



PORT OF OAKLAND FAX TRANSMITTAL

DATE: 7-26-99 TIME: 4:30

TO:

NAME: Barney Chan

DEPARTMENT: _____

COMPANY/ORGANIZATION: ALHCSA

FAX NUMBER: 337-9335

PHONE/EXTENSION NUMBER: _____

FROM:

NAME: D Herman

DEPARTMENT: _____

FAX NUMBER: _____

PHONE: 272-1184

Number of pages including this cover sheet: 3

If there is a problem with this transmittal, please call:

NAME: _____ PHONE: _____

NOTES/COMMENTS:

Barney:
Please find attached the revised
table 2. and revised page 7
of the work plan for the
remediation of Crowley yard II.

Please call me at 272-1184
if you have questions. Thanks, Barney

Clean up levels

**Table 2
 Recommended Clean Soil Contaminant Levels for On-Site Fill**

^A Total Petroleum Hydrocarbons as Diesel (TPHd)	518 mg/kg
^A Total Petroleum Hydrocarbons as Gasoline (TPHg)	629 mg/kg
^B Total Petroleum Hydrocarbons as Motor Oil (TPHmo)	1000 mg/kg
Lead	
^C - Total	-less than 350 mg/kg
^D - Soluble by Waste Extraction Test	-less than 5 mg/L
^D - Soluble by TCLP	-less than 5 mg/L
^{D,E} Other Metals	<ul style="list-style-type: none"> • Less than industrial Preliminary Remediation Goal (EPA Region IX, 1998, and CalEPA, 1994); and • Less than relevant Title 26 and Title 22 hazardous waste disposal criteria.
Volatile Organic Compounds	
^A -Benzene	-2.7 mg/kg
^A -Toluene	-930 mg/kg
^A -Ethylbenzene	-13 mg/kg
^A -Xylene	-358 mg/kg
^A -MIBE	-447 mg/kg
^{D,E} Semi-Volatile Organic Compounds	<ul style="list-style-type: none"> • Less than industrial Preliminary Remediation Goal (EPA Region IX, 1998, and CalEPA, 1994); and • Less than relevant Title 26 and Title 22 hazardous waste disposal criteria.

*SP Bay Area
 Plus Solvent > SPT
 5.6 mg/L
 4 day average*

- A. Values from Table 2: Ecological Protection Zones Tier 1 Standards, from San Francisco Regional Water Quality Control Board Order 99-045.
- B. Values from Table 1 of Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Storage Tank Sites, 1990.
- C. California Health and Safety Code, Section 25157.8.
- D. From hazardous waste definitions, 22 CCR and 26 CCR.
- E. Industrial Preliminary Remediation Goals (EPA Region IX, 1998, and CalEPA, 1994).

3.0 INVESTIGATION AND REMEDIATION ACTIVITIES

3.1 GENERAL

The project goal is over-excavate the two UST sites. Successful completion of the project goal will be defined by collection of soil samples meeting the criteria listed in Section 2.2 of this Workplan.

3.2 REGULATORY REQUIREMENTS

The Remediation Contractor will perform all Workplan items in accordance with the latest edition and/or amendments of the applicable local, state, and federal statutes and regulations, including:

- CFR 1926, Safety and Health Regulations for Construction
- CFR 261, Identification and Listing of Hazardous Waste
- CFR 262 and 263, Standards for Generators and Transporters of Hazardous Wastes
- CFR Part 280 et seq, Standards for Owners and Operators of Underground Storage Tanks
- CFR 172 Hazardous Materials Tables and Communication
- CCR, Construction Safety Orders
- CCR, Hazardous Wastes
- CCR, Groundwater
- Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, August 10, 1990
- Rationale for Modifying the Tier 1 Petroleum Hydrocarbon Saltwater Ecological Protection Zone (SEPZ) Levels for the San Francisco International Airport Board Order 99-045.

3.3 HEALTH AND SAFETY PLAN REQUIREMENTS

The Remediation Contractor will prepare a HASP prior to beginning field work. The HASP will have the following elements:

1. The HASP will be prepared and signed by an American Board of Industrial Hygiene (ABIH) Certified Industrial Hygienist.
2. The HASP will include a list of planned site tasks and an Activity Hazard Analysis for each task. The analysis shall follow Army Corps of Engineers EM-385 methodology.
3. A summary of chemicals which might be encountered by workers at the site, carcinogenicity, teratogenicity, health effects, and relevant occupational standards for each (OSHA PEL, ACGIH TLV, etc.)
4. Required Personal Protective Equipment (PPE) to be used on various tasks of the project, with reference to the Remediation Contractor's Respiratory Protection Program.
5. Air sampling to be performed, including calibration protocols for each instrument, and details on outside laboratories for any personal monitoring.
6. Trigger points for air sampling to upgrade or downgrade PPE.
7. Training requirements for staff who will be working at the site.
8. Location and details of decontamination systems for workers leaving the excavation areas.
9. Emergency Response Plan, including route map to nearest hospital, and emergency contact numbers.
10. Medical monitoring requirements for staff who will be working at the site.