trucks and to prevent contamination of the trucks (e.g., use of liners) should also be discussed.
 - o transportation of the excavated soil. The report indicates that 4,700 cubic yards of soils were transported by truck to ECDC in Utah. The manifests submitted with the report indicate that the excavated soils were sent by rail car. The transportation routes for the trucks must be included. Please discuss whether manifests were required for transportation of the excavated soils to the rail car loading location.
 - o storage of excavated soil. The soil was excavated on November 13 through November 16, 1995. The manifests indicate that the soil was put in rail cars on November 16, 1995, November 20, 1995 and December 2, 1995. Please indicate the location and procedures for storing the excavated soil.
 - o health and safety procedures implemented. This should include a discussion of the personal and perimeter air monitoring conducted and the personal protective equipment used. The air monitoring results should also be provided.
 - o traffic control measures implemented.
 - o site restoration activities.

3. As the initial groundwater samples collected, indicated that the Site has impacted groundwater, a discussion of how the groundwater will be addressed should be included.
4. As industrial PRGs were established for this Site, please indicate how industrial use of the facility will be maintained (e.g., land use restrictions).

SPECIFIC COMMENTS

1. Pages 16 and 17, Section 1.5.
 - o It would be useful to discuss the depth of excavation;
 - o the location and depth of the sample collected from the west side of the excavation pit should be included on one of the figures.
 - o the lead level in the groundwater appeared to be well above drinking water standards. Please clarify whether the sample was filtered or unfiltered.
2. Page 20, Section 2.2. Please clarify the rationale for collecting samples from the northern portion of the site at a depth of six feet.
3. Page 21, Section 2.2.3, Paragraph 1.
 - o The rationale for the six foot depth of excavation should be presented.
 - o Please indicate whether the excavation further excavated the area along the west wall of the excavation previously conducted to remove the underground tank. Alternatively, the sample results from the underground tank confirmation sampling should be included in the confirmation sampling results.
4. Page 22, bullet 2.
 - o Please indicate the location of the air monitoring station. Please also discuss the frequency of sampling and analyzing the air at this station.
 - o Please indicate whether sampling for chemicals other than particulates was conducted.
 - o Please indicate whether the water truck was used.
5. Page 23, Section 3.1, Paragraph 1.
 - o Please indicate what precautions were taken for workers conducting the sampling inside the excavation.

- o Please indicate how duplicate samples were collected.
6. Page 28, Section 4.2.1. Please discuss the results of the duplicate sampling and draw appropriate conclusions regarding the results.
 7. Pages 28 and 29, Section 4.2.2. All three of the equipment rinsate samples detected chemicals. Therefore, please also discuss the following:
 - o when each of the rinsate samples were collected.
 - o the source of the purified water used to conduct the distilled water rinse.
 - o Rationale is provided for the presence of some of the compounds detected in the equipment blanks. However, this rationale does not account for the presence of all the contaminants nor for levels of the contaminants detected. Please clarify whether it is also possible that the results indicate faulty decontamination procedures.
 - o The discussion should include levels in the same units. Within this section, there is a tendency to discuss the levels detected in the equipment blanks in units of mg/l and levels contained in typical water in units of ug/l. This could lead to inappropriate comparisons. Please revise this discussion as indicated.
 8. Page 34, Section 5.5, bullet 1. Please delete. Total threshold limit concentrations or TTCs are not health-based criteria. Therefore, this is an inappropriate comparison.
 9. Table 4-1. Please clarify the purpose of this table. This table takes the chemicals detected and provides an average concentration and compares this average concentration with PRGs. In many cases, the average concentrations are above the applicable PRGs or PRGs are not provided.
 10. Please clarify the discrepancies between the maximum concentrations listed in Table 4-1 and those in Table 5-1. For example, the maximum concentration of benzene is given as 26 mg/kg in Table 4-1 and 20 mg/kg in Table 5-1. Please also check to see whether this alters any of the 95th percent upper confidence limits of the mean calculations and subsequently, the risk calculations.
 11. Appendix III. The chain-of-custody forms were missing and must be included. The rationale for submission of certain groups of

samples late should have been included in the text. Please also clarify how only the samples for TPH-gasoline with BTEX analysis from the November 14, 1995 sampling event could have been received by the laboratory one day late when only one soil sample was collected for the range of analyses performed.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737
(510) 540-3724



January 17, 1996

Mr. Ace Forsen, Chief
Project Development/Benicia-Martinez Bridge
Caltrans
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

**UNDERGROUND TANK CLOSURE REPORT, FORMER J&A TRUCK REPAIR SITE
(AKA SMILO CHEMICAL), 500 KIRKHAM STREET, CYPRESS
RECONSTRUCTION PROJECT, OAKLAND**

The Department of Toxic Substances Control (DTSC) received Caltrans' letter, dated January 11, 1996 containing the Addendum to the underground tank removal report prepared by Jonas and Associates. The Addendum describes how excavated soils were stockpiled, tested, characterized and disposed, and contains copies of the Uniform Hazardous Waste Manifests that accompanied each shipment. DTSC has reviewed the Addendum and has no further comments regarding this report.

If you have any questions regarding this letter, please contact Lynn Nakashima at (510) 540-3839.

Sincerely,

A handwritten signature in cursive script that reads "Barbara J. Cook".

Barbara J. Cook, P.E., Chief
Site Mitigation Branch

cc: See next page

Mr. Ace Forsen
January 17, 1996
Page Two

cc: Mr. Sum Arigala
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
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DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
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(510) 540-3724



December 27, 1995

Mr. Ace Forsen, Chief
Project Development/Benicia-Martinez Bridge
Caltrans
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

**UNDERGROUND STORAGE TANK CLOSURE REPORT, FORMER J & A TRUCK
REPAIR SITE, 500 KIRKHAM STREET, CYPRESS RECONSTRUCTION PROJECT,
OAKLAND**

The Department of Toxic Substances Control (DTSC) received the above mentioned report prepared by Jonas & Associates Inc. on behalf of Caltrans. The report describes the removal of a 1100 -gallon underground tank and subsequent soil and groundwater sampling. DTSC has reviewed the plan and requests that the rationale for disposing the stockpiled soil as a Class I RCRA hazardous waste be included in the report. This discussion should include the RCRA waste code and/or Toxicity Characteristic Leaching Potential (TCLP) results. In addition, state the final disposal location of the soil as ECDC does not have a RCRA disposal facility in Oakland. Finally, include a copy of the hazardous waste manifest(s) that accompanied the shipment.

If you have any questions regarding this letter, please contact Lynn Nakashima at (510) 540-3839.

Sincerely,

A handwritten signature in cursive script that reads "Barbara J. Cook".

Barbara J. Cook, P.E., Chief
Site Mitigation Branch

cc: See next page

Mr. Ace Forsen
December 27, 1995
Page Two

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Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
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Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

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Caltrans
Environmental Engineering
P.O. Box 23660
Oakland, California 94623-0660

Ms. Kathleen Leiga
Caltrans
Cypress Construction Office
1545 Willow Street
Oakland, California 94607

95 DEC 29 PM 12:57
ENVIRONMENTAL
PROTECTION

Susan - could you check w/ Colie
 on this. Deplet not closed. also
 has an ~~of~~ \$288 refund.
 is this correct?

Tom

12/4/95

Tom,

I don't know what to check. I have
 closed the site 8/30/95 & submitted the worksheet to
 Colie. See attached copy. Susan

Edit Save Add new Delete Reset Previous Next Quit

Site #: 3546	StID#: 2265	LookUp-PAYOR #: 611	Sitelst: 3813, 3546,
Site Name: J & A Truck Repair		Jonas & Assoc.	3545, 1284,
Address: 500 Kirkham St		Address: 2815 Mitchell Dr #209	
City: Oakland	Zip: 94607	City: Walnut Creek	CA Zip: 94598
Contact:		Contact: Mr Mark Jonas	
Phone #: 286-0670		Phone #: 510-933-5360	

Code:
 Unauthorized Release? (y/n) Receipt #'s: 759246, 759246
 Date Site Complete: [REDACTED] Type List:
 Payor Links: 611-a T,R

PROJ#	DATE:	RCPT#:	CHECK #:	\$AMOUNT	Type:	#TANKS	DATE DEP	COMPLETE	INSP
3546A	08/08/95	759246	5765	603.00	R	1	08/30/95		CL
3546A	08/08/95				T		08/30/95		CL

LOP - RECORD CHANGE REQUEST FORM

printed:
11/30/95

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

Insp: SH

AGENCY # : 10000 SOURCE OF FUNDS: F
StID : 2265 LOC:
SITE NAME: J & A Truck Repair
ADDRESS : 500 Kirkham St
CITY/ZIP : Oakland 94607

SUBSTANCE: 12034

DATE REPORTED : 08/30/95
DATE CONFIRMED: 08/30/95
MULTIPLE RPs : N

SITE STATUS

CASE TYPE: S CONTRACT STATUS: 2 PRIOR CODE: 2B4 EMERGENCY RESP:
RP SEARCH: S DATE COMPLETED: 08/31/95
PRELIMINARY ASMNT: U DATE UNDERWAY: DATE COMPLETED:
REM INVESTIGATION: DATE UNDERWAY: DATE COMPLETED:
REMEDIAL ACTION: DATE UNDERWAY: DATE COMPLETED:
POST REMED ACT MON: DATE UNDERWAY: DATE COMPLETED:

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 08/31/95
LUFT FIELD MANUAL CONSID: 2HSCA
CASE CLOSED: DATE CASE CLOSED:
~~DATE EXCAVATION STARTED : 08/30/95~~ ~~REMEDIAL ACTIONS TAKEN: ED-~~

-- RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Mr. Joel Howie
COMPANY NAME: Caltrans Environmental Engr.
ADDRESS: P O Box 23660
CITY/STATE: Oakland, California 94623-0660

INSPECTOR VERIFICATION:

NAME _____ SIGNATURE _____ DATE _____

DATA ENTRY INPUT:

Name/Address Changes Only

Case Progress Changes

ANPPGMS _____ LOP _____ DATE _____

LOP _____ DATE _____

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

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.	
REPORT DATE 1 <u>1</u> / 1 <u>1</u> / 4 <u>9</u> / 5 <u>5</u>		CASE #			
REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Frank Cannizzoro		PHONE (510) 286-0670	SIGNATURE <i>Kate Albin</i>	
	REPRESENTING <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER		COMPANY OR AGENCY NAME Caltrans <i>for Frank Cannizzoro</i>		
	ADDRESS 1121 7th Street, Oakland, CA 94607				
RESPONSIBLE PARTY	NAME CALTRANS/ Former J&A Truck Repair		CONTACT PERSON Caltrans, Frank Cannizzoro	PHONE (510) 286-0670	
	ADDRESS 500 Kirkham Street, Oakland, CA 94607 also Caltrans: 1121 7th St., Oakland, CA 94607				
SITE LOCATION	FACILITY NAME (IF APPLICABLE) Former J&A Truck Repair		OPERATOR Caltrans/Former J&A Truck	PHONE (510) 286-0670	
	ADDRESS 500 Kirkham Street, Oakland, CA 94607				
	CROSS STREET 5th Street		CITY Alameda	STATE	ZIP
IMPLEMENTING AGENCIES	LOCAL AGENCY Alameda County Health Care Services		CONTACT PERSON Ms. Susan Hugo	PHONE (510) 567-6780	
	REGIONAL BOARD			PHONE ()	
SUBSTANCES INVOLVED	(1) NAME Petroleum Hydrocarbons		QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN		
	(2)		<input type="checkbox"/> UNKNOWN		
DISCOVERY/ABATEMENT	DATE DISCOVERED M M / D D / Y Y 9 / 5		HOW DISCOVERED <input type="checkbox"/> TANK TEST <input type="checkbox"/> TANK REMOVAL <input checked="" type="checkbox"/> OTHER Site Assessment		
	DATE DISCHARGE BEGAN M M / D D / Y Y <input checked="" type="checkbox"/> UNKNOWN		METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input checked="" type="checkbox"/> REMOVE CONTENTS <input checked="" type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING		
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE 0 / 8 / 3 / 0 / 9 / 5		<input type="checkbox"/> REPAIR TANK <input type="checkbox"/> CLOSE TANK & FILL IN PLACE <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> REPLACE TANK <input type="checkbox"/> OTHER		
SOURCE/CAUSE	SOURCE OF DISCHARGE <input checked="" type="checkbox"/> TANK LEAK <input type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER		CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL <input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER		
	CASE TYPE CHECK ONE ONLY <input type="checkbox"/> UNDETERMINED <input checked="" type="checkbox"/> SOIL ONLY <input checked="" type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)				
CURRENT STATUS	CHECK ONE ONLY <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION <input type="checkbox"/> LEAK BEING CONFIRMED <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input checked="" type="checkbox"/> CLEANUP UNDERWAY				
	REMEDIAL ACTION CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS) <input checked="" type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> VENT SOIL (VS) <input type="checkbox"/> VACUUM EXTRACT (VE) <input type="checkbox"/> OTHER (OT) <u>Long term groundwater monitoring</u>				
COMMENTS					

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

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED ? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.
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REPORT DATE 1 M 1 D 4 Y 9 V 5	CASE #	SIGNED	DATE
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REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Frank Cammissoro	PHONE (510) 286-0670	SIGNATURE <i>Frank Cammissoro</i>
	REPRESENTING <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD	COMPANY OR AGENCY NAME Caltrans
	ADDRESS 1121 7th Street, Oakland, CA 94607		

RESPONSIBLE PARTY	NAME Caltrans - Caltrans	CONTACT PERSON Caltrans, Frank Cammissoro	PHONE (510) 286-0670
	ADDRESS 500 Kirham Street, Oakland, CA 94607 also Caltrans: 1121 7th St., Oakland, CA 94607		

SITE LOCATION	FACILITY NAME (IF APPLICABLE) Former J&A Truck Repair	OPERATOR Caltrans/Former J&A Truck	PHONE (510) 286-0670
	ADDRESS 500 Kirham Street, Oakland, CA 94607		
	CROSS STREET 5th Street		

IMPLEMENTING AGENCIES	LOCAL AGENCY Alameda County Health Care Services	AGENCY NAME	CONTACT PERSON Ms. Susan Hugo	PHONE (510) 567-6780
	REGIONAL BOARD			PHONE ()

SUBSTANCES INVOLVED	(1) NAME Petroleum Hydrocarbons	QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN
	(2)	<input type="checkbox"/> UNKNOWN

DISCOVERY/ABATEMENT	DATE DISCOVERED 9 Y 5 M	HOW DISCOVERED <input type="checkbox"/> TANK TEST <input type="checkbox"/> TANK REMOVAL <input checked="" type="checkbox"/> OTHER Site Assessment	<input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS
	DATE DISCHARGE BEGAN <input checked="" type="checkbox"/> UNKNOWN	METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input checked="" type="checkbox"/> REMOVE CONTENTS <input checked="" type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING	
	HAS DISCHARGE BEEN STOPPED ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE 0 8 3 0 D 9 Y 5 M	<input type="checkbox"/> REPAIR TANK <input type="checkbox"/> CLOSE TANK & FILL IN PLACE <input type="checkbox"/> CHANGE PROCEDURE	<input type="checkbox"/> REPLACE TANK <input type="checkbox"/> OTHER

SOURCE/ CAUSE	SOURCE OF DISCHARGE <input checked="" type="checkbox"/> TANK LEAK <input type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER	CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL <input type="checkbox"/> OTHER
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CASE TYPE	CHECK ONE ONLY <input type="checkbox"/> UNDETERMINED <input checked="" type="checkbox"/> SOIL ONLY <input checked="" type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)
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CURRENT STATUS	CHECK ONE ONLY <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION <input type="checkbox"/> LEAK BEING CONFIRMED <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input checked="" type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input checked="" type="checkbox"/> CLEANUP UNDERWAY
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REMEDIAL ACTION	CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS) <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> VACUUM EXTRACT (VE) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> VENT SOIL (VS) <input type="checkbox"/> OTHER (OT) Long term groundwater monitoring
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COMMENTS	
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DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737
(510) 540-3724



STIP 2265

November 9, 1995

Mr. Ace Forsen, Chief
Project Development/Benicia-Martinez Bridge
Caltrans
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

REMEDIAL DESIGN AND IMPLEMENTATION PLAN, J&A TRUCK REPAIR (AKA SMILO CHEMICAL), 500 KIRKHAM STREET, CONTRACT "A", CYPRESS RECONSTRUCTION PROJECT, OAKLAND

The Department of Toxic Substances Control (DTSC) received the Addendum to the Remedial Design and Implementation Plan (RDIP) prepared by Jonas & Associates Inc. on behalf of Caltrans. The Addendum adequately addresses the concerns contained in DTSC's letter dated October 20, 1995; therefore, the RDIP is approved and remediation activities may commence.

