

2/16/94
TANK CLOSURE REPORT
AND
WORKPLAN FOR EXCAVATION
OF CONTAMINATED SOIL

RAS-CO MANUFACTURING COMPANY, INC.
413 WEST SUNSET BOULEVARD
HAYWARD, CA 94541

Prepared For:
MR. OSCAR LANG
RAS-CO MANUFACTURING COMPANY, INC.
413 WEST SUNSET BOULEVARD
HAYWARD, CA 94541

Submitted By:
TANK PROTECT ENGINEERING
Of Northern California, Inc.
2821 WHIPPLE ROAD
UNION CITY, CA 94587
(510) 429-8088

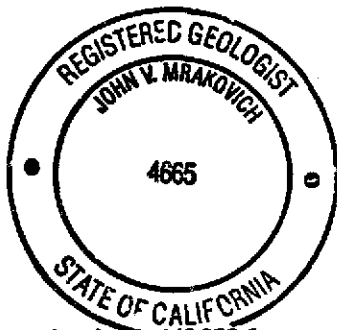
510 429-8089

December 16, 1994

Project Number 329

John V. Mrakovich

John V. Mrakovich, Ph.D.
Senior Registered Geologist



Expiration 4/30/96

Louis Travis III

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Civil Engineer

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This report has been prepared by the staff of Tank Protect Engineering of Northern California, Inc. under direction of an Engineer and/or Geologist whose seal(s) and/or signature(s) appear hereon.

The findings, recommendations, specifications or professional opinions are presented, within the limits prescribed by the client, after being prepared in accordance with generally accepted professional engineering and geologic practice. We make no other warranty, either expressed or implied.

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FIGURE

1. SITE PLAN: TANK REMOVAL (11/10/94)

TABLE

1. SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS

APPENDICES

- A. . ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY,
DEPARTMENT OF ENVIRONMENTAL HEALTH, HAZARDOUS
MATERIALS DIVISION, UNDERGROUND TANK CLOSURE PLAN
- . ALAMEDA COUNTY FIRE DEPARTMENT, FIRE DEPARTMENT
/PLANS APPLICATION
- . BAY AREA AIR QUALITY MANAGEMENT DISTRICT, NOTIFICATION
FORM
- . ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH,
HAZARDOUS MATERIALS INSPECTION FORM
- . UNIFORM HAZARDOUS WASTE MANIFEST
- . H&H ENVIRONMENTAL SERVICES, CERTIFICATE OF DISPOSAL
- . UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE
(LEAK)/CONTAMINATION SITE REPORT
- B. SAMPLE HANDLING PROCEDURES
- C. CERTIFIED ANALYTICAL REPORT AND CHAIN-OF-CUSTODY
DOCUMENTATION
- D. WASTE HANDLING AND DECONTAMINATION PROCEDURES
- E. QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES
- F. SITE SAFETY PLAN

1.0 INTRODUCTION

The subject site is located at 413 West Sunset Boulevard in the City of Hayward in Alameda County, California and is occupied by RAS-CO Manufacturing Company, Inc. (RAS-CO). The contact person is Mr. Oscar Lang; telephone number (510) 782-3161.

Tank Protect Engineering of Northern California, Inc. (TPE) was contracted by RAS-CO to remove a 500-gallon and a 250-gallon gasoline, steel, single-walled, underground, storage tank from the site.

~~This Tank Closure Report and Workplan for Excavation of Contaminated Soil (TCR\WP) documents tank closure activities at the site and presents a scope of work for conducting a preliminary investigation and remediation of vadose zone contaminated soil.~~ The WP was verbally requested by the Alameda County Health Care Services Agency (ACHCSA)

*Letter dtd 12/10/94 went out to owner
Re: PSA requirements*

2.0 TANK REMOVAL

Prior to beginning tank removal activities, TPE obtained an acceptance of an Underground Tank Closure Plan from the ACHCSA and a Fire Permit from the Alameda County Fire Department (ACFD), and notified the Bay Area Air Quality Management District [(BAAQMD) see Appendix A].

Tank removal activities began on November 10, 1994 by removing soil from over the tanks. Product was removed from each tank by TPE and stored on site in a labeled 55-gallon drum. Questions regarding disposition of the drummed product should be directed to RAS-CO.

Next, TPE excavated about 12 cubic yards (cyds) of soil to uncover the tanks for hoisting to the ground surface (see Figure 1). The excavated soil was placed on top of and covered with plastic sheeting. Apparent hydrocarbon contamination, as evidenced by stains and odor, was present in the stockpiled soil.

The excavation reached a maximum depth of about 7 feet. No groundwater was encountered. The lithology of the sidewalls, from ground surface to depth, consisted of top soil to a depth of about 2.5 feet, clayey silt to a depth of about 6 feet, and sandy gravel to a depth of about 7 feet. Apparent hydrocarbon contamination, as evidenced by stains and odor, was present in the floor and sidewalls of the excavation.

Prior to removal from the excavation, the tanks were purged of flammable vapors by displacement with dry ice as indicated by a combustible gas indicator (Gastech model 1314). After being removed to the ground surface, the tanks were examined for evidence of leakage by the ACHCSA inspector and TPE. Both tanks were rusty and a small hole was observed on the bottom end of the 500-gallon tank opposite the fill end (see Appendix A for ACHCSA Hazardous Materials Inspection Form).

The tanks and associated piping were transported off site by H&H Ship Service Company (H&H) as hazardous waste under Uniform Hazardous Waste Manifest, State Manifest Document Number 93617918 to their facility located at 220 Terry A. Francois Street in San Francisco, California 94107 (see Appendix A). After rendering the tanks harmless, H&H disposed of them as scrap metal at Schnitzer Steel located in Oakland, California (see Appendix A).

*Tanks
manifest*

Tank removal activities and subsequent soil sampling were conducted under the supervision of the ACHCSA and ACFD inspectors and in accordance with the California Regional Water Quality Control Board - San Francisco Bay Region's (CRWQCB) "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites", dated August 10, 1990 Recommendations.

2.1 Excavation of Contaminated Soil

Because apparent hydrocarbon contamination was present in the east sidewall and floor of the excavation, TPE, with the approval of the ACHCSA inspector and RAS-CO, excavated about 2 cyds of contaminated soil from the east sidewall and floor of the excavation (see Figure 1).

The horizontal excavation was conducted to a distance of about 3 feet outward from the east sidewall of the excavation and the vertical excavation was conducted to a maximum depth of about 11 feet. The excavated soil was added to the stockpiled soil and covered with plastic sheeting. The lithology of the sidewall, 7 feet below the ground surface, consisted of clayey silt to a depth of about 8 feet and clay to a depth of about 11 feet.

