SITE MITIGATION REPORT
Project #150-504B

JACK M. HOLLAND, SR.
16301 EAST 14th STREET
SAN LEANDRO, CALIFORNIA

12-9-98

PREPARED BY ENVIRONMENTAL BIO-SYSTEMS, INC.
FOR
ESTATE OF JACK M. HOLLAND, SENIOR

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9 December 1998

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Environmental Bio-Systems, Inc.
Innovative Solutions for a Better Environment
Contractor's License A-Haz 687236

1. INTRODUCTION

Environmental Bio-Systems, Inc. (EBS) performed the scope of services described within this document on behalf of the Estate of Jack M. Holland, Sr. (the Client) per the terms of EBS proposal #P98026B-R2, executed by the Client on 28 July 1998. The reported work was performed at 16301 East 14th Street in San Leandro, California (the site) to comply with a mandate from the Alameda County District Attorney's Office.

The principal project contacts are:

Client: Ms. Anne Marie Holland Tiers, Executor of the Jack M. Holland, Sr. Estate, 1498 Hamrick Lane, Hayward, CA 94544, (510) 782-4307.

Consultant: Dave A. Sadoff, Project Manager, Environmental Bio-Systems, Inc., P.O. Box 7171, San Jose, CA 95150-7171, (408) 979-8600.

2. SCOPE OF WORK

The project was organized into two phases, identified as Task I and Task II. Task I of the project encompassed the disposal of approximately 180 containers (and their contents) ranging in size between 1-quart and 55-gallons from the subject site. Task II included demolition and disposal of 20 above-ground storage tanks (ASTs) and the excavation and removal of 8 underground storage tanks (USTs). Appendix A contains a site location map (Figure 1), a site map with AST locations (Figure 2), a site map with UST locations (Figure 3), a map depicting soil sample locations and results (Figure 4), and a map depicting tank pit water sample locations and results (Figure 5).

Major items included in the scope of Task I included the following:

- Production of a site-specific Work Plan and a Health and Safety plan.
- Production of a detailed Work Plan.
- Construction of a bermed, visqueen sheeted drum inventory containment area where all liquid containing drums, cans, jugs and containers were placed.
- Inventory and labeling of all containers.
- Sampling and analyzing of liquids for polychlorinated biphenyls and halogenated organic compounds.
- Consolidation of compatible small container contents into 55-gallon drums.
- Removal and recycling or disposal of inventoried liquids by properly licensed transporters to properly licensed recycling/disposal facilities.
- Disposal of all evacuated liquid containers.
- Collection and proper disposal of miscellaneous project wastes including small containers, sludge, absorbent, used disposable personal protective equipment, and visqueen sheeting.

Major items included in Task II included the following:

- Production of a site-specific work plan and a health and safety plan.
- Procurement of permits from the Alameda County Fire Department (ACFD), the Alameda County Health Care Services Agency (ACHCSA), and the Bay Area Air Quality Management District (BAAQMD).
- Evacuation of liquids from the ASTs and USTs by licensed oil recycler.
- Removal and disposal of approximately 3,000 gallons of oil sludge from one of the ASTs.
- Demolition of 20 ASTs and all accessible above-ground pipelines, dispensers, and fueling equipment.
- Excavation, removal and disposal of 8 USTs.
- Backfill of resulting UST excavations using overburden soil. Benching and sloping sidewalls of the pits to reduce Client liability.
- Preparation of this report.

3. SITE LOCATION AND DESCRIPTION

3.1. Location and Use

The site is located at 16301 E. 14th Street in San Leandro, California. The subject property encompasses approximately three acres in a mixed commercial and residential area within an unincorporated section of Alameda County. A site location map is included as Figure 1.

The United States Geological Survey Hayward, California Quadrangle Map shows the site to be located in Section 5, Township 3 south, Range 2 west of the Mount Diablo Base and Meridian. The property is situated approximately 3 miles east of San Francisco Bay's east shoreline, and lies at an elevation of approximately 40 feet above mean sea level. The topography of the site dips gently to the west.

The site is bounded by a Little League baseball field to the south, by Edendale School to the west, and by used auto dealerships to the north and east.

Known usage of the site includes bulk fuel storage, blending, and fuel retail sales carried out approximately between 1960 and the mid-1980s. A building in the southwest portion of the lot, historically used for vehicle repair, is currently used for storage and maintenance of equipment by San Leandro Crane.

3.2. Regional Geology

The site is located in the East Bay Plain Area of the San Francisco Bay drainage basin. The Hayward Fault lies approximately 1,000-feet east-northeast of the site.

The flat, alluviated lowlands are bounded to the north by the San Pablo Bay, to the east by the Hayward Fault and the Coast Range foothills, and to the south and west by the San Francisco Bay. Older alluvium in the area consists of Pliocene and Pleistocene clay, silt, sand, and gravel. These sediments were derived mainly from the hills to the east and southeast, and represent successive coalescing alluvial fans.

3.2.1. Hydrogeological Setting

The subject site is situated above the San Lorenzo Cone sub-area, which consists of various sand and gravel strata within the older alluvium. Three shallow aquifers (to 400 feet bgs) have been identified for this area. These aquifers are correlative to the Niles cone sub-area Newark, Centerville, and Fremont aquifers (shallowest to deepest). Well yields from these aquifers range from a few tens of gallons per minute to over one thousand-gallons per minute.

4. PREVIOUS ENVIRONMENTAL WORK

1990

Crosby and Overton, Inc. (C&O) drilled and sampled five exploratory soil borings near the two diesel USTs. Soil samples collected from the borings were found to contain up to 25,000 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as diesel (TPHd). An unauthorized fuel release form was filed with the ACHCSA. Ground water was first encountered at approximately 15 feet below ground surface (bgs).

February 1996

Compliance & Closure, Inc. (CCI) directed the locating of eight USTs at the Site. CCI reportedly located three gasoline, two kerosene, two diesel, and one stoddard solvent UST.

April 1996

CCI installed and sampled three ground water monitoring wells. Soils encountered during drilling activities were described as silty clay, thin beds of silty sand and sand to 18 feet bgs.

Soil samples collected during well drilling of the wells reportedly contained up to 4,400 mg/kg total petroleum hydrocarbons as gasoline (TPHg) and 8,200 TPHd. These soil samples were also found to contain up to 0.024 mg/kg 1,4-dichlorobenzene and 0.4 mg/kg methylene chloride.

Ground water samples collected from the wells were found to contain up to 33,000 micrograms per liter (µg/L) TPHg,; up to 12 µg/L benzene, 83 µg/L toluene, 22 µg/L ethylbenzene, and 160 µg/L xylenes (BTEX, respectively); up to 9,700 µg/L TPHd,; up to 41,000 µg/L total recoverable petroleum hydrocarbons (TRPH); and up to 3.1 µg/L 1,2-dichlorobenzene.

July 1996

CCI conducted quarterly monitoring of the ground water wells. Ground water samples were found to contain up to 1,400 µg/L TPHg; 17, 5.6, 7.6 and 32 µg/L BTEX components, respectively; and 4,600 µg/L TPHd.

October 1996

CCI conducted quarterly monitoring of the ground water wells. Ground water samples were found to contain up to 7,300 µg/L TPHg; 16, 8.9, 20 and 15 µg/L BTEX components, respectively; and 14,000 µg/L TPHd.

January 1997

CCI conducted quarterly monitoring of the ground water wells. Ground water samples were found to contain up to 2,600 µg/L TPHg; 6.4 µg/L benzene; 44 µg/L toluene; and 2,800 µg/L TPHd.

April 1997

CCI conducted quarterly monitoring of the ground water wells. Ground water samples were found to contain up to 2,700 µg/L TPHg; 16, 8, 10 and 25 µg/L BTEX components, respectively; and 500 µg/L TPHd.

5. TASK I

The construction of a bermed and lined inventory area, and the consolidation and field screening of containers and their contents was carried out between 4 and 7 August 1998. Compatible liquids were subsequently recycled or disposed of at properly licensed facilities.

5.1. Work Plan

EBS drafted and submitted a Work Plan per the requirement of the ACPWA. A copy is included in Appendix B. The Work Plan was conditionally approved by Paul M. Smith, Hazardous Materials Specialist with the ACPWA, in a letter dated 13 July 1998. A copy of this letter is also included in Appendix B. Conditions for work plan approval cited by Mr. Smith included that drum crushing activities be conducted within the lined containment area; that drums containing a significant amount of sludge be properly profiled and transported to an approved facility or be rinsed out on-site; profiling of non-petroleum wastes; and the proviso that a security guard be stationed at the site during all inactive periods.

5.2. Health and Safety Plan

EBS subcontracted Environmental Health Consultants, Inc. (EHCI) of Burlingame, California to provide a site-specific Health and Safety Plan (HSP) addressing work associated with Task I. They were also contracted to conduct periodic unannounced site visits to ensure compliance with the plan. The Task I HSP was written by Irene S. Fanelli, Certified Industrial Hygienist (No. 4035 CP). A copy of the plan is included in Appendix C. It was reviewed and signed by all on-site workers acknowledging their comprehension of its' contents.

A "tailgate" meeting was held at the beginning of each work day. Specific and general potential hazards related to the anticipated work, emergency procedures, and hospital location were discussed during these meetings.

5.3. Field Work

5.3.1. Air Monitoring

Periodic breathing space and perimeter air monitoring was conducted during field activities by Mr. Kurt Ettinger, Industrial Hygienist with EHCI. A Thermo Analytical 580 D photoionization detector (PID) was used for this purpose. The

PID was calibrated at the beginning of each work day using isobutylene calibration gas.

The highest PID readings were measured at 2 parts per million (ppm) isobutylene equivalents near the breathing zone. A reading of 10 or greater would have necessitated engineering controls (i.e. respirators). No recordable isobutylene equivalents were ever measured along the property perimeter.

5.3.2. Inventory Area Construction and Container Collection

EBS contracted Zaccor Companies, Inc. of Alameda, California (Zaccor) to construct a visqueen-lined, bermed container inventory area in the area depicted on Figure 2. Zaccor is a California State Certified General A Contractor with Hazardous and Asbestos Certificates (#478799). Fifty five gallon drums found throughout the site were subsequently transferred to the inventory area on wooden pallets. The drums were labeled with a unique number which was affixed to the drum via fade-resistant marker on 3" by 5" adhesive labels. The drums were then grouped according to field observations of similar colors, drum types, and estimated age. A total of 143 drums were assembled and labeled.

Liquids in smaller containers were combined with similar-appearing liquids in 55-gallon drums within the containment area. These drums were also labeled as described above. A total of approximately 60 miscellaneous smaller containers were collected, labeled and consolidated.

5.3.3. Drum Content Sampling and Analyses

Samples were collected from all 55-gallon drums by representatives of Evergreen Oil Company of Newark, California (Evergreen). The samples were then field-composited based on grouping similar appearing drums and/or contents. The composited samples were then analyzed by Evergreen at their Newark, California laboratory. This laboratory is licensed by the State of California Department of Toxic Substances Control Environmental Laboratory Accreditation Program

(ELAP #1900). Evergreen analyzed the composited samples for PCBs, flashpoint, total organic halogens, oil and grease percentage, pH, and gravity.

Several composite samples failed Evergreen's acceptance criteria. The contents of the drums from which these samples were collected were subsequently re-sampled and discretely analyzed for the analytes found at unacceptable concentrations in the composite.

Two of the drums were found to contain concentrations of PCBs above Evergreen's acceptance levels. These drums were subsequently placed into 85-gallon metal overpack drums and segregated for separate disposal. The overpack drums were labeled as containing a reportable quantity hazardous waste liquid, not otherwise specified (oil contaminated with polychlorinated biphenyls).

One drum was found to contain sodium hypochlorite. This drum was placed into an 85-gallon "poly" overpack and also segregated for separate disposal. This drum was labeled as containing hazardous waste, corrosive, not otherwise specified (sodium hypochlorite).

Approximately 28 drums were found to contain levels of total organic halogens or flashpoints above Evergreen's acceptance criteria. These drums were marked with a distinguishing feature to allow segregation from wastes intended for Evergreen's recycling facility.

5.4. Waste Disposal

5.4.1. Oily Water

A total of approximately 4,636 gallons of oily water were vacuumed from drums into trucks and transported under Uniform Hazardous Waste Manifest (UHWM) to Evergreen's facility in Newark, California on 5 and 6 August 1998. Evergreen is licensed to accept this waste stream (EPA# CAD982413262). Copies of the UHWMs are included in Appendix D. A copy of the Certificate of Recycling is also included in Appendix D.

5.4.2. Oily Water with Halogens and/or High Flash Points

HVOC

Approximately 650 gallons of oily water with halogens were vacuumed into trucks and transported under UHWM to Solvent Services, Inc. in San Jose, California (SSI) for recycling/disposal. SSI is licensed to accept this waste stream (EPA# CAD059494310). A copy of the UHWM is included in Appendix D.

5.4.3. Oily Water with PCBs

PCBs

Two drums containing approximately 100 gallons of oily water with PCBs were transported under UHWM to Safety Kleen, Inc.'s facility in Aragonite, Utah for incineration. Safety Kleen is licensed to accept this waste stream (EPA# UTD981552177). A copy of this UHWM is included in Appendix D.

5.4.4. Sodium Hypochlorite

One drum containing approximately 50 gallons of sodium hypochlorite was transported under UHWM to Crosby and Overton, Inc. of Long Beach, California (C&O) for disposal. C&O is licensed to accept this waste stream (EPA# CAD028409019). A copy of this UHWM is included in Appendix D.

5.5. Drums

Bin #1

All evacuated 55-gallon drums were crushed using a hydraulic drum crusher on 7 August 1998. The crushed drums were placed into a roll-off bin. This bin was transported to Forward, Inc. in Stockton, California for disposal on 4 September 1998. A copy of the Non-Hazardous Waste Manifest which accompanied the bin to Forward is included in Appendix D.

5.6. Miscellaneous Debris and Waste Collection

Bin #2

Approximately 60 empty containers, ranging in volume from one quart to 30-gallons in size, were placed within a second roll-off bin staged on-site. Sludge,

absorbent material, used disposable personal protective equipment, and visqueen sheeting were also placed within this bin.

5.6.1. Bin Content Sampling and Analyses

Bin #2

Two samples (designated Bin-A and Bin-B) were collected from random points within the second bin. This laboratory-composited sample was analyzed at Analytical Sciences of Petaluma, California (AS). AS is an ELAP certified laboratory (#2118). AS was instructed to analyze the sample for the following analyses per landfill profiling requirements:

- TPHg by EPA Method 5030 and 8015 (Modified)
- TPHd by EPA Method 5030 and 8015 (Modified)
- TRPH by Standard Method 5520F
- LUFT Metals by EPA Method 3050 and 7000 Series
- VOCs by EPA Method 8260
- SVOCs by EPA Method 8270B

Due to laboratory limitations, AS subcontracted the SVOC analysis to Sequoia Analytical of Petaluma, California (Sequoia). Sequoia is an ELAP certified laboratory (#2245).

5.6.1.1. Analytical Results

Copies of the laboratory analytical reports are included in Appendix E. Composited sample Bin-A and Bin-B were found to contain the following:

A) Petroleum Hydrocarbons

- 230 milligrams per kilogram (mg/kg) TPHg
- 10,000 mg/kg TPHd
- 460,000 mg/kg TRPH

B: Metals

- 9.0 mg/kg Cadmium
- 67 mg/kg Chromium
- 330 mg/kg Lead
- 800 mg/kg Zinc

C: VOCs

- 3,500 micrograms per kilogram (µg/kg) toluene
- 5,000 µg/kg tetrachloroethene
- 11,000 µg/kg ethylbenzene
- 26,000 µg/kg total xylenes
- 520 µg/kg isopropyl benzene
- 950 µg/kg n-propyl benzene
- 1,800 µg/kg 1,3,5-trimethylbenzene
- 600 µg/kg tert-butylbenzene
- 5,800 µg/kg 1,2,4-trimethylbenzene
- 810 µg/kg n-butylbenzene
- 2,900 µg/kg naphthalene

D: SVOCs

- 14,900 µg/kg acenaphthylene
- 30,000 µg/kg bis (2-ethylhexyl) phthalate
- 31,800 µg/kg 2-methylnaphthalene
- 12,300 µg/kg phenanthrene

The result attained for lead (330 mg/kg) is greater than 10 times the California Title 22 soluble threshold limit concentration (STLC). Therefore, the intended landfill (Forward) requested the sample be further analyzed per their acceptance requirements for STLC lead by EPA Method 6010A and for the Title 22 aquatic bioassay by the Static Acute Bioassay Procedures for Hazardous Waste Samples, California Department of Fish and Game WPCL (November 1988).

The sample was found to contain 39,500 micrograms per liter (µg/L) STLC lead (greater than the 5,000 µg/L level specified as hazardous waste in California Title

22); **and failed the aquatic bioassay (>40% fish mortality).** Copies of the analytical reports may be found in Appendix E. This waste stream was subsequently classified as a hazardous waste and could not be accepted by Forward based upon its' profile. This bin remains staged on-site pending acceptance at a Class I disposal facility.

6. TASK II

EBS contracted Zaccor to demolish, flatten, and transport all 20 ASTs on 3 and 4 September 1998. The eight USTs were uncovered, inerted, and removed from the site on 8 and 9 September 1998.

6.1. Work Plan

EBS generated a Work Plan specific to Task II per the requirements of the ACFD and the ACHCSA. A copy of this plan is included in Appendix B.

6.2. Health and Safety Plan

A Task II specific HSP was generated by Zaccor to meet the requirements of the ACFD and the AHCSA. A copy is included in Appendix C. The Task II HSP was signed by all on-site workers prior to the commencement of work, acknowledging their comprehension of its' contents.

A "tailgate" meeting was held at the beginning of each work day. Specific and general potential hazards related to the anticipated work, emergency procedures, and hospital location were discussed during these meetings.

EBS supplied EHCI with a copy of the Task II HSP, and contracted them to conduct periodic site visits to ensure plan compliance during this phase of work.

6.3. Permits

EBS procured ACFD permits for the demolition of the ASTs and the removal of the 8 USTs (permits #982041 and 982040, respectively, issued 1 September 1998). Copies of the ACFD permits are included in Appendix F.

EBS also procured a permit from the ACHCSA for the removal of the 8 USTs. ACHCSA approved the permit application on 2 September 1998. A copy of this permit is included in Appendix F.

Due to the anticipated demolition of several site structures to allow excavator access to work areas, a BAAQMD Asbestos Demolition and Renovation Notification was filed on 24 August 1998. Per the requirements of the BAAQMD Regulation 3, an Asbestos Survey was conducted of the affected structures. EBS contracted Hazardous Materials Assessment, Inc. of San Leandro, California (HMA). HMA is a California Certified Asbestos Consultant (#92-0018). None of the sampled building materials were found to contain reportable concentrations of asbestos. A copy of the Asbestos Survey is included in Appendix G. The BAAQMD issued Notification J# 28748 on 15 August 1998.

The BAAQMD was also notified of the intended UST removal per their Regulation 8, Rule 40 on 24 August 1998. Copies of all permits and notifications are included in Appendix F.

6.4. Field Work

Task II field work began on 31 August and terminated on 10 September 1998. AST demolition proceeded first to increase available work area during the subsequent removal of USTs.

6.4.1. Air Monitoring

Periodic breathing space and perimeter air monitoring was conducted during field activities by Mr. Kurt Ettinger, Industrial Hygienist with EHCI. A Thermo

Analytical 580 D photoionization detector (PID) was used for this purpose. The PID was calibrated at the beginning of each work day.

The highest PID readings were measured at 6 parts per million (ppm) isobutylene equivalents near the breathing zone. A reading of 10 or greater would have necessitated engineering controls (i.e. respirators). No recordable isobutylene equivalents were ever measured along the property perimeter.

6.4.2. Liquid and Sludge Removal

Approximately 2,240 gallons of liquid were evacuated from the 8 USTs by vacuum truck on 31 August 1998. The liquid was transported by Evergreen to SSI under UHWM. A copy of this UHWM is included in Appendix D.

Approximately 5,200 gallons of liquid and sludge and rinsate were removed from the ASTs by vacuum truck on 3 September 1998. The liquids and sludge were transported under UHWM by Evergreen to their Newark facility for recycling. A copy of this UHWM is included in Appendix D.

* Due to apparent ground water intrusion into some of the USTs, an additional 450 gallons of liquid were evacuated via vacuum truck on 8 September 1998. This liquid was transported by Foss Environmental & Infrastructure of Alameda, California (Foss) to SSI. Foss is a licensed hazardous waste hauler (EPA# CAR000030114). A copy of the UHWM which accompanied the liquid to SSI is included in Appendix D.

6.4.3. AST Demolition and Removal

The ASTs were demolished and removed from the site by Zaccor on 3 and 4 September 1998. Prior to demolition, the interior space of all ASTs were remotely checked under the direction of James Ferdinand, Fire Marshal with the ACFD. Fire Marshal Ferdinand employed a Gastech™ lower explosive limit (LEL) and oxygen meter to verify that the interior atmosphere of the tanks were

sufficiently below the LEL. None of the 20 ASTs were found to exhibit measurable explosive vapors (LEL = 0).

The ASTs were then demolished using an excavator-mounted shear beam. The beam was used to cold cut the ASTs. The steel tank debris was then loaded onto flatbed trucks and transported to the Shnitzer Steel scrap yard in Oakland, California for recycling.

6.4.4. UST Removal

The 8 USTs were inerted, excavated, and removed from the site on 9 September 1998. The tanks were designated T1 through T8 for identification and reference purposes.

Tanks T1 and T2 were situated adjacent to each other in an end-to-end fashion. Tanks T3 and T4 were likewise situated. Tanks T5 and T6 were found to lie side by side, as were Tanks T7 and T8. The locations of these tanks and soil overburden stockpiles are depicted on Figure 3 in Appendix A.

The UST interiors were purged of flammable vapors and oxygen using dry ice. The interior atmosphere of each tank was evaluated using a Gastech™ LEL and oxygen meter to ensure each UST exhibited LEL and oxygen contents <10% prior to UST removal, per ACFD regulations. Fire Inspector Nick Chimento of the ACFD was present to observe the tank atmosphere instrument readings. All UST interior atmospheres were found to contain < 10% LEL and < 10% oxygen.

The USTs were lifted from the pits and positioned to allow exterior inspections by EBS, Inspector Chimento, and Scott Seery, Senior Hazardous Materials Specialist with the ACHCSA. A copy of the ACHCSA Inspection Sheet is included in Appendix H.

[redacted] was found to be a 10,000-gallon UST of single wall bare steel construction. The tank was severely pitted, and measured 27'6" by 8'. It was used to contain[redacted]

[redacted] was also found to be a 10,000-gallon UST of single wall bare steel construction, with dimensions of 27' by 8'. This vessel and had two large holes in its' bottom measuring approximately 2" by 1" and 1" by ½". This tank contained [redacted].

[redacted] was found to be a 10,000-gallon single wall bare steel UST with dimensions of 28'6" by 8'. A hole measuring approximately 1.5" by 1" was noted on its' bottom. This tank was used to contain [redacted]

Tank T4 was found to be 12,000 gallon, tar-wrapped single wall steel UST measuring 33'6" by 8'. No corrosion, pitting or holes were noted in this tank. This vessel was used to contain stoddard solvent.

Tank T5 was found to be a 5,000-gallon single wall bare steel UST with dimensions of 14' by 7'6. No corrosion, pitting or holes were observed in this vessel. This UST was used to contain kerosene.

Tank T6 was found to be a 5,000-gallon UST of single wall bare steel construction. This tank was used to contain kerosene, and had dimensions of 14' by 7'9". No corrosion, pitting or holes were noted in this tank.

Tank T7 was found to be a 6,000-gallon single wall bare steel UST used to contain diesel. No corrosion, pitting or holes were observed in this 16'8" by 8' tank.

Tank T8 was found to be a 5,000-gallon UST of single wall bare steel construction. This 13'6" by 7'6" vessel was used to contain diesel. No corrosion, pitting or holes were noted in this tank.

Following approval by Inspectors Chimento and Seery, the USTs were removed, loaded onto flatbed trucks and transported by ECI under hazardous waste manifest for recycling at their Richmond, California facility. Appendix D includes a copies of the UHWMs which accompanied the USTs to the ECI facility. A certificate of destruction from ECI for the USTs is also included in Appendix D.

Ground water was present in all UST depressions, and stabilized at approximately 10 feet below ground surface (bgs). A sheen was noted on ground water in each of the 5 excavations. Slight to moderate petroleum odor and a typical greenish discoloration were observed in soils excavated from around the USTs.

6.4.5. Sampling

Soil and ground water sampling were performed per ACHCSA and State of California guidelines on 9 September 1998. All sampling was performed in the presence of Inspector Seery.

6.4.5.1. Soil Sampling

Soil samples were collected at locations specified by Inspector Seery. The locations of all samples are depicted on Figure 4. Soil sample designations were based upon the corresponding UST designation in proximity to the sample and depth (e.g., sample T1-10' was collected near UST T1, at a depth of 10' bgs). Soil samples collected from each end of a single UST were designated with the UST designation, the number 1 or 2, and the depth (e.g., sample T4-2-10' was the second sample collected in proximity to UST T4 at a depth of 10' bgs).

Composite soil samples SS1-4 and KS1-4 were collected from the accumulated stockpile of overburden soil excavated from around the stoddard solvent and kerosene tanks, respectively. Each sample consisted of four individual samples which were laboratory composited prior to analysis.

6.4.5.1.1. Soil Sampling Methods

Soil was collected from the excavations by inserting a clean stainless steel sample tube into freshly exposed soil brought up from the pit in a back-hoe bucket. A wooden mallet was used to drive each tube into the soil, packing it full to exclude head-space.

Composite stockpile samples consisted of four stainless steel tubes filled with soil at randomly selected locations. A wooden mallet was used to drive clean stainless steel sample tubes into freshly exposed soil approximately six inches to two feet beneath the pile surface.

The ends of all tubes submitted to the laboratory were covered with Teflon™ sheets and sealed with plastic end caps. The sample tubes were then labeled with a designation unique to the project and stored in an insulated cooler on top of crushed ice.

6.4.5.2. Pit Water Sampling

Samples were collected from water found in the tank depressions. Water sample designations were based upon the corresponding USTs in whose depression the samples were collected (e.g., T3-H_20 was collected from water present beneath the location of UST T3). Pit water in several locations was found to co-mingle with pit water from beneath an adjacent removed UST. In this case, the water sample was designated in a fashion to illustrate the co-mingled nature of the sample (e.g. T7,8- H_20).

T3 water "leaked" into T7,8 and T5,6 pits

6.4.5.2.1. Pit Water Sampling Methods

New disposable polyethylene bailers were lowered in the pit water, retrieved, and emptied into sample containers appropriate for the intended analysis. The containers were then labeled with a designation unique to the project and stored in an insulated cooler on top of crushed ice.

6.4.6. Pit Backfilling

Following removal and off-site transportation of the USTs, the soil stockpiles were re-introduced into their respective excavations. This was done in agreement with Inspector Seery, with the intention of reducing hazard exposure associated with open excavations.

7. LABORATORY ANALYSES AND SAMPLE RESULTS

7.1. Laboratory Analyses

All samples were transported to Analytical Sciences (AS) of Petaluma, California. AS is a laboratory which is accredited by ELAP to perform the indicated analyses (certification #2118). Chain of custody documentation was initiated at the site and accompanied all samples in transit to the laboratory.

Samples T1-10', T2-1-10', T2-2-10', T3-1-10', T5,6-1-10', T5,6-2-10', T1,2-H_20, T3- H_20, T5,6- H_20, AND T7,8- H_20 were analyzed for TPHd, TPHg, BTEX, MTBE, and Pb. Samples T4-1-10', T4-2-10', T4- H_20, and SS1-4 were analyzed for TPHss and BTEX. Sample KS1-4 was analyzed for TPHk and BTEX.

7.1.1. Analytical Methods

The following methods were used by the laboratory for each of the selected analytes:

TPHg/BTEX/MTBE-	EPA 5030/8015M/8020
TPHd-	EPA 3550/8015M
TPHss/BTEX-	EPA 3550/8015M/8020
TPHk/BTEX	EPA 3550/8015M/8020
Total Lead-	EPA 3050/7420

7.2. Soil Samples

The results of soil sample analyses are summarized below and in Table 1. Chain of custody forms and certified laboratory analytical reports are presented in Appendix E.

Sample T1-10' was found to contain 3,900 mg/kg TPHg; 1,100 mg/kg TPHd; 10 mg/kg benzene, 16 mg/kg toluene, 6.7 mg/kg ethylbenzene, and 45 mg/kg xylenes; and 15 mg/kg Pb.

Sample T2-10' was found to contain 3,700 mg/kg TPHg; 3,200 mg/kg TPHd; 7 mg/kg benzene, 6.9 mg/kg toluene, 9.1 mg/kg ethylbenzene, and 40 mg/kg xylenes; and 15 mg/kg Pb.

Sample T2-2-10' was found to contain 3,800 mg/kg TPHg; 2,600 mg/kg TPHd; 8.7 mg/kg benzene, 11 mg/kg toluene, 9.6 mg/kg ethylbenzene and 44 mg/kg xylenes; and 17 mg/kg Pb.

Sample T3-1-10' was found to contain 1,200 mg/kg TPHg; 460 mg/kg TPHd; 3 mg/kg benzene, 5.2 mg/kg toluene, 3.3 mg/kg ethylbenzene, and 12 mg/kg xylenes; and 5 mg/kg Pb.

Sample T3-2-10' was found to contain 6,900 mg/kg TPHg; 390 mg/kg TPHd; 21 mg/kg benzene, 28 mg/kg toluene, 16 mg/kg ethylbenzene, and 100 mg/kg xylenes, and 7 mg/kg Pb.

Sample T5,6-1-10' was found to contain 1.7 mg/kg TPHg; 0.005 mg/kg benzene, 0.018 mg/kg total xylenes, and 11 mg/kg Pb. This sample was not found to contain reportable concentrations of the other chosen analytes.

Sample T5,6-2-10' was found to contain 4.0 mg/kg TPHg; 80 mg/kg TPHd; 0.039 mg/kg total xylenes, and 5 mg/kg Pb. This sample was not found to contain reportable concentrations of the other chosen analytes.

7.3. Water Samples

The results of water sample analyses are summarized below and in Table 1. Chain of custody forms and certified laboratory analytical reports are presented in Appendix E.

Ground water sample T1&T2-H_20 was found to contain 41,000 µg/L TPHg; 300,000 µg/L TPHd; 1,400 µg/L benzene, 5,400 µg/L toluene, 1,000 µg/L

ethylbenzene, and 4,000 µg/L xylenes, respectively. This sample was not found to contain reportable concentrations of Pb.

Sample T3-H_20 was found to contain 35,000 µg/L TPHg; 52,000 µg/L TPHd; 1,400 µg/L benzene, 440 µg/L toluene, 1,600 µg/L ethylbenzene, and 6,500 µg/L xylenes . This sample was not found to contain reportable concentrations of Pb.

Sample T4-H_20 was found to contain 490,000 µg/L TPHss; 34 µg/L benzene, 32 µg/L toluene, 170 µg/L ethylbenzene, and 660 µg/L xylenes.