If you have any questions regarding this letter, please contact Lynn Nakashima at (510) 540-3839.

Sincerely,

A handwritten signature in cursive script that reads "Barbara J. Cook".

Barbara J. Cook, P.E., Chief
Site Mitigation Branch

cc: See next page

Mr. Ace Forsen
November 9, 1995
Page Two

ENVIRONMENTAL
PROTECTION

95 NOV 14 PM 2:46

cc: Mr. Sum Arigala
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
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(510) 540-3724



October 20, 1995

Mr. Ace Forsen, Chief
Project Development/Benicia-Martinez Bridge
Caltrans
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

COMMENTS TO REMEDIAL DESIGN AND IMPLEMENTATION PLAN (RDIP), J&A TRUCK REPAIR (AKA SMILO CHEMICAL) SITE, 500 KIRKHAM STREET, CYPRESS RECONSTRUCTION PROJECT, OAKLAND

The Department of Toxic Substances Control (DTSC) has received the above mentioned plan prepared by Jonas & Associates, Inc. on behalf of Caltrans. In general, the plan is well written and contains most of the elements required in a RDIP. After review of the document, DTSC has the following comments to the plan and site specific health and safety plan:

Remedial Design and Implementation Plan

1. State whether the underground storage tank located at the site will be excavated prior to or during soil excavation. If the tank will be removed during the soil excavation, then the general process that will be used to remove the tanks should be included, along with the name of the regulatory agency that will oversee the removal.
2. Page 1, Introduction: Reference to the Remedial Action Plan (RAP) should be included in the introduction. The introduction should include a list of all remedial alternatives considered in the RAP, a summary of the selected alternative and the rationale for its selection.
3. Page 13, Section 2.1, Work Performed Prior to Excavation Activities: This section states that underground utility lines will be marked and identified by Caltrans. The methods that Caltrans will be using to identify and mark the areas need to be included in this section or as an appendix to the report.
4. Page 14, Section 2.4, Waste Containment: Identify the location of the waste containment area on site or include the criteria that will be used to locate the site.
5. Page 18, first paragraph: Identify who will be responsible for backfilling the site after

Mr. Ace Forsen
October 20, 1995
Page Two

excavation is completed.

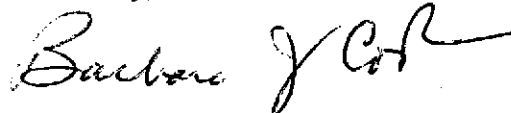
6. Page 18, Section 3.3.1, Wastewater: State the name of the "other contractor" who will be responsible for treating the wastewater. In addition, describe when the change in possession of the wastewater will be made and the procedures that will be used to make this change.
7. Figure APV-1: Change the ECDC Landfill location from California to Utah.

Health and Safety Plan

8. Page 4, Section 1.5, Health and Safety Plan Availability: Add that the HASP will be available on-site.
9. Page 18, Section 7.3.9, Weather and Heat Stress: DTSC strongly urges, at a minimum, adherence to the heat stress monitoring protocols and work/rest regimens outlined in the Heat Stress section of the American Conference of Governmental Industrial Hygienist (ACGIH) Threshold Limit Value (TLV) booklet for Chemical Substances and Physical Agents (1994-1995). The heat stress section of the HASP does not specify a work/rest cycle or the type, frequency, and associated action levels for metabolic monitoring (i.e. pulse or body temperature measurements).

If you have any questions regarding these comments, please call Lynn Nakashima at (510) 540-3839.

Sincerely,



Barbara J. Cook, P.E., Chief
Site Mitigation Branch

cc: See next page

Mr. Ace Forsen
October 20, 1995
Page Three

cc: Mr. Sum Arigala
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Mr. Joel Howie
Caltrans
Environmental Engineering
P.O. Box 23660
Oakland, California 94623-0660

Ms. Kathleen Leiga
Caltrans
Cypress Construction Office
1545 Willow Street
Oakland, California 94607

9/6/95
 Norma,
 Tank was removed on 8/30/95
 Susan



STATE OF CALIFORNIA
 STATE WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A
 COMPLETE THIS FORM FOR EACH FACILITY/SITE

<input type="checkbox"/> ONE ITEM	<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input checked="" type="checkbox"/> 7 PERMANENTLY CLOSED SITE
-----------------------------------	---	---	---	--	---

I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)

DBA OR FACILITY NAME Cypress Freeway/Former: J&A Truck Repair		NAME OF OPERATOR Caltrans/Formerly J&A Truck Repair	
ADDRESS 500 Kirkham Street		NEAREST CROSS STREET 5th Street	PARCEL # (OPTIONAL)
CITY NAME Oakland		STATE CA	ZIP CODE 94607
<input checked="" type="checkbox"/> BOX TO INDICATE <input type="checkbox"/> CORPORATION <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> LOCAL-AGENCY DISTRICTS* <input type="checkbox"/> COUNTY-AGENCY* <input checked="" type="checkbox"/> STATE-AGENCY* <input type="checkbox"/> FEDERAL-AGENCY*		* If owner of UST is a public agency, complete the following: name of Supervisor of division, section, or office which operates the UST Caltrans Construction Div.	
TYPE OF BUSINESS <input type="checkbox"/> 1 GAS STATION <input type="checkbox"/> 2 DISTRIBUTOR <input type="checkbox"/> 3 FARM <input type="checkbox"/> 4 PROCESSOR <input checked="" type="checkbox"/> 5 OTHER		<input type="checkbox"/> IF INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE 1
		E. P. A. I. D. # (optional) Cal 000123236	

EMERGENCY CONTACT PERSON (PRIMARY)		EMERGENCY CONTACT PERSON (SECONDARY) - optional	
DAYS: NAME (LAST, FIRST) Caltrans Attn. Ray Pang	PHONE # WITH AREA CODE (510) 286-5281	DAYS: NAME (LAST, FIRST) Caltrans Attn. Kate Leiga	PHONE # WITH AREA CODE
NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE	NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)

NAME Caltrans Attn. Ray Pang		CARE OF ADDRESS INFORMATION	
MAILING OR STREET ADDRESS 1121 7th Street		<input checked="" type="checkbox"/> box to indicate <input type="checkbox"/> CORPORATION <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> LOCAL-AGENCY <input checked="" type="checkbox"/> STATE-AGENCY <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> COUNTY-AGENCY <input type="checkbox"/> FEDERAL-AGENCY	
CITY NAME Oakland		STATE CA	ZIP CODE 94607
		PHONE # WITH AREA CODE (510) 286-5281	

III. TANK OWNER INFORMATION - (MUST BE COMPLETED)

NAME OF OWNER Caltrans Attn. Ray Pang		CARE OF ADDRESS INFORMATION	
MAILING OR STREET ADDRESS 1121 7th Street		<input checked="" type="checkbox"/> box to indicate <input type="checkbox"/> CORPORATION <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> LOCAL-AGENCY <input checked="" type="checkbox"/> STATE-AGENCY <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> COUNTY-AGENCY <input type="checkbox"/> FEDERAL-AGENCY	
CITY NAME Oakland		STATE CA	ZIP CODE 94607
		PHONE # WITH AREA CODE (501) 286-5281	

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.

TY (TK) HQ **44-032062**

V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) - IDENTIFY THE METHOD(S) USED

<input checked="" type="checkbox"/> box to indicate	<input type="checkbox"/> 1 SELF-INSURED	<input type="checkbox"/> 2 GUARANTEE	<input type="checkbox"/> 3 INSURANCE	<input type="checkbox"/> 4 SURETY BOND
	<input type="checkbox"/> 5 LETTER OF CREDIT	<input type="checkbox"/> 6 EXEMPTION	<input checked="" type="checkbox"/> 99 OTHER State Agency	

VI. LEGAL NOTIFICATION AND BILLING ADDRESS Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING: I. II. III.

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

OWNER'S NAME (PRINTED & SIGNED) CALTRANS	OWNER'S TITLE	DATE MONTH/DAY/YEAR 8/30/95
--	---------------	---------------------------------------

LOCAL AGENCY USE ONLY

COUNTY # <input type="text"/>	JURISDICTION # <input type="text"/>	FACILITY # <input type="text"/>
LOCATION CODE - OPTIONAL	CENSUS TRACT # - OPTIONAL	SUPVISOR - DISTRICT CODE - OPTIONAL

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.

OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B



COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM	<input type="checkbox"/> 1 NEW PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input type="checkbox"/> 7 PERMANENTLY CLOSED ON SITE
	<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 6 TEMPORARY TANK CLOSURE	<input checked="" type="checkbox"/> 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: **CYPRESS FREEWAY/FORMER J&A TRUCK REPAIR**

I. TANK DESCRIPTION COMPLETE ALL ITEMS -- SPECIFY IF UNKNOWN

A. OWNER'S TANK I.D.#	B. MANUFACTURED BY: UNKNOWN
C. DATE INSTALLED (MO/DAY/YEAR) UNKNOWN	D. TANK CAPACITY IN GALLONS: - 2000 GALLONS

II. TANK CONTENTS IF A-1 IS MARKED, COMPLETE ITEM C.

A. <input checked="" type="checkbox"/> 1 MOTOR VEHICLE FUEL	B. <input type="checkbox"/> 1 PRODUCT	C. <input type="checkbox"/> 1a REGULAR UNLEADED
<input type="checkbox"/> 2 PETROLEUM	<input type="checkbox"/> 2 WASTE	<input type="checkbox"/> 1b PREMIUM UNLEADED
<input type="checkbox"/> 3 CHEMICAL PRODUCT		<input type="checkbox"/> 2 LEADED
<input type="checkbox"/> 4 OIL		<input type="checkbox"/> 3 DIESEL
<input type="checkbox"/> 80 EMPTY		<input type="checkbox"/> 4 GASAHOL
<input type="checkbox"/> 95 UNKNOWN		<input type="checkbox"/> 5 JET FUEL
		<input type="checkbox"/> 6 AVIATION GAS
		<input type="checkbox"/> 7 METHANOL
		<input type="checkbox"/> 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED **GASOLINE (TYPE UNKNOWN)** C. A. S. #:

III. TANK CONSTRUCTION MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM	B. TANK MATERIAL (Primary Tank)	C. INTERIOR LINING	
<input type="checkbox"/> 1 DOUBLE WALL	<input type="checkbox"/> 1 BARE STEEL	<input type="checkbox"/> 1 RUBBER LINED	
<input checked="" type="checkbox"/> 2 SINGLE WALL	<input type="checkbox"/> 2 STAINLESS STEEL	<input type="checkbox"/> 2 ALKYD LINING	
<input type="checkbox"/> 3 SINGLE WALL WITH EXTERIOR LINER	<input type="checkbox"/> 3 FIBERGLASS	<input type="checkbox"/> 3 EPOXY LINING	
<input type="checkbox"/> 4 SECONDARY CONTAINMENT (VAULTED TANK)	<input type="checkbox"/> 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC	<input type="checkbox"/> 4 PHENOLIC LINING	
<input type="checkbox"/> 95 UNKNOWN	<input type="checkbox"/> 5 CONCRETE	<input type="checkbox"/> 5 GLASS LINING	
<input type="checkbox"/> 99 OTHER STEEL WITH TAR COATING	<input type="checkbox"/> 6 POLYVINYL CHLORIDE	<input type="checkbox"/> 6 UNLINED	
	<input type="checkbox"/> 7 ALUMINUM	<input checked="" type="checkbox"/> 95 UNKNOWN	
	<input type="checkbox"/> 8 100% METHANOL COMPATIBLE W/FRP	<input type="checkbox"/> 99 OTHER	
	<input type="checkbox"/> 9 BRONZE	IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___	
	<input type="checkbox"/> 10 GALVANIZED STEEL		
	<input type="checkbox"/> 95 UNKNOWN		
	<input type="checkbox"/> 99 OTHER STEEL WITH TAR COATING		
D. CORROSION PROTECTION	E. SPILL AND OVERFILL		
<input type="checkbox"/> 1 POLYETHYLENE WRAP	SPILL CONTAINMENT INSTALLED (YEAR) _____		
<input checked="" type="checkbox"/> 2 COATING	OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____		
<input type="checkbox"/> 3 VINYL WRAP			
<input type="checkbox"/> 4 FIBERGLASS REINFORCED PLASTIC			
<input type="checkbox"/> 5 CATHODIC PROTECTION			
<input type="checkbox"/> 91 NONE			
<input type="checkbox"/> 95 UNKNOWN			
<input type="checkbox"/> 99 OTHER			

IV. PIPING INFORMATION CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE	B. CONSTRUCTION	C. MATERIAL AND CORROSION PROTECTION	D. LEAK DETECTION
A U 1 SUCTION	A U 1 SINGLE WALL	A U 1 BARE STEEL	<input type="checkbox"/> 1 AUTOMATIC LINE LEAK DETECTOR
A U 2 PRESSURE	A U 2 DOUBLE WALL	A U 2 STAINLESS STEEL	<input type="checkbox"/> 2 LINE TIGHTNESS TESTING
A U 3 GRAVITY	A U 3 LINED TRENCH	A U 3 POLYVINYL CHLORIDE (PVC)	<input type="checkbox"/> 3 INTERSTITIAL MONITORING
A U 99 OTHER	A U <u>95</u> UNKNOWN	A U 4 FIBERGLASS PIPE	<input type="checkbox"/> 99 OTHER UNKNOWN
	A U 99 OTHER	A U 5 ALUMINUM	
		A U 6 CONCRETE	
		A U 7 STEEL W/ COATING	
		A U <u>95</u> UNKNOWN	
		A U 8 100% METHANOL COMPATIBLE W/FRP	
		A U 99 OTHER	

V. TANK LEAK DETECTION

<input type="checkbox"/> 1 VISUAL CHECK	<input type="checkbox"/> 2 INVENTORY RECONCILIATION	<input type="checkbox"/> 3 VADOZE MONITORING	<input type="checkbox"/> 4 AUTOMATIC TANK GAUGING	<input type="checkbox"/> 5 GROUND WATER MONITORING
<input type="checkbox"/> 6 TANK TESTING	<input type="checkbox"/> 7 INTERSTITIAL MONITORING	<input type="checkbox"/> 91 NONE	<input checked="" type="checkbox"/> 95 UNKNOWN	<input type="checkbox"/> 99 OTHER

VI. TANK CLOSURE INFORMATION

1. ESTIMATED DATE LAST USED (MO/DAY/YR) 1970S	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING 400 GALLONS	3. WAS TANK FILLED WITH INERT MATERIAL? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
---	--	---

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

APPLICANT'S NAME (PRINTED & SIGNATURE) CALTRANS	DATE 8/30/95
--	---------------------

LOCAL AGENCY USE ONLY THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #
PERMIT NUMBER	PERMIT APPROVED BY/DATE		PERMIT EXPIRATION DATE	

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED.
FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

Norma, please transfer to LOP.