2.1.1 Soil Sampling

After removal and excavation activities, 3 discrete soil samples (S-2 through S-4) were collected for chemical analysis from the floor and sidewalls of the excavation at the locations shown in Figure 1. Sample S-2 was collected at a depth of about 6.5 feet from beneath the 250-gallon tank. Samples S-3 and S-4 were collected at depths of about 7 and 7.5 feet from the north and east sidewalls of the excavation, respectively.

The excavation samples were collected about 1 to 2 feet into native soil by excavating a coherent block of soil with a backhoe bucket and collecting a sample by driving a clean 2-inch diameter by 6-inch long brass tube into the soil in the bucket with a slide-hammer corer.

Four discrete soil samples (SP1-A through SP1-D) were collected for laboratory compositing and chemical analysis from the stockpiled soil at the locations shown in Figure 1.

The stockpile samples were collected directly into brass tubes driven by a slide-hammer corer at depths of about 1.5 feet below the stockpile's surface. *How many?*

After collecting each sample, the brass tube ends were quickly covered with Teflon sheeting and capped with plastic end-caps. Each tube was labeled to show site address, project number, sample name and depth, date and time collected, and sampler name and stored in an individual plastic bag in an iced-cooler.

The samples were transported to California Department of Health Services (DHS) certified Trace Analysis Laboratory, Inc. located in Hayward, California accompanied

by chain-of-custody documentation (see Appendix B for TPE's protocol relative to sample handling procedures).

All samples were analyzed for total petroleum hydrocarbons as gasoline (TPHG) by the DHS Method; for benzene, toluene, ethylbenzene, and xylenes (BTEX) by the Modified United States Environmental Protection Agency (EPA) Method 8020; and for total lead by EPA Method 7420.

2.1.1.1 Analytical Results

Samples S-2, S-3, and S-4 detected TPHG at concentrations of .59 parts per million (ppm), 1,100 ppm, and 5,000 ppm, respectively. All BTEX chemicals, with the exception of benzene in samples S-2 and S-3, were detected at concentrations ranging from .0088 ppm ethylbenzene to 620 ppm xylenes. Total lead was detected in all samples ranging in concentration from 3.8 ppm to 25 ppm.

Composite stockpile sample SP1(A-D) detected TPHG, benzene, toluene, ethylbenzene, xylenes, and total lead at concentrations of 3,400 ppm, 3.6 ppm, 69 ppm, 32 ppm, 300 ppm, and 24 ppm, respectively.

Analytical results are summarized in Table 1 and documented with a certified analytical report and chain-of-custody in Appendix C.

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

Based on the above analytical results, a November 22, 1994 Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report was prepared and submitted to the ACHCSA (see Appendix A).

4.0 PROPOSED WORKPLAN FOR EXCAVATION OF CONTAMINATED VADOSE ZONE SOIL

Because soil samples collected at the time of tank removal detected TPHG at concentrations of 1,100 ppm and 5,000 ppm in the north and east sidewalls of the excavation, respectively, RAS-CO has contracted with TPE to investigate and remediate vadose zone soil contamination.

TPE proposes the following scope of work:

- . Conduct an Underground Service Alert (USA) to minimize the potential of encountering unexpected utilities.
- . Contact appropriate agencies prior to beginning excavation activities.
- . Excavate contaminated soil from the north and east sidewalls and floor of the excavation and ~~stockpile the soil on site.~~
- . After excavating contaminated soil in the above task, collect verification soil samples from the excavation sidewalls and floor for chemical analysis for TPHG and BTEX.
- . Prepare a report.

4.1 Prefield Activities

Prior to beginning excavation activities, TPE will: obtain approval of the above scope of work from the ACHCSA; notify the BAAQMD; and conduct an USA location request to minimize the potential for encountering any buried utilities or underground objects while conducting excavation.

4.2 Excavation of Contaminated Soil

TPE proposes to conduct ^{max} ~~horizontal excavation of contaminated vadose zone soil to a distance of up to about 20 feet outward from the present position of the north and east sidewalls of the excavation or to the limits imposed by property boundaries, and vertical excavation to the depth of groundwater or to the depth that can be safely reached by the equipment used.~~ Excavation will not be conducted to the extent of endangering the freeway, utilities, or any other known structures or objects. If, after excavating to the above limits, soil contamination is still present in the walls and/or floor of the excavation and appears to be widespread horizontally and/or vertically, TPE may advise the client to conduct soil borings as a second phase of investigation to assess other remedial options such as vapor extraction.

*Could be
base if contamin.
is not present
- Yes - per. [unclear]*

*Anticipated
depth - to
ground
[unclear]*

The extent of excavation will be based on field-screening methods that include the detection of apparent soil contamination as evidenced by visible hydrocarbon stains, odors, and headspace field-screening of excavated soil samples using a Gastech, Inc., Trace-Tehtor Hydrocarbon Vapor Tester (HVT).

Headspace analysis will be conducted by sealing a soil sample in a quart-size plastic bag and warming the bagged sample in the sun to promote volatilization of any hydrocarbons, if present, into the headspace of the bag. The headspace will be tested for volatile hydrocarbons by inserting the probe of the HVT into the bag, while minimizing the entry of fresh air, and recording the response in ppm.

~~Excavated soil will be stored on site on top of and covered with plastic sheeting. The~~ client will be responsible to maintain the cover when TPE personnel are not working with the stockpile.

4.2.1 Verification Soil Sampling

When the horizontal and vertical extent of apparent contaminated vadose zone soil has been reached, based on the above field-screening methods, or the horizontal and vertical limits discussed above have been reached, verification soil samples will be collected for chemical analysis to document cleanup concentrations of TPHG and

1 sample / 20 linear feet

BTEX. As a minimum, soil samples will be collected at about 15-foot horizontal and vertical intervals. If groundwater is encountered, the last vertical soil sample will be collected at a depth of about 1 foot above the groundwater's surface. Additional soil samples may be collected where contaminated soil is suspected and in permeable materials that may act as conduits for contaminant transport, as specified in the CRWQCB Recommendations. If any sidewall is less than 15 feet long, a minimum of 1 verification soil sample will be collected from that wall.

Soil samples will be collected from the sidewalls and/or floor of the excavation by removing about 1 foot of soil to expose a fresh surface and driving a clean 2-inch diameter by 6-inch long brass tube into the newly exposed surface with a slide-hammer corer. Samples may also be collected by excavating soil with the bucket of a backhoe and collecting a sample in a brass tube from soil in the bucket.