Sample T5&T6-H_20 was found to contain 78,000 µg/L TPHg; 67,000 µg/L TPHd; 1,500 µg/L benzene, 8,400 µg/L toluene, 1,900 µg/L ethylbenzene, and 14,000 µg/L xylenes. This sample was not found to contain reportable concentrations of Pb.
Sample T7&T8-H_20 was found to contain 30,000 µg/L TPHg; 1,600,000 µg/L TPHd; 700 µg/L benzene, 4,100 µg/L toluene, 760 µg/L ethylbenzene, and 6,000 µg/L xylenes. This sample was not found to contain reportable concentrations of Pb.

8. SUMMARY

1. The contents of 143 55-gallon steel drums and approximately 60 smaller containers were inventoried and removed from the site via vacuum truck. Approximately 4,636 total gallons of oily water were transported to Evergreen's Newark, California facility for recycling.

   Approximately 650 gallons of oily water contaminated with halogenated constituents were disposed at the Solvent Service facility in San Jose, California.

   Two 55-gallon drums containing approximately 100 total gallons of oily water contaminated with PCBs were placed into 85-gallon overpack drums and were transported to Safety Kleen's Aragonite, Utah facility for incineration.

One 55-gallon drum containing approximately 50 gallons of sodium hypochlorite was placed into an 85-gallon poly overpack drum and transported to Crosby and Overton's Long Beach, California facility for disposal.

2. All evacuated 55-gallon drums were crushed, placed into a roll-off bin, and transported to Forward's Stockton, California facility for disposal.

3. All of the smaller containers and miscellaneous debris encountered during the progression of the project were placed into a second roll-off bin staged on-site. The contents of this bin have been classified as a California hazardous waste due to lead content and the failure of aquatic bio-assay test. This bin remains on-site pending final disposition.
4. Approximately 2,690 gallons of liquid and sludge were removed from eight site USTs via vacuum truck prior to UST removal. Approximately 5,200 gallons of liquid and sludge were removed from the site ASTs by vacuum truck prior to AST dismantling and removal.

5. Twenty ASTs were demolished using an excavator-mounted shear. The demolished ASTs were loaded onto flatbed trucks and transported to Shnitzer Steel's Oakland, California facility for recycling.

6. Eight USTs were inerted, excavated, and transported on flatbed trucks to ECI's Richmond, California facility for recycling. Seven of the USTs were found to be constructed of single-wall bare steel, the eighth was constructed of tar-wrapped single-wall steel.

   Tanks T2 and T3 were observed to have large (up to 2" by 1") holes in their bottoms. Tank T1 was observed to be severely pitted.

   A sheen was noted on ground water in each of the 5 tank pits. Slight to moderate petroleum odor and a typical greenish discoloration was observed in soils excavated from around the USTs.

7. A total of nine soil samples were collected from beneath USTs T1, T2, T3, T4, T5 and T6 at the air-ground water interface (approximately 10 feet bgs). Analyses of these samples revealed the presence of up to 6,900 mg/kg TPHg; up to 21, 28, 69, and 130 mg/kg BTEX, respectively; up to 3,200 mg/kg TPHd; up to 9,600 mg/kg TPHss; and up to 11 mg/kg Pb.

8. One four-point composite soil sample was collected from the stoddard solvent tank overburden. This sample was not found to contain reportable concentrations of TPHss or BTEX.

9. One four-point composite soil sample was collected from the kerosene tank overburden. This sample was found to contain 5,200 mg/kg TPHk. This sample was not found to contain reportable concentrations of BTEX.
10. Accumulated pit water samples were collected from connected tank pits T1 and T2, from T3, T4, connected pits T5 and T6, and from connected pits T7 and T8. Analyses of these samples revealed the presence of up to 78,000 µg/L TPHg; up to 1,500, 8,400, 1,900, and 14,000 µg/L BTEX, respectively; up to 1,600,000 µg/L TPHd; and 490,000 µg/L TPHss. Neither MTBE nor Pb was found in any of the water samples above the laboratory reporting limits.

11. Soil overburden was placed back into the pits with the concurrence of the ACHCSA. No engineered compaction was performed during backfilling activities.

9. DISCUSSION AND RECOMMENDATIONS

Above-ground items of concern to regulatory agencies (i.e. ASTs, drums, containers and their contents) have been removed from the site. The containers and their contents have been recycled or disposed at approved and certified facilities. All known site USTs have been removed and recycled at an approved and certified facility.

A significant release of TPHg, BTEX, TPHd and TPHss to site soil and ground water has occurred, most probably a result of loss of product through breaches in the tanks identified during their removal. It is likely that overfill or spillage which occurred during bulk fuel distribution operations has also contributed significantly to the release.

Assessment of the vertical and lateral extents of impact to site soil and ground water by compounds of concern was beyond the scope of this project. EBS recommends that the Client adequately characterize the site and develop a comprehensive corrective action plan which satisfies both State and Local regulations.

The client should, at this time, apply to the State of California Leaking Underground Storage Tank Cleanup Fund. The site may be eligible for reimbursement from the fund.

Copies of this report must be submitted by the Client to following concerned regulatory agencies:

1. **Alameda County District Attorney's Office (ACDA)** - Lawrence C. Blazer, 677 Oakport Street, Suite 400, Oakland, CA 94621, (510) 569-9281.

2. **Alameda County Health Care Services Agency (ACHCSA)** - Scott O. Seery, 1131 Harbor Bay Parkway, 2nd Floor, Alameda, CA 94502, (510) 567-6783.

3. **Alameda County Public Works Agency (ACPWA)** - Paul Smith, 951 Turner Court, Suite 300, Hayward, CA 94545-2651, (510) 670-3236.

4. **Alameda County Fire Department (ACFD)** - James Ferdinand, 100 Civic Plaza Drive, Dublin, CA 94568, (510) 833-6609.

EBS further recommends that the Client forward copies of this report to any other regulatory agencies and interested parties as required.

10. LIMITATIONS

The recommendations in this report were developed in accordance with generally accepted standards of current environmental practice in California. These recommendations are time-dependent and should not be considered valid after a 1 year period from the issue of this report. After 1 year from the issue of this report, site conditions and recommendations contained within this report should be reviewed.

This study was performed solely for the purpose of evaluating environmental conditions of the site subsurface relative to hydrocarbon impact at the subject Site. No engineering or geotechnical references are implied or should be inferred.

Evaluation of the condition of the Site, for the purpose of this study, was made from a limited number of observation points. Subsurface conditions may deviate away from these points. Additional work, including further study of the subsurface, can reduce the inherent uncertainties associated with this type of work.

This study was performed, and the report was prepared for the sole use of our client, the Estate of Jack M. Holland, Sr.. This report and the findings contained herein shall not be disclosed to nor used by any other party without the prior written consent of Environmental Bio-Systems, Inc. It is the responsibility of the client to convey these recommendations to regulatory agencies and other parties, as appropriate.

The recommendations herein are professional opinions that our firm has endeavored to provide with competence and reasonable care. We are not able to eliminate the risks associated with environmental work. No guarantees or warrants, express or implied, are provided regarding our recommendations

11. REFERENCES

Compliance & Closure, Inc., April 1997 Quarterly Report, Former Jack Holland Sr. Oil Company, 16301 East 145h Street, San Leandro, California, 14 April 1997.

Compliance & Closure, Inc., Summary of Environmental Investigation Conducted at Jack Holland Sr. Oil Company Property, East 14th Street, San Leandro, California, 4 June 1998.

Hazardous Materials Assessment, Inc., Asbestos Survey #8092, 16301 E. 14th Street, San Leandro, California, 13 August 1998.

United States Geological Survey (USGS), Hayward, California Topographic Map, 7.5 minute series with 25-foot contour intervals, 1956, photorevised 1980.

TABLE 1: RESULTS OF SOIL SAMPLE ANALYSES

Sample #	TPHg (mg/kg)	benzene (mg/kg)	toluene (mg/kg)	ethyl-benzene (mg/kg)	xylenes (mg/kg)	MTBE (mg/kg)	TPHd (mg/kg)	TPHk (mg/kg)	TPHss (mg/kg)	total Pb (mg/kg)
T1-10'	3,900	10	16	6.7	45	ND	1,100	--	--	15
T2-1-10'	3,700	7.0	6.9	9.1	40	ND	3,200	--	--	15
T2-2-10'	3,800	8.7	22	9.6	44	ND	2,600	--	--	17
T3-1-10'	1,200	3.0	5.2	3.3	12	ND	460	--	--	5.0
T3-2-10'	6,900	21	28	16	100	ND	390	--	--	7.0
T4-1-10'	--	ND	ND	69	130	--	--	--	9,600	--
T4-2-10'	--	4.0	5.7	11	36	--	--	--	4,300	
T5.6-1-10'	1.7	0.005	ND	ND	0.018	ND	ND	--	--	11
T5,6-2-10'	4.0	ND	ND	ND	0.039	ND	80	--	--	5.0
SS1-4	--	ND	ND	ND	ND	--	--	--	ND	--
KS1-4	--	ND	ND	ND	ND	--	--	5,200	--	--

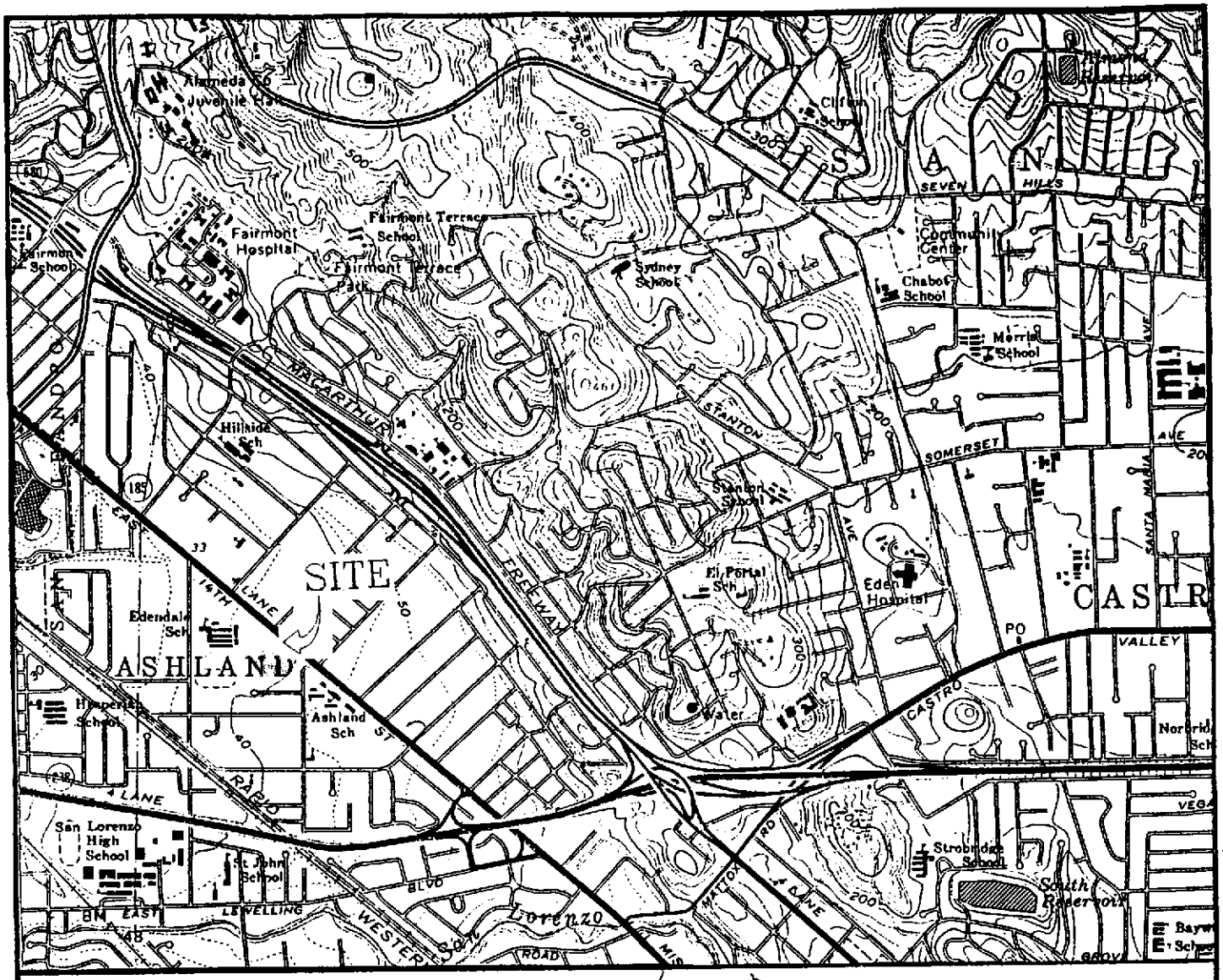
[1]ND: Analyte not detected above detection limit as stated on laboratory report.
[2]--: Sample not analyzed for this analyte.
Note- See laboratory reports for specific analyte detection limits.

TABLE 2: RESULTS OF WATER SAMPLE ANALYSES

Sample #	TPHg (µg/L)	[redacted] (µg/L)	toluene (µg/L)	ethyl-benzene (µg/L)	xylenes (µg/L)	MTBE (µg/L)	TPHd (µg/L)	TPHss (µg/L)	total Pb (mg/L)
T1&T2-H_20	41,000	[redacted]	5,400	1,000	4,000	ND	300,000	--	ND
T3-H_20	35,000	[redacted]	440	1,600	6,500	ND	52,000	--	ND
T4-H_20	--	[redacted]	32	170	660	--	--	490,000	--
T5&T6-H_20	78,000	[redacted]	8,400	1,900	14,000	ND	67,000	--	ND
T7&T8-H_20	30,000	[redacted]	4,100	760	6,000	ND	1,600,000	--	ND

[1]ND- Analyte not detected above detection limit as stated on laboratory report.
[2]NA- Sample not analyzed for this analyte.
Note- See laboratory reports for specific analyte detection limits.

APPENDIX A
FIGURES



SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET

DOTTED LINES REPRESENT 5-FOOT CONTOURS

NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

Source: USGS Hayward, California Quadrangle

ENVIRONMENTAL BIO-SYSTEMS, INC.

DATE: 12/9/98

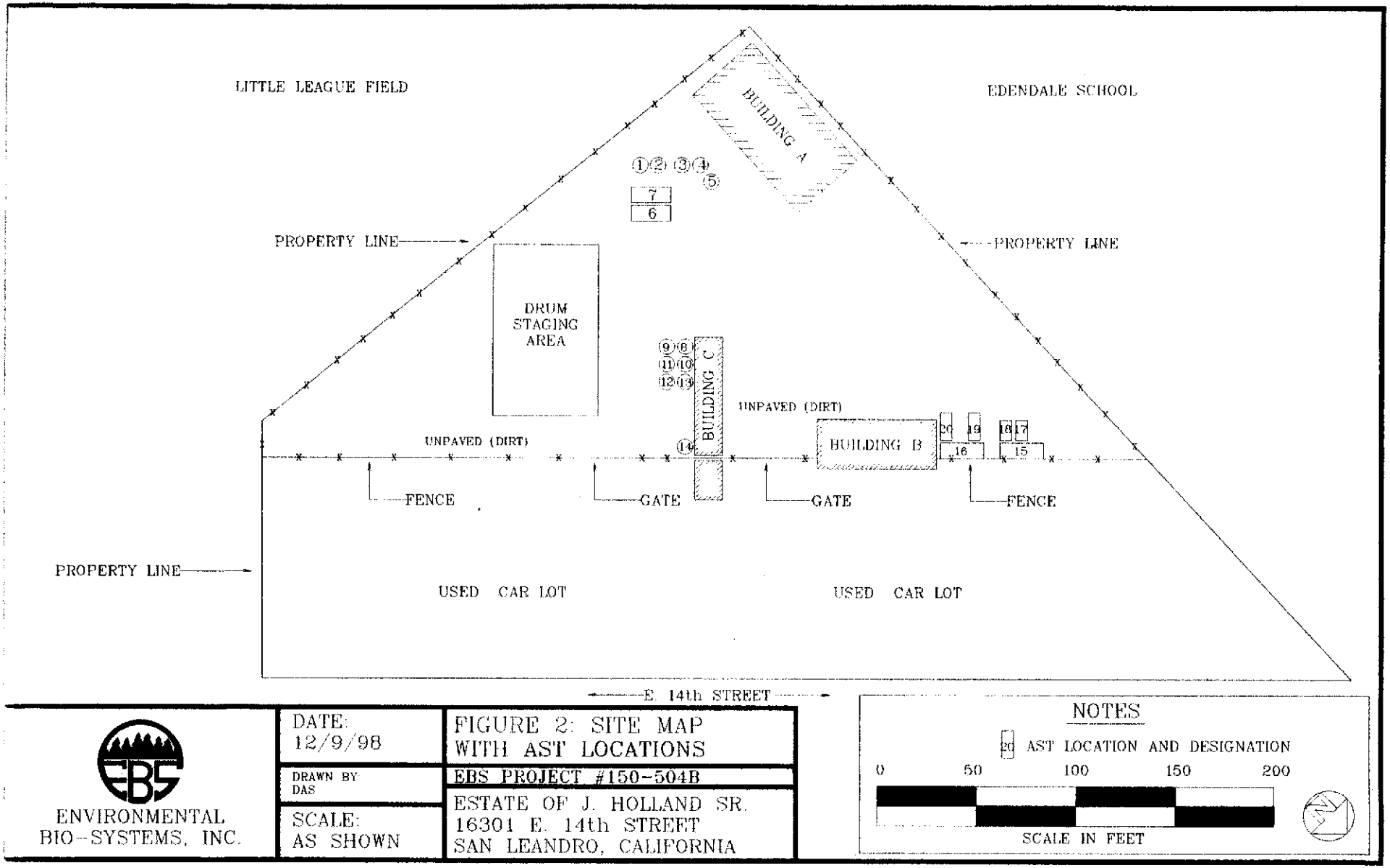
DRAWN BY: DAS

SCALE: 1" = 2,000'

FIGURE 1: SITE LOCATION MAP

ESTATE OF J. HOLLAND SR.
16301 E. 14th STREET
SAN LEANDRO, CALIFORNIA

ENVIRONMENTAL BIO-SYSTEMS, INC., PROJECT #150-504B



ENVIRONMENTAL BIO-SYSTEMS, INC.

DATE: 12/9/98

DRAWN BY: DAS

SCALE: AS SHOWN

FIGURE 2: SITE MAP WITH AST LOCATIONS

EBS PROJECT #150-504B

ESTATE OF J. HOLLAND SR.
16301 E. 14th STREET
SAN LEANDRO, CALIFORNIA

NOTES

20 AST LOCATION AND DESIGNATION

0 50 100 150 200

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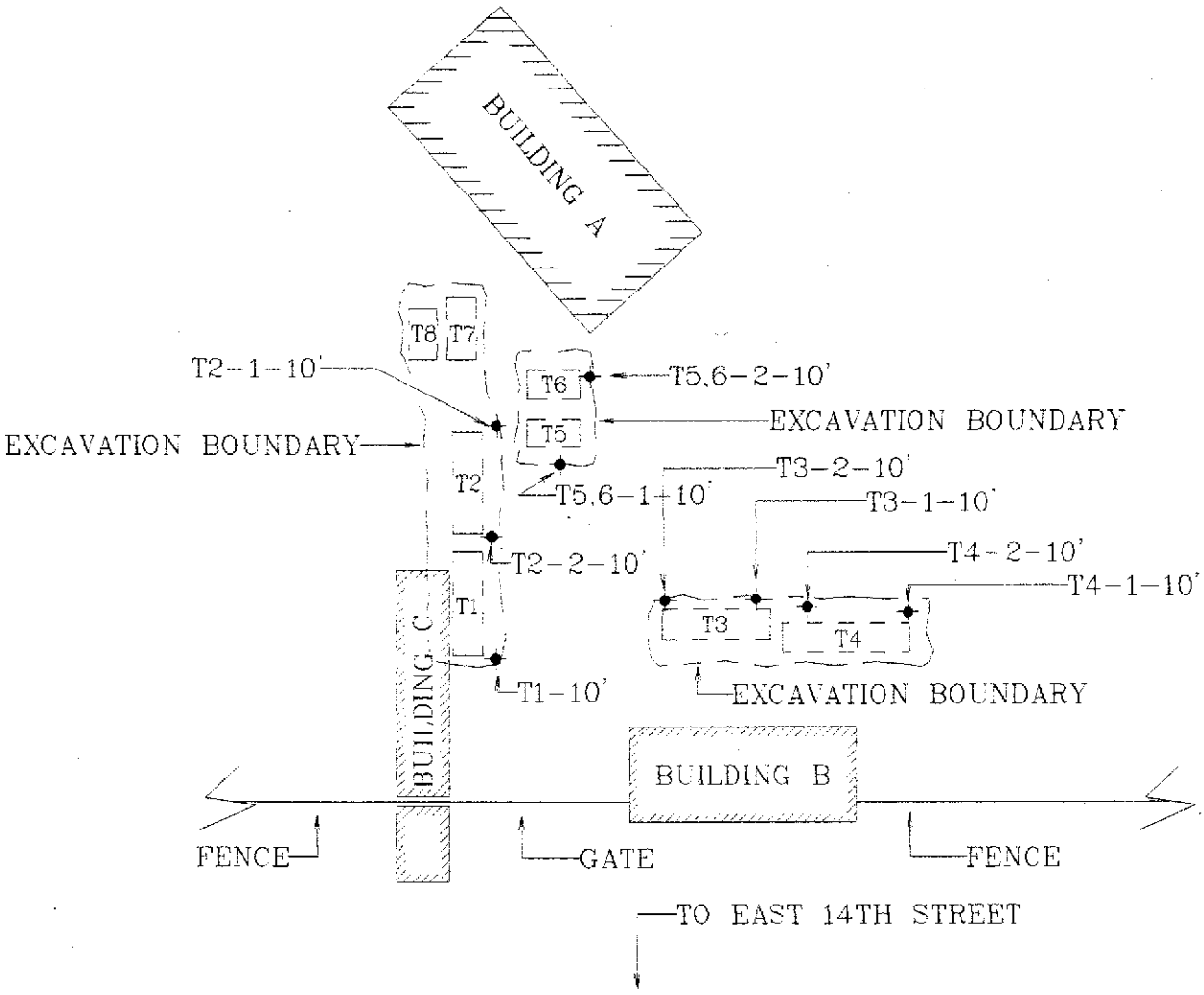


NOTES

T8 UST LOCATION AND DESIGNATION

T5,6-2-10' SOIL SAMPLE LOCATION AND DESIGNATION

0 20 40
SCALE IN FEET

N

ENVIRONMENTAL BIO-SYSTEMS, INC.

DATE: 12/9/98

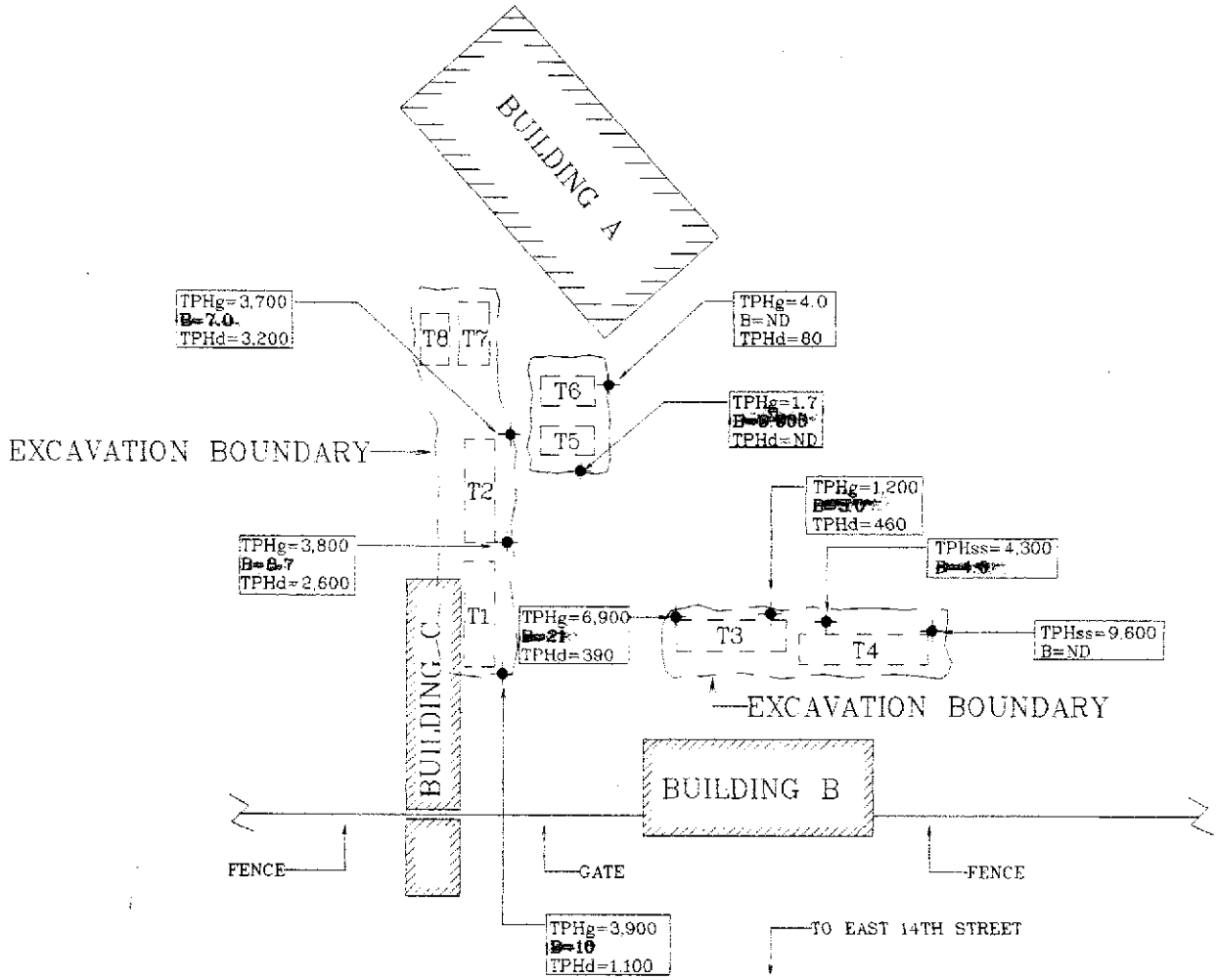
DRAWN BY: DAS

SCALE: AS SHOWN

FIGURE 3: UST AND SOIL SAMPLING LOCATIONS

ESTATE OF J. HOLLAND SR.
16301 E. 14th STREET
SAN LEANDRO, CALIFORNIA

ENVIRONMENTAL BIO-SYSTEMS, INC., PROJECT #150-504B



NOTES

TPHg	Total Petroleum Hydrocarbons as Gasoline
B	Benzene
TPHd	Total Petroleum Hydrocarbons as Diesel
TPHss	Total Petroleum Hydrocarbons as Stoddard Solvent

All Results in mg/kg

0 20 40
SCALE IN FEET

ENVIRONMENTAL BIO-SYSTEMS, INC.

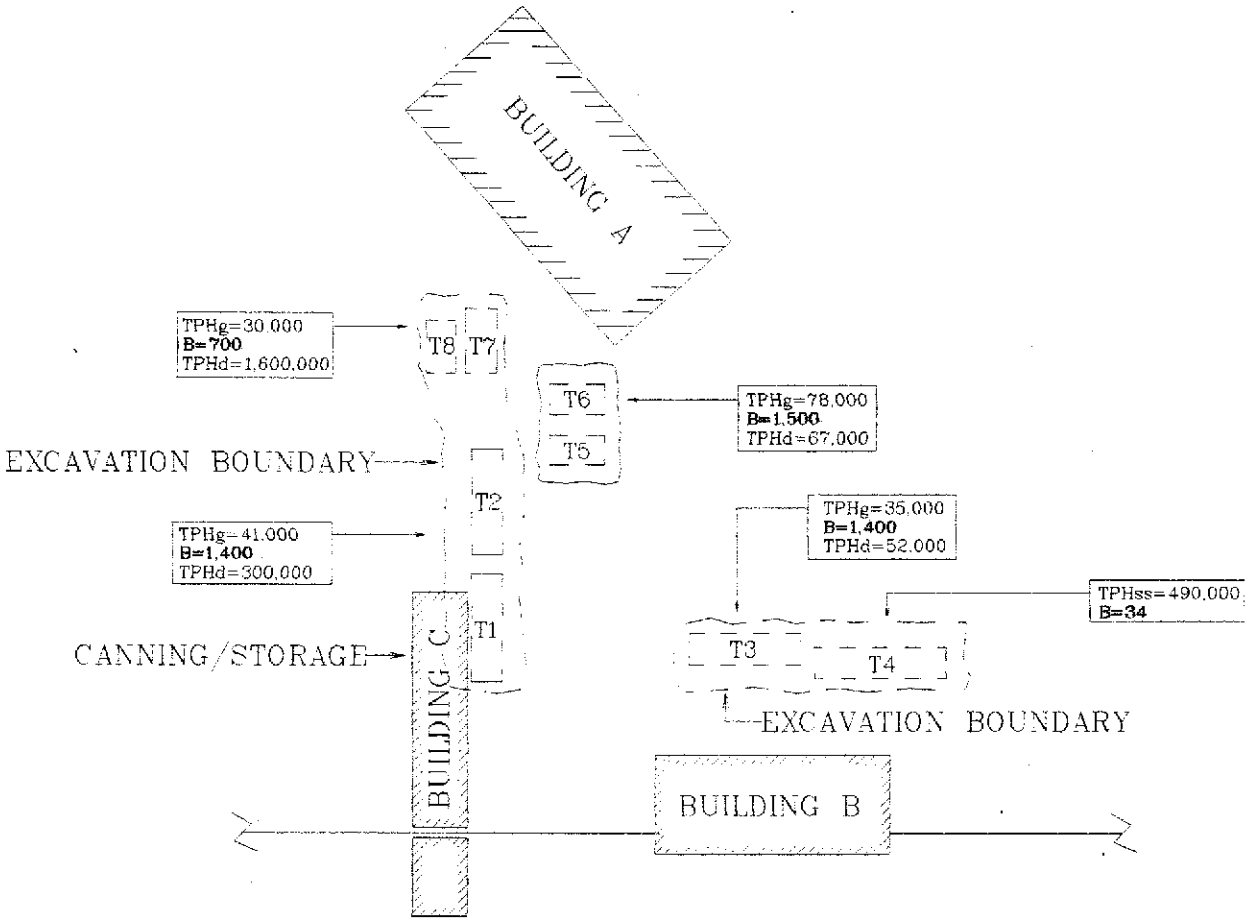
DATE: 12/9/98

DRAWN BY: DAS

SCALE: AS SHOWN

FIGURE 4: SOIL SAMPLE RESULTS

ESTATE OF J. HOLLAND SR.
16301 E. 14th STREET
SAN LEANDRO, CALIFORNIA



NOTES

TPHg	Total Petroleum Hydrocarbons as Gasoline
B	Benzene
TPHd	Total Petroleum Hydrocarbons as Diesel
TPHss	Total Petroleum Hydrocarbons as Stoddard Solvent

All Results in ug/L

0 20 40

SCALE IN FEET

ENVIRONMENTAL BIO-SYSTEMS, INC.