Thanks, Susan

STID 2265
TMS 8.31.95
(no)

DATE: 8/30/95
TO : Local Oversight Program
FROM: SUSAN
SUBJ: Transfer of Eligible Oversight Case

Site name: Former J & A Truck Repair

Address: 500 KIRKHAM ST. city OAKLAND zip 94607

Closure plan attached? Y N DepRef remaining \$ _____

DepRef Project # _____ STID #(if any) 2265

Number of Tanks: 1 removed? Y N Date of removal 8/30/95

Leak Report filed? Y N Date of Discovery _____

Samples received? Y N Contamination: _____

Petroleum Y N Types: Avgas Jet leaded unleaded Diesel
fuel oil waste oil kerosene solvents

Monitoring wells on site _____ Monitoring schedule? Y N

LUFT category 1 2 3 * H S C A R W G O

Briefly describe the following:

Preliminary Assessment _____

Remedial Action _____

Post Remedial Action Monitoring _____

Enforcement Action _____

ALAMEDA COUNTY HAZARDOUS MATERIALS DIVISION
DEPOSIT / REFUND ACCOUNT SHEET

printed 08/08/95

SITE INFORMATION

J & A Truck Repair
500 Kirkham St
Oakland 94607
Site Contact:
Site Phone : 286-0670

StID: 2265 Site#: 3546
PROJECT#: 3546A
PROJECT TYPE: *** R ***
INSP: Susan Hugo
ACCT. SHEET PG #: _____

PROPERTY OWNER INFORMATION

Owner Contact:
Owner Phone :

PAYOR INFORMATION

Jonas & Assoc.
2815 Mitchell Dr #209
Walnut Creek CA 94598 #611
Payor Contact: Mr Mark Jonas
Payor Phone : 510-933-5360

Date	Action Taken	Time		Hours Spent/Depstd	Hour Balnce	Money	
		In	Out			Spent/Depositd	Money Balance
08/08/95	Rcpt# 759246 Deposit of \$603.00 @ \$90/hour			+6.69	+6.69	\$603.00	\$603.00
08/08/95	Admin. Charge: 1 hour			1.00	5.69	\$513.00	\$513.00
8/10/95	Review closure plan			1.0			
8/16/95	Review closure plan / missing info.			0.5			
8/16/95	Talked to Romina Gross re. missing info			0.4			
8/17/95	Review submitted info. + approved permit			0.4			
8/30/95	Transfer to LOP.			0.2			
8/30/95	Submitted to District.						
				2.5	3.19		

UPON COMPLETION OF PROJECT

PROJ COMPLETED BY : Susan L Hugo ATTACH: State Forms A, B & C
 Billing Adjustment*
DATE OF COMPLETION : 8/30/95 DATE SENT TO BILLING: _____
TOTAL COST OF PROJECT: _____ REFUND AMOUNT: _____ Rev. 5/95

* Billing adjustment forms needed when site is in our UST program.

ALAMEDA COUNTY, DEPARTMENT OF
ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

II, III

white -env.health
yellow -facility
pink -files

Site ID # _____ Site Name former J&A Truck Repair Today's Date 8/30/95

Site Address 500 Kirkham St.

City Oakland Zip 94607 Phone _____

MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

- I. Haz. Mat/Waste GENERATOR/TRANSPORTER
- II. Business Plans, Acute Hazardous Materials
- III. Underground Tanks

Manifest # 95-208686

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments:

Hept = tank's transporter
1 - 2000 gal diesel tank
gasoline

O₂ = 1% LEL = 7.5%

Oakland Fire Dept not available; requested
AEDT to oversee removal for their dept
(per Romena Jonas).

Tank ~~has~~ Wrappings present.
Groundwater present in the excavation
Sheen/floating product present.
Tank previously had product (gasoline)
pumped out approx 400 gal.

2 soil samples collected, one from each
end of the tank at the soil/water
interface. Groundwater sample
collected.

Stockpiled soil must be characterized
for disposal.

Transfer to HOP

II, III

II.A BUSINESS PLANS (Title 19)

- 1. Immediate Reporting 2703
- 2. Bus. Plan Stds 25503(b)
- 3. RR Cars > 30 days 25503.7
- 4. Inventory Information 25504(a)
- 5. Inventory Complete 2730
- 6. Emergency Response 25504(b)
- 7. Training 25504(c)
- 8. Deficiency 25505(a)
- 9. Modification 25505(b)

II.B ACUTELY HAZ. MATLS

- 10. Registration Form Filed 25533(a)
- 11. Form Complete 25533(b)
- 12. RMPP Contents 25534(c)
- 13. Implement Sch. Req'd? (Y/N)
- 14. OffSite Conseq. Assess. 25524(c)
- 15. Probable Risk Assessment 25534(d)
- 16. Persons Responsible 25534(g)
- 17. Certification 25534(f)
- 18. Exemption Request? (Y/N) 25534(b)
- 19. Trade Secret Requested? 25538

III. UNDERGROUND TANKS (Title 23)

- General
- 1. Permit Application 25284 (H&S)
 - 2. Pipeline Leak Detection 25292 (H&S)
 - 3. Records Maintenance 2712
 - 4. Release Report 2651
 - 5. Closure Plans 2670

- Method
- 1) Monthly Test
 - 2) Daily Vadose
Semi-annual groundwater
One time soils
 - 3) Daily Vadose
One time soils
Annual tank test
 - 4) Monthly Gndwater
One time soils
 - 5) Daily Inventory
Annual tank testing
Cont pipe leak det
Vadose/gndwater mon.
 - 6) Daily Inventory
Annual tank testing
Cont pipe leak det
 - 7) Weekly Tank Gauge
Annual tank testing
 - 8) Annual Tank Testing
Daily inventory
 - 9) Other _____

- 7. Precip Tank Test 2643
Date: _____
- 8. Inventory Rec. 2644
- 9. Soil Testing 2646
- 10. Ground Water 2647

- Monitoring for Existing Tanks
- 11. Monitor Plan 2632
 - 12. Access, Secure 2634
 - 13. Plans Submit 2711
Date: _____
 - 14. As Built 2635
Date: _____

Contact: Romena Jonas
Title: Principal
Signature: Romena Jonas

Inspector: _____
Signature: Juan L. Hugg



8/30/95
G.A. Truck Repair
500 Kirkham



8/30/95
G.A. Truck Repair
500 Kirkham

STID 2265

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

1131 HARBOR BAY PARKWAY
R-250

ALAMEDA, CA 94502

Project Specialist (print) SUSAN K. HIGG

ACCEPTED

Underground Storage Tank Closure Permit Application

Alameda County Division of Hazardous Materials
80 Swan Way, Suite 200,
Oakland, CA 94621
Telephone: (510) 271-4320

These closure/removal plans have been received and found to be acceptable and essentially meet the requirements of State and Local Health Laws. Changes to your closure plans indicated by this Department are to assure compliance with State and local laws; the first proposed herein is now released for issuance of any required building permits for construction/destructions. One copy of the accepted plans must be on the job and available to all contractors and craftsmen involved with the removal. Any changes or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspections Department to determine if such changes meet the requirements of State and local laws.

Notify this Department at least 72 hours prior to the following required inspections: *

- Removal of Tank(s) and Piping
- Sampling
- Final Inspection

Issuance of a) permit to operate, b) permanent site closure, is dependent on compliance with accepted plans and all applicable laws and regulations.

*THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS

** Please make a note of change made on pages 1-5 of C.*

*Suzanne F. Arge
8/17/95*

Forms A & B to be submitted at the site.

UNDERGROUND TANK CLOSURE PLAN

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

1. Business Name Barney Smilo (Subleased to J&A Truck Repair)
Business Owner J&A Truck Repair
2. Site Address 500 Kirkham Street
City Oakland, CA Zip 94607 Phone _____
3. Mailing Address _____
City _____ Zip _____ Phone (510) 286-0670
4. Land Owner Caltrans - Ray Pang
Address 1121 7th Street, Oakland City, State CA Zip 94607
5. Generator name under which tank will be manifested Caltrans

EPA I.D. No. under which tank will be manifested CAL000123236 ✓

** A Fair Certificate must be at the site at all times.*

6. Contractor Performance Excavators Inc.
Address 3060 Kerner Blvd., Suite A
City San Rafael, CA 94901 Phone (415) 257-4640
License Type A-Haz ID# 667433 9/2 3/31/97

7. Consultant Jonas & Associates Inc.
Address 2815 Mitchell Drive, Suite 209
City Walnut Creek, CA 94598 Phone (510) 933-5360

8. Contact Person for Investigation
Name Mark Warner Title Project Manager
Phone (415) 257-4640

9. Number of tanks being closed under this plan 1
Length of piping being removed under this plan Unknown
Total number of tanks at facility _____

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

** Underground tanks are hazardous waste and must be handled **
as hazardous waste

a) Product/Residual Sludge/Rinsate Transporter

Name H&H Environmental EPA I.D. No. CAD004771168
Hauler License No. 0334 License Exp. Date 1/31/96
Address Terry A. Francois Blvd.
City San Francisco State CA Zip 94107-2106

b) Product/Residual Sludge/Rinsate Disposal Site

Name PRC EPA I.D. No. CAD083166728
Address 13331 N. Highway 33
City Patterson State CA Zip 95363

c) Tank and Piping Transporter

Name H&H Environmental EPA I.D. No. CAD000471168
Hauler License No. 0334 License Exp. Date 1/31/96
Address Terry A. Francois Blvd.
City San Francisco State CA Zip 95363

d) Tank and Piping Disposal Site

Name H&H Environmental EPA I.D. No. CAD00471168
Address Terry A. Francois Blvd.
City San Francisco State CA Zip 95363

11. Experienced Sample Collector

Name Mark Jonas, Ellis Ishaya
Company Jonas & Associates Inc.
Address 2815 Mitchell Drive, Suite 209
City Walnut Creek State CA Zip 94598 Phone (510) 933-5360

12. Laboratory

Name ChromaLab, Inc.
Address 1220 Quarry Lane
City Pleasanton State CA Zip 94566-4756
State Certification No. 1094

13. Have tanks or pipes leaked in the past? Yes [] No [] UNKNOWN

If yes, describe. _____

14. Describe methods to be used for rendering tank inert

Inert each tank with 1.5 pounds of solid carbon dioxide (dry ice) for each 100 gallons of the tank volume.

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be plugged.

The Bay Area Air Quality Management District (771-6000), along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of explosion proof combustible gas meters to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas meter on site to verify tank inertness.

15. Tank History and Sampling Information

Tank		Material to be sampled (tank contents, soil, ground-water, etc.)	Location and Depth of Samples
Capacity	Use History (see instructions)		
2,000	Diesel <i>gasoline</i>	Soil <i>ground water must be sampled if present.</i>	beneath the tank at a maximum of two feet below the native soil/backfill interface. <i>one soil sample collected from back end of the Tank</i>
<i>One soil sample must be collected underneath the dispenser.</i>			

One soil sample must be collected for every 20 feet of piping that is removed. A ground water sample must be collected should any ground water be present in the excavation.

Excavated/Stockpiled Soil	
Stockpiled Soil Volume (Estimated)	Sampling Plan <i>properly characterized & disposed</i>

g Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting. *g*

16. Chemical methods and associated detection limits to be used for analyzing samples

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Method Number	Method Detection Limit
<i>g</i> TPH G TPH D BTEX	GCFID 5030 GCFID 3550 5030	8015 8015 8020	1.0 PPM 1.0 PPM 5.0 PPB <i>g</i>

17. Submit Site Health and Safety Plan (See Instructions) See Enclosure.

18. Submit Worker's Compensation Certificate copy

Name of Insurer Republic Indemnity

19. Submit Plot Plan (See Instructions)

20. Enclose Deposit (See Instructions)

21. Report any leaks or contamination to this office within 5 days of discovery. The report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report form. (see Instructions)

22. Submit a closure report to this office within 60 days of the tank removal. This report must contain all the information listed in item 22 of the instructions.

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true.

I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

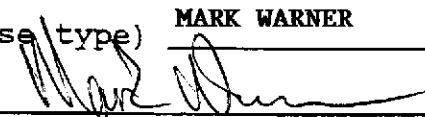
I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

Signature of Contractor

Name (please type) MARK WARNER

Signature 

Date 8-1-95

Signature of Site Owner or Operator

Name (please type) Caltrans - Ray Pang

Signature 

Date 8-1-95

Estimated boundary
of area with highest
contamination

HEALTH AND SAFETY PLAN

ADDENDUM A

UNDERGROUND STORAGE TANK REMOVAL

CONTRACT NUMBER: 04-192204
CYPRESS FREEWAY RE-ALIGNMENT, CONTRACT A
STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
OAKLAND, CALIFORNIA

Support Zone

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Access Control

Contamination Reduction Cor

Contamination Reduction Zone (CRZ)

Exclusion Zone

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1.0 Introduction

This Tank Removal Plan was developed for Performance Excavators, Inc. by Rothwell Consulting Group (RCG). This plan pertains to site remediation operations performed for the prime contractor, MCM Construction, Inc., by Performance Excavators in contaminated areas of the Cypress Freeway Re-alignment Project, Section B, located in the City of Oakland, County of Alameda.