All samples will be handled as discussed above in section 2.1 Soil Sampling. See Appendices D and E for TPE's protocols relative to waste handling and decontamination, and quality assurance and quality control procedures, respectively.

4.2.1.1 Chemical Analyses

Verification soil samples are proposed to be analyzed for TPHG by the DHS Method and for BTEX by the Modified EPA Method 8020.

5.0 REPORT

After completing excavation activities, TPE will prepare a report documenting soil excavation, verification soil sampling, and results of chemical analyses. The report will include: copies of all required permits, a detailed site plan showing limits of excavation, locations of verification soil samples, a table summarizing results of chemical analyses, and copies of certified analytical reports and chain-of-custodies.

Conclusions regarding the extent and type(s) of contamination will be presented within the context of this TCR\WP. Recommendations for feasible remedial alternatives and/or supplemental sampling and analyses will be included.

The report will be reviewed and signed by a California Registered Geologist or Professional Engineer.

6.0 SITE SAFETY PLAN

A Site Safety Plan for conducting work under this workplan is included in Appendix F.

7.0 TIME SCHEDULE

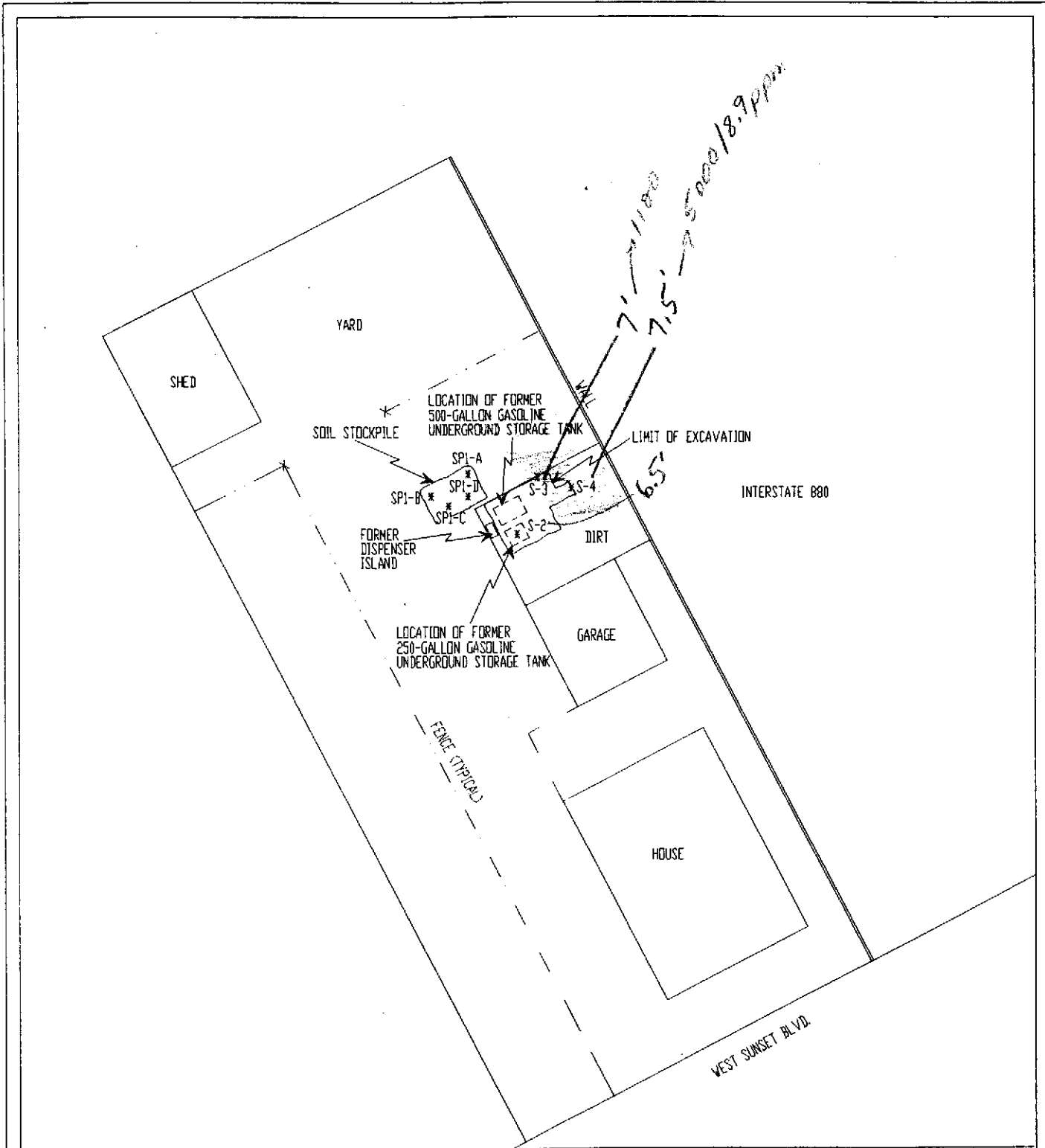
The projected time schedule for implementation of the activities described in this workplan is presented below. The schedule reflects a relatively problem-free program. However, delays in the workplan review, permitting, or laboratory analyses could lengthen the project schedule. Access difficulties, adverse weather, and regulator review could also delay the proposed time schedule. TPE will make every effort to adhere to the project schedule.

Week 1: Client Submits TCR/WP for Regulator Approval.

Week 3: Regulator Approval Received; Conduct Excavation, Verification Soil Sampling, and Chemical Analyses.

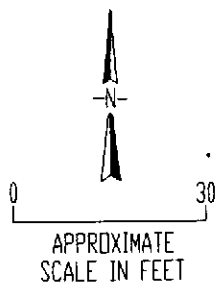
Week 5: Receive Chemical Analyses.

Week 8: Submit Report to Client.