DATE: 12/9/98

DRAWN BY: DAS

SCALE: AS SHOWN

FIGURE 5: GROUND WATER SAMPLE RESULTS

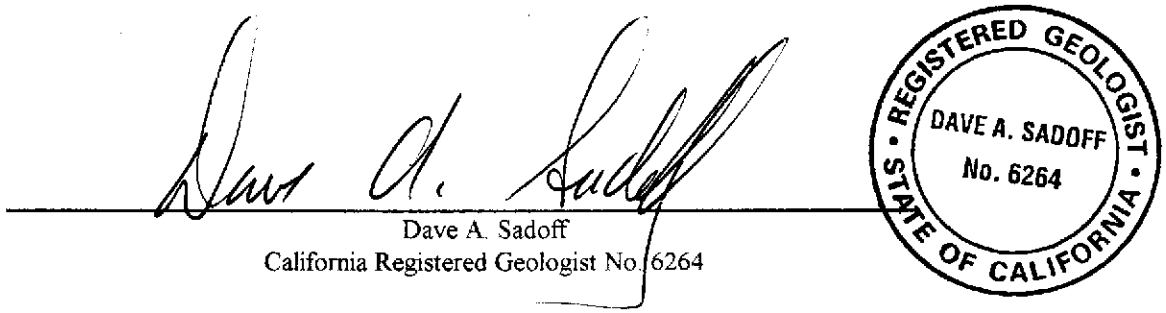
ESTATE OF J. HOLLAND SR.
16301 E. 14th STREET
SAN LEANDRO, CALIFORNIA

APPENDIX B
WORK PLANS

WORK PLAN:
DRUM REMOVAL
PROJECT #150-503B

Holland Oil
16301 E. 14th Street
San Leandro, California

PREPARED BY ENVIRONMENTAL BIO-SYSTEMS, INC.
FOR
MRS. ANN MARIE HOLLAND TIERS



Dave A. Sadoff
California Registered Geologist No. 6264

Timothy M. Babcock
Project Manager, Registered Environmental Assessor No. 05184

1 July 1998

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TABLE OF CONTENTS

1. INTRODUCTION

On behalf of our Client, Ann Marie Holland Tiers, Environmental Bio-Systems, Inc. (EBS) presents this Work Plan for the removal of approximately 100 drums at the referenced site. Work will proceed following approval by each of the concerned regulatory and governing bodies having jurisdiction over this project, including the Alameda County Department of Environmental Health (ACDEH), Alameda County Fire Department (ACFD), and the Alameda County Department of Public Works (ACDPW).

The site is owned by the Jack Holland Sr. Estate (Estate) and Barbara Holland. The principal project contacts are:

Client - Ann Marie Holland Tiers, Estate Administrator, 1498 Hamrick Lane, Hayward, CA 94544, (510) 782-4307.

Consultant - Dave A. Sadoff, Project Manager, Environmental Bio-Systems, Inc., P.O. Box 7171, San Jose, CA 95150-7171, (408) 979-8600.

2. SITE LOCATION AND DESCRIPTION

The Site is located at 16301 East 14th Street in San Leandro, California. A Site Map, showing relevant Site improvements and features, is included as Figure 2 in Attachment A. The lot is partially paved with asphalt and concrete.

The property encompasses approximately 3 acres, and was used from approximately 1960 until the mid 1980s as a bulk fuel storage and sales facility. Approximately 20 above-ground storage tanks (ASTs) and 8 underground storage tanks (USTs) have been identified at the property. The lot is bounded to the south

by a park and ball field, to the southwest by an elementary school, to the east and west by used car sales lots, and to the north and northeast by East 14th Street.

3. SCOPE OF WORK

1. EBS will develop a site-specific health and safety plan to be approved by a certified industrial hygienist (CIH). The CIH will also conduct periodic site visits during project progression to ensure compliance with the provisions of the plan.

2. All site field work will be conducted by properly trained personnel under the provisions of 29 CFR 1910.120.

3. A bermed drum inventory and containment area double-lined with 10-mil visqueen sheets will be constructed at the location indicated on Figure 1. This location is considered to have sufficient access to permit necessary handling and/or transportation of the drums. The containment area will be of adequate size to accommodate all drums and will provide sufficient room for their manipulation during profiling and waste stream segregation.

4. All drums, cans, jugs and containers that contain liquid will subsequently be moved to the containment area.

5. Drum contents will be field-screened and analyzed by Evergreen Environmental Services (EES) of Newark, California for profiling and acceptance to their facility. Each drum having been screened will be clearly labeled.

6. Compatible liquids will then be consolidated.

7. Small containers will be lab-packed in DOT-approved 55-gallon drums packed with absorbent material.

8. Recyclable petroleum liquids will be suctioned from their drums/containers and transported in bulk under Uniform Hazardous Waste Manifest (UHWM) to EES.

9. Residual liquids in the drums will be stabilized by the addition of an absorbent material.

10. Empty drums will then be evaluated for lower explosive limit (LEL).

11. Drums exhibiting an LEL of 0 will be crushed on-site and placed in a roll-off bin along with used personal protective equipment and other solid wastes generated by personnel at the site (i.e.: used visqueen sheeting, gloves, etc.). The contents of the bin will be disposed of at Forward Landfill, Inc. of Stockton, California under special waste manifest at the conclusion of work included in this plan.

12. Drums exhibiting an LEL >0 will remain on-site to be inerted and cold-cut during later demolition of site above-ground storage tanks (AGTs).

13. Drums not accepted by EES will be sampled and additionally profiled as necessary. All such drums will be transported as is (if sufficiently intact) or over-packed in DOT approved containers and transported under UHWM or bill of lading (only if profiling determines the waste to be non-hazardous) to an appropriately licensed recycling/disposal facility to be designated by the Client from available options presented according to profile results.

14. Contents of both above-ground and below-ground storage tanks will also be inventoried at this time. Recyclable petroleum liquids will be removed by suction and transported in bulk along with related drum contents (item #8) to EES under UHWM.

15. Copies of all manifests accompanying the various wastes to their final dispositions will be supplied to the Alameda County Public Works Agency, Alameda County Fire Department, and the Alameda County Department of Environmental Health after the completion of the field work.

16. A security guard will be present on-site during inactive periods (nights).

4. PROJECT ITINERARY

- 2 July 1998: Submit Work Plan to ACDPW, ACDEH, ACFD.
- 15 July 1998: Submit Health and Safety Plan to ACDPW, ACDEH, ACFD.
- 20-22 July 1998: Construct bermed containment area. Characterize and segregate waste-streams.
- 23 July 1998 Remove and transport bulk liquids to EES, crush drums.
- 24 July 1998: Remove roll-off bin containing crushed drums and solid wastes.

5. LIMITATIONS

The scope of work described in this work plan will be conducted in accordance with generally accepted standards of current environmental practice in California. All documentation generated during the project, including but not limited to additional Work Plans and reports with all conclusions, and recommendations contained therein, shall be time-dependent and should not be considered valid after a 1 year period from their issue. After 1 year from issue, site conditions and recommendations contained within should be reviewed.

Evaluation of the condition of the Site, for the purpose of this study, will be made from a limited number of observation points. Subsurface conditions may deviate away from these points. Additional work, including further study of the subsurface, can reduce the inherent uncertainties associated with this type of work.

This study will be performed, and the report prepared for the sole use of our client, Mrs. Anne Marie Holland Tiers. All reports and the findings contained within are not to be disclosed to nor used by any other party without the prior written consent of Environmental Bio-Systems, Inc. It will be the responsibility of the client to convey any and all recommendations to regulatory agencies and other parties, as appropriate.

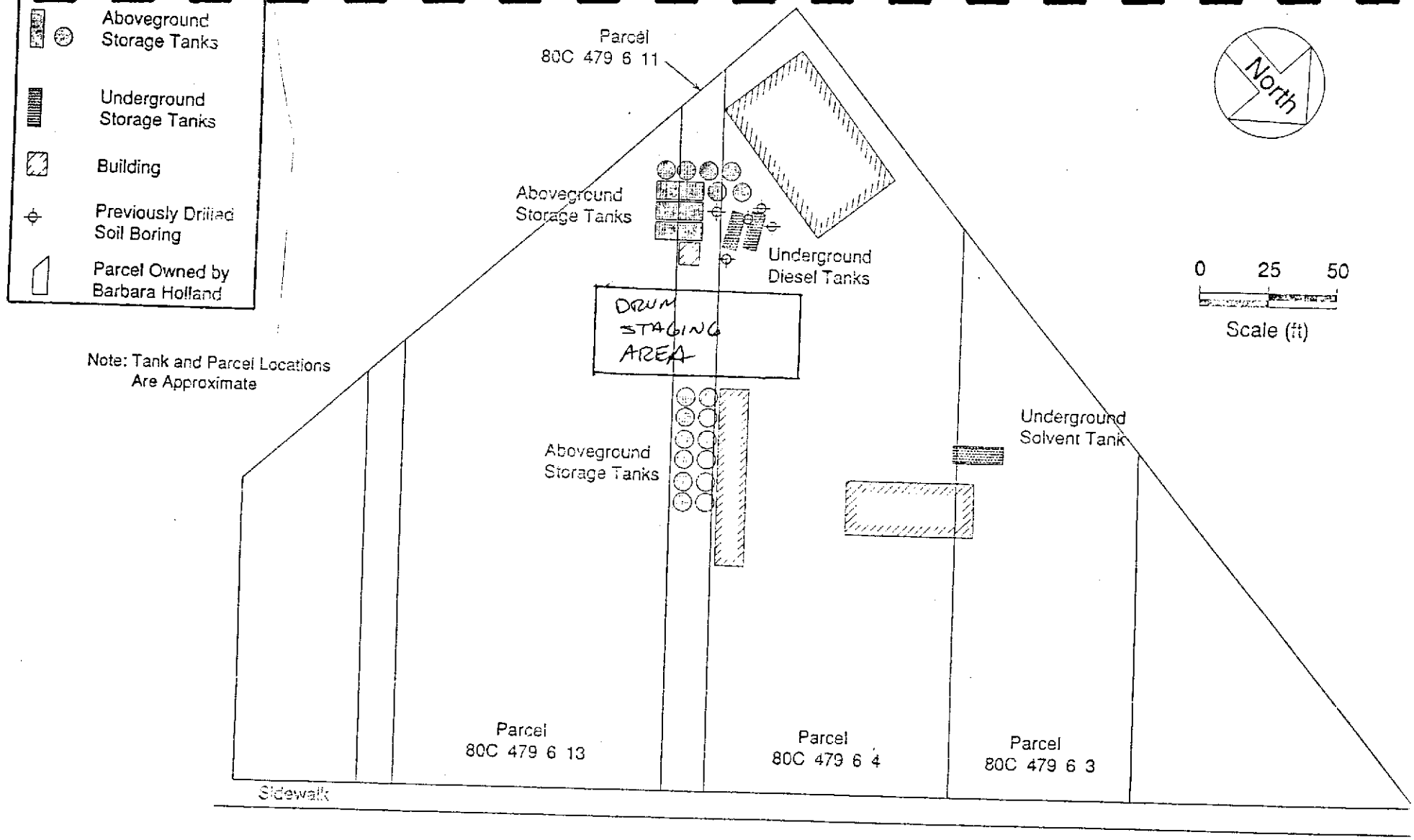
The recommendations to be provided in the summary project report(s) will be professional opinions that our firm has endeavored to provide with competence and reasonable care. We are not able to eliminate the risks associated with environmental work. No guarantees or warrants, express or implied, are provided regarding our recommendations.

Any and all hazardous wastes generated during this work are to remain the property of the Client to be disposed of properly.

It is the clients' responsibility to identify property lines and easements. EBS is not responsible for the accuracy of any property line, easement, or other marker identified by the client.

It is the clients' sole responsibility to inform EBS of any hazardous materials or conditions relating to the UST or the work area in general prior to the progression of field work, or immediately upon their subsequent discovery.

ATTACHMENT A
FIGURE



ENVIRONMENTAL BIO-SYSTEMS, INC.	DATE: 7/1/98	FIGURE 1: SITE MAP
	DRAWN BY: DAS	Map Source: Cambria, Figure 1, 6/4/93
	SCALE: 1"=50'	HOLLAND OIL 16301 EAST 14th STREET SAN LEANDRO, CALIFORNIA

Post-It® Fax Note 7671	Date 7/13/98	# of pages ▶ 3
To Dave Sadoff	From Paul Smith	
Co./Dept. Env. Biosystems	Co. ACPWD / CWP	
Phone # 317-1455	Phone # (510) 670-5236	
Fax # 317-1456	Fax # (510) 670-5251	

COUNTY OF ALAMEDA
PUBLIC WORKS AGEN
951 Turner Court, Room 300
Hayward, CA 94545-2651
(510) 670-5543

July 13, 1998

Ms. Ann Marie Holland Tiers
Co-owner Estate Administrator
1498 Hamrick Lane
Hayward, CA 94544

Ms. Barbara Holland
Co-owner
20993 Foothill Blvd.
Hayward, CA 94541

Re: Conditional Work Plan Approval for Drum Removal at Holland Oil, 16301 E. 14th St., San Leandro, CA 94578

Dear Ann Marie and Barbara:

I have received and reviewed the July 1, 1998 Drum Removal Work Plan, prepared by Environmental Bio-Systems, Inc. This work plan presents proposed steps for the removal of hazardous materials and wastes from all containers at the site. Following are concerns or issues requiring clarification:

Item 11states that emptied drums exhibiting a "Lower Explosive Limit (LEL) of 0" will be crushed on site. I am concerned that activities associated with drum crushing or during transfer to the rolloff bin may generate some spillage. Please ensure that this activity be conducted within the lined drum staging/inventory and containment area and not out on the dirt yard. (Also see comments in item 12 below regarding contaminated containers). Item 11 also states that crushed drums and other wastes will be hauled under special waste manifest.

I discussed this matter with your consultant, Dave Sadoff of Environmental Bio-Systems. He explained that the "special waste" designation he referred to in the work plan was one Forward Landfill uses not the one specified in Section 66261.124 CA Code of Regulations (CCR) which requires, among other things, prior written approval from the Department of Toxic Substances Control (DTSC) before transport of such waste. Please be advised that all unknown wastes associated with work performed during all phases of site remediation at this site must be profiled to determine whether they exceed hazardous waste criteria specified in Section 662610 CCR. Only then may transportation , treatment or disposal options be determined.

Item 12 indicates that drums exhibiting an LEL > 0 will be inerted and cold cut during later demolition of above ground tanks. **If such drums or other vessels contain significant amount of sludge or other residue then they are considered**

hazardous waste and must either be manifested to an authorized hazardous waste facility or rinsed out on-site (via an on-site Department of Toxic Substances Control (DTSC) permitted waste treatment unit). Section 66261.7(b)2, Title 22, (CCR) states that: "Following material removal, the top, bottom and sidewalls of such a container shall not contain remaining adhered or crusted materials resulting from buildup of successive layers of material or a mass of solidified material. A thin uniform layer of dried material or powder is considered acceptable." Drums and other containers with significant residue as discussed above are required to be managed as hazardous waste.

Item 13 states that drums which are not accepted by Evergreen Environmental Services will be additionally profiled as necessary. You are required to perform hazardous waste characterization particularly for non petroleum wastes, as per Sections 66260.20 through 66261.24 CCR. Please also include copies of all waste profile results with waste disposal manifests/bill of lading invoices.

Item 16 states that a security guard will be present on-site during "all inactive periods (nights)" while the above scope of work is being conducted on-site. Inactive periods shall include weekends and all non-work periods (i.e. after hours) for all aspects of work specified in the Drum Removal Work Plan.

This scope of work does not include removal of visible and non visible soil contamination at the site. I understand that this work will be conducted in the next (phase 2) work plan which will be overseen by Environmental Health, Hazardous Materials Division. Environmental Health has been apprised of Public Work's interest in ensuring that all surface and subsurface contamination or associated clean up debris does not pose a threat to stormwater. Please continue to include my Agency in future correspondence relating to clean up of surface contamination at the subject site or any other issues regarding storm water exposure associated with current or future activities.

The work plan as specified is hereby approved under the condition that each of the above concerns are implemented or clarified prior to initiating the work at the site. Work plan approval assumes that you are in compliance with all applicable regulations, statutes and local ordinances.

Please contact Alameda County Fire Department, Environmental Health, or Public Works if you have any questions. Also please call me if scheduling changes to those proposed in the work plan occur or if you have any other questions regarding the above at 670-5236.

Sincerely,

Paul M. Smith

Paul M. Smith
Hazardous Materials Specialist
Alameda County Public Works Agency

c:
Dave Sadoff, Environmental Bio-Systems, Inc., P.O. Box 7171, San Jose, CA 95150-7171

James Ferdinand, Fire Marshal, Alameda County Fire Department, 22341 Redwood Rd., Castro Valley, CA 94546

Scott Seery, Alameda County Environmental Health Department, Hazardous Materials Division, 1131 Harbor Bay Parkway, Rm. 250, Alameda, CA 94502

Stephen Jones, Field Supervisor, Alameda County Public Works Agency, 951 Turner Ct., Hayward, CA 94545-1395

Larry Blazer Esq., Alameda County District Attorney's Office, Consumer & Environmental Affairs Division, 7677 Oakport Dr., Oakland, CA 94621

Edward E. Martins Esq., 22698 Mission Blvd., Hayward, CA 94541

Hal P. Reiland Esq., Reiland & Reiland, P.O. Box 5490, Pleasanton, CA 94566

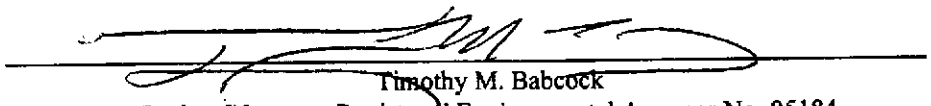
Virginia Crisp Esq., Coblentz, Patch, Duffy & Bass, 222 Kearny St., 7th Floor, San Francisco, CA 94108

WORK PLAN:
DEMOLITION AND REMOVAL OF
USTs & AGTs

PROJECT #150-504B

16301 E. 14th Street
San Leandro, California

PREPARED BY ENVIRONMENTAL BIO-SYSTEMS, INC.
FOR
MRS. ANNE MARIE HOLLAND TIERS,
EXECUTOR OF THE ESTATE OF JACK M. HOLLAND, SR.



Timothy M. Babcock
Project ~~Manager, Registered~~ Environmental Assessor No. 05184

Dave A. Sadoff
California Registered Geologist No. 6264

10 August 1998

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APPENDICES

Environmental Bio-Systems, Inc.
Innovative Solutions for a Better Environment
Contractor's License A-Haz 687236

1. INTRODUCTION

This document describes the proposed demolition of 20 above-ground storage tanks (AGTs) and the removal of eight underground storage tanks (USTs) to be conducted for Mrs. Anne Marie Holland Tiers, Executor of the Estate of Jack M. Holland (the Client) by Environmental Bio-Systems, Inc. (EBS) at 16301 E. 14th Street in San Leandro, California. The scope of work described within this document has been prepared on the Client's behalf, and will be performed in response to requests made of them from the Alameda County District Attorney's office.

The site is owned by the Client and Ms. Barbara Holland. The principal project contacts are:

Principal Client Contact - Ann Marie Holland Tiers, 1498 Hamrick Lane, Hayward, CA 94544, (510) 782-4307.

Consultant - Environmental Bio-Systems, Inc., P.O. Box 7171, San Jose, CA, (510) 429-9988, Mr. Dave A. Sadoff, R.G., C.P.G., R.E.A.

2. SCOPE OF WORK

Tasks included in this phase of work will include the following:

1. Generate and submit this Work Plan per Alameda County Health Care Services Agency (ACHCSA) and Alameda County Fire Department (ACFD) requirements.
2. Procure permits as required from the ACFD, the ACHCSA, and the Bay Area Air Quality Management District (BAAQMD).

3. Contact underground service alert (USA) to notify of intended subsurface activities at least 48 hours prior to commencement of excavating activities.
4. Generate and submit a site-specific Health and Safety Plan approved and signed by a Certified Industrial Hygienist (CIH).
5. Provide CIH-oversight site visits (3 hours a day, 6 days total) to ensure compliance with the Health and Safety Plan during project commencement.
6. Disconnect all facility power and water at meter bow/main.
7. Cold cut, load and scrap 20 ASTs and all accessible above-grade pipelines, dispensers, and fueling equipment.
8. Excavate soils, inert, and dispose of the USTs listed below (along with their reported contents):
   - three 10,000-gallon tanks used to contain gasoline
   - two 5,000-gallon tanks used to contain kerosene
   - one 5,000-gallon tank used to contain diesel
   - one 6,000-gallon tank used to contain diesel
   - one 12,000-gallon tank used to contain stoddard solvent.
9. Collect the following soil samples from the native soil/backfill interface in compliance with Regional Water Quality Control Board (RWQCB) guidelines:
   - Three from beneath each of the 10,000 gallon gasoline USTs to be analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene and total xylenes (BTEX), methyl t-butyl ether (MTBE); three each from below the two gasoline USTs reported to have contained leaded fuel to be analyzed for total lead.
   - Three from beneath each of the 5,000-gallon kerosene USTs to be analyzed for total petroleum hydrocarbons as kerosene (TPHk) and BTEX.
   - Three from beneath the 5,000-gallon and 6,000-gallon diesel USTs (each) to be analyzed for total petroleum hydrocarbons as diesel (TPHd) and BTEX.

- Three from beneath the 12,000-gallon stoddard solvent UST to be analyzed for total petroleum hydrocarbons as stoddard solvent (TPHss) and BTEX.
- One from beneath a gasoline dispenser to be analyzed for TPHg, BTEX, and MTBE.
- One from beneath a diesel dispenser to be analyzed for TPHd and BTEX.
- One 4-point composite from the gasoline UST overburden stockpile to be analyzed for TPHg, BTEX, and MTBE.
- One 4-point composite from the kerosene UST overburden stockpile to be analyzed for TPHd and BTEX.
- One 4-point composite from the diesel UST overburden stockpile to be analyzed for TPHd and BTEX.
- One 4-point composite from the stoddard solvent UST overburden stockpile to be analyzed for TPHss and BTEX.

10. Collect pit water samples (if encountered) from each of the UST excavations. Pit water samples to be analyzed for the analytes listed above under soil sampling for the associated tank.
11. Transport all samples to a California State certified environmental laboratory accreditation program (ELAP) laboratory under chain of custody.
12. Instruct the laboratory to analyze the samples for analytes listed above using the following analytical methods:
    - TPHg using Environmental Protection Agency (EPA) Method 8015.
    - BTEX and MTBE using EPA Method 8020 (confirm MTBE using 8260).
    - Total lead using EPA Method 7421.
    - TPHd using EPA Method 8015.
    - TPHss using EPA Method 8015.
13. Load all 8 USTs onto flatbed trailers and transport to a properly licensed recycling/disposal facility.

14. Bench and slope excavation sidewalls to inhibit collapse pending further potential excavation or remediation.
15. Provide on-site security guard during non-work hours of project.
16. Construct a property perimeter berm using clean overburden soil (if available), per the request of the ACDPW.
17. Prepare a report summarizing the work performed and present it to the Client. The report will contain descriptions of field activities, laboratory analytical reports, scaled drawings, conclusions and recommendations.

3. SITE LOCATION AND DESCRIPTION

3.1. Location and Use

The Site encompasses approximately 3 acres in a mixed commercial and residential area in San Leandro. The Site is bounded by a Little League baseball field to the south, by Edendale Elementary School to the west, and by used auto dealerships to the north and east.

The Site was used as a bulk fuel storage, blending, and retail facility approximately between 1960 and the mid-1980s. A building in the southwest portion of the lot has historically been used for vehicle repair, and is currently used for storage and maintenance of equipment by San Leandro Crane.

4. PREVIOUS ENVIRONMENTAL WORK

1990

Crosby and Overton, Inc. (C&O) drilled and sampled five exploratory soil borings near the two diesel USTs. Soil samples collected from the borings were found to contain up to 25,000 milligrams per kilogram (mg/kg) TPHd. Ground water was first encountered at approximately 15 feet below ground surface (bgs).

February 1996

Compliance & Closure, Inc. (CCI) directed the locating of eight USTs at the Site. CCI reportedly located three gasoline, two kerosene, two diesel, and one stoddard solvent UST.

April 1996

CCI installed and sampled three ground water monitoring wells. Soils encountered during drilling activities were described as silty clay, thin beds of silty sand and sand to 18 feet bgs.

Soil samples collected during drilling of the wells reportedly contained up to 4,400 mg/kg TPHg and 8,200 TPHd. These soil samples were also found to contain up to 0.024 mg/kg 1,4-dichlorobenzene and 0.4 mg/kg methylene chloride.

Ground water samples collected from the wells were found to contain up to 33,000 micrograms per liter (µg/L) TPHg; up to 12, 83, 22 and 160 µg/L BTEX, respectively; up to 9,700 µg/L TPHd; up to 41,000 µg/L total recoverable petroleum hydrocarbons (TRPH); and up to 3.1 µg/L 1,2-dichlorobenzene.

July 1996

CCI conducted quarterly monitoring of the ground water wells. Ground water samples were found to contain up to 1,400 µg/L TPHg; 17, 5.6, 7.6 and 32 µg/L BTEX, respectively; and 4,600 µg/L TPHd.

October 1996

CCI conducted quarterly monitoring of the ground water wells. Ground water samples were found to contain up to 7,300 µg/L TPHg; 16, 8.9, 20 and 15 µg/L BTEX, respectively; and 14,000 µg/L TPHd.

January 1997

CCI conducted quarterly monitoring of the ground water wells. Ground water samples were found to contain up to 2,600 µg/L TPHg; 6.4 µg/L benzene; 44 µg/L toluene; and 2,800 µg/L TPHd.

April 1997

CCI conducted quarterly monitoring of the ground water wells. Ground water samples were found to contain up to 2,700 µg/L TPHg; 16, 8, 10 and 25 µg/L BTEX, respectively; and 500 µg/L TPHd.

5. PERMITS

EBS will procure applicable permits from the ACHCSA by filing an Underground Tank Closure Plan and State of California UST Permit Application Forms A and B. Permits will also be obtained from the ACFD, and the BAAQMD prior to project commencement.

An asbestos survey will be conducted on all structures slated for demolition by a properly licensed asbestos inspector. Copies of the permits will be maintained on-site at all times during the course of the project.

6. FIELD PROCEDURES

The project will be divided into two main tasks, AGT demolition and UST removal. AGT demolition will be performed first to increase available work area and remove obstacles to facilitate the subsequent task. The USTs will be excavated and removed immediately following demolition of the AGTs. All tasks are being scheduled to take place prior to the first day of class at Edendale School (14 September 1998).

6.1. AGT Demolition

EBS has contracted Zaccor Corporation Inc. (ZCI) of Alameda, California (contractor's license #A-Haz 478799) to demolish and scrap the 20 on-site AGTs. Each AGT will be inerted to a lower explosive limit (LEL) of 0 per ACFD specifications, and cut into transportable pieces using hydraulic sheers. The resulting scrap metal will be hauled off-site for recycling.

6.2. UST Removal & Disposal

EBS has also contracted ZCI to inert and excavate the eight site USTs. Each UST will be pressure washed as necessary and inerted by addition of dry ice. All tanks will be measured to have an less than 10 percent of the LEL and a concentration of oxygen below 10 percent prior to removal.

All USTs will be properly transported under hazardous waste manifest by Ecology Control Industries (ECI) of Torrance, California and disposed of at their Richmond facility (EPA ID #CAD009466392).

The resulting excavations will remain open at the conclusion of this phase of work. The sidewalls of the pits will be sloped to decrease the chance of collapse.

6.2.1. Sampling

Soil samples will be collected from freshly exposed soil beneath the ends of each UST within two feet of the tank's bottom if water is not encountered. In the event that pit water is encountered, soil samples will be collected from the pit sidewalls at the ends of the tanks within the unsaturated zone just above water (the capillary fringe). Pit water samples also will be collected from each pit in which water is encountered.

Soil samples will be manually collected from the backhoe bucket. A wood or plastic mallet will be employed to drive a stainless steel sample tube into the soil to be sampled. The tubes will be filled with dirt to exclude head space. The ends of the tubes will then be wrapped with Teflon sheets and sealed with plastic end caps. Each tube will be labeled with a unique designation for this project and either relinquished immediately to an on-site mobile laboratory, or stored on ice in a closed insulated container to be relinquished to a laboratory at a later time. Chain of custody documentation will be initiated at the site and will accompany all samples in transit to the laboratory(s).

Water samples will be collected with a subsurface sample collection device. A one liter bottle will be loaded into the device and sealed with a spring powered stopper arm. The device will subsequently be extended into the pit at the end of a telescoping pole, placing the collection bottle below the surface of water. The collection bottle will then be remotely opened to allow water to fill it and then remotely resealed prior to retrieval from the pit. Water will be decanted from the collection bottle to fill individual sample containers. Water sample containers will include 1 liter amber bottles with threaded caps and hydrochloric acid preserved volatile organic analysis (VOA) vials with septa. All water containers will be clean and unused prior to sample collection. The sampler will be decontaminated and loaded with a fresh collection bottle between use at each tank pit.

6.2.2. Field Screening of Samples

All samples will be field screened using a photoionization detector (PID). The Thermo Environmental Instruments, Co. Model 580D PID to be used for this purpose will be calibrated at the beginning of each day of use to a 100 part per million (ppm) isobutylene standard (one ppm is basically equivalent to 1 mg/kg).

Approximately 50 to 100 grams of soil will be collected from various locations during excavation, and from soil immediately adjacent to the locations of soil samples to be submitted for laboratory analysis. These 50 to 100 gram samples will be sealed within plastic bags labeled with a unique designation for the project and allowed to remain undisturbed for at least 20 minutes. The PID will then be used to measure the resultant accumulation of vapor in the head-space within the bag. The maximum value attained for each such sample will be recorded on a field log.

7. SAMPLE ANALYSES

Soil samples will be analyzed for some or all of the following constituents according to the former contents of the USTs from beneath which they were collected:

- TPHg using EPA Method 8015.
- BTEX and MTBE using EPA Method 8020 (confirm MTBE using 8260).
- Total lead using EPA Method 7421.
- TPHd using EPA Method 8015.
- TPHk using EPA Method 8015.
- TPHss using EPA Method 8015.

Analysis will be performed by Mobile Chem Labs, Inc. of Lafayette, California (MCL). This laboratory is accredited through the California State Department of Toxic Substances Control environmental laboratory accreditation program (ELAP) to perform the indicated analyses.

Minimum laboratory detection limits for the above analytes will be 1 mg/kg for TPHg and 5 µg/kg for BTEX. Detection limits may be raised due to matrix interference by other compounds present and/or high levels of analytes. All changes in detection limits will be documented on the laboratory reports.

8. DOCUMENTATION

A final report documenting the observations, results, conclusions, and recommendations of the project will be prepared and submitted to the client within 30 days of the completion of the field work. Interpretations of the site conditions and the results of analyses will also be provided. Documentation will include scaled diagrams, logs of soil types encountered, copies of the chain of custody forms, laboratory reports, tabulated data, and interpretative figures as needed.