This Plan establishes the policies and procedures that protect the workers and the general public from potential health and safety hazards posed at this site. All contaminated soil removal activities will be conducted in a manner that minimizes the probability of injury, illness, property damage, or damage to the environment and will be performed in accordance with Performance Excavators' Injury and Illness Prevention Program. This Plan is prepared in accordance with and in reference to the following regulations and guidelines:

- United States Department of Labor, OSHA standards, specifically:
 - Title 29 CFR Part 1910.120 - Hazardous Waste Site Operations and Emergency.
 - Title 29 CFR Part 1926 - Health and Safety Regulations for Construction
- California Occupational Health and Safety Regulations, specifically:
 - Title 8 CCR §5192 - Hazardous Waste Site Operations and Emergency Response
 - Title 8 CCR §5094 - Hazard Communication
 - Title 8 CCR §5095-5100 - Hearing Conservation
 - Title 8 CCR Chapter 4, Subchapter 4 - Construction Safety Orders
 - Title 8 CCR §3203 - Injury and Illness Prevention Program
- United States Environmental Protection Agency's Standard Operating Safety Guides, July 1988.
- NIOSH/OSHA/USCG/EPA Occupational Health and Safety Guidance Manual for Hazardous Waste Activities, October 1985.
- Performance Excavators' Injury and Illness Prevention Program

Since site conditions are subject to change and unforeseen conditions may arise, amendments or additions may need to be made to this Plan during the course of work. Modifications to this plan can only be made by the Contractor with the assistance of Performance Excavators' Certified Industrial Hygienist.

1.1 Description of Site

Container Freight and J&A Trucking comprise two of the four contaminated areas requiring remediation. Both are located within close proximity to each other on Union Street, 5th Street, and Kirkham Street, respectively, in Oakland, California.

1.1.1 Container Freight Property

There is an abandoned 2000 gallon underground diesel tank on the property located at door No. 12 in front of the building. The tank has dimensions 4 feet in diameter by 9 feet long. The bottom of the tank is 8 feet below ground surface. The site could be contaminated from potential leaks or spills from tank use.

1.1.2 J&A Truck Repair Property

There is a 2000 gallon underground storage tank with dimensions 4 feet in diameter by 9 feet long. The bottom of the tank is 8 feet below ground surface. The site could be contaminated from potential leaks or spills from tank use.

1.2 Site Conditions

1.2.1 Container Freight

Soil

Concentrations of TPH-D were not detected in soil borings at the site; thus, the RWQCB would not classify materials as a hazardous waste (greater than 1,000 mg/kg). However, benzene was found in the area of contamination at 360 ppm. High concentrations of petroleum hydrocarbons could be found during tank removal activities.

Groundwater

TPH-D was not detected above laboratory limits in groundwater at Container Freight sampling location CTF/H-1.

1.2.2 J&A Truck Repair

Soil

An elevated concentration of lead was detected in the soil sample JA/A-1 at 1 foot. The measured lead value was in excess of ten times the STLC of 5.0 mg/L. Upon re-submittal for testing by the WET method, sample JA/A-1 at 1 foot was found to contain lead less than the STLC. No metals were found in excess of the TTLC. Petroleum hydrocarbons were also found at the site. High concentrations of petroleum hydrocarbons could be found during tank removal activities.

1.3 Risk Assessment

Contaminants found during the site investigation pose a potential health threat to employees working on the site during remedial activities. Theoretical airborne

concentrations of total dust required to generate levels of aerosols exceeding their respective permissible exposure limits (and action levels) are shown below in Table 1.

Table 1 - Airborne Dust Concentrations at Which Permissible Exposure Limits Could Be Exceeded

Contaminant	Maximum Concentration Found in the Soil	PEL-TWA (Action Level) [Ceiling Limit]	Total Dust Concentration Above Which PEL Would Be Exceeded
Diesel	20,700 mg/kg	None established	N/A

Based on the type of operations, hazardous levels of airborne petroleum hydrocarbon vapors are possible during the course of work. However, theoretical airborne concentrations of petroleum hydrocarbons are difficult to calculate due to variables such as temperature, humidity, wind speed and direction, and employees' proximity to the contamination. Because of these variables, air monitoring will be performed in areas where petroleum contamination have been identified or is suspected. Proper personal protective equipment shall be worn during tank removal operations.

1.4 Pathways for Hazardous Substance Dispersion

Hazardous substances may have been and could possibly be dispersed from the source by air or groundwater. Further dispersion by air shall be controlled using dust control measures, work zones, and perimeter fencing.

1.5 Health and Safety Plan Availability

This written Health and Safety Plan shall be made available to any contractor or subcontractor or their representative who will be involved with the hazardous waste operation; to employees; to employee designated representatives; to Division representatives, and to personnel of other federal, state, or local agencies with regulatory authority over the site.

2.0 Organizational Structure

The organizational structure part of this Health and Safety Plan establishes the specific chain of command and specifies the overall responsibilities of supervisors and employees. The organizational structure shall be reviewed and updated as necessary to reflect the current status of site operations. The following are the key supervisory personnel:

2.1 Certified Supervisor

----- is named as the general supervisor (or certified supervisor for hazardous substance removal work). He has the responsibility and authority to direct all operations involving hazardous waste and materials.

2.2 Site Safety Officer

----- is named as the Site Safety Officer. He has the responsibility and authority to develop and implement the site health and safety plan and verify compliance.

2.3 Qualified Person

----- is named as the Qualified Person. He has the responsibility and authority to implement the site health and safety plan and verify compliance. He is also responsible for operations defined as hazardous substance removal work. He is responsible for scheduling and overseeing any air sampling, calibration of sampling equipment, and for evaluation of soil or other contaminated materials sampling results.

2.4 Miscellaneous Personnel

All other personnel needed for hazardous waste site operations and emergency response and their general functions and responsibilities shall be determined and named on as as-needed basis. These personnel shall be briefed on the special hazards of the site and shall sign the signature page of this plan.

2.5 Employee Safety Responsibility

Although the employer is responsible for providing a safe and healthful workplace, each employee is responsible for his/her own safety, as well as the safety of those around him/her. The employee shall use all equipment in a safe and responsible manner, and as directed by supervisory personnel.

2.6 Logs, Reports, and Recordkeeping

Recordkeeping is a crucial component of any effective health and safety program. Site safety records shall therefore be updated daily. The following logs, reports, and records shall be maintained on site:

- Site safety meetings
- Employee training records - site specific and visitors
- Daily safety inspection logs

- Weekly safety reports
- Health and safety plan signature page
- Employee and visitor sign-in sheets
- Ambient and personal air monitoring results
- OSHA 200 log

3.0 Work Activities

The work will involve the following:

- Preparing the site for tank removal operations including placement of fencing, signs, and work zones;
- Securing the necessary permits and notifying the required regulatory agencies;
- Pumping the underground storage tanks of any remaining liquids;
- Testing the interior of the tanks for explosive potential and inerting with dry ice, if necessary;
- Excavating of soils from around and above the tanks;
- Field screening of excavated soils using a PID;
- Hauling and placement of the excavated soils at the staging area;
- Sampling and laboratory analysis of the staged soils to classify for re-use or disposal; and
- Performing confirmation sampling of the excavation.

4.0 Personnel Training Requirements

All employees working on site during the removal of underground storage tanks and the associated contaminated soils who may be exposed to hazardous substances, health hazards, or safety hazards, and their supervisors and management responsible for the site shall receive training meeting the requirements of this section before they are permitted to engage in hazardous waste operations that could expose them to hazardous substances, safety, or health hazards. They shall also receive annual refresher training as specified in this section. Employees shall not be permitted to participate in or supervise field activities until they have been trained to a level required by their job function and responsibility.

4.1 Hazardous Waste Site Training

For all hazardous waste operations taking place in exclusion zones during hazardous substance removal, personnel working at or visiting the site shall have received the following training in accordance with Title 8 CCR 5192.

General site workers (such as equipment operators, general laborers, and supervisory personnel) engaged in hazardous substance removal or other activities which expose or potentially expose workers to hazardous substances and health hazards shall receive a minimum of 40 hours of instruction off the site, and a

minimum of three days actual field experience under the direct supervision of a trained and experienced supervisor.

Workers on site only occasionally for a specific limited task (such as, but not limited to, groundwater monitoring, land surveying, or geophysical surveying) and who are unlikely to be exposed over Permissible Exposure Limits and published exposure levels shall receive a minimum of 24 hours of instruction off the site, and the minimum of one day actual field experience under the direct supervision of a trained, experienced supervisor.

On-site management and supervisors directly responsible for, or who supervise employees engaged in, hazardous waste operations shall receive 40 hours initial training, and three days of supervised field experience and at least eight additional hours of specialized hazardous waste operations management training at the time of job assignment on such topics as, but not limited to, the employer's health and safety program and the associated employee training program, personal protective equipment program, spill containment program, and health hazard monitoring procedure and techniques.

4.1.1 Hazardous Waste Site Training Elements

The hazardous waste site training shall thoroughly cover the following:

- Names of personnel and alternates responsible for site health and safety
- Engineering controls and work practices by which the employee can minimize risks for hazards
- Medical surveillance requirements, including recognition of symptoms and signs which might indicate overexposure to hazards
- The biological, chemical, radiological and physical hazards present on the site and their respective properties
- The potential routes of exposure to chemicals, the possible toxic effects, the IDLH and Permissible Exposure Limit values of chemical hazards, and the level of personal exposure which can be anticipated, acute and chronic effects of toxic chemicals
- Heat and/or cold stress prevention, treatment, and monitoring
- Personal cleanliness and restrictions on eating, drinking, and smoking on the job
- The availability of on-site potable water and toilet facilities
- Applicable provisions of the OSHA standards and the Injury and Illness Prevention Program
- Permit-required confined space entry procedures
- Spill containment program
- The functions, capabilities, limitations, use, and maintenance of monitoring equipment
- The use, care, and disposal of the specific PPE selected for this work. The PPE shall be available for hands-on familiarity and practice donning, as needed.

- Handling of medical emergencies including the locations of telephones and numbers for ambulance service, and hospital locations.
- The decontamination procedures
- The emergency contingency procedures
- The fire and accident response procedures
- Basic operational safety, emphasizing the hazards expected on the site
- Employee rights and responsibilities under OSHA
- Site-specific, task-specific activity hazard analysis.

4.2 Qualifications for Trainers

Trainers shall be qualified to instruct employees about the subject matter that is being presented in training. Such trainers shall have satisfactorily completed a training program for teaching the subjects they are expected to teach, or they shall have the academic credentials and instructional experience necessary for teaching the subjects. Instructors shall demonstrate competent instructional skills and knowledge of the applicable subject matter.

4.3 Training Certification

Employees and supervisors that have received and successfully completed the training and field experience shall be certified by their instructor or the head instructor and trained supervisor as having successfully completed the necessary training. A written certificate shall be given to each person so certified. Any person who has not been so certified or who does not meet these training requirements shall be prohibited from engaging in operations where exposures to hazardous substances are possible.

4.4 Refresher Training

Employees, managers and supervisors specified in section 4.1 shall receive eight hours of refresher training annually on the items specified in subsection 4.1.1, any critique of incidents that have occurred in the past year that can serve as training examples of related work, and other relevant topics.

5.0 Medical Surveillance Program

The medical surveillance program shall be instituted for the following employees:

- Any employee who is or may be exposed to hazardous substances or health hazards at or above the Permissible Exposure Limits or, if there is no Permissible Exposure Limit above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year.
- Any employee who wears a respirator during any part of a day for a period of 30 days or more in a year, or as required by 8 CCR 5144.

- Employees exhibiting symptoms due to possible overexposure involving hazardous substances or health hazards from an emergency response or hazardous waste operation.

5.1 Frequency of Medical Examinations and Consultations

Medical examinations and consultations shall also be made available by the employer to each employee covered under Section 5.0 on the following schedules:

- Prior to assignment.
- At least once every twelve months for each employee covered, unless the attending physician believes a longer interval (not greater than biennially) is appropriate.
- At termination of employment or reassignment to an area where the employee would not be covered if the employee has not had an examination within the last six months.
- As soon as possible, upon notification by an employee either that the employee has developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards or that the employee has been injured or exposed above the Permissible Exposure Limits or published exposure levels in an emergency situation.
- At more frequent times, if the examining physician determines that an increased frequency of examination is medically necessary.

For employees who may have been injured, received a health impairment, developed signs or symptoms which may have resulted from exposure to hazardous substances resulting from an emergency incident, or who have been exposed during an emergency incident to hazardous substances at concentrations above the Permissible Exposure Limits or the published exposure levels without the necessary personal protective equipment being used shall undergo a medical examination:

- As soon as possible following the emergency incident or development of signs or symptoms;
- At additional times, if the examining physician determines that follow-up examinations or consultations are medically necessary.

5.2 Content of Medical Examinations or Consultations

The content of initial medical examinations shall contain, at a minimum, the following:

1. Complete medical and occupational history;
2. General physical examination including an evaluation of all major organ systems;
3. Pulmonary function testing including FVC and FEV₁;

4. Urinalysis for heavy metals;
5. Serum lead; and
6. Serum ZPP.

5.3 Examination by a Physician and Costs

All medical examinations and procedures shall be performed by or under the supervision of a licensed physician certified in occupational medicine by the American Board of Preventative Medicine, and shall be provided without cost to the employee, without loss of pay, and at a reasonable time and place.

5.4 Information Provided to the Physician

The employer shall provide one copy of this standard and its appendices to the attending physician, and in addition, the following for each employee:

- A description of each employee's duties as they relate to the employee's exposures.
- Each employee's exposure levels or anticipated exposure levels.
- A description of any PPE used or to be used by each employee.
- Information from previous medical examinations of each employee which is not readily available to the examining physician.
- Information required by 8 CCR 5144 for each employee.

5.5 Physician's Written Opinion

The written opinion obtained by the employer shall not reveal specific findings or diagnoses unrelated to occupational exposures. The physician shall provide the results of the medical examination and tests to the employee if requested. The employer shall obtain and furnish the employee with a copy of a written opinion from the examining physician containing the following:

- The physician's opinion as to whether the employee has any detected medical conditions which would place the employee at increased risk of material impairment of the employee's health from work in hazardous waste operations or emergency response, or from respirator use.
- The physician's recommended limitations upon the employee's assigned work.
- A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions which require further examination or treatment.

5.6 Medical Surveillance Recordkeeping

An accurate record of the medical surveillance shall be retained. This record shall be retained for the period specified and meet the criteria of 8 CCR 3204. The record shall include at least the following information:

- The name and social security number of the employee.
- Physician's written opinions, recommended limitations, and results of examinations and tests.
- Any employee medical complaints related to exposure to hazardous substances.
- A copy of the information provided to the examining physician by the employer, with the exception of the standard and its appendices.