LEGEND

S-2 NAME AND LOCATION OF SOIL SAMPLE
* OF SOIL SAMPLE



TANK PROTECT ENGINEERING

SITE PLAN:
TANK REMOVAL (11/10/94)

RAS-CD MANUFACTURING CO.
413 W. SUNSET BLVD.
HAYWARD, CA 94541

DATE	11/22/94
FIGURE	1
FILE #	329-10
DRAWN BY	TM
CHECKED BY	LT III

TABLE 1
 SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
 (ppm¹)

Sample ID Name	Date	Depth (Feet)	TPHG	Benzene	Toluene	Ethyl-benzene	Xylenes	Total Lead
S-2	11/10/94	6.5	.590	<.0050	.024	.0088	.100	3.800
S-3	11/11/94	7.0	1,100.000	<.730	19.000	12.000	110.000	25.000
S-4	11/10/94	7.5	5,000.000	8.900	330.000	96.000	620.000	18.000
SP1(A-D)	11/11/94	1.5-2.0	3,400.000	3.600	69.000	32.000	300.000	24.000

¹ PARTS PER MILLION

APPENDIX A

- . ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY,
DEPARTMENT OF ENVIRONMENTAL HEALTH, HAZARDOUS
MATERIALS DIVISION, UNDERGROUND TANK CLOSURE PLAN
- . ALAMEDA COUNTY FIRE DEPARTMENT, FIRE DEPARTMENT/PLANS
APPLICATION
- . BAY AREA AIR QUALITY MANAGEMENT DISTRICT, NOTIFICATION
FORM
- . ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH,
HAZARDOUS MATERIALS INSPECTION FORM
- . UNIFORM HAZARDOUS WASTE MANIFEST
- . H&H ENVIRONMENTAL SERVICES, CERTIFICATE OF DISPOSAL
- . UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE
(LEAK)/CONTAMINATION SITE REPORT

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

officer copy

*ALAMEDA COUNTY
 HAZARDOUS
 9/1 SEP 21 1984
 Ras-co Manufacturing Co*

NAC changes/additions inked

ACCEPTED
 DEPARTMENT OF ENVIRONMENTAL HEALTH
 470 - 27th Street, Third Floor
 Oakland, CA 94612
 Telephone: (415) 674-7237

These plans have been reviewed and found to be acceptable and comply with the requirements of State and local health laws. Changes to the plans indicated by this Department are to comply with State and local laws. The permit holder is to now proceed for removal of any liquid tanks or tanks for construction. One copy of these accepted plans must be on the job and available to all contractors and craftsmen involved with the removal. Any changes or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspection Department to determine if such changes meet the requirements of State and local laws. Notify this Department at least 48 hours prior to the following required inspections:

- Removal of Tank and Piping
 - Sampling
 - Final Inspection
- Issuance of a permit to operate is dependent on compliance with accepted plans and all applicable laws and regulations.

THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS.

UNDERGROUND TANK CLOSURE PLAN
 * * * Complete according to attached instructions * * *

1. Business Name Ras-co Manufacturing Company, Inc.
 Business Owner Ras-co Manufacturing Company, Inc.

2. Site Address 413 West Sunset Blvd.
 City Hayward Zip 94541 Phone (510) 782-3161

3. Mailing Address 413 West Sunset Blvd.
 City Hayward Zip 94541 Phone (510) 782-3161

4. Land Owner Oscar Lang
 Address 413 West Sunset Blvd. City, State Hayward, CA Zip 94541

5. Generator name under which tank will be manifested _____
Ras-co Manufacturing Company, Inc.

EPA I.D. No. under which tank will be manifested CAC000955496

ALAMEDA COUNTY FIRE DEPARTMENT

APPLICATION # 94-1081

FIRE DEPARTMENT/PLANS APPLICATION

FIRE MARSHAL'S OFFICE
1426 164th Avenue
San Leandro, CA 94578
510-670-5853 • FAX 510-276-5915

APPLICATION TYPE: _____ DATE REC'D: 10/27/94 BY: 

CATEGORY: _____

► PROJECT INFORMATION

PROJECT ADDRESS: 413 West Sunset Blvd. CROSS STREET: _____
CITY: Hayward ZIP: 94541 JOB PHONE: (510) 782-3161
APN #: _____ SDR #: _____ PM/TRACT MAP #: _____

DESCRIPTION OF WORK/ACTIVITY:
Removal of one 250-gal & 500-gal underground storage tanks. BUILDING PERMIT #: _____

► APPLICANT

Tank Protect Engineering
NAME: of Northern California, Inc. PHONE # (H): _____ (W): (510) 429-8088
ADDRESS: 2821 Whipple Road, Union City, CA ZIP: 94587

► OWNER

NAME: Oscar Lang PHONE # (H): _____ (W): (510) 782-3161
ADDRESS: 413 West Sunset Blvd., Hayward, CA ZIP: 94541

► CONTRACTOR

Tank Protect Engineering
NAME: of Northern California, Inc. PHONE # (H): _____ (W): (510) 782-3161
ADDRESS: 2821 Whipple Road, Union City, CA ZIP: 94587

CONTRACTOR'S LICENSE TYPE & NUMBER: A-Haz 575837


► = APPLICANT TO FILL IN THESE SECTIONS

APPLICANT'S SIGNATURE:  DATE: 9/20/94

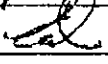

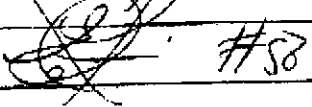
FOR OFFICE ONLY

FEES

Fees are due and payable by check or money order, made out to Alameda County Fire Department, upon submittal of plans and application. If additional fees are required, such shall be paid prior to issuance of a Certificate of Occupancy, project final, or a Fire Permit.

BASE FEE REQUIRED: \$ 120⁰⁰ (4/11) REC'D BY:  DATE: 10/27/94
CONSULTANT'S FEE: \$ _____ REC'D BY: _____ DATE: _____
ADDITIONAL FEES: \$ _____ REC'D BY: _____ DATE: _____

APPROVALS

FIRE PERMIT #: 94-1081 ISSUED DATE: 10/27/94 EXPIRATION DATE: _____
PERMIT ISSUED BY:  DATE: _____ FEE: _____
APPLICATION/PLANS APPROVAL:  BY:  #58 DATE: 10/27/94



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

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

REGULATION 8, RULE 40
Aeration of Contaminated Soil and
Removal of Underground Storage Tanks *N. Lew*

NOTIFICATION FORM

- Removal or Replacement of Tanks
- Excavation of Contaminated Soil

SITE INFORMATION

SITE ADDRESS <u>413 WEST SUNSET BOULEVARD</u>	
CITY, STATE, ZIP <u>HAYWARD, CA 94541</u>	
OWNER NAME <u>RASCO MANUFACTURING COMPANY, INC.</u>	
SPECIFIC LOCATION OF PROJECT <u>RASCO MANUFACTURING COMPANY, INC.</u>	
TANK REMOVAL	CONTAMINATED SOIL EXCAVATION
SCHEDULED STARTUP DATE <u>9/23/94</u>	SCHEDULED STARTUP DATE _____
VAPORS REMOVED BY:	STOCKPILES WILL BE COVERED? YES <input type="checkbox"/> NO <input type="checkbox"/>
<input type="checkbox"/> WATER WASH	ALTERNATIVE METHOD OF AERATION (DESCRIBE BELOW):
<input checked="" type="checkbox"/> VAPOR FREEZING (CO ²)	_____
<input type="checkbox"/> VENTILATION	(MAY REQUIRE PERMITS)