9. WORK ITINERARY

The following time line is anticipated for this phase of work:

- 12 August 1998: Submit Work Plan to ACFD and ACHCSA.
- 17 August 1998: Submit Health and Safety Plan to ACFD and ACHCSA.
- 24 August 1998: Begin site prep work (cut ASTs to allow for removal of contents).
- 31 August 1998: Begin AST removal.
- 7 September 1998: Begin UST removal.
- 11 September 1998: Demobilize equipment, conclude project.

This schedule is subject to revision. The ACFD and ACHCSA will be apprised of any such changes as far in advance as feasible.

10. LIMITATIONS

The project cost is based upon information and service rates acquired to date. Should any significant factor during project progression be other than at the time of this proposal, EBS reserves the right to adjust the charges in a reasonable manner. The maximum liability of EBS for any reason attendant to the services provided shall not exceed $250,000.00.

In the event of non-payment of fees as outlined within this proposal, EBS may cease work, and/or withhold documentation and information gained during work progression until full compensation has been received. Under such circumstances, EBS will be held harmless by the client and/or tenants or lessees of the client, and the client will be held responsible for all costs incurred as a result of the stoppage of work.

EBS will contact Underground Service Alert to mark utilities on adjoining public lands. The use of a private utility locator to mark on-site utilities is not included in the scope of work, but may be arranged for an additional fee at the Client's request. It is the responsibility of the Client to mark all subsurface utilities, improvements, structures, or easements in the proposed work area. EBS will not be liable for any damages to underground structures as a result of subsurface activities while excavating in locations which the Client has not disapproved prior to excavation (or which have been cleared by a private utility locator if such service is added prior to commencement), and which are not within 3 feet of any utilities clearly marked by USA or private locator prior to excavation.

All regulated waste materials generated (if any) during the performance of this project not specifically addressed in this proposal will remain the property of the Client to be disposed of properly. The disposal of liquids referenced to in this proposal applies to fluids acceptable to the Client selected disposal/recycling facilities. All other disposal requested by the Client to be arranged for at additional charge.

The Client will be must be available to sign all uniform hazardous waste manifests at the time the work is performed. All manifest related standby delays will be billed to the Client at additional cost.

The conclusions and recommendations in the report will be developed in accordance with generally accepted standards of current environmental practice in California. These recommendations are time-dependent and should not be considered valid after a 1-year period from the issue of the report. After 1-year from the issue of the report, site conditions and recommendations contained within the report should be reviewed.

The study will be performed solely for the purpose of evaluating environmental conditions at the site. No engineering or geotechnical references will be implied or should be inferred.

Environmental Bio-Systems, Inc. is not liable for the discovery, documentation, or other consequences associated with obscured or otherwise not readily visible conditions encountered during any personal observations documented by staff and/or included in the report.

The project will be performed, and the report will be prepared for the sole use of our client, Ann Marie Holland Tiers, Executor of the Estate of Jack M. Holland. The report and the findings contained therein shall not be disclosed to nor used by any other party without the prior written consent of Environmental Bio-Systems, Inc. It is the responsibility of the client to convey all data, conclusions and recommendations to regulatory agencies and other parties, as appropriate.

All recommendations made will be professional opinions that our firm has endeavored to provide with competence and reasonable care. We are not able to eliminate the risks associated with environmental work. No guarantees or warrants, express or implied, are provided regarding such recommendations.

11. REFERENCES

Compliance & Closure, Inc. Summary of Environmental Investigation Conducted at Jack Holland Sr. Oil Company Property, East 14th Street, San Leandro, California, 4 June 1998.

APPENDIX A:

FIGURES

APPENDIX C
HEALTH AND SAFETY PLANS

HEALTH AND SAFETY PLAN

DRUM AND DRUM CONTENT REMOVAL ACTIVITIES
HOLLAND OIL
16301 E. 14TH STREET
SAN LEANDRO, CALIFORNIA

1.0 INTRODUCTION AND SCOPE OF WORK

This Health and Safety Plan (Plan) will be in effect during drum and drum content removal activities at the Holland Oil site located at 16301 E. 14th Street in San Leandro, California. This Plan addresses the potential exposure to drums and containers containing petroleum hydrocarbons and solvents during drum and container decommissioning activities.

The scope of work for this phase of the project includes profiling, segregating, and decommissioning drums containing various petroleum products including motor oil, fuel oil, hydraulic oil, and stoddard solvents. Evergreen Environmental Services has been retained to perform the drum profiling activities and Zaccor Inc. has been retained to perform the drum segregation and decommissioning activities.

This Plan covers Environmental Bio-Systems, Inc. (EBS), and their subcontractors. If circumstances outside the scope of this Plan occur on site, the Plan will be amended to account for such circumstances, and the appropriate protective measures will be taken.

2.0 PERSONNEL

Site Health and Safety Officer - The Site Health and Safety Officer, _____, will be responsible for briefing field personnel and contractors on the potential site hazards, personal protective equipment to be used on site, work rules and safe work practices, and implementation of the Plan, prior to initiation of work.

The Health and Safety Officer will also conduct tailgate safety meetings as appropriate during field operations, to inform the field personnel and contractors of changing field conditions and any potential changes in the Plan.

Project Manager - The Project Manager, Dave Sadoff, will be responsible for all technical aspects of the project, and will assure that the requirements of the Plan are implemented.

Consulting Certified Industrial Hygienist - The Consulting Certified Industrial Hygienist, Irene S. Fanelli, CIH, has reviewed this Health and Safety Plan, and will provide consulting support for the project activities on an as-needed basis.

Field Personnel - Field personnel will be responsible for understanding and complying with the requirements of this Plan. They will acknowledge and sign a copy of this Plan, and will attend tailgate safety meetings, as required.

Field personnel will have the appropriate prior experience and training, and will meet the medical monitoring requirements of 8 CCR 5192. The required training includes the 40-hour basic training, three days of supervised field experience, 8-hour update training, and 8-hour supervisory training, as appropriate.

3.0 CONTAMINANTS

The potential chemical hazards on site consist of petroleum hydrocarbons and solvents. Specifically, motor oil, fuel oil, hydraulic oil, and stoddard solvents as bulk were stored and sold on site from the early 1960s until the mid 1980s. Some of the more common chemical constituents of petroleum hydrocarbons include Benzene, Ethyl benzene, Toluene, and Xylenes (BTEX). These constituents exist in petroleum products in different percentages depending on the particular type of oil or fuel. Material Safety Data Sheets (MSDS) should be reviewed to identify specific constituents and amounts found in that product.

General symptoms of exposure for petroleum products and their constituents include: irritation of the eyes, nose, mucous membranes, and respiratory system; headache; nausea, vomiting, abdominal pain; giddiness, excitement, dizziness, staggered gait; fatigue, weakness, lassitude; anorexia; corneal vacuolization; dermatitis; and bone marrow depression (benzene). Target organs include the central nervous system, eyes, skin, gastrointestinal tract, blood, liver, and kidneys.

Benzene is listed under California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as a chemical known to the State of California to cause cancer. Toluene is listed as a chemical known to cause reproductive harm. For this reason, the following warning will be given to all on-site personnel:

> "This area contains chemicals known to the State of California to cause cancer (benzene) and reproductive harm (toluene)."

4.0 POTENTIAL FOR EXPOSURE AND ROUTES OF ENTRY

Chemical hazards may be encountered during the drum decommissioning operations. During these operations, site personnel may be exposed to any or all of the chemicals noted in the table. Exposure may occur through inhalation, ingestion, and absorption though dermal contact. The potential for exposure, given reasonable precautions, is considered to be moderate. Overall exposure will be controlled through restriction of personnel from entering the restricted area.. Exposure through inhalation will be controlled through ambient air monitoring and the use of approved respiratory protection as necessary. Dermal exposure will be controlled by limiting contact through safe work

practices, the use of chemical protective clothing, and personal hygiene. Ingestion hazards will be controlled by strict limitation of eating, drinking, and smoking in the work areas, and by rigorous application of decontamination and personal hygiene protocols.

The table below lists toxicological information for the site contaminants:

Chemical	Cal/OSHA PEL or TLV (ppm)	Carcinogen?	Absorbed through skin?
Gasoline	300	No	Yes
Diesel	None	No	Yes
Benzene	1	Yes	Yes
Toluene	50	No	Yes
Ethylbenzene	100	No	No
Xylenes	100	No	No
Fuel Oil	None	No	No
Stoddard Solvent	100	No	No

Notes:

1. Data is taken from Title 8 CCR 5155, the NIOSH Pocket Guide to Chemical Hazards, 1997, and the ACGIH Threshold Limit Values, 1997.
2. The PEL/TLV is the lowest of the two values.

5.0 PHYSICAL HAZARDS

The physical hazards associated with drum decommissioning activities at the Holland Oil site are expected to be of equal or greater concern than the chemical hazards. The following is a list of physical hazards that may be involved in on-site activities and the control measures used to mitigate each hazard.

- **Fire/Explosion**

Gasoline, diesel, and solvent vapors are flammable. Gasoline has a flash point of 104 - 158°F (40 - 70°C). Diesel fuel has a flash point of 100 - 129°F (38 - 54°C). Vapors present in and around drums can present a serious fire and explosion hazard. Non-sparking tools and methods will be utilized during drum profiling, purging and decommissioning activities where flammable vapors or liquids are

present. Proper bonding and grounding procedures will be utilized during flammable liquid transfer operations to prevent spark from static charge. Procedures for safe drum handling activities are included in Appendix A.

Type ABC fire extinguishers are required in each drum decommissioning work locations. At least two fire extinguishers are required in work areas where flammable liquids are handled or processed. Extinguishers must be inspected for damage and defects daily. Used fire extinguishers must be replaced immediately and tagged "out-of-service" until refilled. Extinguishers must be serviced and refilled at least annually by a licensed service firm. Written documentation of service and inspection dates must be attached to each fire extinguisher. Written records of monthly inspections and annual servicing must be available upon request to regulatory inspectors.

- **Heavy Equipment**

Drum transport and crushing equipment will be used at the site. During the site-specific training, all site personnel will be advised of the types of this equipment being used at the site and the hazards of working around such equipment. All personnel operating such equipment will be properly trained and will be instructed to be constantly aware of the presence of other site personnel within their work area. Communication between workers on the ground and Operators will be by line-of-sight, utilizing standard construction hand signals. All personnel on the ground within the working range of trucks and heavy equipment shall assure eye contact AND acknowledgement from the Operator prior to approaching the equipment. Backup alarms and rollover protection will be utilized, as appropriate. Site personnel will be prohibited from standing or passing directly behind equipment or trucks, without first notifying the operator or driver of such movement.

- **Manual Material Handling**

Transport of drums will be performed utilizing mechanical equipment including forklifts, drum grappling equipment and/or equivalent appropriate methods. Site personnel must not attempt to move drums containing product by hand, as these drums may weigh hundreds of pounds. Empty drums may be moved by hand only when movement by mechanical means is possible. If moving empty drums (or other equipment or supplies) by hand, care must be taken to use proper handling techniques in order to prevent injuries.

- **Noise**

Personnel working in areas where heavy equipment and drum crushing is operating may be exposed to excessive noise, and will wear their choice of hearing protection as necessary.

- **Heat Stress**

Heat stress may also be a potential physical hazard during the work. Personnel must be familiar with the symptoms of heat stress, and the conditions during which it may occur. Heat stress symptoms may include nausea, headache, lightheadedness, lack of coordination, or slurred speech. The use of protective clothing greatly enhances the likelihood of heat stress. Where site conditions warrant, site personnel will monitor for heat stress and implement work/rest regimens, as necessary. Potable water and/or an electrolyte replacement fluid such as Gatorade will be available on-site at all times.

6.0 AIR MONITORING/ACTION LEVELS

Direct reading air monitoring will be conducted for organic vapors using a Flame Ionization Detector (FID) or Photo Ionization Detector (PID). All direct-reading monitoring results will be compared to background levels, as measured at locations upwind of the work area. All equipment will be calibrated at least daily, according to the manufacturer's instructions. Additional calibration will be carried out as necessary. Calibration and monitoring data will be recorded in the field log for the project.

All drums and containers will be tested for flammable vapors utilizing a Combustible Gas Indicator (CGI) before being moved or purged of contents. CGIs will be properly calibrated daily as per manufacturer's recommendations as a minimum before usage. Lower Explosive Limits (LELs) found above 0% in drum head spaces or empty drums will be the action level for procedures for profiling, segregating, and decommissioning drums and containers.

All site workers will be informed that they are always entitled to make use of respiratory protection prior to reaching a work area action level. Once an action level is reached, designated protection levels will be mandatory. All respiratory protection will be NIOSH/MSHA approved equipment. If PID readings consistently reach 10 ppm above background in the breathing zone for five minutes, workers will upgrade to respirators with organic vapor cartridges. If PID readings consistently reach 50 ppm in the breathing zone, workers will leave the area until vapor control measures are sufficient to bring organic vapor levels below this level.

7.0 PERSONAL PROTECTIVE EQUIPMENT

All personnel in the active work area will be required to wear a hard hat, chemical resistant PVC or equivalent steel-toed boots, and safety glasses to protect against injury. Personnel will utilize their choice of hearing protection while working around heavy equipment. Personnel will also be required to wear chemical resistant poly-coated Tyvek coveralls, nitrile gloves, and splash goggles or equivalent eye protection when working around drums during all drum decommissioning activities. During initial drum opening, personnel will wear full face cartridge respirators with organic vapor/acid mist cartridges in addition to poly-coated Tyvek coveralls, nitrile gloves, and chemical resistant steel-toe boots.

8.0 DECONTAMINATION

Personnel will utilize appropriate decontamination techniques prior to leaving the work area. These measures include proper containment and disposal of disposable protective equipment, washing and rinsing of reusable equipment, and washing of hands before eating, drinking, or smoking.

9.0 SITE ZONES

Before drum decommissioning activities begin on site an Exclusion Zone (EZ) and Decontamination Reduction Zone (Decon zone) will be established. The EZ and decon zones will generally be the drum staging, sampling, and decommissioning areas. Access will be restricted to the EZ and decon zone to properly trained and protected personnel who are involved with the drum decommissioning activities. The EZ /decon zone restricted areas will be visibly delineated with barricades, caution tape, fencing, or equivalent barriers to prevent unauthorized entry.

10.0 EMERGENCIES IN THE FIELD

- **Spills**

Spill containment supplies and equipment will be available on site in the event of spills. Supplies will include absorbent pads, booms, or equivalent. The quantity of spill containment supplies kept on site must be able to contain a spill from the entire contents of a full 55 gallon drum as a minimum.

- **Fire/explosion**

In the event of a fire or explosion, on site personnel will evacuate to a pre-determined safe meeting area. The safe meeting area will be determined by the on site Project Manager or Site Supervisor and will be communicated to all site workers before site activities begin. Site personnel will not fight fires beyond the "incipient stage" which can easily be extinguished with one fire extinguisher.

- **Medical Emergency**

In case an accident should occur in the field the nearest appropriate emergency facility will be notified immediately. The contacts for the nearest emergency facilities to the project site are included on Table 1.

TABLE 1

EMERGENCY TELEPHONE NUMBERS

CONTACT	PHONE NUMBER
AMBULANCE:	911
FIRE DEPARTMENT: Alameda County	911 or (510) 618-3490 670-5858
POLICE: San Leandro Police Department	911 or (510) 577-3210
HOSPITAL: Alameda County Medical Center	(510) 667-7800
EBS: Dave Sadoff	(510) 317-1455
EHCI: Irene Fanelli KURT ETTINGER	(650) 3478-9205 ICOM PAGE 881.5129 pager (888) 881-5128
EES: Kevin Krause	(510) 795-4400
ZACCOR: Gary Zaccor	(510) 522-6210

To get to the hospital from the site take E. 14th Street north approximately 1 mile to Fairmont Street. Turn right at Fairmont and proceed approximately ½ mile to Foothill Blvd. Turn right at Foothill Blvd. The hospital is on the left – 15400 Foothill Blvd.

9.0 ACCIDENT REPORT

In case of accident, the on-site Health and Safety Officer will provide a report to the Project Manager describing the following:

- The nature of the event that required notification of off-site personnel or agencies.
- The date, time and names of personnel and agencies notified, and their response.
- A description of personal injury and/or property damage.
- A description of the resolutions of the incident.

10.0 ACKNOWLEDGEMENT AND UNDERSTANDING OF THIS PLAN

Field personnel will be briefed on the nature of work at the site, potential hazards, and protective clothing requirements prior to site work. The personnel will then be asked to sign the following statement:

This Health and Safety Plan has been explained to me. I acknowledge receipt of this Plan and obligate myself to read it. I agree to abide by the Plan and procedures outlined herein. I understand that non-compliance with the Plan may lead to termination of my employment.

Signature:	Date:
	8/4/98
	8/4/98
	8/4/98
	8/6/98
	8/4/98
	8/4/98
	8/4/98
	8498

Joe Lee Mordahl

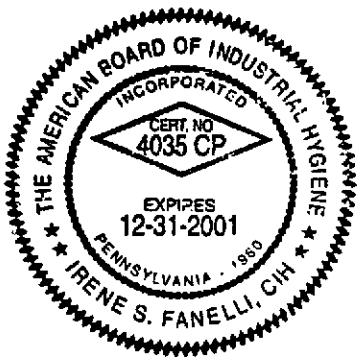
8598 (CONT'D)

This health and safety plan has been developed for the removal of fuel oils, waste oils, and solvents from existing drums and containers at the Holland Oil site located at 16301 E. 14th Street in San Leandro, California. The plan has been prepared in accordance with 8 CCR 5192 and other applicable regulations, and good industrial hygiene practice.

This plan is intended to apply to the drum and drum content removal activities at the above listed site only, and must not be extrapolated to other substances, work activities or project locations without modification to address the specific hazards associated with those substances, activities and/or any other specific regulatory requirements.

Irene S. Fanelli, CIH

7/30/98
Date



APPENDIX A

DRUM HANDLING

DRUM HANDLING

1.0 PURPOSE

This procedure describes the minimum requirements for the safe handling, sampling, overpacking and crushing of drums.

2.0 SCOPE

This procedure applies to all operations where drums and other similar containers are handled.

3.0 DRUM HANDLING

Drums are handled for purposes of staging, characterization, removal, and disposal. Hazards of drum handling include detonation, fire, explosion, vapor generation and physical injury.

3.1 Pre-Inspection

Prior to handling, drums will be inspected for potential hazards. Personnel will look for:

- Symbols, words, or other marks on the drum indicating that its contents are hazardous; e.g., radioactive, explosive, corrosive, toxic, flammable.
- Symbols, words, or other marks on a drum indicating that it contains discarded laboratory chemicals, reagents, or other potentially dangerous materials in small-volume individual containers.
- Signs of deterioration such as corrosion, rust, and leaks.
- Signs that the drum is under pressure, such as swelling and bulging.
- Drum type (stainless steel, polyethylene, fiberboard, etc.).
- Configuration of the drum head.

3.2 Air Monitoring

As a precaution, workers will assume that unlabeled drums contain hazardous contents until their contents have been characterized. Direct-reading instruments such as radiation meters, combustible gas indicators, flame ionization detectors, or photoionization detectors will be used to monitor for toxics, flammables and/or radiation around drums prior to and during handling, if the contents are unknown.

3.3 Required Equipment

The following equipment will be available in the immediate work area during drum handling.

- Fire extinguishers.
- Non-sparking tools.
- Spill adsorbent material (loose or in pads or booms).
- Direct-reading instruments for air monitoring.
- Overpack containers.

Drums will only be handled/moved only to the extent that is absolutely necessary as the potential for leaks, rupture and exposure increases with the amount of handling. Personnel involved in drum handling and characterization will have prior training on potential hazards and safe work practices for these activities. Personnel will immediately notify their supervisor or the site safety and health officer of any changing conditions and new information that appear during drum handling.

3.4 Safe Work Practices

All drums and containers will be approached cautiously until their contents and condition have been characterized. The following procedures will be followed for drum handling.

Drums will be handled one at a time.

Personnel are prohibited from standing, walking or sitting on drums.

Personnel will avoid the swing radius of drums during lifting and hoisting. Walking or standing under suspended loads is prohibited.

All ignition sources must be removed from a 75 foot radius around drum handling activities.

Drums that appear in imminent danger of failing will be overpacked as soon as possible.

Mechanical devices will be used to move drums due to their weight. Drums may weigh 200 - 600 pounds.

When lifting drums, operators must have a clear view of the path of the drum. Spotters will be used if the operator's view is blocked.

When using slings, yokes or other lifting devices to move drums; personnel assisting the lift will move away a safe distance from the area before the drum is lifted.

Critically swollen drums will not be moved until pressure is relieved.

Where explosive or shock-sensitive contents is suspected, drums will be handled and sampled remotely via mechanical means.

3.5 Personnel Protective Equipment and Respirators

Level B will be worn when working with unknowns. For known materials or those expected to present low hazard potential, Level C full-face cartridge respirators with organic vapor/acid mist cartridges will be worn in addition to appropriate skin protection.

4.0 DRUM STAGING, OPENING AND SAMPLING

Drums will be staged in a logical and orderly manner. The arrangement of drums will allow adequate aisles for entrance and exit when working around the drums. Movement of drums will be kept to a minimum. Drums of like contents will be staged together and away from drums of incompatible contents. Gas cylinders will be staged in a cool shaded area. Potentially explosive and shock-sensitive drums will be stored at a location distant from other site activities and in a diked, fenced area. Drums may be stacked no more than two high, with pallets between.

The following procedures will be handled for drum opening and sampling.

Air monitoring will be performed at the drum opening before and during opening.

Access to the drum opening area will be limited to essential personnel only.

Where explosive or shock-sensitive contents are suspected, drums will be opened remotely by mechanical means.

If the drum shows signs of bulging or swelling, excess pressure can be relieved by gently cracking the bung prior to opening.

Non-sparking tools such as plastic, bronze or beryllium will be used for drum opening.

Only one drum at a time will be opened. Drums will be left open only as long as is necessary to take samples. Drums will be closed and resealed as quickly as possible.

Samplers will stand to the side of an open drum and avoid leaning over the opening.

If the drum lid is unable to re replaced securely, the drum will be overpacked or its contents off-loaded to another container.

Sampling equipment will be decontaminated between drums to avoid cross-contamination and mixtures of incompatible compounds.

5.0 DRUM OVERPACKING

Drums exposed to the outdoor elements for a long period of time may be in poor physical condition. Many are rusted and have holes, thus creating a high risk for spills and splashes during handling.

Drums of questionable integrity will not be moved. Leaky or potentially leaking drums will be either off-loaded and demolished or will be overpacked.

Overpacking will be performed by mechanical means when possible. Drums will be lifted, using vise grips or a grappler, and lowered into an overpack drum. The drums will be lifted no higher than is necessary and swinging of the drums will be kept to a minimum. If overpacking must be performed manually, the overpack will be placed over the leaking drum, they will be tilted on their sides, and then uprighted.

Lids will be placed and sealed on overpack drums as quickly as possible. Emergency spill materials will be staged in the area of drum overpacking.

6.0 DRUM DEMOLITION

Empty drums may be crushed in preparation for disposal. Workers will stand clear of the crushing operation. Crushing, moving and loading the drums for storage or transport will be performed mechanically. The operator will maintain a clear evacuation route from his equipment at all times. Only empty drums will be crushed. Due to the high noise of drum crushing, workers in the area will wear hearing protection.

ZACCOR
COMPANIES, INC.
LIC. #478799-A, C-21, ASB, HAZ

SITE HEALTH AND SAFETY PLAN

THE REMOVAL OF UNDERGROUND AND ABOVE GROUND STORAGE TANKS AT 16301 EAST 14TH STREET SAN LEANDRO, CALIFORNIA

*

SOS 9/29/98

* SEE REVISIONS

2900 MAIN STREET ALAMEDA, CA 94501 (510) 522-6210 FAX (510) 522-6259 E-MAIL Zaccor1@aol.com

SITE HEALTH AND SAFETY PLAN

1.0 INTRODUCTION

The Site Health and Safety Plan (HSP) has been prepared by EBS and Zaccor Companies, Inc.. This HSP establishes procedures to address health and safety aspects of field work activities to be conducted by Zaccor Companies, Inc. employees at **16301 EAST 14TH STREET, SAN LEANDRO, CA.**

This Plan addresses exposure to petroleum hydrocarbons, liquid and vapor during the underground (UST) and above ground (AST) tank removal and risk involved with working on and near heavy equipment..

This plan was prepared in accordance with federal (29 CFR 1910.120) and state (Title 8 CCR Section 5192) regulations and has been reviewed by the project manager and project health and safety officer. Prior to entering the site, EBS and Zaccor personnel shall read this plan and be familiar with health and safety procedures required when working onsite. A copy of the HSP shall be available onsite for inspection and review.

The observance of procedures in this plan are mandatory for all EBS and Zaccor employees at the site. All subcontractors, regulatory agency personnel, and other non-EBS and Zaccor personnel shall be made aware of the requirements of this plan; however, subcontractors and others will be responsible for the safety of their own employees and for following all applicable federal, state, and local regulations.

2.0 SITE BACKGROUND

The site encompasses approximately 3 acres and was used from approximately 1960 until the mid 1980's as a bulk fuel storage and sales facility. Approximately 20 aboveground tanks (SATs) and 8 underground tanks (USTs) have been identified at the property. Site history indicates the tanks contained petroleum hydrocarbons. The site is bounded to the south by a park and ball field, to the southwest by an elementary school, to the east and west by used car sales lots, and to the north and northeast by East 14th Street.

3.0 FIELD ACTIVITIES

The field activities to be conducted at the site may include any of the following work tasks;

Heavy Equipment

An excavator, backhoe, loader, and or Bobcat will be used for the excavation and removal of ASTs and USTs located on the subject site. Care will be used to remain out of the working swing area of this equipment. Hard hat and steel toed boots will be worn at all times.

Equipment will be approached only when the operator is aware of the presence of someone approaching and has positioned the equipment into a non-operating status, such as hands and feet off of the controls, or the engine idled down.

Contaminants

The potential chemical hazards may include petroleum hydrocarbons such as motor oil, fuel oil, hydraulic oil, diesel, and stoddard solvent which were stored in bulk and sold onsite as previously referenced. Benzene, toluene, ethylbenzene and total xylenes may also be a concern.

All site field work will be conducted by properly trained personnel under the provisions of 29 CFR 1910.120

Appropriate fire extinguisher medium will be readily accessible in work areas to all personnel. All personnel will be aware of specific locations.

AST's and UST's will be evaluated for explosive vapors using a recently calibrated lower explosive limit (LEL) meter. THE ATMOSPHERE WILL BE MAINTAINED BELOW 10% OF THE LOWER EXPLOSIVE LIMIT (LEL) AT ALL TIMES for the purpose of pressure washing. Tanks will not be pressure washed if the atmosphere is above 10% of the LEL.

Inert tanks will be loaded on a flat bed truck, strapped down and transported using a licensed, trained hazardous waste hauler under Uniform Hazardous Waste Manifest (UHWM) to EES.

4.0 KEY PERSONNEL AND RESPONSIBILITIES

The following sections describe the health and safety responsibilities assigned to the project.

Project Manager: The Project Manager (PM) Dave Sadoff shall:

A direct all personnel involved in contracted activities at the site and vicinity.

B. make the project Health and Safety Officer aware of all pertinent project developments and plans.

C. make the resources available for a safe working environment.

D. maintain communications with client, as necessary.

Project Health & Safety Officer: The Project Health and Safety Officer (PHSO) Kurt Ettinger shall:

A. direct all health and safety aspects of contractual activities conducted by EBS and Zaccor personnel at the site vicinity.

B. insure that all EBS and Zaccor personnel have received required training, are aware of potential hazards associated with site operations, have been instructed in the work practices for health and safety, and are familiar with the site health and safety plan procedures for all scheduled activities and for dealing with emergencies.

C. direct required exposure monitoring to assess site health and safety concerns.

D. prepare any accident/incident reports.

E. modify the site health and safety plan as required based on accidents/incidents and findings regarding personnel exposures and work practices.

F. report all accidents/incidents and findings regarding personnel exposure and work practices to the P. M.

SITE SAFETY OFFICER The Site Safety Officer (SO) Dave Sadof shall:

A. ensure that appropriate personal protective equipment is available for EBS and Zaccor personnel and enforce proper utilization of personal protective equipment by on-site EBS and Zaccor personnel.

B. with guidance from the PHSO, observe subcontractor's personnel with respect to health and safety. If the SSO believes that a subcontractors personnel are or may be exposed to an immediate health hazard, the SSO shall suspend the subcontractors site work. If the subcontractors personnel do not have the required protective equipment, the SSO shall consult with the PM or PHSO before processing with the work.

C. implement the project health and safety plan and report any observed deviations from site conditions anticipated in the plan.

D. conduct site safety briefings as needed.

E. calibrate monitoring equipment daily and properly record and file results.

F. under direction of the PHSO, perform required exposure monitoring.

G. maintain monitoring equipment or arrange maintenance as necessary.

H. assume other duties as directed by the PM or PHSO.

i. report observed accidents / incidents or inadequate work practices to the PHSO and the PM.

PROJECT PERSONNEL: Project personnel involved in on-site investigations and operations shall:

A. take reasonable precautions to prevent injury to themselves and to their fellow employees and perform only those talks that they can do safely.

B. immediately report accidents and/or unsafe conditions to the SSO or PHSO.

C. follow the procedures set forth in the HSP and report to the SSO or PHSO any observed deviations from the procedures described in the plan on the part of EBS and Zaccor or subcontractor personnel.

D. inform the PM and PHSO of any physical conditions that might affect their ability to perform.

Minimum Training and Medical Surveillance Requirements for Site Personnel

__÷__ 40 hr. Health and Safety Training for Hazardous Waste Workers

__÷__ 8 hr. Annual Refresher Training

__÷__ First Aid and CPR Training for Site Health and Safety Officer

__÷__ 8 hr. Supervisor Training for Site Health and Safety Officer

__÷__ Respirator Fit Testing

__÷__ Medical Surveillance

__÷__ Confined Space Entry Training (for personnel entering excavation)

5.0 CHEMICAL HAZARDS AND RISK

Possible exposure to chemicals when tanks are opened and inerted using dry ice, piping is drained and disconnected and during the excavation of soil to access the USTs. Routes of entry include inhalation, absorption. To avoid ingestion of chemicals eating, drinking and smoking in the work area will be controlled by strict limiting. Injection would be a concern should a cut related injury occur, there fore any such injury will be cleaned and treated immediately.

Based upon site history USTs and ASTs are expected to contain petroleum hydrocarbons. It is anticipated that Level D protection will be adequate, however Level C protection will be used on an as needed basis determined by field monitoring.

General symptoms for exposure to anticipated petroleum hydrocarbons are irritation to eyes and nose mucous membranes and respiratory system, burning skin, rash;, nausea, abdominal pain, vomiting; giddiness, excitement, staggering, fatigue, weakness, lassitude; anorexia, cornea vacuolization; and bone marrow depression (benzene). Targeted organs include the central nervous system, skin, mucous membrane, eyes, nose, gastrointestinal system, liver, kidney and blood.