6.0 Site Safety Meetings

Tailgate safety meetings shall be held prior to the start of work and weekly thereafter. Topics to be discussed shall include health and safety hazards associated with the day's activities and any safety-related issues from the previous week's work.

Pre-entry briefings shall be held prior to initiating any site activity in contaminated areas, and at such other times as necessary to ensure that employees are apprised of the site health and safety plan and that this plan is being followed. For operations defined as hazardous substance removal work, a pre-job health and safety conference shall be held before the start of actual work. The conference shall include representatives of the owner or contracting agency, the contractor, the employer, employees, and employee representatives; and shall include a discussion of the employer's health and safety program and the means, methods, devices, processes, practices, conditions, or operations which the employer intends to use in providing a safe and healthy place of employment.

Visitors who are find it necessary to enter the Exclusion Zone or the Contamination Reduction Zone must receive a short orientation covering the relevant safety information contained in this plan.

6.1 Documentation of Site Safety Meetings

A detailed record of each safety meeting and health and safety conference shall be made on the Safety Meeting Form in Appendix G of the original Health and Safety Plan. Visitor training shall also be recorded on this form.

7.0 Site Characterization and Hazard Evaluation

The site has been previously characterized to identify any environmental contaminant and evaluate their human health risks. This information has been

evaluated by Rothwell Consulting Group to determine the appropriate health and safety control procedures needed to protect employees from the identified hazards during tank removal activities.

7.1 Preliminary Evaluation and Hazard Identification

A preliminary evaluation of a site's characteristics has been performed by a Certified Industrial Hygienist to aid in the selection of appropriate employee protection methods prior to site entry. After the start of work, a more detailed evaluation of the site's specific characteristics shall be performed by the qualified person, under the direct supervision of a Certified Industrial Hygienist, to further identify existing site hazards and to further aid in the selection of the appropriate engineering controls and personal protective equipment for the tasks to be performed. All suspected conditions that may pose inhalation or skin absorption hazards that are immediately dangerous to life or health (IDLH) or other conditions that may cause death or serious harm have been identified during the preliminary site investigation and evaluated during the contamination investigation.

7.2 Chemical Hazards

The chemical listed in Table 2 may be encountered during tank removal operations.

Table 2 - Summary of Chemical Contaminants

Compound	Cal/OSHA Permissible Exposure Limit†	Route of Exposure††	Characteristics and Signs and Symptoms of Overexposure.
Petroleum hydrocarbons (as diesel)	None established	Inhalation Absorption	Several types of petroleum hydrocarbons exist. All have a characteristic petroleum odor and may produce acute narcosis at high levels and can cause defatting dermatitis.

† Permissible Exposure Limit = Permissible Exposure Limit as an 8-hour time-weighted average.
 STEL = Short-Term Exposure Limit as a 15-minute time-weighted average.
 C = Ceiling Limit which shall never be exceeded at any time.

†† This indicates the most likely route of occupational exposure. While ingestion can be a route of exposure in nearly every instance, it is unlikely in the occupational setting when using effective decontamination procedures and good work practices.

7.3 Physical Hazards

Performance Excavators has developed standard operating procedures to minimize physical hazards. All personnel, contractors, and subcontractors shall become familiar with the field activities. Hard hats and safety shoes are required in all areas of the site. The following are physical hazards which may be present at the site:

7.3.1 Fire and Explosion Hazards

Tank pulling operations pose the risks of fire and explosion. Excavations have a tendency to trap heavy petroleum vapors and allow combustible vapors to accumulate. All excavations in petroleum contaminated areas shall be tested frequently using a combustible gas indicator that reads in percent of the lower explosive limit. Whenever combustible gas levels exceed 10% of the lower explosive limit, all personnel and equipment shall move upwind away from the excavation until vapor concentrations have dissipated to a safe level.

All tanks shall be tested using a combustible gas indicator prior to extraction. If combustible gas levels exceed 10% of the lower explosive limit within the tank, the tank shall be inerted with dry ice until vapor concentrations within the tank have dissipated to a safe level.

7.3.2 Tripping, Slipping, and Falling Hazards

Personnel will be reminded daily to maintain sure footing on all surfaces. Use of safety harnesses will be required for any personnel working six or more feet above any surface, including on manlifts. Use of hand rails when climbing stairs will be enforced, and handrails will remain secure until the support structure itself is removed and lowered to ground level.

Work surfaces of unknown or suspect integrity will be strengthened or overlain with a work platform capable of supporting all personnel and equipment in use in that area.

In order to minimize tripping hazards caused by construction debris, material will be removed daily from the work areas and stockpiled in appropriate designated storage areas. This "house cleaning" effort will be enforced by the Site Safety Officer at the end of each day.

7.3.3 Head, Eye, and Back Injuries

As minimum requirements, hard hats will be donned prior to performing any site activities. This will prevent minor injuries caused by bumping one's head while working around and under construction equipment. Personnel will be trained in and required to use proper lifting techniques when lifting heavy objects.

7.3.4 Falling Objects

All tasks can be accomplished without any object free-falling to the ground. All equipment and material will be slowly lowered to the ground using a crane or skip bucket. No personnel shall work under this equipment at any time. Also, the Site Safety Officer will ensure that an adequate area is clear of personnel while the equipment is in operation.

7.3.5 Heavy Equipment and Traffic

The use of heavy equipment on site presents the greatest potential for injury to personnel. In order to minimize these hazards, designated routes will be established for mobilization through the facility and specific traffic patterns will be established. All trucks will use spotters for backing procedures. All personnel working along roadsides are required to wear orange safety vests.

Personnel needing to approach heavy equipment during operation will observe the following protocols:

1. Make eye contact with the operator.
2. Signal the operator to cease heavy equipment activity.
3. Approach the equipment and inform the operator of intentions.

Only qualified personnel, as determined by the Site Superintendent, will operate heavy equipment. Those crew members directly involved with spotting for the operator will be the only personnel allowed within the operating radius of the heavy equipment. All other personnel will remain a safe distance away from these operations. Vehicles will yield to all bikes, pedestrians, and railroad crossings.

Equipment that is in safe working order will only be used. To maintain this policy, all equipment brought onto the project site will be inspected for structural integrity, smooth operational performance, and proper functioning of all critical safety devices in accordance with the manufacturer's specifications. This inspection will be performed by a qualified equipment operator and Site Safety Officer. Equipment not conforming to the operational and safety requirements during this inspection will not be put into service until all necessary repairs are made to the satisfaction of the inspection group. Only qualified operators familiar with the equipment will be permitted to operate equipment.

7.3.6 Electrical Hazards

In order to prevent accidents caused by electric shock, the Site Safety Officer will inspect all electrical connections on a daily basis. He will shut down and lock out any equipment which is found to have frayed wiring or loose connections until a

qualified electrician can be contacted and repairs effected. Electrical equipment will be de-energized and tested by an electrician before any electrical work is done. All equipment will be properly grounded prior to and during all work. Underground Service Alert will be notified at least two (2) working days prior to excavation in any area.

In addition, ground fault circuit interrupters (GFCIs) will be installed whenever possible in each circuit between the power source and tool, unless the presence of a potentially explosive atmosphere precludes this procedure. In the event that generators are used to supply power, these generators will be equipped with GFCIs.

7.3.7 Noise

When noise levels may exceed a time weighted average (TWA) of 85 dBA (decibels, A-weighted scale), hearing protection will be required by all exposed employees. Additionally, sound level monitoring will be conducted on-site. All Performance Excavators personnel undergo annual audiograms and will be restricted from high noise exposure should a standard threshold shift be detected. The Hearing Conservation Program is in compliance with both the California and Federal Hearing Conservation Standards.

7.4 Site Topography and Accessibility by Air and Roads

The sites are located in an urban, semi-industrial areas. Topography consists of flat terrain covered with concrete, asphalt, and some vegetation. The sites are readily accessible by adjacent city streets.

8.0 Site Control Program

Appropriate site control procedures shall be implemented to control employee exposure to hazardous substances before clean-up work begins and during removal operations. The site control program may be modified as necessary as new information becomes available.

8.1 Site Work Zones

To prevent migration of contamination caused by personnel or equipment, work areas and personal protective equipment are clearly specified prior to beginning operations. Designated work areas or zones shall be established and delineated, as suggested by the Occupational Health and Safety Guidance Manual for Hazardous Waste Site Activities. Each contaminated work area will be divided into three zones: an Exclusion Zone (EZ), a Contamination Reduction Zone (CRZ), and a Support Zone (SZ).

8.1.1 Exclusion Zone

The Exclusion Zone will consist of areas where inhalation, oral contact, or dermal contact with contaminants is considered to be possible. It is anticipated that the Exclusion Zone will encompass the immediate confines of the excavation area with a 10 foot buffer zone from the edge of the excavation to the Exclusion Zone boundary, if practical. The size and configuration of this area will vary with wind direction, type of operations being conducted, and perimeter air monitoring results. The Exclusion Zone boundary will be clearly and conspicuously marked using boundary tape or safety fencing and signs. The signs will specify that only trained and authorized personnel are allowed to enter. Authorization to be obtained from the foreman/site supervisor. A single entry and exit point will be established through the Contamination Reduction Zone. Entry shall be limited to essential personnel or pre-approved visitors.

8.1.2 Contamination Reduction Zone

The Contamination Reduction Zone will be established between the Exclusion Zone and support zone. In this area, personnel will begin the sequential decontamination process required to exit the exclusion zone. To prevent off-site migration of contamination and to facilitate personnel accountability, all personnel will enter and exit the exclusion zone through the Contamination Reduction Zone.

All waste materials generated in the Contamination Reduction Zone shall be collected and effectively contained through the use of drums, bags, plastic sheeting, and/or tanks. All waste materials shall be labeled as such and properly disposed of according to their hazard classifications.

8.1.3 Support Zone

The Support Zone will consist of a clearly marked area where the office, break areas, and changing facilities are located. Smoking, drinking, and eating will be allowed only in designated areas. Sanitation facilities (toilets, drinking and washing water) are provided in the Support Zone.

8.2 Access Controls During Removal Operations

Physical boundaries shall be established around each work zone using safety fencing and/or barricade tape during hazardous material removal operations as specified in Section 8.2. Supervisors shall instruct all workers and visitors on the limits of the restricted areas. No one shall be allowed to enter a restricted area without the required protective equipment for that area. The Site Safety Officer shall ensure compliance with all restricted area entry and exit procedures. A decontamination point shall be designated for personnel to exit from the contaminated area and enter into the clean area where they may rest and drink fluids. Visitors should check in

immediately upon arrival. Only authorized visitors will be allowed access to the contaminated areas. Each visitor will be required to provide and wear the necessary protective equipment during visits and shall be escorted by supervisory personnel while on site. All visitors, subcontractors and other personnel will be required to sign a safety plan acknowledgment sheet to certify that they have read and will comply with the site Health and Safety Plan. Failure to comply with this site entry procedure will result in expulsion from the site.

8.3 Buddy System

The buddy system shall be used at all times at the site. Employees shall be organized into work groups in such a manner that each employee of the work group is designated to be observed by at least one other employee in the work group. The purpose of the buddy system is to provide quick assistance to employees in the event of an emergency.

9.0 Personal Protective Equipment

Personal protective equipment (PPE) has been selected which will protect employees from the hazards and potential hazards they are likely to encounter as identified during the site characterization and analysis. The level of protection provided by PPE selection shall be increased when additional information on site conditions shows that increased protection is necessary to reduce employee exposures below established Permissible Exposure Limits and published exposure levels for hazardous substances and health hazards.

9.1 PPE Selection and Action Levels

Initial PPE requirements shall be EPA Level D as outlined in Table 3 at all locations in the designated exclusion zones. If photoionization detector levels are seen exceeding 5 ppm in the breathing zones of employees, PPE shall be upgraded to the level shown in Table 4. Also, if a previously unidentified material is discovered during work operations, PPE shall be modified as necessary and at the determination of the Certified Industrial Hygienist.

Table 3 - Level D PPE Requirements

Location	Tasks	EPA Level	Equipment Required
Exclusion Zones	All tasks involving contact with contaminated materials.	D	<ul style="list-style-type: none"> • Hard hat • Tyvek coveralls • Rubber overboots • Nitrile gloves • Cotton inner gloves • Orange safety vests

Contamination Reduction Zone	All tasks.	D	<ul style="list-style-type: none"> • Hard hat • Tyvek coveralls • Rubber overboots • Nitrile gloves • Cotton inner gloves • Orange safety vests
Support Zone	All tasks.	D	<ul style="list-style-type: none"> • Hard hat • Orange safety vests

Table 4 - Level C PPE Requirements

Location	Tasks	EPA Level	Equipment Required
Exclusion Zones	All tasks.	C	<ul style="list-style-type: none"> • Half-mask air purifying respirator equipped with HEPA/organic vapor combination cartridges • Hard hat • Tyvek coveralls • Rubber overboots • Nitrile gloves • Cotton inner gloves • Orange safety vests
Contamination Reduction Zone	All tasks.	D	<ul style="list-style-type: none"> • Hard hat • Tyvek coveralls • Rubber overboots • Nitrile gloves • Cotton inner gloves • Orange safety vests
Support Zone	All tasks.	D	<ul style="list-style-type: none"> • Hard hat • Orange safety vests

9.2 PPE Limitations

The PPE selected for use at the site provides limited protection against chemical contaminants. Tyvek protective clothing must not be worn in areas where splashing of hazardous liquids on the skin is possible. In addition, Tyvek clothing must not be worn by persons performing hot work such as welding, brazing, and metal cutting.

Half mask air-purifying respirators, as specified in the Table 3, must not be worn in an oxygen deficient atmosphere or where concentrations exceed the capabilities of the respirator cartridge. Also, respirator cartridges must conform to the chemical hazards present at the site. Always read the respirator cartridge prior to use to ensure that it is the correct type.

9.3 PPE Work Mission Duration

Disposable protective clothing is to be disposed of after each use. Disposable protective clothing must be replaced upon re-entry into the Exclusion Zone, or if the suit becomes damaged or saturated during use. Repairs to small rips may be made to protective clothing using duct tape.

9.4 PPE Maintenance and Storage

All PPE, including overboots and gloves, shall be maintained in good condition. Any PPE found to be torn, cut, punctured, or otherwise damaged shall be disposed of immediately. After use and decontamination, respirators shall be stored overnight in a closed container. The following day, the closed container shall be transported to the PPE donning area for reuse.

9.5 PPE Training and Proper Fitting

All personnel shall be thoroughly trained in the proper use and limitations of the equipment they are assigned to wear. Annual qualitative respirator fit tests are required of all personnel wearing negative pressure respirators. Qualitative fit tests will utilize isoamyl acetate or irritant smoke. Fit tests must incorporate the make and size of respirator to be used. Additionally, a positive and negative fit test shall be conducted each time a respirator is donned.