CONTRACTOR INFORMATION

NAME <u>TANK PROTECT ENGINEERING</u>	CONTACT <u>LOUIS TRAVIS III</u>
ADDRESS <u>7821 WHIPPLE ROAD</u>	PHONE <u>(510) 429-8088</u>
CITY, STATE, ZIP <u>UNION CITY, CA 94587</u>	

CONSULTANT INFORMATION (IF APPLICABLE)

NAME _____	CONTACT _____
ADDRESS _____	PHONE () _____
CITY, STATE, ZIP _____	

FOR OFFICE USE ONLY			
DATE RECEIVED <u>9/19/94</u>	BY <u>OPT</u>		
CC: INSPECTOR NO. <u>553</u>	DATE <u>9/21/94</u>	(INIT.)	BY <u>OPT</u>
			(INIT)
TELEPHONE UPDATE: CALLER _____	CHANGE MADE _____		
BAAQMD N # _____			

white -env.health
 yellow -facility
 pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
 Oakland, CA 94621
 (415) 271-4320

Hazardous Materials Inspection Form

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. OnSite Conseq. Assess. 25524(c)
- 15. Probable Risk Assessment 25534(d)
- 16. Persons Responsible 25534(g)
- 17. Certification 25534(f)
- 18. Exemption Request? (Y/N) 25536(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

- Monitoring for Existing Tanks**
- 6. Method
 - 1) Monthly Test
 - 2) Daily Vadose
 - Semi-annual groundwater
 - One time sols
 - 3) Daily Vadose
 - One time sols
 - Annual tank test
 - 4) Monthly Groundwater
 - One time sols
 - 5) Daily Inventory
 - Annual tank testing
 - Cont pipe leak det
 - Vadose/grdwat 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. Precs Tank Test 2643
 - Date: _____
- 8. Inventory Rec. 2644
- 9. Soil Testing. 2646
- 10. Ground Water. 2647

- New Tanks**
- 11. Monitor Plan 2632
 - 12. Access. Secure 2634
 - 13. Plans Submit 2711
 - Date: _____
 - 14. As Built 2635
 - Date: _____

Site ID # _____ Site Name Rus Co. Maint. Today's Date 11/10/94

Site Address 413 W Sunset Blvd

City Hayward Zip 94 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 Removal

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

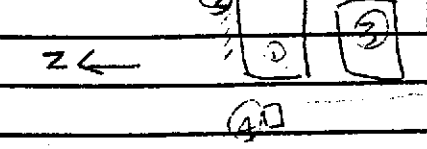
Comments:

A Laddani ACFD
LEL 0% O2 0% 250 gal
LEL 1% O2 1% 93617918 Manifest

500 gal - some rust + pitting noted. One pin size hole ^{noted} on end of tank on bottom (opposite end from fill)

250 gal - gas: some rust. no changes through holes noted

Insert at 70 at 6' (3) Green stains ^{soil} noted on north wall of 500 gallon UST



1) Brown dray (some silt) w/ od. odor of degraded gasoline.

2) drayen silt - brown w/ mod odor - degraded. Sample collected at 7'

3) dray w/ some silt - brown - no odor - at 6.5' Analyze 2 and 3 for PH-G, P, TEX & total lead

4) Sample collected under dispenser - no odor. II, III

Contact: _____

Title: _____

Signature: [Signature]

Inspector: _____

Signature: [Signature]

white -env.health
 yellow -facility
 pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

80 Swan Way, #200
 Oakland, CA 94621
 (415) 271-4320

II, III

Site ID # _____ Site Name Puso Today's Date 11/10/94

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)

Site Address 413 W Sunset Blvd
 City Hayward Zip 94 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

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. OnSite 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

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

Comments:

5) Excavation extended additional 3' into east wall. Soil ^{sample collected} at 7.5' w/ wood/string color slight staining. Scan

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 |
| Monitoring for Existing Tanks | ___ 6. Method |
| | 1) Monthly Test |
| | 2) Daily Vadose
Semi-annual groundwater
One time soils |
| | 3) Daily Vadose
One time soils
Annual tank test |
| | 4) Monthly Groundwater
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 _____ |
| New Tanks | ___ 7. Precs Tank Test 2643 |
| | Date: _____ |
| | ___ 8. Inventory Rec. 2644 |
| | ___ 9. Soil Testing 2646 |
| | ___ 10. Ground Water. 2647 |
| | ___ 11. Monitor Plan 2632 |
| | ___ 12. Access. Secure 2634 |
| | ___ 13. Plans Submit 2711 |
| | Date: _____ |
| | ___ 14. As Built 2635 |
| Date: _____ | |

Rev 8/88

II, III

Contact: _____

Title: _____

Signature: [Signature]

Inspector: _____

Signature: [Signature]