Benzene is listed as a chemical known to cause cancer. Toluene is listed as a chemical to cause reproductive harm. Therefore according to the California Safe Drinking Water and Toxic Enforcement Act (prop. 65) the following warning should be given to all onsite personnel.

"This area contains chemicals known to the State of California to cause cancer (benzene) and reproductive harm (toluene).

Chemical	Cal/OSHA PEL or TLV (ppm)
Gasoline	300
Diesel	None
Benzene	1
Toluene	50
Ethylbenzene	100
Xylenes	100
Fuel Oils	None
Stoddard Solvent	100

Other Risks

Trips, slips, falls, heavy equipment. Operators and ground employees to exercise awareness and caution at all times. Area will be kept as tidy as possible. Cold and heat exposure not expected to be a concern, however workers will be informed of prevention, symptoms and treatment.

6.0 CHEMICAL EXPOSURE MONITORING PLAN

6.1 AIR MONITORING

Direct reading air monitoring will be conducted for organic vapors using a Flame Ionization Detector (FID) or Photo Ionization Detector (PID). All direct-reading monitoring results will be compared to background levels, as measured at locations upwind of the work area. If PID readings consistently reach 10 ppm above background in the breathing zone for five minutes, workers will upgrade to respirators with organic vapor cartridges and down-wind fence line levels will be evaluated. If PID readings consistently reach 50 ppm in the breathing zone, workers will leave the area until vapor

control measures are sufficient to bring organic vapor levels below this level. Any fence line levels observed above background will require discontinuation of activities until work practices/procedures can be modified to reduce fence line levels to background. All equipment will be calibrated at least daily, according to the manufacturer's instructions. Additional calibration will be carried out as necessary. Calibration and monitoring data will be recorded in the field log for the project. All site workers will be informed that they are always entitled to make use of respiratory protection prior to reaching a work area action level. Once an action level is reached, designated protection levels will be mandatory. All respiratory protection will be NIOSH approved equipment.

All tanks will be tested for flammable vapors utilizing a Combustible Gas Indicator (CGI) before tank decommissioning activities begin on each tank. CGIs will be properly calibrated daily as per manufacturers recommendations as a minimum before usage. All tanks must be inert to less than 10% LEL before being decommissioned. Decommissioning includes excavation (For USTs), removal, and loading of tanks for off site transport and disposal. Any onsite demolition of tanks will be through cold cutting techniques. No torching or spark producing tank demolition activities will be allowed.

6.2 DUST MONITORING

Dust monitoring will not be performed. Significant quantities of dust ~~will~~ is not anticipated to be generated by site activities. Water will be available on site to use as dust suppression if visible dust emissions occur.

7.0 POTENTIAL PHYSICAL HAZARDS AND RISKS

In addition to potential chemical hazards, potential physical hazards are present at the site. a description of the potential physical hazards, the tasks (identified in Section 3.0) of which each hazard applies, and precautions to be taken to minimize the hazards are presented in the following sections.

7.1 SAFETY HAZARDS (ALL TASKS)

Various safety hazards and the precautions to be taken to minimize the hazards are summarized below:

a) fall/flying objects: Hard hats and safety glasses will be worn.

b) slippery surfaces; sharp objects such as nails, metal shards, and broken glass; Steel toed boots will be worn and personnel will watch where they are walking.

c) Hot equipment; Personnel will wear heavy gloves if handling hot equipment (i.e. steam cleaners, winches & motors).

d) Rotating equipment (excavators, cranes, etc.); Personnel will remain visible to equipment operators at all times.

7.2 ELECTRICAL HAZARDS & UNDERGROUND UTILITIES (TASK 1 & 2)

Before beginning any work, the SSO shall locate above-ground and underground utilities (electrical, gas, water, telephone, sewer and storm drain) and indicate overhead power lines to all site personnel and contractors.

7.3 NOISE

Large heavy equipment often creates excessive noise. Noise at the site is expected to be quite variable depending upon location and nearby construction activities. Noise monitoring will not be conducted; however, on-site personnel will wear hearing protection

when working near operating or other noisy conditions. EBS and Zaccor includes annual audiometric testing as part of our medical monitoring program.

HEAT STRESS

The signs and symptoms of heat stress include;

a) Heat rash may result from continuous exposure to heat or humid air.

b) Heat cramps are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include: muscle spasms and pains in the hands feet and abdomen.

c) Heat exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardio-vascular insufficiency or dehydration. Signs and symptoms include; pale, cool, moist skin; heavy sweating; dizziness; nausea; and fainting.

d) Heat stroke is the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury and death occur. Competent medical help must be obtained. Signs and symptoms are; red, hot, unusually dry skin; lake of or reduced perspiration; nausea; dizziness and confusion; strong rapid pulse and coma.

If protective clothing must be worn, the suggested guidelines for ambient temperature and maximum work per, from the NIOSH/OSHA/HSGG/EPA "Occupational Safety and Health Guidelines Manual for Hazardous Waste Site Activities" are as follows;

Suggested Frequency of Physiological Monitoring for Fit and Acclimated Workers

Adjusted Temperature Normal Worker Ensemble	Impermeable Ensemble
90∞ F (32.2 C) or above After each 45 min. of work	After each 15 min. of work
87.5∞ -90∞ F(30.8-32.2C) After each 60 min. of work or above	After each 30 min. of work
82.5∞ -87.5∞ F(28.1-30.8C) After each 90 min. of work	After each 60 min. of work
77.5∞ -82.5∞ F(25.3-28.1C) After each 120 min. of work or above	After each 90 min. of work
72.5∞ -77.5∞ F(22.5-25.3C) After each 150 min. of work or above	After each 120 min. of work

Notes:

a For work levels of 250 kilocalories/hour

b calculate the adjusted air temperature (ta/adj) from the measured air temperature (ta) by using this equation; ta adj F=ta F + (13 x % sunshine). Measure air temperature (ta) with a standard mercury in glass thermometer, with bulb shielded from radiant heat. Estimate percent sunshine by judging what percent time the sun is not covered by clouds that are thick enough to produce a shadow (100 percent sunshine = no cloud cover and a sharp distinct shadow; 0 percent sunshine = no shadow).

c A normal work ensemble consists of cotton coveralls or other common clothing with long sleeves and pants.

d Impermeable ensemble includes Tyvek and Saranex coveralls with rubber boots.

Pulse rates and oral temperatures may be monitored as early as possible in the rest period.

HEAT STRESS -continued

If the pulse exceeds 100 beats per minute or temperature exceeds 99 degrees Fahrenheit at the beginning of the rest period, the work cycle will be shortened by one-third

7.6 SUNBURN (ALL TASKS)

Skin exposure to ultraviolet radiation can produce sunburn. Hats or hard-hats, long sleeved shirts, and sunscreen will be used to protect against sunburn.

8.0 PERSONAL PROTECTIVE EQUIPMENT

The following personal protective equipment will be used or available as specified below.

_____	Floatation devise
****	Chemical-resistant rubber boots, steel toed
****	Steel toed boots
****	Hard hats
****	Ear plugs
****	Gloves
****	Disposable suit (Tyvek or Saranex)
****	Half or full face respirator
****	Cartridges
****	Safety Glasses/goggles

Activity	Equipment Clothing
Mandatory	*Non-Mandatory*
Eye Protection- when appropriate	Ear Protection-when appropriate
Steel-Toed boots	Respirator - when appropriate
Tyvek or Saranex- when appropriate	
Gloves	
Hard Hat	

9.0 SITE CONTROL

The purpose of site control is to minimize the potential exposure to site hazards, to prevent vandalism at the site, and to provide adequate facilities for the workers

9.1 WORK ZONES

Before tank decommissioning activities begin on site an Exclusion Zone (EZ) and Decontamination Reduction Zone (Decon Zone) will be established. The EZ will generally be the yard area near the existing tanks. A decon zone will be established adjacent to the EZ. Access will be restricted to the EZ and decon zone to properly trained and protected personnel who are involved with the tank decommissioning activities. The EZ/decon zone restricted areas will be visibly delineated with barricades, caution tape, fencing, or equivalent barriers to prevent unauthorized entry.
See attached map for proposed EZ areas.

9.2 SITE SECURITY

Site security shall consist of site personnel overseeing the work area and allowing only persons with proper OSHA certification and adequate personnel protection to enter the work area. A security guard will be onsite when site personnel depart.

9.3 SANITATION FACILITIES

Rest and water will be

11.0 SAFETY PRACTICES & STANDARD OPERATING PROCEDURES

In working around any hazardous or potentially hazardous substances or situations, site personnel shall plan all activities before starting any task. Site personnel shall identify health and safety hazards involved with the work planned and consult with the PHSO or SSO as to how the task can be performed in the safest manner, if he/she has any uncertainties.

The SSO shall conduct periodic safety briefings so that any precautions that are required will be fully understood by site personnel and contractors, and any questions personnel may have can be addressed. Adherence to the following general safety rules:

1. Wear protective clothing as provided, when required.

2. Wear protective hard hat in construction areas.

3. Wear sturdy work boots or shoes at the site. Steel toed boots required.

4. Prevent splashing of contaminated materials, if applicable.

5. Prevent back injury by never lifting or carrying a load that is more than you can handle. When lifting heavy objects, bend the knees and use the leg muscles.

6. Keep all heat sources away from combustible liquids, gases, or any flammable materials. When working in areas where combustible gases are present, use only intrinsically safe equipment (non-sparking).

7. Be familiar with the physical characteristics of investigations, including;

    a. Accessibility of other personnel, equipment, and vehicles
    b. Site access
    c. Nearest water sources
    d. Location of communication devices

8. Dispose of all wastes generated during work activities at the site as directed by the P. M.

9. Inspect power cords for damage such as cuts and frays.

10. When in doubt of your safety it is better to over protect.

11. Practice defensive driving.

12. Keep a first aid kit and several type ABC fire extinguishers at labeled and designated locations when performing all field work.

12.0 EMERGENCY RESPONSE

In the event of an accident or emergency conditions, the procedures listed below shall be followed immediately. Emergency conditions are:

- Σ An accident (physical or chemical) involving personnel or anyone experiencing adverse effects or symptoms of exposure.
- Σ Discovery of a situation more hazardous than anticipated.
- Σ Accidental release of hazardous materials or wastes.

The site safety officer shall take charge, and follow the emergency procedures listed.

12.1 MEDICAL EMERGENCY

The following steps shall be taken as appropriate in the event of a medical emergency:

1. Remove the injured or exposed person(s) from immediate danger, if possible. Transport the injured person(s) to a hospital if they can be transported safely. The hospital location can be shown on Figure 2.

2. If a serious injury or life threatening condition exists, **CALL AN AMBULANCE** (dial 911). Clearly describe the location, injuries and conditions to the ambulance dispatcher. Designate a person to direct emergency equipment to the injured person.

3. Provide emergency first aid, if possible.

4. Evacuate other on site personnel to a safe place until the P. M. or the PHSO determines that it is safe for work to continue.

5. Immediately implement steps to prevent recurrence of the accident, and to conduct a critique of response and follow up.

6. If there is any question as to the nature of the injury or what should be done, call 911 or appropriate emergency numbers listed below .

Ambulance - 911

Fire Dept. - 881-8181 or 911

Police Dept. - 911

Poison Control Center - 1-800-777-6476 or 213-484-5151

National Emergency Response Center: 1-800-424-8802 (24 hr.)

California State Office of Emergency Services: 1-800-852-7550

7. Location of nearest hospital. See Fig. 2

13.0 TRAINING, MEDICAL SURVEILLANCE, AND RECORD KEEPING

13.1 TRAINING REQUIREMENTS

All project personnel must be in compliance with OSHA regulations specified in 29 CFR 1910.120 and CCR Title 8, Section 5192. These include completion of a 40 hour health and safety training course, annual 8 hour refresher training, and participation in a medical monitoring program and respiratory protection program.

Documentation of required training for diving subcontractors shall be submitted to EBS and Zaccor Companies, Inc. prior to starting work.

Additional site specific training that covers on site hazards, personal protection requirements, decontaminating procedures, and emergency response information as outlined in the site safety plan will be given by the PHSO or SSO before beginning on site work.

13.2 MEDICAL SURVEILLANCE

All EBS and Zaccor project personnel shall participate in a medical monitoring program, which includes annual audiometric and physical exams for employees involved in hazardous waste or materials projects. It requires that all such personnel have medical clearance before being issued a respirator and participating in field activities. Frequency of medical exams complies with CCR8 5192(f3) and is summarized as follows:

1. Prior to performing field work.

2. At least once every 12 months.

3. At termination of employment.

4. Upon occurrence of possible over-exposure.

5. More frequently if deemed necessary by a physician.

6. Documentation of medical clearance will be required from contractors and subcontractors prior to the start of work. (if applicable)

HEALTH AND SAFETY PLAN REVIEW AND APPROVAL

CLIENT: EBS SITE NAME: UST & AST REMOVAL

PROJECT NAME: AST & UST REMOVAL, AT 16301 EAST 14TH STREET, SAN LEANDRO, CA.

Plan Completed By	Signature	Date
Project Manager	DAVE SADOFF Signature	9/3/98 Date
Health & Safety Coordinator	Signature	Date
Site Health & Safety Officer	Signature	Date
Alternate Health & Safety Officer	Signature	Date
Industrial Hygienist	Signature	Date
Excavation Competent Person	Signature	Date
Sub-Contractor Field Supervisor	Signature	Date
Sub-Contractor #2 Field Supervisor	Signature	Date

This Health & Safety Plan has been written for the EBS and Zaccor Companies, Inc. and its employees. It may also be used as a guidance document by properly trained and experienced subcontractors. However, EBS and Zaccor Companies, Inc. does not guarantee the health or safety of any person entering this site.

Due to the potential hazardous nature of this site and the activity occurring thereon, and is not possible to discover, evaluate, and provide protection for all possible hazards which may be encountered. Strict adherance to the health and safety guidelines set forth herein will reduce, but not eliminate, the potential for injury at this site. The health and safety guidelines in this Plan were prepared specifically for this site and should not be used on any other site without prior research by a trained health and safety specialist.

JA 19

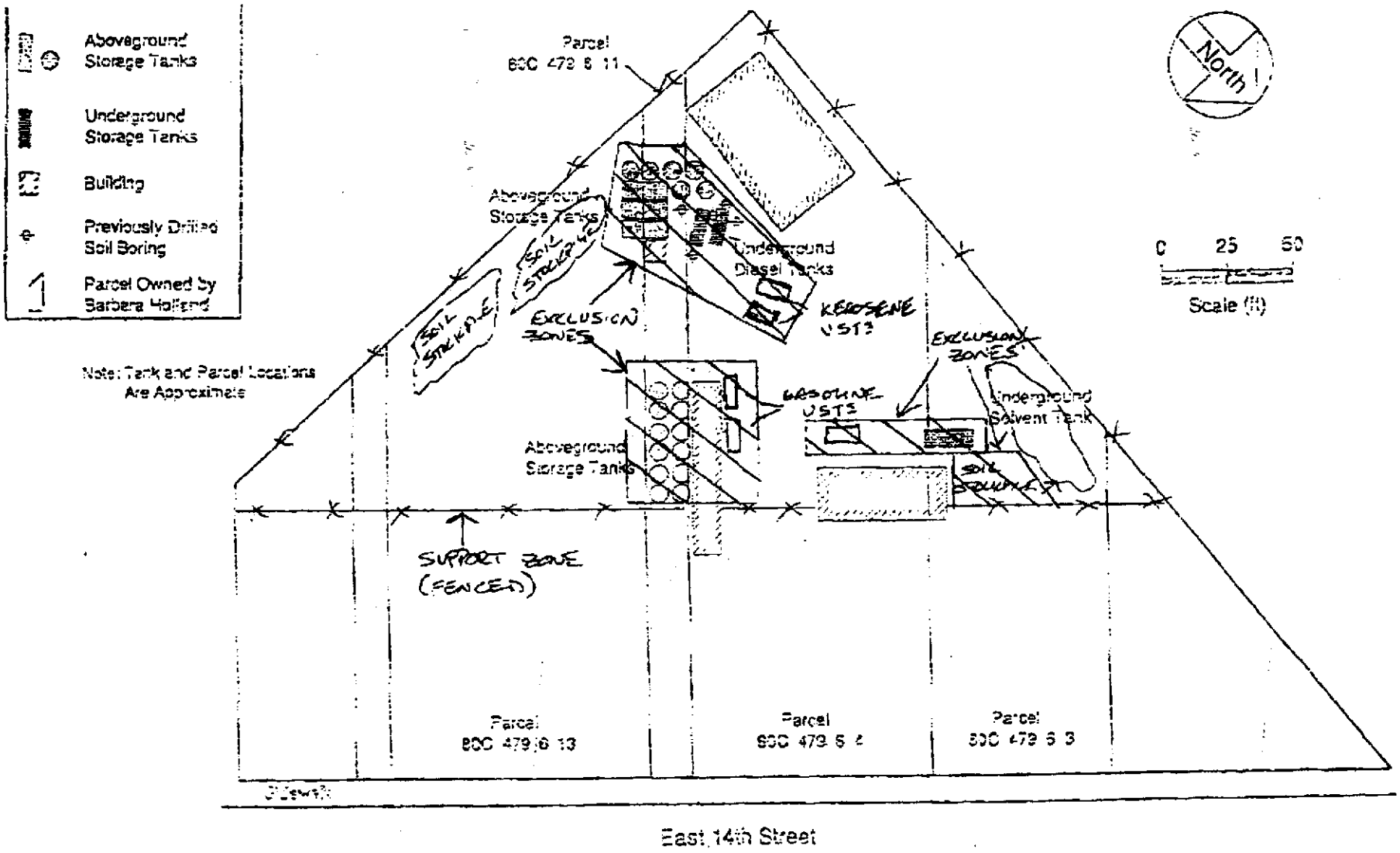
EBS and Zaccor Companies, Inc. claims no responsibility for its use by others. The Plan is written for the specific site conditions, purposes, dates, and personnel specified and must be amended if these conditions change.

FIELD NOTES
ADDITIONAL COMMENTS
HEALTH AND SAFETY ISSUES & PREVENTAIVE MEASURES

Richard Campbell 9/4/98

9/4/98

9-8-98



ENVIRONMENTAL BIO-SYSTEMS, INC.	DATE: 7/1/98	FIGURE 1: SITE MAP
	DRAWN BY: DnS	Map Source: Cambria, Figure 1, 6/6/93
	SCALE: 1"=50'	HOLLAND OIL 16301 EAST 14th STREET SAN LEANDRO, CALIFORNIA

APPENDIX D
UNIFORM HAZARDOUS WASTE MANIFESTS

Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Cont[rol]
Sacramento, California

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802: WITHIN CALIFORNIA, CALL 1-800-852-7550

98264852

UNIFORM HAZARDOUS WASTE MANIFEST

GENERATOR

1. Generator's US EPA ID No. [illegible] — Manifest Document No. [illegible]
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.
EES4

A. State Manifest Document Number: 98264852

3. Generator's Name and Mailing Address: [illegible handwriting]

B. State Generator's ID

4. Generator's Phone ([illegible]) [illegible]

5. Transporter 1 Company Name: EVERGREEN ENVIRONMENTAL SERVICES
6. US EPA ID Number: CAD982413262

C. State Transporter's ID
D. Transporter's Phone: (800) 972-5284

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address:
EVERGREEN OIL, INC.
6880 Smith Avenue
Newark, CA 94560

10. US EPA ID Number: CAD980887418

G. State Facility's ID: CAD980887418
H. Facility's Phone: (510) 795-4400

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. WATER - OIL NON-RCRA HAZARDOUS WASTE, LIQUID	001	TT	01910	G	State 221 EPA/Other None
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above
a. b.
c. d.

15. Special Handling Instructions and Additional Information
24 Hour Emergency Response Telephone No.: CHEMTREC 1-800-424-9300
DOT ERG 171 WEAR PROTECTIVE EQUIPMENT
Invoice #
Sales Order #
[illegible handwriting]

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
X DAVE H. SADIFF [illegible]	X [signature]	05	05	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Al Misucz	[signature]	05	15	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C|A|D|0|0|8|3|2|8|1|6 | Manifest Document No. 61450 52 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law. EES4

GENERATOR

3. Generator's Name and Mailing Address
[illegible]
4. Generator's Phone [illegible]

A. State Manifest Document Number 98264505
B. State Generator's ID

5. Transporter 1 Company Name: EVERGREEN ENVIRONMENTAL SERVICES
6. US EPA ID Number: C|A|D|9|8|2|4|1|3|2|6|2
C. State Transporter's ID
D. Transporter's Phone (800) 972-5284

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
EVERGREEN OIL, INC.
6880 Smith Avenue
Newark, CA 94560
10. US EPA ID Number: C|A|D|9|8|0|6|8|7|4|1|8
G. State Facility's ID: C|A|D|9|8|0|8|8|7|4|1|8
H. Facility's Phone (510) 795-4400

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON-RCRA HAZARDOUS WASTE, LIQUID	001	TT	[illegible]	G	State 221 / EPA/Other None
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
24 Hour Emergency Response Telephone No.: CHEMTREC 1-800-424-9300
DOT ERG 171 WEAR PROTECTIVE EQUIPMENT
Invoice # 703275
Sales Order #
SHE [illegible] CA

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
DAVE A. SHORT, Agent for	[signature]			

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	05	05	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
~~DAVE A. SHORT, Agent for~~	[signature]			

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Cont
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAC0019108 — Manifest Document No. 52406803 7 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law. EES15

3. Generator's Name and Mailing Address: ANN MARIE HOLLAND, EXECTOR — 14988 MONTRICK LANE, HAYWARD CA 94544
4. Generator's Phone (510) 782-4307

A. State Manifest Document Number: 98268037
B. State Generator's ID:

5. Transporter 1 Company Name: EVERGREEN ENVIRONMENTAL SERVICES
6. US EPA ID Number: CAD982413262
C. State Transporter's ID:
D. Transporter's Phone: (800) 972-5284

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: SOLVENT SERVICES, INC. dba LAIDLAW, 1021 Berryessa Road, San Jose, CA 95133
10. US EPA ID Number: CAD059494310
G. State Facility's ID: CAD059494310
H. Facility's Phone: 1-408-461-6000

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
RQ Waste Combustible Liquid, N.O.S. NA 1993, III	0101	TT	00650	G	D001 221 741
					EPA/Other F002
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above
11.a. Used oil with greater than 1,000 ppm halogened solvents.
Profile # _____
D004 D006 D007 D008 D010 F001 F003 F005

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
24 Hour Emergency Response Telephone No.: CHEMTREC 1-800-424-9300
DOT ERG 160 WEAR PROTECTIVE CLOTHING
Invoice # 701523
Sales Order # 96343017
site address 16301 E 14th St SAN LEANDRO CA 94578

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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GENERATOR — (X) Printed/Typed Name: DAVE A. SMITH, AGENT — Signature — Month 08 Day 06 Year 98

TRANSPORTER
17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: PHILLIP JOHNSON — Signature — Month 08 Day 06 Year 98
18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Month Day Year

FACILITY
19. Discrepancy Indication Space
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. — Printed/Typed Name — Signature — Month Day Year

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

98268037

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
			EES4

3. Generator's Name and Mailing Address 4. Generator's Phone ( )	A. State Manifest Document Number: 98264600 B. State Generator's ID
5. Transporter 1 Company Name: EVERGREEN ENVIRONMENTAL SERVICES 6. US EPA ID Number: CAD982413262	C. State Transporter's ID D. Transporter's Phone: (800) 972-5284
7. Transporter 2 Company Name 8. US EPA ID Number	E. State Transporter's ID F. Transporter's Phone
9. Designated Facility Name and Site Address: EVERGREEN OIL, INC. 6880 Smith Avenue Newark, CA 94560 10. US EPA ID Number: CAD980887418	G. State Facility's ID: CAD980887418 H. Facility's Phone: (510) 795-4400

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON-RCRA HAZARDOUS WASTE, LIQUID	001	TT	[illegible]	G	State 22 EPA/Other None
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above	K. Handling Codes for Wastes Listed Above
	a. b. c. d.

15. Special Handling Instructions and Additional Information
24 Hour Emergency Response Telephone No.: CHEMTREC 1-800-424-9300
DOT ERG 171 WEAR PROTECTIVE EQUIPMENT
Invoice # 7
Sales Order #

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	05	16	97

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
	[signature]	05	16	97

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

GENERATOR

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

98264600

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See instructions on back of page 6.

Department of Toxic Substances Con
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
9 A C 1 0 0 1 0 8 5 2 4 0	6 4 4 8 5		EES1

3. Generator's Name and Mailing Address: ANN MARIE HOLLAND EXPEDITOR, 1468 [illegible]

A. State Manifest Document Number: 98264485

B. State Generator's ID:

4. Generator's Phone: 510-752-6[illegible]

5. Transporter 1 Company Name: EVERGREEN ENVIRONMENTAL SERVICES

6. US EPA ID Number: C A D 9 8 2 4 1 3 2 6 2

C. State Transporter's ID:

D. Transporter's Phone: (800) 972-5284

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address:
EVERGREEN OIL, INC.
6880 Smith Avenue
Newark, CA 94560

10. US EPA ID Number: C A D 9 8 0 8 8 7 4 1 8

G. State Facility's ID: C A D 9 8 0 8 8 7 4 1 8

H. Facility's Phone: (510) 795-4400

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON-RCRA HAZARDOUS WASTE, LIQUID ONLY WATER	0 0 1	T T	001200	G	State 221 / EPA/Other None
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information
24 Hour Emergency Response Telephone No.: CHEMTREC 1-800-424-9300
DOT ERG 171 WEAR PROTECTIVE EQUIPMENT

Invoice # 706708
Sales Order #

SITE ADDRESS
1630 E. 14th ST
SAN LEANDRO, CA.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
DAVE D. SMITH, AGENT FOR		05	06	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JOHN STOKES		05	06	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

GENERATOR

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

98264485

C 8022A (4/97)
8700—22

Yellow: GENERATOR RETAINS

OMB No. 2050-0039 (Expires 9-30-99)
Form designed for use on elite (12-pitch) typewriter.

See instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAC[illegible]5240 | Manifest Document No. 69125 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law. ESS6

3. Generator's Name and Mailing Address [illegible] 1051 East 14th St. San Leandro CA 94578

A. State Manifest Document Number 98269128

B. State Generator's ID

4. Generator's Phone ( ) 317 [illegible]

5. Transporter 1 Company Name: EVERGREEN ENVIRONMENTAL SERVICES | 6. US EPA ID Number: CAD982413282 | C. State Transporter's ID | D. Transporter's Phone (800) 972-6284

7. Transporter 2 Company Name | 8. US EPA ID Number | E. State Transporter's ID | F. Transporter's Phone

9. Designated Facility Name and Site Address: SOLVENT SERVICES, INC. dba LANDLAW, 1001 Berryessa Road, San Jose, CA 95133 | 10. US EPA ID Number: CAD059494310 | G. State Facility's ID: CAD059494310 | H. Facility's Phone: 1-408-451-6000

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. ~~Non-RCRA Hazardous waste, Solid~~ S.D.		D-M	5.D 0 P 55		State 223 S.D. EPA/Other ~~Non-RCRA~~ S.D.
b. [illegible] 3, UN 1993, PG III	CF-1	TT	02240	G	State 343 EPA/Other 0001
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
~~Non-RCRA City Debris, Profile #~~
11B: Water Gas High BTU

K. Handling Codes for Wastes Listed Above
a. b.
c. d.

15. Special Handling Instructions and Additional Information
24 Hour Emergency Response Telephone No.: 510-795-4401
DO [illegible] 128 WEAR PROTECTIVE CLOTHING
Invoice # 711303
Sales Order # 96350096

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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GENERATOR — Printed/Typed Name [illegible] | Signature | Month 05 Day 31 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Steven Ducharme | Signature: Steven Ducharme | Month 05 Day 31 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month | Day | Year

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-94)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802: WITHIN CALIFORNIA, CALL 1-800-852-7550

92819001JT

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. / Manifest Document No.: CAC001185240 09007
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
ESTATE OF JACK [illegible]LAND SR.
1498 HAMRICK LANE
HAYWARD CA 94544
4. Generator's Phone (510) 782-4307

5. Transporter 1 Company Name: FOSS ENVIRONMENTAL SERVICES
6. US EPA ID Number: CAR000039114

7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address
SOLVENT SERVICES, INC. d/b LAIDLAW
1021 BERRYESSA RD.
SAN JOSE, CA 95133
10. US EPA ID Number: CAD059494310

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID: CAD[illegible]
H. Facility's Phone: [illegible]

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. WASTE FLAMMABLE LIQUID, N.O.S., 3, UN1993, PG III	001	TT	00450	G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
[illegible] WATER + GAS HIGH BTU
[illegible]ANCE #SJ983477

K. Handling Codes for Wastes Listed Above
a.
c.

15. Special Handling Instructions and Additional Information
24 HOUR E.R. NO.: (510) 795-4401
DOT ERG # 128
WEAR PROTECTIVE CLOTHING
[illegible] 932

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
DAVE A. SADOFF, AGENT FOR	[signature]	09	08	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Thomas L. Beckel	[signature]	09	08	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (7/92)
EPA 8700—22

Yellow: GENERATOR RETAINS

Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAC001085240 Manifest Document No. 33483

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Estate of Jack Holland Sr. Oil Company, Inc.
1498 Hamilton Lane Hayward, CA. 94544

4. Generator's Phone (510) 782-4307

A. State Manifest Document Number 96633483

B. State Generator's ID

5. Transporter 1 Company Name
ECOLOGY CONTROL INDUSTRIES

6. US EPA ID Number
CAD982030173

C. State Transporter's ID

D. Transporter's Phone (510) 235-1393

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
EVERGREEN OIL INC
6880 SMITH AVE
NEWARK, CA 94560

10. US EPA ID Number
CAD980887418

G. State Facility's ID

H. Facility's Phone (510) 795-4401

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
USED OIL NON- RCRA HAZARDOUS WASTE LIQUID	001	TT	05200	G	State 221 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
USED OIL/WATER MIXTURE

K. Handling Codes for Wastes Listed Above
a. b.
c. d.

Wear appropriate protective clothing when handling.
Station Address: 16301 E. 14th St. San Leandro
24 Hour Emergency Telephone Number: (510) 782-4307 1-800-424-8802
24 Hour Emergency Contact: Ann M. Holland Christine Ext 31
ERG 17

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
DAVE SHADOFF, AGENT FOR	X	09	03	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JOAN [illegible]		09	03	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

96633483

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Contr
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone

5. Transporter 1 Company Name | 6. US EPA ID Number

E. State Transporter's ID

7. Transporter 2 Company Name | 8. US EPA ID Number

F. Transporter's Phone

9. Designated Facility Name and Site Address | 10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Numbers
a.					State / EPA/Other
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

a.

c.

d.