9.6 PPE Donning and Doffing Procedures

All PPE shall be donned prior to entering the Exclusion Zone. PPE shall be donned with the assistance of a "buddy" to verify that equipment is worn properly. All PPE shall be worn in accordance with the manufacturer's recommendations. At no time shall a person remove the designated PPE while in the designated work zones. Disposable PPE shall only be removed in the Contamination Reduction Zone upon exiting the Exclusion Zone. Personnel shall utilize seating (during decontamination and doffing procedures) to prevent tripping and falling.

9.7 PPE Inspection Procedures

PPE shall be inspected by employees prior to donning. Boots, gloves, and disposable clothing found to be defective shall not be worn and shall be disposed of. Defective respirators, safety glasses, and hard hats shall be reported to the Site Safety Officer.

9.8 Evaluation of the Effectiveness of the PPE Program

Periodic inspections and observations of personnel using PPE shall be made by the Site Safety Officer to ensure that the PPE Program elements are being followed.

10.0 Respiratory Protection Program

This respiratory protection program provides the minimum requirements for respiratory protection whenever Level C or higher levels of personal protection are required.

10.1 Respirator Cartridges

The crew members working in an EPA Level C ensemble shall wear half-mask air purifying respirators equipped with HEPA/organic vapor cartridges, depending on site conditions. HEPA/organic vapor cartridges hold approval for dust, mists, fumes, asbestos, and radionuclides, as well as organic vapors at concentrations less than 1,000 ppm.

10.2 Cartridge Changes

All cartridges will be changed a minimum of once daily. However, increased airborne concentrations and breathing rates may necessitate more frequent changes. Changes will occur when personnel begin to experience increased breathing resistance, notice any unusual odor inside the respirator, or experience excessive heat generation in the cartridges. All cartridge changes will take place in the CRZ after decontamination of the exterior part of the PPE ensemble.

10.3 Respirator Inspection, Cleaning and Storage

Respirators shall be maintained by the employee to whom they are assigned. All respirators and associated equipment shall be inspected and cleaned, as necessary, prior to use. Respirators shall be decontaminated, cleaned, and disinfected by the user during each decontamination episode. Harsh detergents or solvents must not be used to clean respirators. Cleaned respirators must be thoroughly dried before storing. Respirators will be checked periodically by the Site Safety Officer. Respirators shall be stored in a clean, dry container and out of direct sunlight. Respirators must also be stored in such a way that the facepiece is not misshapen.

10.4 Respirator Use with Facial Hair

No personnel with facial hair which interferes with the respirator's sealing surface shall be permitted to wear a respirator.

10.5 Respirator Use With Corrective Lenses

Full-face respirator use is not anticipated at the site. However, normal eyeglasses cannot be worn under full-face respirators because the temple bars interfere with the respirator's sealing surfaces. For workers requiring corrective lenses who also must

don full-face respiratory protection, special spectacles designed for use with respirators will be provided.

10.6 Respirator Use With Contact Lenses

Contact lenses shall not be worn with any type of respirator.

10.7 Medical Certification for Respirator Use

Only workers who have been certified by a physician as being physically capable of respirator usage will be issued a respirator.

10.8 Respirator Limitations

The respirators specified for this site have their limitations. Respiratory protection specified in Table 3 may not be worn in atmospheres immediately dangerous to life or health (IDLH), or in oxygen deficient atmospheres. They may not be worn in concentrations which exceed ten times the Permissible Exposure Limit of any airborne contaminant. HEPA/organic vapor cartridges may not be worn in organic vapor concentrations exceeding 1000 ppm.

11.0 Monitoring

Air monitoring shall be performed to quantify airborne levels of hazardous substances in order to determine the appropriate level of employee protection needed on site, and to evaluate engineering controls and work practices. Monitoring shall be performed continuously where airborne concentrations of hazardous substances are anticipated to be the highest, as determined by the Certified Industrial Hygienist. Perimeter monitoring shall also be conducted upwind and downwind of each tank removal.

11.1 Employee Air Monitoring

Tank removal excavations have a tendency to trap heavy petroleum vapors and allow combustible vapors to accumulate. Employee exposures shall be quantified using a PID held in the breathing zones. All excavations in petroleum contaminated areas shall be tested frequently using a combustible gas indicator that reads in percent of the lower explosive limit. Whenever combustible gas levels exceed 10% of the lower explosive limit, all personnel and equipment shall move upwind away from the excavation until vapor concentrations have dissipated to a safe level.

All tanks shall be tested using a combustible gas indicator prior to extraction. If combustible gas levels exceed 10% of the lower explosive limit within the tank, the

tank shall be inerted with dry ice until vapor concentrations within the tank have dissipated to a safe level.

11.2 Types of Monitoring Equipment, Locations, and Frequencies

Table 5 - Employee Monitoring Requirements

Type	Frequency and Location	Calibration Schedule
<u>Petroleum Hydrocarbons</u> Photoionization detector.	Continuously in the EZs during excavation.	Once per day.

Table 6 - Work Area Monitoring Requirements

Type	Frequency and Location	Calibration Schedule
<u>Flammable vapors</u> LEL/Oxygen meter	Continuously in the work areas during excavation.	Once per day.
<u>Petroleum Hydrocarbons</u> Photoionization detector.	Continuously in the work areas during excavation.	Once per day.

11.3 Training Requirements of Monitoring Personnel

11.4 Documentation of Monitoring

Records of monitoring results shall be maintained at the site. Records shall include the date, time, contaminants or hazards monitored, person conducting monitoring, calibration date and method, operations and location of monitoring, and results. An air monitoring data sheet shall be completed for each sample.

12.0 Informational Programs

The contractor shall inform employees, contractors, and subcontractors (or their representatives) actually engaged in hazardous waste operations shall be informed of the nature, level, and degree of exposure likely as a result of participation in such hazardous waste operations. Any information concerning the chemical, physical, and toxicological properties of each substance known or expected to be present on site that is available to the employer and relevant to the duties an employee is expected to perform shall be made available to the affected employees prior to the commencement of their work activities.

The company's Injury and Illness Prevention and Hazard Communication Programs shall be available in the job trailer. Employees, contractors, and subcontractors shall also be informed and shall share information on chemical

hazards at the site, as required by the Hazard Communication standard. MSDS for all hazardous materials used on site shall be made readily available to site personnel. Employees, contractors, and subcontractors working outside of the operations part of a site shall only be notified of chemical hazards as required by the Hazard Communication standard.

13.0 Material Handling

Hazardous substances and contaminated soils, liquids, and other residues shall be handled, transported, labeled, and disposed of in accordance with this section.

13.1 Drums and Containers

If unlabeled drums and containers are encountered, they shall be considered to contain hazardous substances, work shall stop, and the Engineer shall be notified of the discovery.

Drums and containers used during the clean-up shall meet the appropriate U.S. Department of Transportation (DOT), OSHA, and EPA regulations for the wastes that they contain. When practical, drums and containers shall be inspected and their integrity shall be assured prior to being moved. Drums or containers that cannot be inspected before being moved because of storage conditions (i.e., buried beneath the earth, stacked behind other drums, stacked several tiers high in a pile, etc.) shall be moved to an accessible location and inspected prior to further handling.

Site operations shall be organized to minimize the amount of drum or container movement. Prior to movement of drums or containers, all employees exposed to the transfer operation shall be warned of the potential hazards associated with the contents of the drums or containers. Drums and containers that cannot be moved without rupture, leakage, or spillage shall be emptied into a sound container using a device classified for the material being transferred. Drums and containers under pressure, as evidenced by bulging or swelling, shall not be moved until such time as the cause for excess pressure is determined and appropriate containment procedures have been implemented to protect employees from explosive relief of the drum.

13.2 Shipping and Transport of Drums and Containers

Drums and containers shall be identified and classified prior to packaging for shipment. Drum or container staging areas shall be kept to the minimum number necessary to safely identify and classify materials and prepare them for transport. Staging areas shall be provided with adequate access and egress routes.

14.0 Decontamination Procedures

All employees leaving the exclusion zone shall be appropriately decontaminated; all contaminated clothing and equipment leaving a contaminated area shall be appropriately disposed of or decontaminated.

Decontamination procedures shall be monitored by the Site Safety Officer to determine their effectiveness. When such procedures are found to be ineffective, appropriate steps shall be taken to correct any deficiencies.

14.1 Personnel Decontamination Procedures

Upon exiting the Exclusion Zone, personnel shall remove all visible contamination from their PPE using soap, water, and brushes. Personnel shall use the following decontamination procedure:

- Step 1: Hardhat removal
- Step 2: Boot, glove, and coverall wash
- Step 3: Boot, glove, and coverall rinse
- Step 4: Tape removal
- Step 5: Overboot removal
- Step 6: Suit removal
- Step 7: Outer glove removal
- Step 8: Respirator removal (optional)
- Step 9: Respirator cartridge removal (optional)
- Step 10: Cotton inner glove removal
- Step 11: Wash hands, face.

All disposable protective clothing shall be removed during decontamination and shall be disposed of in a lidded container lined with a labeled drum liner. All waste generated at the site shall be disposed of according to the hazard classification of the debris.

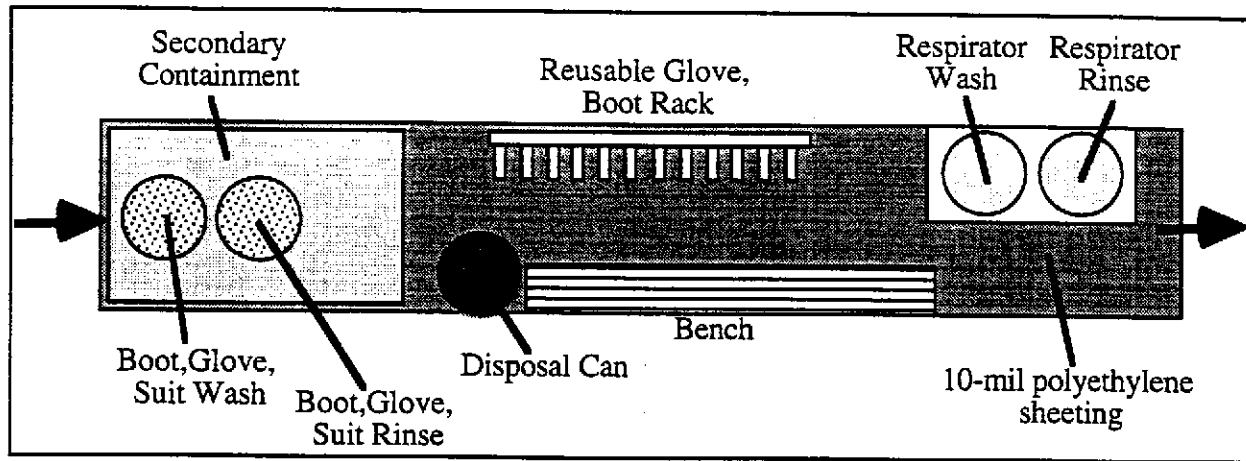


Figure 1 - Personnel Decontamination Layout

14.2 Equipment Decontamination Procedures

Upon exit from the Exclusion Zone, personnel shall drive equipment onto the decontamination pad in the Contamination Reduction Zone and remove all visible contamination from their equipment using soap, water, and brushes. The tracks and tires of equipment shall be scraped to remove the gross contamination before driving onto the decontamination pad. Water from the decontamination pad will be collected in a sump and transferred to a larger storage tank or pumped and properly disposed of when full.

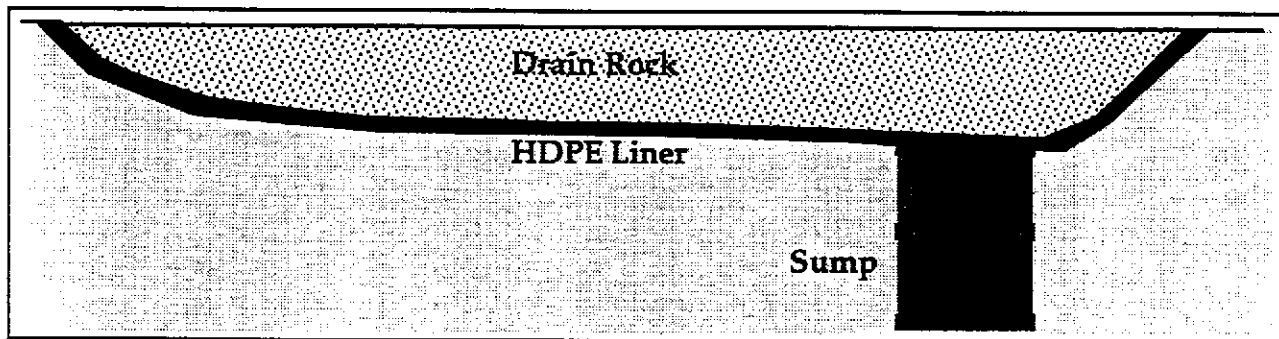


Figure 2 - Equipment Decontamination Layout

14.3 Location and Layout of Decontamination Facilities

Employee decontamination shall be performed at the southwest corners of each Exclusion Zone, adjacent to the Support Zone. This location will minimize the

exposure of uncontaminated employees, areas, and equipment to contaminated employees or equipment. The decontamination facility shall be arranged in such a way that personnel and equipment must exit the Exclusion Zone only through the CRZ. Equipment decontamination facilities shall be established at locations within the staging areas.

14.4 Employee Wash Facilities

After employee exit the Contamination Reduction Zone (where they have decontaminated and removed their PPE), they shall proceed to a wash facility to wash hands and face prior to eating, drinking, smoking, or leaving the site. Disposable towels shall be provided for drying.

14.5 Storage and Disposal of Decontamination Water

All water used for decontamination shall be contained and stored in storage tanks. All decontamination water shall be sampled for the contaminants of concern so that a proper disposal plan can be devised.

15.0 Emergency Response Plan

This emergency response plan explains how to handle anticipated emergencies prior to the commencement of hazardous waste operations.

15.1 Emergency Procedures

Employees may respond to low danger emergencies, such as administration of first aid, fighting small fires (with fire extinguishers), and clean-ups of small chemical spills (of less than 55 gallons or 500 pounds). All employees shall evacuate from the danger area when an emergency not listed above occurs, and shall not assist in handling the emergency.

Should outside medical or other emergency assistance be required, personnel shall notify the job trailer of the nature of the emergency and a call shall be to 9-1-1.

If the injury or illness appears to be minor, the affected person appears to be minor, the person may be driven to the emergency room of Brookside Hospital.

15.2 Site Communications and Alerting Means for Emergencies

Temporary radio and telephone communications are to be established at the job trailer and at the site. Emergency alerts shall be made using two-way radios from the job trailer to the site, or vice versa. Personnel working on the site shall be alerted by air horns using the following alerts:

3 short blasts in sequence..... Exit the work area
1 long blast..... All clear

15.3 Places of Refuge

All personnel, when alerted during emergencies, shall exit the Exclusion Zone through the Contamination Reduction Zone and muster in the Support Zone. Personnel are to remain in the staging area and await further instructions.