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 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> <u>1</u> <u>2</u> <u>2</u> <u>9</u> <u>4</u>		CASE #		SIGNED _____ DATE _____		
REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Mark Varney		PHONE (510) 429-8088		SIGNATURE 	
	REPRESENTING <input checked="" type="checkbox"/> OWNEROPEATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER		COMPANY OR AGENCY NAME Tank Protect Engineering of Northern California, Inc.			
	ADDRESS 2821 Whipple Road Inc. Union City, CA 94587					
RESPONSIBLE PARTY	NAME Ras-Co Manufacturing Co., Inc. <input type="checkbox"/> UNKNOWN		CONTACT PERSON Oscar Lang		PHONE (510) 782-3161	
	ADDRESS 413 West Sunset Blvd. Hayward, CA 94541					
SITE LOCATION	FACILITY NAME (IF APPLICABLE) Ras-Co Manufacturing Co., Inc.		OPERATOR Oscar Lang		PHONE (510) 782-3161	
	ADDRESS 413 West Sunset Blvd. Hayward, Alameda 94541					
	CROSS STREET					
IMPLEMENTING AGENCIES	LOCAL AGENCY Alameda County Health Care Services Agency		CONTACT PERSON Eva Chu		PHONE (510) 567-6700	
	REGIONAL BOARD CRMOCB - San Francisco Bay Region				PHONE (510) 286-1255	
SUBSTANCES INVOLVED	(1) NAME Petroleum Hydrocarbons - see below				QUANTITY LOST (GALLONS) <input type="checkbox"/> UNKNOWN	
	(2)				<input type="checkbox"/> UNKNOWN	
DISCOVERY/ABATEMENT	DATE DISCOVERED 1 <u>1</u> <u>1</u> <u>0</u> <u>9</u> <u>4</u>		HOW DISCOVERED <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input type="checkbox"/> TANK TEST <input checked="" type="checkbox"/> TANK REMOVAL <input type="checkbox"/> OTHER			
	DATE DISCHARGE BEGAN _____ <input checked="" type="checkbox"/> UNKNOWN		METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input type="checkbox"/> REMOVE CONTENTS <input checked="" type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING <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			
	HAS DISCHARGE BEEN STOPPED? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE _____					
SOURCE/ CAUSE	SOURCE OF DISCHARGE <input type="checkbox"/> TANK LEAK <input checked="" 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			
	CHECK ONE ONLY <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input 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 type="checkbox"/> CLEANUP UNDERWAY					
	CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)					
	<input 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)					
COMMENTS	Removed one 500-gallon gasoline and one 250-gallon gasoline underground storage tanks.					

APPENDIX B

SAMPLE HANDLING PROCEDURES

APPENDIX B

SAMPLE HANDLING PROCEDURES

Soil and groundwater samples will be packaged carefully to avoid breakage or contamination, and will be delivered to the laboratory in an iced-cooler. The following sample packaging requirements will be followed.

- . Sample bottle/sleeve lids will not be mixed. All sample lids will stay with the original containers and have custody seals affixed to them.
- . Samples will be secured in coolers to maintain custody, control temperature, and prevent breakage during transportation to the laboratory.
- . A chain-of-custody form will be completed for all samples and accompany the sample cooler to the laboratory.
- . Ice, blue ice, or dry ice (dry ice will be used for preserving soil samples collected for the Alameda County Water District) will be used to cool samples during transport to the laboratory.
- . Each sample will be identified by affixing a pressure sensitive, gummed label, or standardized tag on the container(s). This label will contain the site identification, sample identification number, date and time of sample collection, and the collector's initials.
- . Soil samples collected in brass tubes will be preserved by covering the ends with Teflon tape and capped with plastic end-caps. The tubes will be labeled, sealed in quart size bags, and placed in an iced-cooler for transport to the laboratory.

All groundwater sample containers will be precleaned and will be obtained from a State Department of Health Services certified analytical laboratory.

Sample Control/Chain-of-Custody: All field personnel will refer to this workplan to verify the methods to be employed during sample collection. All sample gathering activities will be recorded in the site file; all sample transfers will be documented in the chain-of-custody; samples are to be identified with labels and all sample bottles are to be custody-sealed. All information is to be recorded in waterproof ink. All TPE field personnel are personally responsible for sample collection and the care and custody of collected samples until the samples are transferred or properly dispatched.

The custody record will be completed by the field technician or professional who has been designated by the TPE project manager as being responsible for sample shipment to the appropriate laboratory. The custody record will include, among other things, the following information: site identification, name of person collecting the samples, date and time samples were collected, type of sampling conducted (composite/grab), location of sampling station, number and type of containers used, and signature of the TPE person relinquishing samples to a non-TPE person with the date and time of transfer noted. The relinquishing individual will also put all the specific shipping data on the custody record.

Records will be maintained by a designated TPE field employee for each sample, site identification, sampling locations, station numbers, dates, times, sampler's name, designation of the samples as a grab or composite, notation of the type of sample (e.g. groundwater, soil boring, etc.), preservatives used, on-site measurement data, and other observations or remarks.

APPENDIX C

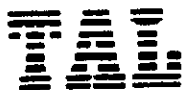
CERTIFIED ANALYTICAL REPORT AND
CHAIN-OF-CUSTODY DOCUMENTATION

Trace Analysis Laboratory, Inc.

3423 Investment Boulevard, #8 • Hayward, California 94545

Telephone (510) 783-6960

Facsimile (510) 783-1512



November 18, 1994

Mr. Jeff Farhoomand
Tank Protect Engineering
2821 Whipple Road
Union City, California 94587

Dear Mr. Farhoomand:

Trace Analysis Laboratory received seven soil samples on November 11, 1994 for your Project No. 329, Rasco Manufacturing, 413 West Sunset Boulevard, Hayward, CA 94541 (our custody log number 4936).

These samples were analyzed for Total Petroleum Hydrocarbons as Gasoline, Benzene, Toluene, Ethylbenzene, Xylenes, and Total Lead. Our analytical report and the completed chain of custody form are enclosed for your review.

Trace Analysis Laboratory is certified under the California Environmental Laboratory Accreditation Program. Our certification number is 1199.

If you should have any questions or require additional information, please call me.

Sincerely yours,

A handwritten signature in cursive script that reads "Scott T. Ferriman".

Scott T. Ferriman
Project Specialist

Enclosures



LOG NUMBER: 4936
 DATE SAMPLED: 11/10/94 and 11/11/94
 DATE RECEIVED: 11/11/94
 DATE EXTRACTED: 11/14/94
 DATE ANALYZED: 11/15/94 and 11/17/94
 DATE REPORTED: 11/18/94

CUSTOMER: Tank Protect Engineering
 REQUESTER: Jeff Farhoomand
 PROJECT: No. 329, Rasco Manufacturing, 413 West Sunset Boulevard,
 Hayward, CA 94541

Method and Constituent:	Units	Sample Type: Soil					
		S-2		S-3		S-4	
		Concen- tration	Reporting Limit	Concen- tration	Reporting Limit	Concen- tration	Reporting Limit
DHS Method:							
Total Petroleum Hydro- carbons as Gasoline	ug/kg	590	500	1,100,000	37,000	5,000,000	80,000
Modified EPA Method 8020 for:							
Benzene	ug/kg	ND	5.0	ND	730	8,900	3,200
Toluene	ug/kg	24	5.0	19,000	730	330,000	3,200
Ethylbenzene	ug/kg	8.8	5.0	12,000	730	96,000	3,200
Xylenes	ug/kg	100	15	110,000	2,200	620,000	9,400

Method and Constituent:	Units	Composite of SP1-A, SP1-B, SP1-C, and SP1-D				Method Blank	
		Concen- tration	Reporting Limit	Concen- tration	Reporting Limit	Concen- tration	Reporting Limit
		DHS Method:					
Total Petroleum Hydro- carbons as Gasoline	ug/kg	3,400,000	72,000	ND	500		
Modified EPA Method 8020 for:							
Benzene	ug/kg	3,600	1,400	ND	5.0		
Toluene	ug/kg	69,000	1,400	ND	5.0		
Ethylbenzene	ug/kg	32,000	1,400	ND	5.0		
Xylenes	ug/kg	300,000	4,300	ND	15		

QC Summary:

% Recovery: 94, 70
 % RPD: 11, 9.4

Concentrations reported as ND were not detected at or above the reporting limit.