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802: WITHIN CALIFORNIA, CALL 1-800-852-7550

93217308

DTSC 8022A (1/95)
EPA 8700—22

Yellow: GENERATOR RETAINS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-94)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Contr
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD001085240 | Manifest Document No. 190918 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ESTATE OF JACK HOLLAND SR.
14498 HAMILTON LANE
HAYWARD, CA 94544
4. Generator's Phone (510) 782-4307

A. State Manifest Document Number
B. State Generator ID
C. State Transporter ID
D. Transporter
E. Transporter
F. State Facility ID
G. State Facility
H. Facility's Phone

5. Transporter 1 Company Name: ACTI | 6. US EPA ID Number: CAR000022101

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address: CROSBY & OVERTON
1630 W. 11TH
LONG BEACH, CA 90813 | 10. US EPA ID Number: CAD009466797

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. HAZ. WASTE, LIQUID, N.O.S. (SODIUM HYDROXIDE), 8, UN1719, II	001	DF	00040	P
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
K. Handling Codes for Wastes Listed Above
a.
b.
c.

15. Special Handling Instructions and Additional Information
24 HOUR EMERGENCY #: (510) 317-1415
24 HOUR CONTACT: DAVE SAMUFF
WEAR PROTECTIVE CLOTHING, GLOVES

SITE LOCATION:
16301 E. 14TH ST.
SAN LEANDRO, CA 94578

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.

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GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
JAN MARIE HOLLAND, JACK HOLLAND ESTATE EXECUTOR OF		09	14	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
ROBERT HOLLAND		09	14	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

928JU98

DTSC 8022A (7/92)
EPA 8700—22

Yellow: GENERATOR RETAINS

Certificate of Recycling

Dear Valued Customer:

Evergreen certifies that the **used oil, used antifreeze, oily water,** and **used oil filters** collected from your facility were fully recycled in accordance with all applicable state and federal regulations.

Evergreen Environmental Services also provides emergency spill response: vacuum cleaning of tanks, clarifiers, and sumps; transportation of hazardous waste, steam cleaning, management of oily solids, and treatment of non-hazardous wastewater.

For more information regarding the services Evergreen provides, please call:

1-800-972-5284

We appreciate your business!

This certificate also serves as notification, as required by Title 22, Section 66264.12, that Evergreen Oil, Inc. has the appropriate permits for, and will accept the wastes manifested to Evergreen facilities.

"dedicated to the protection of the environment"

State of California - Environmental Protection Agency

Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAP0108531103 — Manifest Document No. 16816
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Estate of Frank Heller L. Sr. 11498 Hemrick Ln. Hayward, CA. 94544
4. Generator's Phone (510) 782-4307

A. State Manifest Document Number: 98234686
B. State Generator's ID:

5. Transporter 1 Company Name: ECOLOGY CONTROL INDUSTRIES
6. US EPA ID Number: CAD982030173
C. State Transporter's ID:
D. Transporter's Phone: 510-235-1393

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: ERICKSON INC. 255 PARR BLVD RICHMOND. CA 94601
10. US EPA ID Number: CAD009466392
G. State Facility's ID:
H. Facility's Phone: 510-235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
WASTE EMPTY STORAGE TANK Non-RCRA hazardous waste solid	002	TP	13485	P	State 512 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
QTY. 2 EMPTY STORAGE TANK(S) # 23811 23812 TANK(S) HAVE BEEN INERTED WITH 15 LBS DRY ICE PER 1000 GALLONS CAPACITY.

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
Wear appropriate protective clothing when handling. SITE LOCATION: 16301 E. 14th St San L. Orl, CA. 94578
24 Hour Emergency Telephone Number: (510) 372-1455
24 Hour Emergency Contact: DAVE SAFF
ERG 171

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name: DAVE A. SAFF, AGENT FOR — Signature: [signature] — Month 09 Day 09 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: BRIAN L. McKINLEY — Signature: [signature] — Month 09 Day 09 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

DO NOT WRITE BELOW THIS LINE.

GENERATOR

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802: WITHIN CALIFORNIA, CALL 1-800-852-7550

98234686

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C|A|C|0|1|0|8|5|2|4|0 — Manifest Document No. 3|4|7|0|4 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ESTATE OF JANIE Holland Sr.
1498 HANNICK LN
Hayward, CA. 94544

4. Generator's Phone ( )

A. State Manifest Document Number: 98234704

B. State Generator's ID

5. Transporter 1 Company Name: BYRNS TRKING ~~ECOLOGY CONTROL INDUSTRIES~~

6. US EPA ID Number: CAD982346207 ~~CAD982030173~~

C. State Transporter's ID

D. Transporter's Phone: 925-684-3919 ~~510-295-1399~~

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
ERICKSON INC.
255 PARR BLVD
RICHMOND, CA 94801

10. US EPA ID Number: CAD009466392

G. State Facility's ID

H. Facility's Phone: 510-235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. WASTE EMPTY STORAGE TANK Non-RCRA hazardous waste solid	002	TP	20000	P	State 512 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above

QTY. 2 EMPTY STORAGE TANK(S) # 23813. 23814 TANK(S) HAVE BEEN INERTED WITH ~~11 LBS DRY ICE PER 1000 GALLONS CAPACITY~~

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information

Wear appropriate protective clothing when handling. SITE LOCATION:
24 Hour Emergency Telephone Number: 510 317 1455 16301 E 14th St. 94578.
24 Hour Emergency Contact: Dave Saadeh San Leandro CA. ERG 17

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
DAVE A. SAADEH, AGENT FOR		09	09	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Bill Dallosso	Bill Dallosso	09	09	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

98234704

OMB No. 2050-0039 (Expires 9-30-99)
ype. Form designed for use on elite (12-pitch) typewriter.

See instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD009466392 Manifest Document No. 6588 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ESTATE OF JACK HOLLAND SR.
1498 HUMBOLDT LANE
HAYWARD, CA. 94544
4. Generator's Phone 510) 782-4307

A. State Manifest Document Number 98234688
B. State Generator's ID

5. Transporter 1 Company Name: ECOLOGY CONTROL INDUSTRIES
6. US EPA ID Number: CAD982030173
C. State Transporter's ID
D. Transporter's Phone 510-235-1393

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
ERICKSON INC.
255 PARR BLVD
RICHMOND, CA 94801
10. US EPA ID Number: CAD009466392
G. State Facility's ID
H. Facility's Phone 510-235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. WASTE EMPTY STORAGE TANK Non-RCRA hazardous waste solid	003	TP	60000 ~~64000~~	P	State 512 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
QTY. 3 EMPTY STORAGE TANK(S) # 23005, 23009, 23510
TANK(S) HAVE BEEN INERTED WITH
15 LBS DRY ICE PER 1000 GALLONS CAPACITY. 2400 TOTAL

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
Wear appropriate protective clothing when handling. SITE LOCATION: 16301 E. 14TH ST. SAN LEANDRO, CA 94578
24 Hour Emergency Telephone Number:
24 Hour Emergency Contact: ERG 171

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
MARK A. SADOFF, AGENT FOR		09	09	98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Pepito Jones		09	09	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

DTSC (4/97)
EPA 22

Yellow: GENERATOR RETAINS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CA4001085240 Manifest Document No. 14054

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ESTATE OF JACK HOLLAND SR.
14498 HAMRICK LANE
HAYWARD, CA 94544
4. Generator's Phone ( )

A. State Manifest Document Number 98234589

B. State Generator's ID

C. State Transporter's ID

5. Transporter 1 Company Name: TRIDENT TRUCKLINES
6. US EPA ID Number: CAD982484370

D. Transporter's Phone (510)783-2881

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
ERICKSON INC.
255 PARR BLVD
RICHMOND, CA 94801
10. US EPA ID Number: CAD009466392

G. State Facility's ID

H. Facility's Phone 510-235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. WASTE EMPTY STORAGE TANK Non-RCRA hazardous waste solid	001	TP	12000	P	State 512 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
QTY. 1 EMPTY STORAGE TANK(S) # 3,5
TANK(S) HAVE BEEN INERTED WITH
15 LBS DRY ICE PER 1000 GALLONS CAPACITY.

K. Handling Codes for Wastes Listed Above
a. b.
c. d.

15. Special Handling Instructions and Additional Information
Wear appropriate protective clothing when handling. SITE LOCATION: 16301 E. 14TH ST.
24 Hour Emergency Telephone Number: (510)317-1455 SAN LEANDRO, CA 94578
24 Hour Emergency Contact: DAVE A. SHOFF ERG 171

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
DAVE A. SHOFF AGENT FOR		09	07	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
BOB SANDERS JR		09	09	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 23815

CUSTOMER

JOB NO. 974054
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 23808

LOCATION: RICHMOND, CA DATE: 9/15/98 TIME: 8:30:44 AM

EST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT DIESEL

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 5,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Latrice Collen — REPRESENTATIVE

TITLE

Dave Soto — INSPECTOR

CP5995

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 23923

CUSTOMER

JOB NO. 974054
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 23809

LOCATION: RICHMOND, CA DATE: 9/15/98 TIME: 8:43:31 AM

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT DIESEL

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 6,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Latrice Collins — REPRESENTATIVE

TITLE

Dave Soto — INSPECTOR

CP5995

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 28317

CUSTOMER

JOB NO. 974054
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 23810

LOCATION: RICHMOND, CA DATE: 9/15/98 TIME: 8:32:16 AM

EST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT KEROSENE

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 5,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Patricia Collins — Dave Fate

REPRESENTATIVE TITLE INSPECTOR

CP5995

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 28913

CUSTOMER

JOB NO. 974054
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 23811

LOCATION: RICHMOND, CA DATE: 9/14/98 TIME: 8:33:44 AM

EST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT UG

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 10,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Patricia Collins — Dave Soto

REPRESENTATIVE TITLE INSPECTOR

CP5995

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 28919

CUSTOMER

JOB NO. 974054
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 23812

LOCATION: RICHMOND, CA DATE: 9/16/98 TIME: 8:38:15 AM

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT KEROSENE

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 6,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Patrice Callen — REPRESENTATIVE

TITLE

Dave Soto — INSPECTOR

CP5995

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 28920

CUSTOMER

JOB NO. 974054
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 23813

LOCATION: RICHMOND, CA DATE: 9/15/98 TIME: 8:40:47 AM

EST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT UG

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 10,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

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The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Patricia Collins — REPRESENTATIVE

TITLE

Dave Soto — INSPECTOR

CP5995

DAY OR NIGHT TELEPHONE (510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 28921

CUSTOMER

JOB NO. 974054
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 23814

LOCATION: RICHMOND, CA DATE: 9/15/98 TIME: 8:41:16 AM

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT UG

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 10,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

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The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Patricia Collins — Dave Soto

REPRESENTATIVE TITLE INSPECTOR

CP5995

DAY OR NIGHT TELEPHONE (510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 28922

CUSTOMER

JOB NO. 974054
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 23815

LOCATION: RICHMOND, CA DATE: 9/15/98 TIME: 8:42:09 AM

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT STODDARD SOLVENT

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 12,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Jaime Collin — Dave Soto

REPRESENTATIVE TITLE INSPECTOR

CP5995

FORWARD INCORPORATED

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. 742862

GENERATOR ESTATE OF JACK HOLLAND SR OIL COMPANY
MAILING ADDRESS 1498 HAMRICK LANE
CITY, STATE, ZIP HAYWARD, CA 94544
PHONE (510) 782-4357
CONTACT PERSON ANN HOLLAND
SIGNATURE OF AUTHORIZED AGENT / TITLE *
DATE

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
☑ GLOVES ☐ GOGGLES ☐ RESPIRATOR ☑ HARD HAT
☑ TY-VEK ☐ OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE

☐ TREATMENT SOIL	☐ SLUDGE
☐ DISPOSAL SOIL	☐ NON-FRIABLE ASBESTOS
☐ CONSTRUCTION SOIL	☐ WOOD
☐ STOCK PILE	☐ ASH
	☒ OTHER

GENERATING FACILITY

RECEIVING FACILITY

FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

HAULER
ADDRESS
CITY, STATE, ZIP
PHONE
SIGNATURE OF AUTHORIZED AGENT OR DRIVER *
DATE

TRACTOR LIC. #
TRUCK NUMBER
TRAILER LIC. #
TRAILER LIC. #

END DUMP	BOTTOM DUMP	TRANSFER
☐	☐	☐

ROLL-OFF(S)	FLAT-BED	VAN	DRUMS
☑	☐	☐	☐

FACILITY

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS
FACILITY TICKET NUMBER
SIGNATURE OF AUTHORIZED AGENT
DATE
*

CUBIC YARDS

DISPOSAL METHOD: (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
☐ SOIL					
☐ SLUDGE					
☐ NON-FRIABLE ASBESTOS					
☐ WOOD					
☐ ASH					
☐ OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE
TO SCHEDULE CALL (209) 982-4298

FO1 (C9511NH) 6-96

GENERATOR COPY

MANIFEST # C 636115

APPENDIX E
LABORATORY REPORTS
AND
CHAIN OF CUSTODY DOCUMENTATION

EVERGREEN LABORATORY CALIF. CERTIFIED #1900 — 7156

SAMPLE SUBMISSION CHAIN OF CUSTODY/WORK ORDER

SAMPLE SUBMITTED BY:	RAY	DATE	9/1/98
PERSON WHO SAMPLED:	RAY	NUMBER OF SAMPLES	
REPORT RESULTS TO:	Kim Krause	HOW SAMPLED (GRAB, THIEF, COMP):	G
PROFILE NUMBER	7156	SOURCE (COMPANY):	

***This sample represents material that the company would like to use for the following (Check One) MUST BE COMPLETED:**

☐ **Feedstock for plant** ☐ **Fuel Oil** ☐ **Out of State Fuel**
☐ **Water for Treatment in 704 tanks** ☐ **Water to Lift**
☐ **Butterfield** ☒ **McKittrick**

Test	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Sample Identification:	SAM 1	SAM 2	SAM 5	SAM 6	SAM 7
Certificate Required ?	Yes No	Yes No	Yes No	Yes No	Yes No
Acceptance Testing: Oil					
○ Percent Water					
○ API					12
○ Chlorine screen					
○ ~~PCB~~	—				
○ Flash	F	F	F	F	F
○ ~~LDX~~	—	PASS	FAIL	PASS	PASS
○ Total Organic Halogens	ND	<74		ND	>C
○ Silicon Screen					
○ Fuel Metals					
○ Sulfur					
○ APPROVAL: FEED or FUEL					
○ DISAPPROVAL-Offsite Disp.					
○ Other Tests: specify					
○ Waste Water Profiling					
○ Oil & Grease 418.3 or %	20 %	20 %	40 %	25 %	40 %
○ Total Organic Halogens					
○ pH	7.0	7.0	7.0	7.0	9.6
○ BS & W					
○ API Gravity					18.6
○ Color/ Odor					
○ BETX / TTOs					
○ Phenols					
○ USD Metals					
○ COD					
○ Approval to unload (treat)					
○ Approval to Discharge: USD					
○ Other test needed: specify					

RELINQUISHED BY	PRINT NAME/COMPANY	DATE/TIME	signature
		9/1/98 2000	

EVERGREEN LABORATORY CALIF. CERTIFIED #1900 7157

SAMPLE SUBMISSION CHAIN OF CUSTODY/WORK ORDER

SAMPLE SUBMITTED BY:	RAY	DATE	9/4/98
PERSON WHO SAMPLED:	RAY	NUMBER OF SAMPLES	5
REPORT RESULTS TO:	[illegible]	HOW SAMPLED (GRAB, THIEF, COMP):	G
PROFILE NUMBER	7157	SOURCE (COMPANY):	Chevron OLQ

***This sample represents material that the company would like to use for the following (Check One) MUST BE COMPLETED:**

☐ **Feedstock for plant** ☐ **Fuel Oil** ☐ **Out of State Fuel**
☐ **Water for Treatment in 704 tanks** ☐ **Water to Lift**
☐ **Butterfield** ☒ **McKittrick**

Test	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Sample Identification:	SAM 8	SAM 9	SAM 10	SAM 11	[illegible]
Certificate Required ?	No	No	Water	No	No
Acceptance Testing: Oil					
○ Percent Water					
○ API					
○ Chlorine screen					
○ PCB	ND	ND	—	—	ND
○ Flash	P	P	P	P	P
○ ~~LUX~~ Flash	—	PASS	—	—	—
○ Total Organic Halogens	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
○ Silicon Screen					
○ Fuel Metals					
○ Sulfur					
○ APPROVAL: FEED or FUEL					
○ DISAPPROVAL-Offsite Disp.					
○ Other Tests: specify					
○ **Waste Water Profiling**					
○ Oil & Grease 418.3 or %	[illegible]	10%	1%	3%	30%
○ Total Organic Halogens					
○ pH	7.0	9.6	11.0	7.0	[illegible]
○ BS & W					
○ API Gravity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
○ Color/ Odor					
○ BETX / TTOs					
○ Phenols					
○ USD Metals					
○ COD					
○ Approval to unload (treat)					
○ Approval to Discharge: USD					
○ Other test needed: specify					

RELINQUISHED BY	PRINT NAME/COMPANY	DATE/TIME	signature
		9/4/98 1000	[illegible]

EVERGREEN LABORATORY CALIF. CERTIFIED #1900 7158

SAMPLE SUBMISSION CHAIN OF CUSTODY/WORK ORDER

SAMPLE SUBMITTED BY:	RAY	DATE	8/4/15
PERSON WHO SAMPLED:	RAY	NUMBER OF SAMPLES	
REPORT RESULTS TO:	RAY/Kevin Cruse	HOW SAMPLED (GRAB, THIEF, COMP):	G
PROFILE NUMBER	7158	SOURCE (COMPANY):	Aera Energy LLC

***This sample represents material that the company would like to use for the following (Check One) MUST BE COMPLETED:**

☐ **Feedstock for plant** ☐ **Fuel Oil** ☐ **Out of State Fuel**
☐ **Water for Treatment in 704 tanks** ☐ **Water to Lift**
☐ **Butterfield** ☒ **McKittrick**

Test	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Sample Identification:	SAM 3	SAM 4	SAM 1	SAM 3	
Certificate Required ?	Yes/No	Yes/No	Yes/No	Oily Waste	
Acceptance Testing: Oil					
○ Percent Water					
○ API					
○ Chlorine screen					
○ PCB				ND	
○ Flash	F	P	P	F	
○ ~~LUBR~~ OIL	—	—	—	PASS	
○ Total Organic Halogens	ND	ND			
○ Silicon Screen					
○ Fuel Metals					
○ Sulfur					
○ APPROVAL: FEED or FUEL					
○ DISAPPROVAL-Offsite Disp.					
○ Other Tests: specify					
○ **Waste Water Profiling**					
○ Oil & Grease 418.3 or %	40%	40%			
○ Total Organic Halogens					
○ pH			6.4	—	
○ BS & W					
○ API Gravity					
○ Color/ Odor					
○ BETX / TTOs					
○ Phenols					
○ USD Metals					
○ COD					
○ Approval to unload (treat)					
○ Approval to Discharge: USD					
○ Other test needed: specify					

RELINQUISHED BY	PRINT NAME/COMPANY	DATE/TIME	signature
		8/4/15 1000	

EVERGREEN LABORATORY CALIF. CERTIFIED #1900 7159

SAMPLE SUBMISSION CHAIN OF CUSTODY/WORK ORDER

SAMPLE SUBMITTED BY:	RAY	DATE	3/11/15
PERSON WHO SAMPLED:	RAY	NUMBER OF SAMPLES	
REPORT RESULTS TO:	RAY Kevin Mike	HOW SAMPLED (GRAB, THIEF, COMP):	G
PROFILE NUMBER	7159	SOURCE (COMPANY):	Sentinel

***This sample represents material that the company would like to use for the following (Check One) MUST BE COMPLETED:**

☐ **Feedstock for plant** ☐ **Fuel Oil** ☐ **Out of State Fuel**
☐ **Water for Treatment in 704 tanks** ☐ **Water to Lift**
☐ **Butterfield** ☐ **McKittrick**

Test	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Sample Identification:	[illegible]	7-6	7-7	7-9	Feedstock
Certificate Required ?	FAX	No	Yes/FAX	Yes/FAX	Fuel
Acceptance Testing: Oil					
○ Percent Water					.7
○ API					31.2
☒ Chlorine screen	Pass	Pass	Pass	Pass	Pass
○ PCB	ND	ND	—	—	ND
○ Flash	P	P	P	P	P
○ LUX					
○ Total Organic Halogens					
○ Silicon Screen	[illegible]			(-)	ND
○ Fuel Metals					
○ Sulfur					
○ APPROVAL: FEED or FUEL					
○ DISAPPROVAL-Offsite Disp.					
○ Other Tests: specify					
○ **Waste Water Profiling**					
○ Oil & Grease 418.3 or %			1.7%		
○ Total Organic Halogens					
○ pH	2	—		—	—
○ BS & W					
○ API Gravity	41	—	/	41	31.2
○ Color/ Odor					
○ BETX / TTOs					
○ Phenols					
○ USD Metals					
○ COD					
○ Approval to unload (treat)					
○ Approval to Discharge: USD					
○ Other test needed: specify					

RELINQUISHED BY	PRINT NAME/COMPANY	DATE/TIME	signature
		3/11/15 [illegible]	[signature]

EVERGREEN LABORATORY CALIF. CERTIFIED #1900

SAMPLE SUBMISSION CHAIN OF CUSTODY/WORK ORDER

SAMPLE SUBMITTED BY:	AL M.	DATE	9/5/09
PERSON WHO SAMPLED:	"	NUMBER OF SAMPLES	4
*REPORT RESULTS TO:	K. KRAUSE	HOW SAMPLED (GRAB, THIEF, COMP):	
PROFILE NUMBER		SOURCE (COMPANY):	

***This sample represents material that the company would like to use for the following (Check One) MUST BE COMPLETED:**

☐ **Feedstock for plant** ☐ **Fuel Oil** ☐ **Out of State Fuel**
☐ **Water for Treatment in 704 tanks** ☐ **Water to Lift**
☐ **Butterfield** ☐ **McKittrick**

Test	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Sample Identification:	D-46	D-42	D-29	D-32	
Certificate Required ?					
Acceptance Testing: Oil					
○ Percent Water					
○ ~~API~~					
○ Chlorine screen					
○ ~~PCB~~	1,411.61 PPM	1,422 PPM	ND	ND	
○ Flash	~~PM~~ 154	152			
○ LUX					
○ Total Organic Halogens					
○ Silicon Screen					
○ Fuel Metals					
○ Sulfur					
○ APPROVAL: FEED or FUEL					
○ DISAPPROVAL-Offsite Disp.					
○ Other Tests: specify					
○ **Waste Water Profiling**					
○ Oil & Grease 418.3 or %					
○ Total Organic Halogens					
○ pH					
○ BS & W					
○ API Gravity					
○ Color/ Odor					
○ BETX / TTOs					
○ Phenols					
○ USD Metals					
○ COD					
○ Approval to unload (treat)					
○ Approval to Discharge: USD					
○ Other test needed: specify					

RELINQUISHED BY	PRINT NAME/COMPANY	DATE/TIME	signature
		9/5/09 1451	

EVERGREEN LABORATORY CALIF. CERTIFIED #1900 7168

SAMPLE SUBMISSION CHAIN OF CUSTODY/WORK ORDER

SAMPLE SUBMITTED BY:		DATE	
PERSON WHO SAMPLED:		NUMBER OF SAMPLES	
REPORT RESULTS TO:		HOW SAMPLED (GRAB, THIEF, COMP):	
PROFILE NUMBER		SOURCE (COMPANY):	

***This sample represents material that the company would like to use for the following (Check One) MUST BE COMPLETED:**

☐ **Feedstock for plant** ☐ **Fuel Oil** ☐ **Out of State Fuel**
☐ **Water for Treatment in 704 tanks** ☐ **Water to Lift**
☐ **Butterfield** ☐ **McKittrick**

Test	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Sample Identification:	G1	G2	G3		
Certificate Required ?					
Acceptance Testing: Oil					
○ Percent Water			✓ 12.28		
○ API			✓		
○ Chlorine screen			F		
○ ~~PCB~~		ND	✓ ND		
○ Flash @ 140°F	PASS	PASS	✓ P		
○ LUX					
○ ~~Total Organic Halogens~~			✓ [redacted]		
○ Silicon Screen			✓ 5 mg/kg		
○ Fuel Metals					
○ Sulfur					
○ APPROVAL: FEED or FUEL					
○ DISAPPROVAL-Offsite Disp.					
○ Other Tests: specify 9010			Fail		
○ Waste Water Profiling					
○ Oil & Grease 418.3 or %	41	40			
○ Total Organic Halogens	PND	PND			
○ pH	5.4	5.1			
○ BS & W					
○ API Gravity					
○ Color/ Odor					
○ BETX / TTOs					
○ Phenols					
○ USD Metals					
○ COD					
○ Approval to unload (treat)					
○ Approval to Discharge: USD					
○ Other test needed: specify					

RELINQUISHED BY	PRINT NAME/COMPANY	DATE/TIME	signature

EVERGREEN LABORATORY CALIF. CERTIFIED #1900 7167

SAMPLE SUBMISSION CHAIN OF CUSTODY/WORK ORDER

SAMPLE SUBMITTED BY:		DATE	
PERSON WHO SAMPLED:		NUMBER OF SAMPLES	
REPORT RESULTS TO:		HOW SAMPLED (GRAB, THIEF, COMP):	
PROFILE NUMBER		SOURCE (COMPANY):	

***This sample represents material that the company would like to use for the following (Check One) MUST BE COMPLETED:**

☐ **Feedstock for plant** ☐ **Fuel Oil** ☐ **Out of State Fuel**
☐ **Water for Treatment in 704 tanks** ☐ **Water to Lift**
☐ **Butterfield** ☐ **McKittrick**

Test	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Sample Identification:	B	C	D	E	F1→F4
Certificate Required ?					
Acceptance Testing: Oil					
○ Percent Water	✓ 0.85	✓ 1.28	✓ 5.14	✓ 2.34	
○ API					
○ Chlorine screen	P	P	P	P	
○ PCB	✓ ND	✓ ND	✓ ND	✓ ND	
○ Flash @ 100°F	✓ P	✓ P	✓ P	✓ P	
○ LUX					
○ Total Organic Halogens	✓ ND	✓ ND	✓ ND	✓ ND	
○ Silicon Screen	✓ ND	✓ 3 mg/L	✓ 8 mg/L	✓ 11 mg/L	
○ Fuel Metals					
○ Sulfur					
○ APPROVAL: FEED or FUEL					
○ DISAPPROVAL-Offsite Disp.					
○ Other Tests: specify					
○ **Waste Water Profiling**					
○ Oil & Grease 418.3 or %					✓ ~
○ Total Organic Halogens					✓ P ND
○ pH					✓ 7.0
○ BS & W					✓ 1
○ API Gravity					✓ 31.7
○ Color/ Odor					
○ BETX / TTOs					
○ Phenols					
○ USD Metals					
○ COD					
○ Approval to unload (treat)					
○ Approval to Discharge: USD					
○ Other test needed: specify					

RELINQUISHED BY	PRINT NAME/COMPANY	DATE/TIME	signature

EVERGREEN LABORATORY CALIF. CERTIFIED #1900

SAMPLE SUBMISSION CHAIN OF CUSTODY/WORK ORDER

7166 → 71

SAMPLE SUBMITTED BY:		DATE	
PERSON WHO SAMPLED:		NUMBER OF SAMPLES	
REPORT RESULTS TO:		HOW SAMPLED (GRAB, THIEF, COMP):	
PROFILE NUMBER		SOURCE (COMPANY):	

***This sample represents material that the company would like to use for the following (Check One) MUST BE COMPLETED:**

☐ **Feedstock for plant** ☐ **Fuel Oil** ☐ **Out of State Fuel**
☐ **Water for Treatment in 704 tanks** ☐ **Water to Lift**
☐ **Butterfield** ☐ **McKittrick**

Test	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Sample Identification:					
Certificate Required ?					
Acceptance Testing: Oil					
○ Percent Water					
○ API					
○ Chlorine screen					
○ PCB					
○ Flash					
○ LUX					
○ Total Organic Halogens					
○ Silicon Screen					
○ Fuel Metals					
○ Sulfur					
○ APPROVAL: FEED or FUEL					
○ DISAPPROVAL-Offsite Disp.					
○ Other Tests: specify					
○ **Waste Water Profiling**					
○ Oil & Grease 418.3 or %					
○ Total Organic Halogens					
○ pH					
○ BS & W					
○ API Gravity					
○ Color/ Odor					
○ BETX / TTOs					
○ Phenols					
○ USD Metals					
○ COD					
○ Approval to unload (treat)					
○ Approval to Discharge: USD					
○ Other test needed: specify					

RELINQUISHED BY	PRINT NAME/COMPANY	DATE/TIME	signature

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

October 26, 1998

Mark Valentini
Analytical Sciences
PO Box 750336
Petaluma, CA 94975

RE: Mark Valentini/P810027

Dear Mark Valentini

Enclosed are the results of analyses for sample(s) received by the laboratory on September 30, 1998. The Bioassay analysis was run at Sequoia Redwood City. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

MS

Matt Sakai
Project Manager

CA ELAP Certificate Number 2245

Sequoia Analytical

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Analytical Sciences	Project:	Mark Valentini	Sampled:	9/19/98
PO Box 750336	Project Number:	Holland (8092902)	Received:	9/30/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported:	10/26/98

ANALYTICAL REPORT FOR P810027

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
Bin A-B (2354)	P810027-01	Soil	9/19/98

Sequoia Analytical

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Analytical Sciences	Project:	Mark Valentini	Sampled: 9/19/98
PO Box 750336	Project Number:	Holland (8092902)	Received: 9/30/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported: 10/26/98

STLC CAM Metals by EPA 6000/7000 Series Methods
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Bin A-B (2354)			**P810027-01**				**Soil**	
Lead	8100250	10/21/98	10/22/98	EPA 6010A	375	**39500**	ug/L	

Sequoia Analytical

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Analytical Sciences	Project:	Mark Valentini	Sampled: 9/19/98
PO Box 750336	Project Number:	Holland (8092902)	Received: 9/30/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported: 10/26/98

STLC CAM Metals by EPA 6000/7000 Series Methods/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 8100250	**Date Prepared: 10/21/98**					**Extraction Method: Title 22-STLC**				
Blank	**8100250-BLK1**									
Lead	10/22/98			**ND**	ug/l	**375**				
LCS	**8100250-BS1**									
Lead	10/22/98	2500		2620	ug/l	80.0-120	105			
Matrix Spike	**8100250-MS1**		**P810025-01**							
Lead	10/22/98	2500	ND	2670	ug/l	75.0-125	**107**			
Matrix Spike Dup	**8100250-MSD1**		**P810025-01**							
Lead	10/22/98	2500	ND	2700	ug/l	75.0-125	**108**	20.0	**0.930**	

Sequoia Analytical

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Analytical Sciences	Project:	Mark Valentini	Sampled:	9/19/98
PO Box 750336	Project Number:	Holland (8092902)	Received:	9/30/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported:	10/26/98

Notes and Definitions

#	Note
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Sequoia Analytical Petaluma	Client Project ID: P810027-01	Sampled: 9/19/98
1455 McDowell Blvd. North	Sample Descript: P810027-01	Received: 10/5/98
Suite D, Petaluma CA 94954	Analysis Method: See below	
Attention: Matt Sakai	Lab Number: 9810360-01A	Reported: 10/13/98

STATIC HAZARDOUS ABBREVIATED SCREEN BIOASSAY

Species: Pimephales promelas
Common Name: Fathead Minnow

Organisms/Tank: 10
Organisms/Conc.: 20
Tank Depth: 16 cm
Tank Volume: 8 L
Acclimation Temp.: 21 °C +/- 1
Supplier: Sticklebacks Unlimited/ Thomas Fish

Mean length: 43.0 mm
Min. length: 38.0 mm
Max. length: 48.0 mm
Min. weight: 0.3 g
Mean weight: 0.45 g
Max. weight: 0.55 g

Dilution Water: Synthetic Softwater
Hardness 40-48

	Alkalinity, mg/L		Hardness, mg/L	
	Initial	Final	Initial	Final
Control	32	34	46	44
750 ppm	60	100	60	80
Duplicate 750 ppm	60	80	60	80

	Initial	24 Hr	48 Hr	72 Hr	96 Hr
DATE	10/8/98	10/9/98	10/10/98	10/11/98	10/12/98

	DO mg/L	C Temp	pH Units	DO mg/L	C Temp	pH Units	# M Dead	DO mg/L	C Temp	pH Units	# M Dead	DO mg/L	C Temp	pH Units	# M Dead	DO mg/L	C Temp	pH Units	# M Dead	Total Dead
Control	8.9	21	7.4	6.6	20	6.5	0	5.9	20	6.8	0	5.4	20	6.6	0	5.2	20	6.4	0	0
750 ppm	9.1	21	7.8	7.3	20	7.1	0	3.5	20	6.5	5	6.6	20	6.8	3	7.8	20	7.1	1	9
300 ppm	9.1	21	7.8	7.1	20	7.0	1	3.4	20	6.5	1	7.7	20	6.9	0	8.0	20	7.0	0	2
Duplicate																				
750 ppm	9.1	21	8.0	7.2	20	7.1	0	2.5	20	6.5	2	8.2	20	6.8	1	8.5	20	7.2	2	5
300 ppm	9.1	21	7.9	7.3	20	7.1	0	2.6	20	6.5	1	7.8	20	6.9	0	8.1	20	7.1	0	1

Remarks: The screen fails if > 40% of the fish die in the 750 ppm concentration.
Aerated all tanks except control 10/10/98. This screen fails.