15.4 Identification of Nearest Medical Assistance

Summit Medical Center
350 Hawthorne Avenue
Oakland, CA 94609
(510) 655-4000

In an emergency, call 911

The Hospital Location Map and Emergency Telephone Numbers are found in Appendix C. They shall be posted at the site and at all phones in the main office trailer.

15.5 Status and Capabilities of Emergency Response Providers

Local emergency responders (fire department, medical providers and transporters) are on full time alert and have the capabilities to respond to any anticipated site emergency.

15.6 Pre-emergency Planning

The types of emergencies anticipated include personal injuries, fire, and small chemical spills. An OSHA-approved first aid kit shall be made available at the site. Also, two employees trained and currently certified in first aid and CPR shall be on site at all times. A charged and inspected fire extinguisher shall be available on each piece of equipment. Spill containment equipment will be made available if hazardous materials are stored on site.

15.7 Personnel Roles, Lines of Authority, and Communication

The Site Safety Officer shall act as the incident commander during an emergency response. He shall coordinate and direct emergency response procedures to all site personnel. An emergency shall be communicated to all persons on site by radio and/or verbal communications.

15.8 Emergency Recognition and Prevention

All site personnel shall be trained to recognize when an emergency situation has arisen and shall know how to notify the Site Safety Officer of the incident. Site personnel shall use safe work practices to minimize the potential for an incident. Regular safety meeting shall be held to identify and communicate problem areas at the site.

15.9 Site Security and Control

During an emergency situation, all personnel are responsible for assuring the public's safety and shall keep all bystanders and unauthorized personnel from entering the site. All no time shall personnel give statements regarding an emergency to persons not associated with emergency response or management.

15.10 Decontamination of Injured Workers

Due to the relatively low levels of contamination at the site, decontamination procedures for injured workers may be limited to removal of outer coveralls and boots so long as such action will not aggravate the injury. If the injury is minor, and does not require immediate medical attention, workers may decontaminate as usual.

15.11 Accident Reporting and Follow-Up

All incident scenes shall be preserved so that a thorough incident investigation may be performed. All causes of the incident shall be investigated and the findings presented to site personnel to prevent future incidents.

16.0 Spill Containment

It is not anticipated that large volumes of hazardous materials will be stored on site. However, if large volumes of hazardous or potentially-hazardous liquids are stored on site, adequate secondary containment shall be provided around the storage area. In addition, spill containment equipment (absorbent socks, clay, and shovels, and a salvage drum) shall be kept at the site to respond to small spills of hazardous liquids or solids. Should a spill occur, immediate steps to contain the spill must be taken. Such steps include shutting of valves, closing doors or vents, protecting sanitary sewers and surface waters, or shutting off pumps. At no time shall a spill be contained if such action presents a hazard. The Site Safety Officer must then be notified of the situation so that he may direct the clean-up.

17.0 Sanitation at Temporary Workplaces

17.1 Potable Water

An adequate supply of potable water shall be provided on the site. Portable containers used to dispense drinking water shall be capable of being tightly closed and equipped with a tap, and shall be otherwise designed, constructed, and serviced so that sanitary conditions are maintained. Water shall not be dipped from containers. Any container used to store, dispense, or distribute drinking water shall be clearly marked as to the nature of its contents and not used for any other purpose.

Where single service cups (to be used but once) are supplied, both a sanitary container for the unused cups and a receptacle for disposing of the used cups shall be provided.

17.2 Non Potable Water

Outlets for non potable water, such as water for equipment decontamination, dust control, or firefighting purposes, shall be identified to indicate clearly that the water is unsafe and is not to be used for drinking, washing, or cooking purposes. There shall be no cross-connection, open or potential, between a system furnishing potable water and a system furnishing non potable water.

17.3 Toilet Facilities

A minimum of one separate toilet facility shall be provided for each 20 employees or fraction thereof of each sex. Such facilities may include both toilets and urinals provided that the number of toilets shall not be less than one half of the minimum required number of facilities. EXCEPTION: Where there are less than 5 employees, separate toilet facilities for each sex are not required provided the toilet facilities can be locked from the inside and contain at least one toilet. Under temporary field conditions, provisions shall be made to assure that at least one toilet facility is available.

If the site is not provided with a sanitary sewer, it shall be provided with one of the following toilet facilities unless prohibited by local codes:

- Chemical toilets
- Recirculating toilets
- Combustion toilets
- Flush toilets

Doors entering toilet facilities shall be provided with entrance locks controlled from inside the facility. Toilet facilities shall be kept clean, maintained in good working order, and provided with an adequate supply of toilet paper.

Washing facilities shall be on site for washing of hands and face following decontamination procedures. Such facilities shall be in near proximity to the CRZ.

18.0 Site Illumination

Table 7 - Minimum Illumination Intensities in Foot-Candles

Foot Candles	Area or Operations
5	General site areas.
3	Excavation and waste areas, accessways, active storage areas, loading platforms, refueling, and field maintenance areas.
5	Indoors: Warehouses, corridors, hallways, and exitways.
5	Tunnels, shafts, and general underground work areas. (EXCEPTION: Minimum of 10 foot-candles is required at tunnel and shaft heading during drilling, mucking, and scaling. Mine Health and Safety Administration approved cap lights shall be acceptable for use in the tunnel heading.)
10	General shops (e.g., mechanical and electrical equipment rooms, active storerooms, barracks or living quarters, locker or dwelling rooms, dining areas, and indoor toilets and workrooms.)
30	First aid stations, infirmaries, and offices.

19.0 Confined Space Entry

In any confined space, dangerous air contaminants cannot always be prevented from accumulating or be removed by natural ventilation. Whenever an employee works in this type of environment, the chance always exists that an oxygen-deficient, explosive, or toxic atmosphere may be present upon entry or develop while working or even as a result of work being performed in the space.

Since all confined spaces represent a potential hazard, special precautionary measures must be implemented to protect the workers. This program outlines the precautionary measures necessary for each entry into a confined space during hazardous material removal operations. With thorough training, quality equipment, clear thinking, and responsible actions, the employee who enters the confined space should exit alive and unharmed.

19.1 Definitions of Confined Spaces

A confined space as a space that is:

- Large enough and so configured that an employee can bodily enter and perform work.
- Has limited or restricted means of entry or exit
- Is not designed for human occupancy

19.2 Permit-required Confined Spaces

An area is considered a permit-required confined space if it presents or has the potential to contain hazards related to atmospheric conditions, engulfment, configuration or any other recognized serious hazard. If excavations or bridge interiors have any of these potential hazards, they shall be considered confined spaces.

The Site Safety Officer shall conduct evaluations of the workplace and determine if there are any permit-required confined spaces. He/she then shall inform workers through signs or other means and prevent unauthorized entry.

19.2.1 Permit System

The Site Safety Officer shall act as entry supervisor. The entry supervisor must authorize entry, prepare and sign written permits, order corrective measures and cancel permits when work is completed. A permit is found in Appendix E.

19.4 Entry Supervisor

The entry supervisor must know the hazards of confined spaces, verify that all tests have been conducted and procedures and equipment are in place. The entry supervisor shall terminate entry and cancel permits and verify that rescue service are available. He/she is also responsible for removing unauthorized workers who enter confined spaces and determine that acceptable conditions continue.

19.5 Rescue Services

The fire department shall be called whenever a confined space entry is performed. They shall be notified of the location and nature of the entry so that they can provide prompt assistance, if needed.

19.6 Lockout/Tagout Procedures

Any equipment (electrical or mechanical) that is capable of being reenergized remotely or dissipating potential energy must have all switches, valves, etc. capable of doing so physically disconnected or locked out prior to commencement of work.

The steps of a lockout/tagout procedure include:

- Inform the operator and all area personnel of work to be performed.
- Lockout device is attached, with tag, to switch, valve, or other actuator.
- All involved personnel attach separate locks to lockout device and pocket keys.
- All locks and therefore lockout device remain in place until work is complete and all personnel are clear of hazard.

- Lockout device is removed and operator and area personnel are informed of work completion.

19.7 Atmospheric Testing of Confined Spaces

19.7.1 List of Equipment

- Photoionization detector equipped with a 10.6 eV lamp if a toxic environment is possible..
- Catalytic hot wire combustible gas indicator that reads in percent of the lower explosive limit and oxygen combination meter that reads in percent oxygen if flammability and/or oxygen deficiency are possible.
- Ten foot non-sparking pole
- Tygon tubing

19.7.2 Testing for Explosive Atmosphere

Explosivity should always be the first test due to the immediate danger of explosion whether or not personnel actually enter the space. A hot wire combustible gas indicator should be used.

Warning

1. The catalytic hot wire LEL does not detect many hazardous gases.
2. Leaded gasoline and chlorinated solvents can poison the meter very quickly causing malfunction.
3. The LEL does not detect explosive dust atmospheres.
4. Nearby electrical equipment may cause erratic readings.

19.7.3 LEL Monitor Preparation

- The meter should be calibrated within 5 days of use.
- Start and check the meter according to manufacturer's instruction.
- Warm up and zero the meter in a clean area.
- Test the meter with a known positive source (such as an unlit butane lighter).
- Zero the meter at 5%. This allows the operator to see negative reactions which may indicate unexpected gases.

19.7.4 LEL Monitor Operation

It is best to provide a pole and a tube to collect the sample from a distance. The retention time for the tubing should be considered. Sample in an imaginary diamond very slowly.

- If the needle goes to 100% and then drops to zero, the UEL has been exceeded.

- If the needle quickly drops below zero, this indicates an oxygen deficient atmosphere.
- If the needle deflects upscale and then comes back down to zero, this may be caused by a gas that is heavier than air.
- If there is a constant upscale erratic deflection of the needle, there may be high levels of chlorinated solvents and some heavier inert gases.
- If more than 100% of the LEL, this is very dangerous and must be made explosive before it is safe to enter.
- If 100% of the LEL, it is immediately explosive and must be made ventilated before it is safe to enter.
- If more than 10% of the LEL, it is illegal to enter according to OSHA regulations and must be ventilated.
- If less than 10% of the LEL, it is legal to enter but may still be toxic.

19.7.5 Testing for Oxygen Deficiency

Monitoring for oxygen deficiency should be performed in the same manner as for explosivity.

- If oxygen concentration is less than 19.5%, it is oxygen deficient and illegal to enter according to OSHA regulations and must be ventilated.
- If oxygen concentration is more than 23.5%, it is oxygen enriched and illegal to enter according to OSHA regulations and must be ventilated.

19.7.6 Testing for Toxic Airborne Contaminants

If a toxic atmosphere is suspected, testing should be conducted for the contaminant(s) suspected and compared with their permissible exposure limits. Testing is most easily done using a photoionization detector.

19.8 Ventilation

Exhaust ventilation may be used to draw or push dense gases and vapors from bottom of space, allowing fresh air to replace them. The source of ventilating air must be uncontaminated. Consider destination of exhausted gases/vapors before beginning ventilation.

19.9 Extraction and Rescue Equipment

A rescue harness is to be worn at all times during entry into confined spaces with recognized hazards and limited and limited access or egress. A tripod shall be available for overhead rescue. Observer shall be in constant communication with entry personnel. The entry procedure shall be aborted at the first indication of difficulty.

20.0 Hot Work Permits

No hot work, including welding, torch cutting, and brazing shall take place without first acquiring a hot work permit from the Site Safety Officer. A copy of the hot work permit is in Appendix E.

21.0 Site Excavations

Site excavations created during initial site preparation or during hazardous waste operations shall be shored or sloped as appropriate to prevent accidental collapse in accordance with 8 CCR, Chapter 4, Subchapter 4, Article 6.

22.0 Safety Inspections

Inspections shall be conducted by the Site Safety Officer or, in the absence of that individual, another individual who is knowledgeable in occupational health and safety, acting on behalf of the employer as necessary to determine the effectiveness of the site health and safety plan. Any deficiencies in the effectiveness of the site health and safety plan shall be corrected by the employer. A record of the safety inspection are maintained in Appendix F.

PRODUCER

Holtemann, Ord & Smith
P. O. Box 4409
Petaluma CA 94955-4409

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

- COMPANY LETTER **A** California Comp & Fire
- COMPANY LETTER **B**
- COMPANY LETTER **C**
- COMPANY LETTER **D**
- COMPANY LETTER **E**

INSURED

Performance
Excavators, Inc.
3060 Kerner Blvd.
San Rafael CA 94901

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR. <input type="checkbox"/> OWNER'S & CONTRACTOR'S PROT.				GENERAL AGGREGATE \$ PRODUCTS-COMP/OP AGG. \$ PERSONAL & ADV. INJURY \$ EACH OCCURRENCE \$ FIRE DAMAGE (Any one fire) \$ MED. EXP. (Any one person) \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> GARAGE LIABILITY				COMBINED SINGLE LIMIT \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE \$
	EXCESS LIABILITY <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				EACH OCCURRENCE \$ AGGREGATE \$
A	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY	w958123672	08/01/95	08/01/96	STATUTORY LIMITS EACH ACCIDENT \$ 1,000,000 DISEASE-POLICY LIMIT \$ 1,000,000 DISEASE-EACH EMPLOYEE \$ 1,000,000
	OTHER				

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

Job: Cypress "A" Oakland @ 500 Kirkham Street & 1285 Fifth Street

Cancellation: Except for ten days for non-payment of premium.

CERTIFICATE HOLDER

Alameda County Health
Agency, Div. of Environ.
Dept. of Envir. Health
1131 Harbor Wy Prkwy 2Fl
Alameda CA 94502

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Jeannette Dowling

QUE 15 '95 04:24PM CALTRANS EXPRESS
08/16/95 11:21AM FROM JONAS AND ASSOCIATES 510 933 5362

P.3

P.3

ALAMEDA COUNTY HAZARDOUS MATERIALS DIVISION
Declaration of Site Account Refund Recipient
SITE OWNER FILL OUT FOR SITE
-- OPTIONAL --

The property owner will use this form to designate someone other than his- or her- self to receive any refund due at the completion of all deposit/refund projects at the site listed below. In the absence of this form, the property owner will receive any refund. Only one person at any one time may be designated to receive any refund.

SITE NUMBER/ADDRESS:		PROPERTY OWNER		
<u>Site Number</u>		<u>Caltrans</u>		
<u>J&A Truck Repair</u>		<u>Owner's Name</u>		
<u>Company Name</u>		<u>1121 7th Street</u>		
<u>300 Kirkham Street</u>		<u>Owner's address</u>		
<u>Street Address</u>		<u>Oakland, CA 94607</u>		
<u>Oakland, California 94607</u>		<u>Owner's City State Zip</u>		
<u>City</u>	<u>Site Code</u>	<u>Owner's City</u>	<u>State</u>	<u>Zip</u>

I designate the following person to receive any refund due at the completion of all deposit/refund projects:

Jonas & Associates Inc.