LOG NUMBER: 4936
 DATE SAMPLED: 11/10/94 and 11/11/94
 DATE RECEIVED: 11/11/94
 DATE EXTRACTED: 11/17/94
 DATE ANALYZED: 11/17/94
 DATE REPORTED: 11/18/94
 PAGE: Two

Sample Type: Soil


Method and Constituent:	Units	S-2		S-3		S-4	
		Concentration	Reporting Limit	Concentration	Reporting Limit	Concentration	Reporting Limit
EPA Method 7420:							
Lead	ug/kg	3,800	3,600	25,000	3,600	18,000	3,600

Method and Constituent:	Units	Composite of SPI-A, SPI-B, SPI-C, and SPI-D		Method Blank	
		Concentration	Reporting Limit	Concentration	Reporting Limit
EPA Method 7420:					
Lead	ug/kg	24,000	3,600	ND	3,600

QC Summary:

% Recovery: 93
 % RPD: 2.6

Concentrations reported as ND were not detected at or above the reporting limit.


 Louis W. DuPuis
 Quality Assurance/Quality Control Manager

APPENDIX D

WASTE HANDLING AND DECONTAMINATION PROCEDURES

APPENDIX D

WASTE HANDLING AND DECONTAMINATION PROCEDURES

Decontamination: Any drilling, sampling or field measurement equipment that comes into contact with soil or groundwater will be properly decontaminated prior to its use at the site and after each incident of contact with the soil or groundwater being investigated. Proper decontamination is essential to obtain samples that are representative of environmental conditions and to accurately characterize the extent of soil and groundwater contamination. Hollow-stem auger flights and the drill bit will be steam-cleaned between the drilling of each well.

All sample equipment, including the split-tube sampler and brass tubes, will be cleaned by washing with trisodium phosphate oralconox detergent, followed by rinsing with tap water. Where required by specific regulatory guidelines, a nonphosphate detergent will be used.

Waste Handling: Waste materials generated during site characterization activities will be handled and stored as hazardous waste and will be stored on site in appropriately labeled containers. Waste materials anticipated include excavated soil, drill cuttings, development and purge water, water generated during aquifer testing, water generated during decontamination, and used personnel protection equipment such as gloves and Tyvek. The site owner will be responsible for providing the storage containers and will be responsible for the disposal of the waste materials. Drill cuttings from individual borings will be stored separately in drums or covered by plastic sheeting and the appropriate disposal procedure will be determined by the site owner or TPE following receipt of the soil sample analytical results. Drums will be labeled to show material stored, known or suggested contaminant, date stored, expected removal date, company name, contact, and telephone number.

APPENDIX E

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES

The field blank is a water sample that is taken into the field and is opened and exposed at the sampling point to detect contamination from air exposure. The water sample is poured into appropriate containers to simulate actual sampling conditions. Contamination for air exposure can vary considerably from site to site.

The laboratory will not be informed about the presence of field and trip blanks and a false identifying number will be put on the label. Full documentation of these collection and decoy procedure will be made in the site log book.

Duplicate samples are identical sample pairs (collected in the same place and at the same time), placed in identical containers. For soils, adjacent sample liners will be analyzed. For the purpose of data reporting, one is arbitrarily designated the sample, and the other is designated as a duplicate sample. Both sets of results are reported to give an indication of the precision of sampling and analytical methods.

The laboratory's precision will be assessed without the laboratory's knowledge by labeling one of the duplicates with false identifying information. Data quality will be evaluated on the basis of the duplicate results.

Laboratory QA/QC: Execution of a strict QA/QC program is an essential ingredient in high-quality analytical results. By using accredited laboratory techniques and analytical procedures, estimates of the experimental values can be very close to the actual value of the environmental sample. The experimental value is monitored for its precision and accuracy by performing QC test designed to measure the amount of random and systematic errors and to signal when correction of these errors is needed.

The QA/QC program describes methods for performing QC tests. These methods involve analyzing method blanks, calibration standards, check standards (both independent and EPA-certified standards), duplicates, replicates, and sample spikes. Internal QC also requires adherence to written methods, procedural documentation, and record keeping, and the observance of good laboratory practices.

APPENDIX F

SITE SAFETY PLAN

SITE SAFETY PLAN
TANK PROTECT ENGINEERING OF NORTHERN CALIFORNIA, INC.

Site: RAS-CO Manufacturing Company, Inc.
413 West Sunset Blvd.
Hayward, CA 94541

Project Number: 329

Original Site Safety Plan: Yes (X) No ()

Revision Number:

Plan Prepared by John V. Mrakovich

Date: 09/13/94

Plan Approved by Louis Travis III

Date: 09/14/94

Please respond to each item as completely as possible. Where an item is not applicable, please mark "N/A".

1. KEY PERSONNEL AND RESPONSIBILITIES

Project Manager	Lee Huckins & Louis Travis	(510) 429-8088
Site Safety Manager	Lee Huckins & Louis Travis	(510) 429-8088
Alternate Site Safety Manager	N/A	
Field Team Members		

Agency Reps: [Please specify by one of the following symbols: Federal: (F), State: (S), Local: (L), Contractor(s): (C)]

(L) Alameda County Health Care Services Agency: (510) 567-6700

2. JOB HAZARD ANALYSIS

2.1 OVERALL HAZARD EVALUATION

Hazard Level: High () Moderate () Low (X) Unknown ()
Hazard Type: Liquid (X) Solid (X) Sludge () Vapor/Gas (X)

Known or suspected hazardous materials present on site

Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)

Characteristics of hazardous materials included above (complete for each chemical presents):

MATERIAL #1

Corrosive ()	Ignitable (X)	Toxic (X)	Reactive ()
Volatile (X)	Radioactive ()	Biological Agent ()	
Exposure Routes:	Inhalation (X)	Ingestion (X)	Contact (X)

MATERIAL #2

Corrosive ()	Ignitable ()	Toxic ()	Reactive ()
Volatile ()	Radioactive ()	Biological Agent ()	
Exposure Routes:	Inhalation ()	Ingestion ()	Contact ()

MATERIAL #3

Corrosive ()	Ignitable ()	Toxic ()	Reactive ()
Volatile ()	Radioactive ()	Biological Agent ()	
Exposure Routes:	Inhalation ()	Ingestion ()	Contact ()

MATERIAL #4

Corrosive ()	Ignitable ()	Toxic ()	Reactive ()
Volatile ()	Radioactive ()	Biological Agent ()	
Exposure Routes:	Inhalation ()	Ingestion ()	Contact ()

2.2 JOB-SPECIFIC HAZARDS

For each labor category specify the possible hazards based on information available (i.e., Task-driller, Hazards-trauma from drill rig accidents, etc.) For each hazard, indicate steps to be taken to minimize the hazard.