Analyst: M. Grislis

Method Reference: Static Acute Bioassay Procedures for Hazardous Waste Samples, November 1988, California Department of Fish and Game WPCL.

SEQUOIA ANALYTICAL, ELAP# 1210

Anthony P. McMahon
Client Services Representative

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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Sequoia Analytical - Petaluma
1455 McDowell Blvd. North
Suite D
Attention: Matt Sakai

Client Proj. ID: P810027-01
Lab Proj. ID: 9810360

Received: 10/05/98
Reported: 10/14/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 3 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Tony McMahon

Project Manager

Sequoia Analytical - Petaluma Subcontract Order
P810027

Sending Laboratory	Receiving Laboratory
Sequoia Analytical - Petaluma 1455 N. McDowell Blvd. Suite D Petaluma, CA 94954 Phone: 707/792-1865 Fax: 707/792-0342 Project Manager: Matt Sakai	Sequoia Analytical - Redwood City 680 Chesapeake Dr. Redwood City, CA 94603 Phone: 650-364-9600 Fax: 650-364-9233

9810360

Subcontract Order Comments

09/30/98 11:42

Sample/Analysis Information

Sample Name	Matrix	Sampled/ Expires	Analysis Requested	Due	Lab Number	Container	Comments
P810027-01	Other (W)	9/19/98				A	
		9/20/98	[Set up analysis]-1	10/14/98			Bioasay-%SurvivalSub to RWC

Released By _____ Date 10/2 Received By _____ Date 10-5 1810

Released By _____ Date 10-5 Received By _____ Date 10-6-98

2000

Analytical Sciences
P.O. Box 750336, Petaluma, CA 94975-0336
1130 Industrial Ave., #11, Petaluma, CA 94952
(707) 769-3128
Fax (707) 769-8093

CHAIN OF CUSTODY

LAB PROJECT NUMBER: P810027

CLIENT'S PROJECT NAME: HOLLAND (8092902)

CLIENT INFORMATION

COMPANY NAME: ANALYTICAL SCIENCES
ADDRESS: P.O BOX 750336
PETALUMA CA 94975-0336
CONTACT: MARK VALENTINI
PHONE #: 707 769-3128
FAX #: 707 769-8093

TURNAROUND TIME (check one)

MOBILE LAB

SAME DAY		24 HOURS	
48 HOURS		72 HOURS	
5 DAYS		NORMAL	✓

COOLER TEMPERATURE
COOL/BLUE ICE °C

COC
PAGE 1 OF 1

ANALYSIS (circle methods)

ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	# CONT.	PRESV. YES/NO	TPH GAS/MBTEX EPA 8015/8020	TPH DIESEL EPA 8015	EPA 8010 / EPA 8260 / TRPH / TOG	TOTAL LEAD / 5 LUFT METALS	STLC / Pb	96 HOUR WET WASTE SCREEN	COMMENTS	LAB SAMPLE #
1	BNA-B (2354)	9-19-98		SOIL	1						X	X		COMPOSITED BY	P810027-1
2	COMPOSITE													ANALYTICAL SCIENCES	1
3															
4															
5															
6															
7															
8															
9															
10															

SIGNATURES

RELINQUISHED BY:
Heather A Allen — SIGNATURE
9/32/98 — DATE
11:42 — TIME

RECEIVED BY LABORATORY:
SIGNATURE
9/32/98 — DATE
11:42 — TIME

Analytical Sciences
P.O. Box 750336, Petaluma, CA 94975-0336
1130 Industrial Ave., #11, Petaluma, CA 94952
(707) 769-3128
Fax (707) 769-8093

CHAIN OF CUSTODY

LAB PROJECT NUMBER: 8092902

CLIENT'S PROJECT NAME: HOLLAND ESTATE (150-5048)

CLIENT INFORMATION

COMPANY NAME: ENVIRONMENTAL BIO SYSTEMS INC
ADDRESS: P.O. Box 7171
SAN JOSE CA 95150-7171
CONTACT: DAVE SADOFF
PHONE #: (408) 979-8600
FAX #:

TURNAROUND TIME (check one)

MOBILE LAB

SAME DAY		24 HOURS	
48HOURS		72 HOURS	
5 DAYS		NORMAL	

COOLER TEMPERATURE
COOL/BLUE ICE °C

COC
PAGE 1 OF 1

ANALYSIS (circle methods)

ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	# CONT.	PRESV. YES/NO	TPH GAS/MBTEX EPA 8015/8020	TPH DIESEL EPA 8015	EPA 8010 / EPA 8260	TRPH / TOG	TOTAL LEAD / 5 LUFT METALS	STLC / TCLP	9040 NOVA HAZ WASTE SCREEN	COMMENTS	LAB SAMPLE #
1	BIN A-B comp.	9-19-98									X	X		relogged sample from lab job # 8290905 Additional analyses requested by Dave Sadoff	2354
2															
3															
4															
5															
6															
7															
8															
9															
10															

SIGNATURES

RELINQUISHED BY:

SIGNATURE _____ DATE _____ TIME _____

RECEIVED BY LABORATORY:

SIGNATURE Heather A Allen DATE 9/29/98 TIME

ENVIRONMENTAL BIO-SYSTEMS, INC.
Innovative Solutions for a Better Environment
(408) 979-8600
P.O. Box 7171
San Jose, CA 95150-7171

CHAIN OF CUSTODY

LAB JOB # 8090905

PROJECT NUMBER	150-504B
CLIENT	HOLLAND ESTATE
SITE	16301 E. 14TH SAN LEANDRO, CA

ALL SAMPLES TO BE ANALYZED USING METHODS AND DETECTION LIMITS ESTABLISHED BY REGION _____ OF THE STATE WATER RESOURCES CONTROL BOARD.

INSTRUCTIONS:
2:1 COMPOSITE

SAMPLE I.D.	MATRIX	NUMBER OF CONTAINERS	COMPOSITE	ANALYSIS: TPHd	TPHd	8260	8270	LUFT 5 METALS	5520/TRPH			TURNAROUND	SAMPLE CONDITION	LAB SAMPLE#
BIN-A			X	X	X	X	X	X	X			STANDARD		2354
BIN-B			X									"		

SAMPLING COMPLETED	DATE 9/8/98	TIME 15:14	SAMPLING PERFORMED BY	DAVE A. SADOFF	MARIE VALENTINE	Analytical Sciences	
RELEASED BY	DATE 9/8/98	TIME 15:20	RECEIVED BY		DATE 9/9/98	TIME 15:20	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #				

Analytical Sciences

Report Date: September 28, 1998

Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
ATTN: Dave Sadoff

LABORATORY REPORT

Project Name: **Holland Estate 150-504B**

Lab Project Number: **8090905**

This 10 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.
Laboratory Director

P.O. Box 750336
Petaluma, CA 94975-0336
(707) 769-3128 Fax: (707) 769-8093

1130 Industrial Avenue
Suite 11
Petaluma, CA 94952

TPH Gasoline in Soil Composite

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2354	Bin A&B Composite	TPH/Gasoline	230	10

Date Sampled: 09/09/98 Date Analyzed: 09/23/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

TPH Diesel in Soil Composite

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2354	Bin A&B Composite	Diesel	10,000	100

The chromatogram indicates significant amounts of hydrocarbons are present. These hydrocarbons have a higher boiling point than diesel and fall in the motor oil and grease range.

Date Sampled: 09/09/98 Date Extracted: 09/23/98 QC Batch #: 545
Date Received: 09/09/98 Date Analyzed: 09/23/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

Total Recoverable Petroleum Hydrocarbons in Soil Composite

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2354	Bin A&B Composite	TRPH	400,000	20,000

Date Sampled: 09/09/98 Date Extracted: 09/23/98 QC Batch #: 548
Date Received: 09/09/98 Date Analyzed: 09/23/98 Method: SM5520F/Silica
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

Metals in Soil Composite

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2354	Bin A&B Composite	Cadmium (Cd)	9.0	1.0
		Chromium (Cr)	67	1.5
		Lead (Pb)	330	4.0
		Nickel (Ni)	26	2.0
		Zinc (Zn)	800	1.0

Date Sampled: 09/09/98 Date Digested: 09/10/98 QC Batch #: 532
Date Received: 09/09/98 Date Analyzed: 09/11/98, 09/15/98
Method: EPA 3050/7000 series

CA Lab Accreditation #: 2118 / I-2303

Volatile Hydrocarbons by GC/MS in Soil Composite

Lab #	Sample ID	Compound Name	Result (ug/kg)	RDL (ug/kg)
2354	Bin A&B Composite	dichlorodifluoromethane	ND	500
		chloromethane	ND	500
		vinyl chloride	ND	500
		chloroethane	ND	500
		bromomethane	ND	500
		trichlorofluoromethane	ND	500
		1,1-dichloroethene	ND	500
		methylene chloride	ND	500
		trans-1,2-dichloroethene	ND	500
		1,1-dichloroethane	ND	500
		cis-1,2-dichloropropane	ND	500
		cis-1,2-dichloroethene	ND	500
		2,2-dichloropropane	ND	500
		chloroform	ND	500
		bromochloromethane	ND	500
		1,1,1-trichloroethane	ND	500
		1,2-dichloroethane	ND	500
		1,1-dichloropropene	ND	500
		carbon tetrachloride	ND	500
		benzene	ND	500
		trichloroethene	ND	500
		1,2-dichloropropane	ND	500
		dibromomethane	ND	500
		bromodichloromethane	ND	500
		cis-1,3-dichloropropene	ND	500
		toluene	[redacted]	500
		1,1,2-trichloroethane	ND	500
		1,3-dichloropropane	ND	500
		dibromochloromethane	ND	500
		[redacted]	[redacted]	500
		1,2-dibromoethane	ND	500
		chlorobenzene	ND	500
		1,1,1,2-tetrachloroethane	ND	500
		ethyl benzene	11,000	500
		m,p-xylene	14,000	500
		styrene	ND	500
		o-xylene	12,000	500
		bromoform	ND	500

CA Lab Accreditation #: 2118 / I-2303

Lab #	Sample ID	Compound Name	Result (ug/kg)	RDL (ug/kg)
2354	Bin A&B Composite	1,1,2,2-tetrachloroethane	ND	500
		isopropyl benzene	620	500
		1,2,3-trichloropropane	ND	500
		bromobenzene	ND	500
		n-propyl benzene	980	500
		2-chlorotoluene	ND	500
		4-chlorotoluene	ND	500
		1,3,5-trimethylbenzene	4,800	500
		tert-butylbenzene	680	500
		1,2,4-trimethylbenzene	5,900	500
		sec-butylbenzene	ND	500
		1,3-dichlorobenzene	ND	500
		1,4-dichlorobenzene	ND	500
		1,2-dichlorobenzene	ND	500
		p-isopropyltoluene	ND	500
		n-butylbenzene	950	500
		1,2,4-trichlorobenzene	ND	500
		naphthalene	2,900	500
		hexachlorobutadiene	ND	500
		1,2,3-trichlorobenzene	ND	500

Surrogates	Result (ug/kg)	% Recovery	Acceptance Range (%)
dibromofluoromethane (25,000)	21,000	84.0	80 – 120
toluene-d_8 (25,000)	24,100	96.4	80 – 120
4-bromofluorobenzene (25,000)	23,800	95.2	80 – 120

Date Sampled: 09/09/98
Date Received: 09/09/98
Holding Time Met: Yes ✓ No ___
Date Analyzed: 09/23/98
Method: EPA 8260
QC Batch #: 549

LABORATORY
QUALITY ASSURANCE REPORT

QC Batch #: 547 **Lab Project #:** 8090905

Sample ID	Compound	Result (mg/kg)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
2362	CMS	TPH/Gas		NS	
	CMS	Benzene	0.0370	0.0385	96.1
	CMS	Toluene	0.0337	0.0385	87.5
	CMS	Ethyl Benzene	0.0356	0.0385	92.5
	CMS	Xylenes	0.1170	0.1150	102

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
2362	CMSD	TPH/Gas		NS		
	CMSD	Benzene	0.0343	0.0385	89.1	7.6
	CMSD	Toluene	0.0321	0.0385	83.4	4.9
	CMSD	Ethyl Benzene	0.0340	0.0385	88.3	4.6
	CMSD	Xylenes	0.1100	0.1150	95.7	6.0

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

QC Batch #: 541 **Lab Project #:** 8090905

Sample ID	Compound	Result (mg/kg)
MB	TPH/Diesel	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
2330	CMS	TPH/Diesel	391	438	89.3

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
2330	CMSD	TPH/Diesel	390	438	89.0	0.26

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

QC Batch #: 548 **Lab Project #:** 8090905

Sample ID	Compound	Result (mg/kg)
MB	TRPH	ND

Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
LCS	TRPH	570	565	101

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

QC Batch #: 532 **Lab Project #:** 8090905

Sample ID	Compound	Result (mg/kg)
MB	Cadmium (Cd)	ND
MB	Chromium (Cr)	ND
MB	Lead (Pb)	ND
MB	Nickel (Ni)	ND
MB	Zinc (Zn)	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
2329	CMS	Cadmium (Cd)	45	45	100
	CMS	Chromium (Cr)	200	182	89.6
	CMS	Lead (Pb)	89	91	90.8
	CMS	Nickel (Ni)	286	182	116
	CMS	Zinc (Zn)		NS	

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
2329	CMSD	Cadmium (Cd)	47	45	104	4.3
	CMSD	Chromium (Cr)	210	182	95.1	4.9
	CMSD	Lead (Pb)	91	91	93.0	2.2
	CMSD	Nickel (Ni)	298	182	123	4.1
	CMSD	Zinc (Zn)		NS		

Sample 2329 metal levels (mg/kg): Cd – ND; Cr – 37; Pb – 6.4; Ni – 75

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

QC Batch #: 549 **Lab Project #:** 8090905

Sample ID	Compound Name	Result (ug/kg)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/kg)	% Recovery	Acceptance Range (%)
dibromofluoromethane (125)	109	87.2	80 – 120
toluene-d_8 (125)	122	97.6	80 – 120
4-bromofluorobenzene (125)	119	95.2	80 – 120

Sample ID	Compound Name	Result (ug/kg)	Spike Level	% Recv.
LCS	1,1-dichloroethene	51.0	62.5	81.6
LCS	benzene	51.2	62.5	81.9
LCS	trichloroethene	51.0	62.5	81.6
LCS	toluene	54.0	62.5	86.4
LCS	chlorobenzene	56.5	62.5	90.4

Surrogates	Result (ug/kg)	% Recovery	Acceptance Range (%)
dibromofluoromethane (125)	105	84.0	80 – 120
toluene-d_8 (125)	122	97.6	80 – 120
4-bromofluorobenzene (125)	116	92.8	80 – 120

CA Lab Accreditation #: 2118 / I-2303

Sample ID	Compound Name	Result (ug/kg)	Spike Level	% Recv.	RPD
LCSD	1,1-dichloroethene	55.0	62.5	88.0	7.5
LCSD	benzene	54.1	62.5	86.6	5.5
LCSD	trichloroethene	51.4	62.5	82.2	0.78
LCSD	toluene	53.9	62.5	86.2	0.19
LCSD	chlorobenzene	57.2	62.5	91.5	1.2

Surrogates	Result (ug/kg)	% Recovery	Acceptance Range (%)
dibromofluoromethane (125)	103	82.4	80 – 120
toluene-d_8 (125)	117	93.6	80 – 120
4-bromofluorobenzene (125)	109	87.2	80 – 120

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

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CHAIN OF CUSTODY

LAB JOB # 8090905

ALL SAMPLES TO BE ANALYZED USING METHODS AND DETECTION LIMITS ESTABLISHED BY REGION ______ OF THE STATE WATER RESOURCES CONTROL BOARD.

INSTRUCTIONS: 2:1 COMPOSITE

PROJECT NUMBER: 150-504B
CLIENT: HOLLAND ESTATE
SITE: 16301 E. 14TH SAN LEANDRO, CA

SAMPLE I.D.	MATRIX	NUMBER OF CONTAINERS	COMPOSITE	TPHg	TPHd	8260	8270	LUFT 5 METALS	5520/TRPH			TURNAROUND	SAMPLE CONDITION	LAB SAMPLE#
BIN-A			X	X	X	X	X	X	X			STANDARD		2354
BIN-B			X									"		

SAMPLING COMPLETED DATE: 9/9/98 TIME: 1510 SAMPLING PERFORMED BY: DAVE A. SADOFF Mark Valentini Analytical Sciences

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	9/9/98	15:20	[signature]	9/9/98	15:20

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

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September 29, 1998

Mark Valentini
Analytical Sciences
PO Box 750336
Petaluma, CA 94975

RE: Mark Valentini/P809172

Dear Mark Valentini

Enclosed are the results of analyses for sample(s) received by the laboratory on September 14, 1998. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matt Sakai
Project Manager

CA ELAP Certificate Number 2245

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Analytical Sciences	Project:	Mark Valentini	Sampled: 9/9/98
PO Box 750336	Project Number:	Holland (8090905)	Received: 9/14/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported: 9/29/98

ANALYTICAL REPORT FOR P809172

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
Bin A-B (2354)	P809172-01	Soil	9/9/98

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Analytical Sciences	Project:	Mark Valentini	Sampled: 9/9/98
PO Box 750336	Project Number:	Holland (8090905)	Received: 9/14/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported: 9/29/98

Semivolatile Organic Compounds by EPA Method 8270B
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Bin A-B (2354)			**P809172-01**				**Soil**	
Acenaphthene	8090368	9/22/98	9/24/98		8250	ND	ug/kg	
Acenaphthylene	"	"	"		8250	[redacted]	"	
Anthracene	"	"	"		8250	ND	"	
Benzoic acid	"	"	"		41800	ND	"	
Benzo (a) anthracene	"	"	"		8250	ND	"	
Benzo (b) fluoranthene	"	"	"		8250	ND	"	
Benzo (k) fluoranthene	"	"	"		8250	ND	"	
Benzo (g,h,i) perylene	"	"	"		8250	ND	"	
Benzo (a) pyrene	"	"	"		8250	ND	"	
Benzyl alcohol	"	"	"		16500	ND	"	
Bis(2-chloroethoxy)methane	"	"	"		8250	ND	"	
Bis(2-chloroethyl)ether	"	"	"		8250	ND	"	
Bis(2-chloroisopropyl)ether	"	"	"		8250	ND	"	
Bis(2-ethylhexyl)phthalate	"	"	"		8250	[redacted]	"	
4-Bromophenyl phenyl ether	"	"	"		8250	ND	"	
Butyl benzyl phthalate	"	"	"		8250	ND	"	
4-Chloroaniline	"	"	"		16500	ND	"	
4-Chloro-3-methylphenol	"	"	"		16500	ND	"	
2-Chloronaphthalene	"	"	"		8250	ND	"	
2-Chlorophenol	"	"	"		8250	ND	"	
4-Chlorophenyl phenyl ether	"	"	"		8250	ND	"	
Chrysene	"	"	"		8250	ND	"	
Dibenz (a,h) anthracene	"	"	"		8250	ND	"	
Dibenzofuran	"	"	"		8250	ND	"	
Di-n-butyl phthalate	"	"	"		8250	ND	"	
1,2-Dichlorobenzene	"	"	"		8250	ND	"	
1,3-Dichlorobenzene	"	"	"		8250	ND	"	
1,4-Dichlorobenzene	"	"	"		8250	ND	"	
3,3'-Dichlorobenzidine	"	"	"		16500	ND	"	
2,4-Dichlorophenol	"	"	"		8250	ND	"	
Diethyl phthalate	"	"	"		8250	ND	"	
2,4-Dimethylphenol	"	"	"		8250	ND	"	
Dimethyl phthalate	"	"	"		8250	ND	"	
4,6-Dinitro-2-methylphenol	"	"	"		41800	ND	"	
2,4-Dinitrophenol	"	"	"		41800	ND	"	
2,4-Dinitrotoluene	"	"	"		8250	ND	"	
2,6-Dinitrotoluene	"	"	"		8250	ND	"	
Di-n-octyl phthalate	"	"	"		8250	ND	"	
Fluoranthene	"	"	"		8250	ND	"	
Fluorene	"	"	"		8250	ND	"	
Hexachlorobenzene	"	"	"		8250	ND	"	

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Analytical Sciences	Project:	Mark Valentini	Sampled:	9/9/98
PO Box 750336	Project Number:	Holland (8090905)	Received:	9/14/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported:	9/29/98

Semivolatile Organic Compounds by EPA Method 8270B
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Bin A-B (2354) (continued)			**P809172-01**				**Soil**	
Hexachlorobutadiene	8090368	9/22/98	9/24/98		8250	ND	ug/kg	
Hexachlorocyclopentadiene	"	"	"		8250	ND	"	
Hexachloroethane	"	"	"		8250	ND	"	
Indeno (1,2,3-cd) pyrene	"	"	"		8250	ND	"	
Isophorone	"	"	"		8250	ND	"	
2-Methylnaphthalene	"	"	"		8250	**31800**	"	
2-Methylphenol	"	"	"		8250	ND	"	
4-Methylphenol	"	"	"		8250	ND	"	
Naphthalene	"	"	"		8250	ND	"	
2-Nitroaniline	"	"	"		41800	ND	"	
3-Nitroaniline	"	"	"		41800	ND	"	
4-Nitroaniline	"	"	"		41800	ND	"	
Nitrobenzene	"	"	"		8250	ND	"	
2-Nitrophenol	"	"	"		8250	ND	"	
4-Nitrophenol	"	"	"		41800	ND	"	
N-Nitrosodiphenylamine	"	"	"		8250	ND	"	
N-Nitrosodi-n-propylamine	"	"	"		8250	ND	"	
Pentachlorophenol	"	"	"		41800	ND	"	
Phenanthrene	"	"	"		8250	**12300**	"	
Phenol	"	"	"		8250	ND	"	
Pyrene	"	"	"		8250	ND	"	
1,2,4-Trichlorobenzene	"	"	"		8250	ND	"	
2,4,5-Trichlorophenol	"	"	"		8250	ND	"	
2,4,6-Trichlorophenol	"	"	"		8250	ND	"	
Surrogate: 2-Fluorophenol	"	"	"	-		*49.0*	%	
Surrogate: Phenol-d6	"	"	"	-		*83.2*	"	
Surrogate: Nitrobenzene-d5	"	"	"	-		*76.6*	"	
Surrogate: 2-Fluorobiphenyl	"	"	"	-		*82.9*	"	
Surrogate: 2,4,6-Tribromophenol	"	"	"	-		*162*	"	*S-AC*
Surrogate: Terphenyl-dl4	"	"	"	-		*129*	"	

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Analytical Sciences	Project:	Mark Valentini	Sampled: 9/9/98
PO Box 750336	Project Number:	Holland (8090905)	Received: 9/14/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported: 9/29/98

Semivolatile Organic Compounds by EPA Method 8270B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 8090368	**Date Prepared: 9/22/98**				**Extraction Method: EPA 3550A**					
Blank	**8090368-BLK1**									
Aniline	9/24/98			ND	ug/kg	330				
Benzidine	"			ND	"	1670				
N-Nitrosodimethylamine	"			ND	"	330				
Anthracene	"			ND	"	330				
Benzoic acid	"			ND	"	1670				
Benzo (a) anthracene	"			ND	"	330				
Benzo (b) fluoranthene	"			ND	"	330				
Benzo (k) fluoranthene	"			ND	"	330				
Benzo (g,h,i) perylene	"			ND	"	330				
Benzo (a) pyrene	"			ND	"	330				
Benzyl alcohol	"			ND	"	660				
Bis(2-chloroethoxy)methane	"			ND	"	330				
Bis(2-chloroethyl)ether	"			ND	"	330				
Bis(2-chloroisopropyl)ether	"			ND	"	330				
Bis(2-ethylhexyl)phthalate	"			ND	"	330				
4-Bromophenyl phenyl ether	"			ND	"	330				
Butyl benzyl phthalate	"			ND	"	330				
4-Chloroaniline	"			ND	"	660				
4-Chloro-3-methylphenol	"			ND	"	660				
2-Chloronaphthalene	"			ND	"	330				
2-Chlorophenol	"			ND	"	330				
4-Chlorophenyl phenyl ether	"			ND	"	330				
Chrysene	"			ND	"	330				
Dibenz (a,h) anthracene	"			ND	"	330				
Dibenzofuran	"			ND	"	330				
Di-n-butyl phthalate	"			ND	"	330				
1,2-Dichlorobenzene	"			ND	"	330				
1,3-Dichlorobenzene	"			ND	"	330				
1,4-Dichlorobenzene	"			ND	"	330				
3,3'-Dichlorobenzidine	"			ND	"	660				
2,4-Dichlorophenol	"			ND	"	330				
Diethyl phthalate	"			ND	"	330				
2,4-Dimethylphenol	"			ND	"	330				
Dimethyl phthalate	"			ND	"	330				
4,6-Dinitro-2-methylphenol	"			ND	"	1670				
2,4-Dinitrophenol	"			ND	"	1670				
2,4-Dinitrotoluene	"			ND	"	330				
2,6-Dinitrotoluene	"			ND	"	330				
Di-n-octyl phthalate	"			ND	"	330				
Fluoranthene	"			ND	"	330				

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Analytical Sciences	Project:	Mark Valentini	Sampled: 9/9/98
PO Box 750336	Project Number:	Holland (8090905)	Received: 9/14/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported: 9/29/98

Semivolatile Organic Compounds by EPA Method 8270B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)	**8090368-BLK1**									
Fluorene	9/24/98			**ND**	ug/kg	**330**				
Hexachlorobenzene	"			**ND**	"	**330**				
Hexachlorobutadiene	"			**ND**	"	**330**				
Hexachlorocyclopentadiene	"			**ND**	"	**330**				
Hexachloroethane	"			**ND**	"	**330**				
Indeno (1,2,3-cd) pyrene	"			**ND**	"	**330**				
Isophorone	"			**ND**	"	**330**				
2-Methylnaphthalene	"			**ND**	"	**330**				
2-Methylphenol	"			**ND**	"	**330**				
4-Methylphenol	"			**ND**	"	**330**				
Naphthalene	"			**ND**	"	**330**				
2-Nitroaniline	"			**ND**	"	**1670**				
3-Nitroaniline	"			**ND**	"	**1670**				
4-Nitroaniline	"			**ND**	"	**1670**				
Nitrobenzene	"			**ND**	"	**330**				
2-Nitrophenol	"			**ND**	"	**330**				
4-Nitrophenol	"			**ND**	"	**1670**				
N-Nitrosodiphenylamine	"			**ND**	"	**330**				
N-Nitrosodi-n-propylamine	"			**ND**	"	**330**				
Pentachlorophenol	"			**ND**	"	**1670**				
Phenanthrene	"			**ND**	"	**330**				
Phenol	"			**ND**	"	**330**				
Pyrene	"			**ND**	"	**330**				
1,2,4-Trichlorobenzene	"			**ND**	"	**330**				
2,4,5-Trichlorophenol	"			**ND**	"	**330**				
2,4,6-Trichlorophenol	"			**ND**	"	**330**				
Surrogate: 2-Fluorophenol	"	*5000*		*3020*	"		*60.4*			
Surrogate: Phenol-d6	"	*5000*		*3230*	"		*64.6*			
Surrogate: Nitrobenzene-d5	"	*3330*		*2080*	"		*62.5*			
Surrogate: 2-Fluorobiphenyl	"	*3330*		*2390*	"		*71.8*			
Surrogate: 2,4,6-Tribromophenol	"	*5000*		*3760*	"		*75.2*			
Surrogate: Terphenyl-dl4	"	*3330*		*2790*	"		*83.8*			
LCS	**8090368-BS1**									
Acenaphthene	9/24/98	3330		2180	ug/kg		65.5			
4-Chloro-3-methylphenol	"	5000		3180	"		63.6			
2-Chlorophenol	"	5000		2980	"		59.6			
1,4-Dichlorobenzene	"	3330		1780	"		53.5			
2,4-Dinitrotoluene	"	3330		2200	"		66.1			
4-Nitrophenol	"	5000		2800	"		56.0			
N-Nitrosodi-n-propylamine	"	3330		1930	"		58.0			

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Analytical Sciences	Project:	Mark Valentini	Sampled: 9/9/98
PO Box 750336	Project Number:	Holland (8090905)	Received: 9/14/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported: 9/29/98