Name

2815 Mitchell Drive, Suite 209

Street address

Walnut Creek, California 94598

City / Zip

Raymond Pang 8/14/95

Property Owner Signature Date

Raymond Pang

Property Owner Name

RETURN FORM TO: DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-4577

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737



(510) 540-3839

March 15, 1995

Mr. Ace Forsen, Chief
Project Development/Benicia-Martinez Bridge
Caltrans
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

SECOND DRAFT PRELIMINARY ENDANGERMENT ASSESSMENT (PEA), J&A TRUCK REPAIR (AKA SMILO CHEMICAL), 500 KIRKHAM STREET, CYPRESS RECONSTRUCTION PROJECT, OAKLAND

The Department of Toxic Substances Control (DTSC) has received the second draft of the PEA for J&A Truck Repair submitted by Environmental Solutions, Inc. on behalf of Caltrans. DTSC has reviewed the revisions to the document that were made in response to DTSC's January 27, 1995 comment letter. DTSC found that all comments were adequately responded to, and therefore is approving the PEA.

If you have any questions regarding this letter, please contact Lynn Nakashima of my staff at (510) 540-3839.

Sincerely,

A handwritten signature in cursive script that reads "Barbara J. Cook".

Barbara J. Cook, P.E. Chief
Site Mitigation Branch

cc: See next page



Mr. Ace Forsen
March 15, 1995
Page Two

cc: Mr. Sum Arigala
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Mr. Chris Wilson
Caltrans
Environmental Engineering
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Mr. Jed A. Douglas
Environmental Solutions, Inc.
1201 North McDowell Boulevard
Petaluma, California 94954

ENVIRONMENTAL
PROTECTION
95 MAR 27 PM 3:12

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737



(510) 540-3724

January 27, 1995

Mr. Ace Forsen, Chief
Project Development/Benicia-Martinez Bridge
Caltrans
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

DRAFT PRELIMINARY ENDANGERMENT ASSESSMENT (PEA), THIRD SITE GROUP, J&A TRUCK REPAIR (AKA SMILO CHEMICAL), 500 KIRKHAM, CYPRESS RECONSTRUCTION PROJECT, OAKLAND

The Department of Toxic Substances Control (Department) has received the Draft PEA for J&A Truck Repair submitted by Environmental Solutions, Inc. on behalf of Caltrans on January 20, 1995. The PEA was generally well written and contained most of the required components contained in the Department's guidance document. The Department's comments are as follows:

1. Section 4.0, Apparent Problem: This section should contain a brief discussion explaining the reason groundwater was not considered an exposure pathway of concern, and the rationale for omitting environmental receptors.
2. Section 5.1.7, Potentially Affected Receptors Within a One Mile Radius: Businesses located within a one mile radius of the site should also be included in Table 3. In addition, this section refers to Table 5 rather than Table 3.
3. Section 6.1, Summary of Activities and Results From PEA Investigations, Item 2: There is a discrepancy in the number of wipe samples reported in this paragraph. Please revise and correct.
4. Section 10.2, Recommendations for Further Action: The Department requests that groundwater monitoring wells be installed to determine the extent of volatile organic compounds found in the central and eastern portion of the site. This section should also include the recommendation to decontaminate the interior of the warehouse prior to



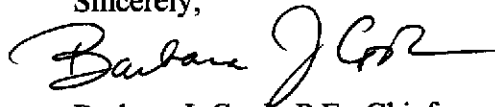
Mr. Ace Forsen
January 27, 1995
Page Two

demolition.

5. Table 3: This table should reference Figure 12 and not Figure 11.

If you have any questions regarding this letter, please contact Lynn Nakashima of my staff at (510) 540-3839.

Sincerely,



Barbara J. Cook, P.E., Chief
Site Mitigation Branch

cc: Mr. Sum Arigala
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Mr. Chris Wilson
Caltrans
Environmental Engineering
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Mr Jed A. Douglas
Environmental Solutions, Inc.
1201 North McDowell Boulevard
Petaluma, California 94954

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737

(510) 540-3724

ALCO
HAZMAT

54 SEP 28 AM 8:10



September 28, 1994

Mr. Ace Forsen, Chief
Project Development/Benicia-Martinez Bridge
Caltrans
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

**REVISED ADDENDUM TO SOIL AND GROUNDWATER INVESTIGATION WORKPLAN,
J&A TRUCK REPAIR, 500 KIRKHAM AVENUE, THIRD SITE GROUP, CYPRESS
RECONSTRUCTION PROJECT, OAKLAND**

The Department of Toxic Substances Control (Department) has received the Revised Addendum to the J&A Truck Repair Investigation Workplan submitted by Environmental Solutions, Inc. on behalf of Caltrans. The Revised Addendum addressed all comments contained in the Department's letter dated September 13, 1994; therefore, the revised addendum is approved. If you have any questions regarding this letter, please contact Lynn Nakashima of my staff at (510) 540-3839.

Sincerely,

A handwritten signature in cursive script that reads "Barbara J. Cook".

Barbara J. Cook, P.E., Chief
Site Mitigation Branch

cc: See next page



Mr. Ace Forsen, Chief
September 28, 1994
Page Two

cc: Mr. Sum Arigala
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Mr. Joel Howie
Caltrans
Environmental Engineering
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Mr. Jed Douglas
Environmental Solutions, Inc.
1201 North McDowell Boulevard
Petaluma, California 94954

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737

(510) 540-2122

HAZMAT
94 SEP 14 PM 2:41



September 13, 1994

Mr. Ace Forsen, Chief
Project Development/Benicia-Martinez Bridge
Caltrans
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

**ADDENDUM AND RESPONSE TO COMMENTS TO SOIL AND GROUNDWATER
INVESTIGATION WORKPLAN, THIRD SITE GROUP, J&A TRUCK REPAIR,
CYPRESS RECONSTRUCTION PROJECT, OAKLAND**

*UST
Removed*

The Department of Toxic Substances Control (Department) has received the Addendum and response to comments to the Workplan for J&A Truck Repair located at 500 Kirkham Avenue, Oakland, submitted on behalf of Caltrans by Environmental Solutions, Inc. The Department has reviewed the responses provided by Caltrans and found them to adequately address the Department's August 28, 1994 comments. The Department has also reviewed the Workplan Addendum that describes sampling around the recently discovered underground storage tank (UST) and has the following comments:

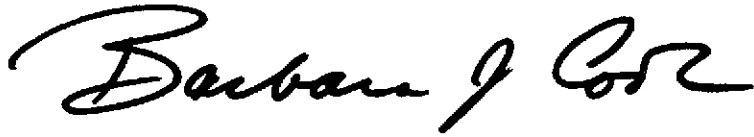
1. Please provide a description of the area that will be surveyed and describe how the geophysical survey of the area will be conducted.
2. If possible, one of the soil borings around the UST should be placed near the location of the fill pipe.
3. Because the use of the UST prior to 1973 is unknown, soil and groundwater samples should be analyzed for total metals and VOCs, in addition to TPH-gasoline, TPH-diesel, BTEX, and oil and grease.



Mr. Ace Forsen
September 13, 1994
Page Two

If you have any questions regarding this letter, please contact Lynn Nakashima of my staff at (510) 540-3839.

Sincerely,

A handwritten signature in black ink that reads "Barbara J. Cook". The signature is written in a cursive, flowing style.

Barbara J. Cook, P.E., Chief
Site Mitigation Branch

cc: Mr. Sum Arigalia
Regional Water Quality Control Board
San Francisco Bay Region
2101 Wester Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Mr. Joel Howie
Caltrans
Environmental Engineering
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Mr. Jed Douglas
Environmental Solutions, Inc.
1201 North McDowell Boulevard
Petaluma, California 94954

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737
(510) 540-2122



HAZARDOUS
96 AUG 31 10:47

August 29, 1994

Mr. Ace Forsen
Chief, Project Development/Benicia-Martinez Bridge
Caltrans
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:

COMMENTS TO SOIL AND GROUNDWATER INVESTIGATION WORKPLAN, J&A TRUCK REPAIR - THIRD SITE GROUP, OAKLAND, CYPRESS RECONSTRUCTION PROJECT

The Department of Toxic Substances Control (Department) has received the revised workplan for J&A Truck Repair, former Smilo Chemical, located at 500 Kirkham Street in Oakland. The workplan submitted is approved by the Department contingent upon the following changes being made:

1. Section 3.2, Wipe Sampling Locations and Protocol should be amended to include that for chlorinated solvents and semi-volatiles, a glass fiber filter (37 mm) wetted with isopropanol or another organic solvent will be used. Paper filters moistened with deionized water will be used for metals and other analysis. In addition, the wipes should be pre-weighed (tared) in a laboratory so that units of concentration can be determined.
2. Section 3.3, Sampling Plan, should state whether groundwater samples will be filtered in the field or in the laboratory.
3. Table 2, Analytical Procedures needs to be amended to include that the maximum holding time for mercury is 28 days.



Mr. Ace Forsen
August 29, 1994
Page Two

If you have any questions regarding this letter, please
contact Lynn Nakashima at (510) 540-3839.

Sincerely,



Barbara J. Cook, P.E., Chief
Site Mitigation Branch

cc: Mr. Joel Howie
Caltrans
Environmental Engineering
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Mr. Sum Arigala
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Ms. Cydney M. Miller
Environmental Solutions, Inc.
1201 North McDowell Boulevard
Petaluma, California 94954

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737

(510) 540-3724

ALCO
HAZMAT

94 JUN 23 PM 2:42



June 17, 1994

Mr. Ace Forsen
Chief, Project Development/Benicia-Martinez Bridge
Caltrans
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Forsen:
Mr

**COMMENTS TO DRAFT SOIL AND GROUNDWATER INVESTIGATION WORKPLAN,
J&A TRUCKING - THIRD SITE GROUP, CYPRESS FREEWAY RECONSTRUCTION
PROJECT, OAKLAND**

The Department of Toxic Substances Control (Department) has received the above mentioned workplan. Please find enclosed the Department's comments to the workplan. Due to the history of the site, the Department feels that additional sampling is warranted to confirm that the site was adequately remediated.

If you have any questions regarding this letter, please contact Lynn Nakashima at (510) 540-3839.

Sincerely,

A handwritten signature in black ink that reads "Barbara J. Cook".

Barbara J. Cook, P.E., Chief
Site Mitigation Branch

Enclosure

cc: Ms. Diane Steinhauser
Chief, Environmental Engineering
Caltrans - District 4
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660

Mr. Joel Howie
Caltrans - District 4
Environmental Engineering
111 Grand Avenue
P.O. Box 23660
Oakland, California 94623-0660



Mr. Ace Forsen
June 17, 1994
Page Two

cc: Mr. Rich Hiett
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
80 Swan Way, Room 350
Oakland, California 94621

Comments to Draft Soil and Groundwater Investigation Workplan
J&A Trucking-Third Site Group
Cypress Reconstruction
Oakland

1. Page 1, Section 2.0, Site Description: This section needs to include a description of the current site operation and site features. A large building and storage area are mentioned, but the workplan does not state what the building is used for, what is kept in the storage area, or what activities are on-going.
2. Page 1, Section 2.1, Site History and Previous Work:
 - a. This section needs to include a detailed description of the former Smilo Chemical facility. For example, three sumps and drum storage areas were located at the site but never mentioned as well as a dirt drainage line. In addition, it should be stated that both the Department and RWQCB conducted inspections at the site.
 - b. Maps showing current and historic site features needs to be included in the workplan.
3. Page 3, Section 3.0, Scope of Work:
 - a. Please provide the rationale for limiting the number of soil borings to eight and why only three groundwater samples will be collected. If sufficient groundwater can be collected from a boring, a groundwater sample should be collected and analyzed.
 - b. Because Caltrans is proposing to use the warehouse for training purposes, the interior of the building should be sampled to ensure that no chemical residues remain. A wipe sampling procedure and plan should be proposed to test the interior walls, floor, ceiling, and ventilation ducts of the building.
4. Page 3, Section 3.1, Soil Boring Locations and Protocol:
 - a. Because the map provided in Plate 2 is not to scale, it is difficult to determine the spacing of the borings. A map drawn to scale should replace Plate 2. The map should also identify the locations of the sumps, ditches, and former drum storage areas.
 - b. Additional soil borings are needed along the former drainage ditch, in the east sump area, in the barrel sump area, near the location of the former dumpster, downgradient of the concrete sump and/or under the sump and at any piping locations (if any). Chemicals brought to the site were reportedly discharged at these locations.
 - c. A description of the labels that will be placed on the drums containing decontamination rinse water and soil cuttings should be included. The labels should identify the composition and physical state of the material (e.g. soil cuttings, decontamination rinse water - pending laboratory analysis), name of generator, contact person, address, and initial date of accumulation.
5. Page 4, Section 4.0, Sampling Plan:
 - a. Sample containers used to collect VOCs should be pre-chilled using wet ice prior to sample collection to minimize volatilization.
 - b. This section needs to include a description of the sample numbering system that

will be used to identify samples.

c. A description of the type of field documentation will be collected, and how it will be collected should be included in this section.

d. The chain-of-custody procedures that will be used needs to be described in detail in this section, or in Section 3.5, Quality Assurance/Quality Control.

6. Page 4, Section 3.4, Analytical Program: This section references tables 2 and 3. This should be corrected to reference tables 1 and 2.

7. Table 1, Analytical Procedures: This table needs to identify the specific matrix the quantitation limits are established for. Groundwater quantitation limits should be set so that they can be compared to the RWQCB NPDES discharge requirements. In addition, the quantitation limit for hexavalent chromium should be lowered to meet the preliminary remediation goal of 0.68 ppm.

8. Table 2, Soil and Groundwater Analytical Program: The rationale for not analyzing all samples collected for the selected parameters is unclear. All 1-foot, 5-foot and 8-foot samples should be analyzed for VOCs (8240), Semi-Volatiles (8270). Four samples each from the surface sample, 1-foot, 5-foot and 8-foot samples should be analyzed for hexavalent chromium. And surface samples should be analyzed for Semi-Volatiles (8270).

9. Appendix B, Soil and Groundwater Sample Collection Procedures:

a. The procedures described to cap soil sample tubes is inconsistent with that described in Section 3.2, Sampling Plan. Please correct this discrepancy.

b. Sampling equipment used to collect soil and groundwater samples should be decontaminated using a final deionized water rinse, and not a tap water rinse.

1300

12-4-84

470-2712 ST

attending Bob Marek RWACB, Ed Refell DONS
Tom Peacock ACHCSA Ed Howell ACHCSA

re: Smilo
580 Kirkham St.

has been dormant for over two years.
Architects had drawn up plans for renovation
of building

Smilo samples taken 3-19-81

Heavy Metals were below action levels
per title 22 66699

Pesticides were found to be minimally
above action levels.

According to Howard Hatayama not sufficient
to require clean-up.

9410 in Cal Trans Easement

Ed Refell will have Howard Hatayama to
review the file and give an answer

12-4-81

Bob Marek -

1. concerns with surface contamination getting into surface runoff.

2. concerns with contamination of ground water approx 5 feet ±

Concentrations do not justify further testing.

Smilo - 465-8022

Home - 731-3131

Warrants surface clean-up needed only.