Backhoe/Excavator Operator-Trauma from equipment accidents, wear hard hat, gloves, steel-toed boots.

The following additional hazards are expected on site (i.e., snake infested area, extreme heat, etc.):

Temporary open excavation.

Measures to minimize the effects of the additional hazards are:

Protect with barricades, caution tape, or traffic cones when unattended.

3. MONITORING PLAN

3.1 (a) Air Monitoring Plan

Action levels for implementation of air monitoring. Action levels should be based on published data available on contaminants of concern. Action levels should be set by persons experienced in industrial hygiene.

Level
(i.e., .5 ppm)

Action Taken
(i.e., commence perimeter monitoring)

5 ppm

Cease work and commence perimeter monitoring until contamination disperses.

(b) Air Monitoring Equipment

Outline the specific equipment to be used, calibration method, frequency of monitoring, locations to be monitored, and analysis of samples (if applicable).

Gastech, Inc. Trace-Techtor, hexane calibration. Monitor at excavation during each sampling event if vapors detected.

If air monitoring is not to be implemented for this site, explain why:

N/A

3.2 Personnel Monitoring

(Include hierarchy of responsibilities decision making on the site)

Site safety manager to make decision.

3.3 Sampling Monitoring

- (a) Techniques used for sampling: **Sample air at excavation with Gastech, Inc., Trace-Techtor.**
- (b) Equipment used for sampling: **Gastech, Inc., Trace-Techtor.**
- (c) Maintenance and calibration of equipment: **Calibrate to hexane prior to operation.**

4. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Equipment used by employees for the site tasks and operations being conducted. Be specific (i.e., hard hat, impact resistance goggles, other protective glove, etc.).

Hard hat, protective gloves (when necessary), steel-toed boots.

5. SITE CONTROL AND SECURITY MEASURES

The following general work zone security guidelines should be implemented:

- Work zone will be restricted by traffic cones.
- Excavations will be protected when unattended. Visitors will not be allowed to enter the work zone unless they have attended a project safety briefing.

6. DECONTAMINATION PROCEDURE

List the procedures and specific steps to be taken to decontaminate equipment and PPE.

Wash with trisodium phosphate solution and rinse with clean tap water.

7. TRAINING REQUIREMENTS

Prior to mobilization at the job site, employees will attend a safety briefing. The briefing will include the nature of the wastes and the site, donning personal protection equipment, decontamination procedures and emergency procedures.

8. MEDICAL SURVEILLANCE REQUIREMENTS

If any task requires a very high personnel protection level (OSHA Level A or B), personnel shall provide assurances that they have received a physical examination and they are fit to do the task. Also personnel will be instructed to look for any symptom of heat stress, heat stroke, heat exhaustion or any other unusual symptom. If there is any report of that kind it will be immediately followed through, and appropriate action will be taken.

9. STANDARD OPERATION PROCEDURES

Tank Protect Engineering of Northern California, Inc. (TPE) is responsible for the safety of all TPE employees on site. Each contractor shall provide all the equipment necessary to meet safe operation practices and procedures for their personnel on site and be responsible for the safety of their workers.

A "Three Warning" system is utilized to enforce compliance with Health and Safety procedures practices which will be implemented at the site for worker safety:

- * Eating, drinking, chewing gum or tobacco, and smoking will be allowed only in designated areas.
- * Wash facilities will be utilized by workers in the work areas before eating, drinking, or use of the toilet facilities.
- * Containers will be labeled identifying them as waste, debris or contaminated clothing.
- * All excavation/drilling work will comply with regulatory agency requirements.
- * All site personnel will be required to wear hard hats and advised to take adequate measures for self protection.
- * Any other action which is determined to be unsafe by the site safety officer.

10. CONFINED SPACE ENTRY PROCEDURES

No one is allowed to enter any confined space operation without proper safety measures. Specifically in case of an excavated tank pit no one should enter at any time.

11. EMERGENCY RESPONSE PLAN

Fire extinguisher(s) will be on site prior to excavation. Relevant phone numbers:

Person	Title	Phone No.
<u>Lee Huckins & Louis Travis</u>	Project Manager	(510) 429-8088
_____	Fire	911 or _____
_____	Police	911 or _____
_____	Ambulance	911 or _____
_____	Poison Control Center	(800) 523-2222
_____	Nearest off-site no.	_____
<u>Kaiser Permanente Hospital</u>	Medical Advisor	(510) 784-4251
<u>Mr. Oscar V. Lang</u>	Client Contact	(510) 782-3161
U.S EPA - ERT _____		(201) 321-6660
Chemtrec _____		(800) 424-9300
Centers for Disease Control _____	Day	(404) 329-3311
	Night	(404) 329-2888
National Response Center _____		(800) 424-8802
Superfund/RCRA Hotline _____		(800) 424-8802
TSCA Hotline _____		(800) 424-9065
National Pesticide Information Services _____		(800) 845-7633
Bureau of Alcohol, Tobacco, and Firearms _____		(800) 424-9555

HEALTH AND SAFETY COMPLIANCE STATEMENT

I, _____ have received and read a copy of the project Health and Safety Plan.

I understand that I am required to have read the aforementioned document and have received proper training under the occupational Safety and Health Act (29 CFR, Part 1910.120) prior to conducting site activities at the site.

Signature

Date

Signature

Date

Nearest Hospital:

Kaiser Permanente Hospital
27400 Hesperian Blvd.
Hayward, CA
Emergency (510) 784-4251
Gen. Info. (510) 784-4000

Directions From Site:

Drive westerly on W. Sunset Blvd., to Hesperian Blvd. Turn left (southeast) onto Hesperian Blvd. The hospital will be on the left hand side.