Semivolatile Organic Compounds by EPA Method 8270B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS (continued)	**8090368-BS1**									
Pentachlorophenol	9/24/98	5000		3170	ug/kg		63.4			
Phenol	"	5000		2500	"		50.0			
Pyrene	"	3330		1660	"		49.8			
1,2,4-Trichlorobenzene	"	3330		1930	"		58.0			
Surrogate: 2-Fluorophenol	"	*5000*		*3020*	"		*60.4*			
Surrogate: Phenol-d6	"	*5000*		*2750*	"		*55.0*			
Surrogate: Nitrobenzene-d5	"	*3330*		*1930*	"		*58.0*			
Surrogate: 2-Fluorobiphenyl	"	*3330*		*2140*	"		*64.3*			
Surrogate: 2,4,6-Tribromophenol	"	*5000*		*3450*	"		*69.0*			
Surrogate: Terphenyl-dl4	"	*3330*		*2590*	"		*77.8*			
Matrix Spike	**8090368-MS1**		**P809157-06**							
Acenaphthene	9/24/98	3330	ND	2260	ug/kg		**67.9**			
4-Chloro-3-methylphenol	"	5000	ND	3610	"		**72.2**			
2-Chlorophenol	"	5000	ND	3010	"		**60.2**			
1,4-Dichlorobenzene	"	3330	ND	1670	"		**50.2**			
2,4-Dinitrotoluene	"	3330	ND	2500	"		**75.1**			
4-Nitrophenol	"	5000	ND	3370	"		**67.4**			
N-Nitrosodi-n-propylamine	"	3330	ND	2170	"		**65.2**			
Pentachlorophenol	"	5000	ND	3880	"		**77.6**			
Phenol	"	5000	ND	2690	"		**53.8**			
Pyrene	"	3330	ND	1800	"		**54.1**			
1,2,4-Trichlorobenzene	"	3330	ND	1790	"		**53.8**			
Surrogate: 2-Fluorophenol	"	*5000*		*2930*	"		*58.6*			
Surrogate: Phenol-d6	"	*5000*		*2930*	"		*58.6*			
Surrogate: Nitrobenzene-d5	"	*3330*		*1970*	"		*59.2*			
Surrogate: 2-Fluorobiphenyl	"	*3330*		*2150*	"		*64.6*			
Surrogate: 2,4,6-Tribromophenol	"	*5000*		*3810*	"		*76.2*			
Surrogate: Terphenyl-dl4	"	*3330*		*3080*	"		*92.5*			
Matrix Spike Dup	**8090368-MSD1**		**P809157-06**							
Acenaphthene	9/24/98	3330	ND	2310	ug/kg		**69.4**		**2.18**	
4-Chloro-3-methylphenol	"	5000	ND	3580	"		**71.6**		**0.834**	
2-Chlorophenol	"	5000	ND	3100	"		**62.0**		**2.95**	
1,4-Dichlorobenzene	"	3330	ND	1620	"		**48.6**		**3.24**	
2,4-Dinitrotoluene	"	3330	ND	2610	"		**78.4**		**4.30**	
4-Nitrophenol	"	5000	ND	3510	"		**70.2**		**4.07**	
N-Nitrosodi-n-propylamine	"	3330	ND	2260	"		**67.9**		**4.06**	
Pentachlorophenol	"	5000	ND	4030	"		**80.6**		**3.79**	
Phenol	"	5000	ND	2760	"		**55.2**		**2.57**	
Pyrene	"	3330	ND	1910	"		**57.4**		**5.92**	

Sequoia Analytical

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Analytical Sciences	Project:	Mark Valentini	Sampled:	9/9/98
PO Box 750336	Project Number:	Holland (8090905)	Received:	9/14/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported:	9/29/98

Semivolatile Organic Compounds by EPA Method 8270B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike Dup (continued)	**8090368-MSD1**		**P809157-06**							
1,2,4-Trichlorobenzene	9/24/98	3330	ND	1790	ug/kg		**53.8**		**0**	
Surrogate: 2-Fluorophenol	"	*5000*		*3120*	"		*62.4*			
Surrogate: Phenol-d6	"	*5000*		*3050*	"		*61.0*			
Surrogate: Nitrobenzene-d5	"	*3330*		*2100*	"		*63.1*			
Surrogate: 2-Fluorobiphenyl	"	*3330*		*2350*	"		*70.6*			
Surrogate: 2,4,6-Tribromophenol	"	*5000*		*4110*	"		*82.2*			
Surrogate: Terphenyl-dl4	"	*3330*		*3350*	"		*101*			

Sequoia Analytical

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Analytical Sciences	Project:	Mark Valentini	Sampled:	9/9/98
PO Box 750336	Project Number:	Holland (8090905)	Received:	9/14/98
Petaluma, CA 94975	Project Manager:	Mark Valentini	Reported:	9/29/98

Notes and Definitions

#	Note
S-AC	Acid surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two acid surrogates.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

Analytical Sciences
P.O. Box 750336, Petaluma, CA 94975-0336
1130 Industrial Ave., #11, Petaluma, CA 94952
(707) 769-3128
Fax (707) 769-8093

CHAIN OF CUSTODY

LAB PROJECT NUMBER:

CLIENT'S PROJECT NAME: HOLLAND (8040905)

CLIENT INFORMATION

COMPANY NAME: ANALYTICAL SCIENCES
ADDRESS: P.O. BOX 750336
PETALUMA, CA 94975-0336
CONTACT: MARK VALENTINI
PHONE #: (707) 769-3128
FAX #: (707) 769-8093

TURNAROUND TIME (check one)

MOBILE LAB

SAME DAY		24 HOURS	
48 HOURS		72 HOURS	
5 DAYS		NORMAL	✓

COOLER TEMPERATURE: cold/blue ICED °C

COC
PAGE 1 OF 1

P809172

ANALYSIS (circle methods)

ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	# CONT.	PRESV. YES/NO	TPH GAS/MBTEX EPA 8015/8020	TPH DIESEL EPA 8015	EPA 8010	EPA 8260	TRPH	TOG	TOTAL LEAD/ 5 LUFT METALS	EPA 8270			COMMENTS	LAB SAMPLE #
1	B/N A-B(2354) Composite	9-9-98		SOIL	1								X				Composited by Analytical Sciences.	P809172-1
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

SIGNATURES

RELINQUISHED BY:			RECEIVED BY LABORATORY:		
Heather A. Allen	9/14/98	16:55	[illegible]	9/14/98	16:55
SIGNATURE	DATE	TIME	SIGNATURE	DATE	TIME

Analytical Sciences

Report Date: September 24, 1998

Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
ATTN: Dave Sadoff

LABORATORY REPORT

Project Name: **Holland Estate 150-504B**

Lab Project Number: **8090906**

This 20 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini

Mark A. Valentini, Ph.D.
Laboratory Director

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Petaluma, CA 94975-0336
(707) 769-3128 Fax: (707) 769-8093

1130 Industrial Avenue
Suite 11
Petaluma, CA 94952

TPH Gasoline in Soil

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2355	T1-10'	TPH/Gasoline	3,900	200
		MTBE	ND	4.0
		Benzene	10	1.0
		Toluene	16	1.0
		Ethyl Benzene	6.7	1.0
		Xylenes	45	3.0

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2356	T2-1-10'	TPH/Gasoline	3,700	400
		MTBE	ND	8.0
		Benzene	7.0	2.0
		Toluene	6.9	2.0
		Ethyl Benzene	9.1	2.0
		Xylenes	40	6.0

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2357	T2-2-10'	TPH/Gasoline	3,800	400
		MTBE	ND	8.0
		Benzene	8.7	2.0
		Toluene	11	2.0
		Ethyl Benzene	9.6	2.0
		Xylenes	44	6.0

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2358	T3-1-10'	TPH/Gasoline	1,200	200
		MTBE	ND	4.0
		Benzene	3.0	1.0
		Toluene	5.2	1.0
		Ethyl Benzene	3.3	1.0
		Xylenes	12	3.0

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2359	T3-2-10'	TPH/Gasoline	6,900	200
		MTBE	ND	4.0
		Benzene	21	1.0
		Toluene	28	1.0
		Ethyl Benzene	16	1.0
		Xylenes	100	3.0

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2362	T5,6-1-10'	TPH/Gasoline	1.7	1.0
		MTBE	ND	0.025
		Benzene	0.005	0.005
		Toluene	ND	0.005
		Ethyl Benzene	ND	0.005
		Xylenes	0.018	0.015

Date Sampled: 09/09/98 Date Analyzed: 09/23/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2363	**T5,6-2-10'**	**TPH/Gasoline**	**4.0**	1.0
		MTBE	**ND**	0.025
		Benzene	**ND**	0.005
		Toluene	**ND**	0.005
		Ethyl Benzene	**ND**	0.005
		Xylenes	**0.039**	0.015

Date Sampled: 09/09/98 Date Analyzed: 09/23/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

TPH Diesel in Soil

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2355	T1-10'	Diesel	1,100	10

Date Sampled: 09/09/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/09/98 Date Analyzed: 09/16/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2356	T2-1-10'	Diesel	3,200	100

Date Sampled: 09/09/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/09/98 Date Analyzed: 09/16/98, 09/23/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2357	T2-2-10'	Diesel	2,600	10

Date Sampled: 09/09/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/09/98 Date Analyzed: 09/16/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2358	T3-1-10'	Diesel	460	5.0

Date Sampled: 09/09/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/09/98 Date Analyzed: 09/16/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2359	T3-2-10'	Diesel	390	5.0

Date Sampled: 09/09/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/09/98 Date Analyzed: 09/16/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2362	T5,6-1-10'	Diesel	ND	5.0

Date Sampled: 09/09/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/09/98 Date Analyzed: 09/18/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2363	T5,6-2-10'	Diesel	80	5.0

Date Sampled: 09/09/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/09/98 Date Analyzed: 09/18/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

TPH Stoddard Solvent in Soil

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2360	T4-1-10'	Stoddard Solvent	9,600	200

Date Sampled: 09/09/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/09/98 Date Analyzed: 09/16/98, 09/23/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2361	T4-2-10'	Stoddard Solvent	4,300	100

Date Sampled: 09/09/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/09/98 Date Analyzed: 09/16/98, 09/23/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

BTEX in Soil

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2360	T4-1-10'	Benzene	ND	2.5
		Toluene	ND	2.5
		Ethyl Benzene	69	2.5
		Xylenes	130	7.5

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2361	T4-2-10'	Benzene	4.0	1.0
		Toluene	5.7	1.0
		Ethyl Benzene	11	1.0
		Xylenes	36	3.0

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 547
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

Total Lead in Soil

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2355	T1-10'	Lead (Pb)	15	4.0

Date Sampled: 09/09/98 Date Digested: 09/09/98 QC Batch #: 532
Date Received: 09/09/98 Date Analyzed: 09/11/98
Method: EPA 3050/7420

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2356	T2-1-10'	Lead (Pb)	15	4.0

Date Sampled: 09/09/98 Date Digested: 09/09/98 QC Batch #: 532
Date Received: 09/09/98 Date Analyzed: 09/11/98
Method: EPA 3050/7420

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2357	T2-2-10'	Lead (Pb)	17	4.0

Date Sampled: 09/09/98 Date Digested: 09/09/98 QC Batch #: 532
Date Received: 09/09/98 Date Analyzed: 09/11/98
Method: EPA 3050/7420

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2358	T3-1-10'	Lead (Pb)	5.0	4.0

Date Sampled: 09/09/98 Date Digested: 09/09/98 QC Batch #: 532
Date Received: 09/09/98 Date Analyzed: 09/11/98
Method: EPA 3050/7420

CA Lab Accreditation #: 2118 / I-2303

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2359	T3-2-10'	Lead (Pb)	7.0	4.0

Date Sampled:	09/09/98	Date Digested:	09/09/98	QC Batch #:	532
Date Received:	09/09/98	Date Analyzed:	09/11/98		
Method:	EPA 3050/7420				

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2362	T5,6-1-10'	Lead (Pb)	11	4.0

Date Sampled:	09/09/98	Date Digested:	09/09/98	QC Batch #:	532
Date Received:	09/09/98	Date Analyzed:	09/11/98		
Method:	EPA 3050/7420				

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2363	T5,6-2-10'	Lead (Pb)	5.0	4.0

Date Sampled:	09/09/98	Date Digested:	09/09/98	QC Batch #:	532
Date Received:	09/09/98	Date Analyzed:	09/11/98		
Method:	EPA 3050/7420				

Analytical Sciences

September 24, 1998

Dave Sadoff
Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171

Dear Dave,

Enclosed you will find Analytical Sciences' final report 8091501 for your Holland Estate (150-504B) project site. An invoice for this work is enclosed.

Should you or your client have any questions regarding this report please contact me at your convenience. We appreciate you selecting Analytical Sciences for this work and look forward to serving your analytical chemistry needs on projects in the future.

Sincerely,

Analytical Sciences

Mark A. Valentini

P.O. Box 750336
Petaluma, CA 94975-0336
(707) 769-3128 Fax: (707) 769-8093

1130 Industrial Avenue
Suite 11
Petaluma, CA 94952

Analytical Sciences

Report Date: September 24, 1998

Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
ATTN: Dave Sadoff

LABORATORY REPORT

Project Name: **J. Holland Estate 150-504B**

Lab Project Number: **8091501**

This 5 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini

Mark A. Valentini, Ph.D.
Laboratory Director

P.O. Box 750336
Petaluma, CA 94975-0336
(707) 769-3128 Fax: (707) 769-8093

1130 Industrial Avenue
Suite 11
Petaluma, CA 94952

BTEX in Soil Composite

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2373	SS1-4 Composite	Benzene	ND	0.005
		Toluene	ND	0.005
		Ethyl Benzene	ND	0.005
		Xylenes	ND	0.015

Date Sampled: 09/14/98 Date Analyzed: 09/24/98 QC Batch #: 547
Date Received: 09/15/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2374	KS1-4 Composite	Benzene	ND	1.0
		Toluene	ND	1.0
		Ethyl Benzene	ND	1.0
		Xylenes	ND	1.0

Significant levels of hydrocarbons necessitated a dilution which resulted in elevated detection limits.

Date Sampled: 09/14/98 Date Analyzed: 09/24/98 QC Batch #: 547
Date Received: 09/15/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

TPH Stoddard Solvent in Soil Composite

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2373	SS1-4 Composite	Stoddard Solvent	ND	5.0

Date Sampled: 09/14/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/15/98 Date Analyzed: 09/18/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

TPH Kerosene in Soil Composite

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
2374	KS1-4 Composite	Kerosene	5,200	200

Date Sampled: 09/14/98 Date Extracted: 09/15/98 QC Batch #: 541
Date Received: 09/15/98 Date Analyzed: 09/18/98, 09/22/98 Method: EPA 3550/8015M
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

LABORATORY
QUALITY ASSURANCE REPORT

QC Batch #: 547 **Lab Project #:** 8091501

Sample ID	Compound	Result (mg/kg)
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
2362	CMS	TPH/Gas		NS	
	CMS	Benzene	0.0370	0.0385	96.1
	CMS	Toluene	0.0337	0.0385	87.5
	CMS	Ethyl Benzene	0.0356	0.0385	92.5
	CMS	Xylenes	0.1170	0.1150	102

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
2362	CMSD	TPH/Gas		NS		
	CMSD	Benzene	0.0343	0.0385	89.1	7.6
	CMSD	Toluene	0.0321	0.0385	83.4	4.9
	CMSD	Ethyl Benzene	0.0340	0.0385	88.3	4.6
	CMSD	Xylenes	0.1100	0.1150	95.7	6.0

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

QC Batch #: 541 Lab Project #: 8091501

Sample ID	Compound	Result (mg/kg)
MB	TPH/Diesel	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
2330	CMS	TPH/Diesel	391	438	89.3

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
2330	CMSD	TPH/Diesel	390	438	89.0	0.26

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

ENVIRONMENTAL BIO-SYSTEMS, INC.
Innovative Solutions for a Better Environment
(408) 979-8600
P.O. Box 7171
San Jose, CA 95150-7171

CHAIN OF CUSTODY LAB PROJECT # 8091501

PROJECT NUMBER	150-504B
CLIENT	J. HOLLAND ESTATE
SITE	16301 E. 14TH ST. SAN LEANDRO, CA

ALL SAMPLES TO BE ANALYZED USING METHODS AND DETECTION LIMITS ESTABLISHED BY REGION _____ OF THE STATE WATER RESOURCES CONTROL BOARD.

INSTRUCTIONS:

SAMPLE I.D.	MATRIX	NUMBER OF CONTAINERS	COMPOSITE	ANALYSIS: TPHss +BTEX	ANALYSIS: TPHK +BTEX	TURNAROUND	SAMPLE CONDITION	LAB SAMPLE#
SS1-4	SOIL	4	X	X		STANDARD		2373
KS1-4	SOIL	4	X		X	"		2374

SAMPLING COMPLETED	DATE 9/14/98	TIME 15:15	SAMPLING PERFORMED BY	DAVE A. SADOFF	MARK VALENTINI, Analytical Sciences		
RELEASED BY	DATE 9/15/98	TIME 10:31	RECEIVED BY		DATE 9/15/98	TIME 10:31	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #				

TPH Gasoline in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2364	T1&T2-H_2O	TPH/Gasoline	41,000	5,000
		MTBE	ND	200
		Benzene	1,400	40
		Toluene	5,400	40
		Ethyl Benzene	1,000	40
		Xylenes	4,000	120

A floating product was evident. Water from below the floating product layer was analyzed.

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 546
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2365	T3-H_2O	TPH/Gasoline	35,000	10,000
		MTBE	ND	400
		Benzene	1,400	80
		Toluene	440	80
		Ethyl Benzene	1,600	80
		Xylenes	6,500	240

A floating product was evident. Water from below the floating product layer was analyzed.

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 546
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2367	T5,6-H_2O	TPH/Gasoline	78,000	10,000
		MTBE	ND	400
		Benzene	1,500	80
		Toluene	8,400	80
		Ethyl Benzene	1,900	80
		Xylenes	14,000	240

A floating product was evident. Water from below the floating product layer was analyzed.

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 546
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2368	T7,8-H_2O	TPH/Gasoline	30,000	10,000
		MTBE	ND	400
		Benzene	700	80
		Toluene	4,100	80
		Ethyl Benzene	760	80
		Xylenes	6,000	240

A floating product was evident. Water from below the floating product layer was analyzed.

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 546
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

TPH Diesel in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2364	T1&T2-H_2O	TPH/Diesel	300,000	10,000

Date Sampled: 09/09/98 Date Extracted: 09/22/98 QC Batch #: 545
Date Received: 09/09/98 Date Analyzed: 09/22/98 Method: EPA 3510/8015M
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2365	T3-H_2O	TPH/Diesel	52,000	2,500

Date Sampled: 09/09/98 Date Extracted: 09/22/98 QC Batch #: 545
Date Received: 09/09/98 Date Analyzed: 09/22/98 Method: EPA 3510/8015M
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2367	T5,6-H_2O	TPH/Diesel	67,000	2,500

Date Sampled: 09/09/98 Date Extracted: 09/22/98 QC Batch #: 545
Date Received: 09/09/98 Date Analyzed: 09/22/98 Method: EPA 3510/8015M
Holding Time Met: Yes ✓ No ____

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2368	T7,8-H_2O	TPH/Diesel	1,600,000	50,000

Date Sampled: 09/09/98 Date Extracted: 09/22/98 QC Batch #: 545
Date Received: 09/09/98 Date Analyzed: 09/22/98 Method: EPA 3510/8015M
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

TPH Stoddard Solvent in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2366	T4-H_2O	Stoddard Solvent	490,000	10,000

Date Sampled: 09/09/98 Date Extracted: 09/22/98 QC Batch #: 545
Date Received: 09/09/98 Date Analyzed: 09/22/98 Method: EPA 3510/8015M
Holding Time Met: Yes ✓ No ____

BTEX in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
2366	T4-H_2O	Benzene	34	10
		Toluene	32	10
		Ethyl Benzene	170	10
		Xylenes	660	30

A floating product was evident. Water from below the floating product layer was analyzed.

Date Sampled: 09/09/98 Date Analyzed: 09/22/98 QC Batch #: 546
Date Received: 09/09/98 Method: EPA 5030/8015M/8020
Holding Time Met: Yes ✓ No ____

CA Lab Accreditation #: 2118 / I-2303

Total Lead in Water

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
2364	T1&T2-H_2O	Lead (Pb)	ND	0.50

Date Sampled: 09/09/98 Date Digested: 09/10/98 QC Batch #: 535
Date Received: 09/09/98 Date Analyzed: 09/11/98
Method: EPA 3050/7420

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
2365	T3-H_2O	Lead (Pb)	ND	0.50

Date Sampled: 09/09/98 Date Digested: 09/10/98 QC Batch #: 535
Date Received: 09/09/98 Date Analyzed: 09/11/98
Method: EPA 3050/7420

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
2367	T5,6-H_2O	Lead (Pb)	ND	0.50

Date Sampled: 09/09/98 Date Digested: 09/10/98 QC Batch #: 535
Date Received: 09/09/98 Date Analyzed: 09/11/98
Method: EPA 3050/7420

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
2368	T7,8-H_2O	Lead (Pb)	ND	0.50

Date Sampled: 09/09/98 Date Digested: 09/10/98 QC Batch #: 535
Date Received: 09/09/98 Date Analyzed: 09/11/98
Method: EPA 3050/7420

CA Lab Accreditation #: 2118 / I-2303

LABORATORY
QUALITY ASSURANCE REPORT

QC Batch #: 547 **Lab Project #:** 8090906

Sample ID	Compound	Result (mg/kg)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
2362	CMS	TPH/Gas		NS	
	CMS	Benzene	0.0370	0.0385	96.1
	CMS	Toluene	0.0337	0.0385	87.5
	CMS	Ethyl Benzene	0.0356	0.0385	92.5
	CMS	Xylenes	0.1170	0.1150	102

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
2362	CMSD	TPH/Gas		NS		
	CMSD	Benzene	0.0343	0.0385	89.1	7.6
	CMSD	Toluene	0.0321	0.0385	83.4	4.9
	CMSD	Ethyl Benzene	0.0340	0.0385	88.3	4.6
	CMSD	Xylenes	0.1100	0.1150	95.7	6.0

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

QC Batch #: 541 **Lab Project #:** 8090906

Sample ID	Compound	Result (mg/kg)
MB	TPH/Diesel	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
2330	CMS	TPH/Diesel	391	438	89.3

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
2330	CMSD	TPH/Diesel	390	438	89.0	0.26

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

QC Batch #: 532 **Lab Project #:** 8090906

Sample ID	Compound	Result (mg/kg)
MB	Lead (Pb)	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
2329	CMS	Lead (Pb)	89	90.9	90.9

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
2329	CMSD	Lead (Pb)	91	90.9	93.1	2.2

Sample 2329 metal levels (mg/kg): Pb – 6.4

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

QC Batch #: 546 **Lab Project #:** 8090906

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
LCS	TPH/Gas		NS	
LCS	Benzene	7.34	8.00	91.8
LCS	Toluene	7.09	8.00	88.6
LCS	Ethyl Benzene	7.42	8.00	92.8
LCS	Xylenes	22.9	24.0	95.4

Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
LCSD	TPH/Gas		NS		
LCSD	Benzene	7.02	8.00	88.4	4.5
LCSD	Toluene	6.84	8.00	85.5	3.6
LCSD	Ethyl Benzene	7.20	8.00	90.0	3.0
LCSD	Xylenes	21.8	24.0	90.8	4.9

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

QC Batch #: 545 **Lab Project #:** 8090906

Sample ID	Compound	Result (ug/L)
MB	TPH/Diesel	ND

Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
LCS	TPH/Diesel	2,630	2,930	89.8

Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
LCSD	TPH/Diesel	2,800	2,930	95.6	6.3

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

QC Batch #: 535 **Lab Project #:** 8090906

Sample ID	Compound	Result (mg/L)
MB	Lead (Pb)	ND

Sample #	Sample ID	Compound	Result (mg/L)	Spike Level	% Recv.
2365	CMS	Lead (Pb)	0.90	1.00	90

Sample #	Sample ID	Compound	Result (mg/L)	Spike Level	% Recv.	RPD
2365	CMSD	Lead (Pb)	0.90	1.00	90	0.0

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range

CA Lab Accreditation #: 2118 / I-2303

ENVIRONMENTAL BIO-SYSTEMS, INC.
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P.O. Box 7171
San Jose, CA 95150-7171

CHAIN OF CUSTODY

Lab proj. # 8090906

ALL SAMPLES TO BE ANALYZED USING METHODS AND DETECTION LIMITS ESTABLISHED BY REGION _____ OF THE STATE WATER RESOURCES CONTROL BOARD.

INSTRUCTIONS:

PROJECT NUMBER	HOLLAND ESTATES
CLIENT	150-504B
SITE	16301 E. 14TH
	SAN LEANDRO, CA

SAMPLE I.D.	MATRIX	NUMBER OF CONTAINERS	COMPOSITE	ANALYSIS: TPHd	TPHg/BTEX/MTBE	TPHss/BTEX	Total Pb	TURNAROUND	SAMPLE CONDITION	LAB SAMPLE#
T1-10'	SOIL	1		X	X		X	STANDARD		2355
T2-1-10'		1		X	X		X			2356
T2-2-10'		1		X	X		X			2357
T3-1-10'		1		X	X		X			2358
T3-2-10'		1		X	X		X			2359
T4-1-10'		1				X				2360
T4-2-10'		1				X				2361
T5,6-1-10'		1		X	X		X			2362
T5,6-2-10'	✓			X	X		X	✓		2363

SAMPLING COMPLETED	DATE 9/9/98	TIME 15:10	SAMPLING PERFORMED BY	DAVE A. SADA	Analytical Sciences	MARK VALENTINO	
RELEASED BY	DATE 9/9/98	TIME 15:20	RECEIVED BY		DATE 9/9/98	TIME 15:20	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #				

ENVIRONMENTAL BIO-SYSTEMS, INC.
Innovative Solutions for a Better Environment
(408) 979-8600
P.O. Box 7171
San Jose, CA 95150-7171

CHAIN OF CUSTODY

Lab project # 8090906

ALL SAMPLES TO BE ANALYZED USING METHODS AND DETECTION LIMITS ESTABLISHED BY REGION _____ OF THE STATE WATER RESOURCES CONTROL BOARD.

INSTRUCTIONS:

P212

PROJECT NUMBER	150-504B
CLIENT	HOLLAND ESTATE
SITE	16301 E. 14TH ST, SAN LEANDRO, CA

SAMPLE I.D.	MATRIX	NUMBER OF CONTAINERS	COMPOSITE	ANALYSIS: TPHd	ANALYSIS: TPHg+BTEX+MTBE	ANALYSIS: TPH ss + BTEX	ANALYSIS: TOTAL Pb	TURNAROUND	SAMPLE CONDITION	LAB SAMPLE#
T1+T2-H2O	WATER	4		X	X		X	STANDARD		2364
T3-H2O		4		X	X		X			2365
T4-H2O		4				X				2366
T5,6-H2O		4		X	X	X	X			2367
T7,8-H2O		4		X	X		X			2368

SAMPLING COMPLETED	DATE 9/9/98	TIME 15:10	SAMPLING PERFORMED BY	DAVE A. SADOFF			
RELEASED BY	DATE 9/9/98	TIME 15:30	RECEIVED BY	Analytical Sciences MARK VALENTINI	DATE 9/9/98	TIME 15:3	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #				

APPENDIX F
PERMITS

(Revised 8/97)

ALAMEDA COUNTY FIRE DEPARTMENT

FIRE CODE REGULATED ACTIVITIES

Application and Permit

[ ] City of San Leandro [ ] City of Dublin [✓] Unincorporated Alamed.

TYPE OF PERMIT: UST REMOVAL - 8 TANKS

APPLICATION DATE: 9/1/98 **ACTIVITY DATE(S):** 9/3/98 – 9/11/98

LOCATION WHERE ACTIVITY TO BE CONDUCTED: 16301 E. 14TH ST., SAN LEANDRO

NAME OF ORGANIZATION OR INDIVIDUAL MAKING APPLICATION:

NAME: ENVIRONMENTAL BIO-SYSTEMS PHONE: (510)317-1455 CONTACT PERSON: DAVE SADOFF

ADDRESS: P.O. BOX 7171 CITY: SAN JOSE, CA ZIP: 95150-7171

CONTRACTOR INFORMATION (IF REQUIRED) - *ATTACH COPY OF WORKERS COMP AND BUSINESS LICENSE*

COMPANY NAME: ENVIRONMENTAL BIO-SYSTEMS, INC. PHONE: (510)317-1455

ADDRESS: P.O. BOX 7171 CITY: SAN JOSE, CA.

LICENSE #: A-HAZ 687236 CONTACT PERSON: DAVE SADOFF

DESCRIPTION OF ACTIVITY TO BE PERFORMED: - ATTACH COPIES OF REQUIRED LISTINGS, CERTIFICATES, ETC. TO FULLY EXPLAIN PROJECT. INSUFFICIENT INFORMATION OR DETAIL MAY DELAY APPROVAL OF PERMIT.

EXCAVATION, REMOVAL OF UST'S

ALL PERMITS ISSUED BY THE FIRE DEPARTMENT SHALL BE PRESUMED TO CONTAIN THE PROVISO THAT THE APPLICANT, HIS AGENTS AND EMPLOYEES SHALL CARRY OUT THE PROPOSED ACTIVITY IN COMPLIANCE WITH ALL THE REQUIREMNTS OF THE FIRE CODE AND ANY OTHER LAWS OR REGULATIONS APPLICABLE THERETO, WHETHER SPECIFIED OR NOT, AND IN COMPLETE ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. THIS PERMIT SHALL NOT BE CONSTRUED AS AUTHORITY TO CANCEL, VIOLATE OR SET ASIDE ANY PROVISIONS OF THE FIRE CODE AND SHALL NOT TAKE THE PLACE OF ANY LICENSE REQUIRED BY LAW. PERMITS ARE NOT TRANSFERABLE AND ANY CHANGE IN USE, OCCUPANCY, OR OPERATION OR OWNERSHIP SHALL REQUIRE A NEW PERMIT. PERMITS MAY BE SUSPENDED OR REVOKED FOR CAUSE AT ANY TIME.

I HEREBY AFFIRM ALL INFORMATION PROVIDED AS A PART OF THIS PERMIT APPLICATION IS TRUE AND CORRECT

Wm A. Sadoff 9/1/98

SIGNITURE OF APPLICANT DATE

SPECIAL PERMIT REQUIRMENTS MAY BE LISTED ON THE REVERSE SIDE.
COMPLIANCE WITH THESE REQUIREMENTS IS A CONDITION OF THIS PERMIT.

APPROVAL DATE: _____ Rejection Date: _____ Reviewed By: _____

EXPIRATION DATE: _____ Permit Fees Due: 360.00 Date Paid: _____

SIGNATURE OF INSPECTOR: _____ **DATE:** 9/1/98

(PERMIT NOT VALID WITHOUT APPROVED SIGNATURE)

ALAMEDA COUNTY FIRE DEPARTMENT

FIRE CODE REGULATED ACTIVITIES

Application and Permit

[ ] City of San Leandro [ ] City of Dublin [✓] Unincorporated Alameda County

TYPE OF PERMIT: AST Removal 20 Tanks

APPLICATION DATE: 9/1/98 **ACTIVITY DATE(S):** 9/3/98 - 9/11/98

LOCATION WHERE ACTIVITY TO BE CONDUCTED: 16301 E. 14th St., San Leandro

NAME OF ORGANIZATION OR INDIVIDUAL MAKING APPLICATION:

NAME: Environmental Bio-Systems PHONE: (510) 317-1455 CONTACT PERSON: Dave Sadoff

ADDRESS: P.O. Box 7171 CITY: San Jose, CA ZIP: 95150

CONTRACTOR INFORMATION (IF REQUIRED) - *ATTACH COPY OF WORKERS COMP AND BUSINESS LICENSE*

COMPANY NAME: Environmental Bio-Systems, Inc. PHONE: (510) 317-1455

ADDRESS: P.O. Box 7171 CITY: San Jose, CA

LICENSE #: A-HAZ 687236 CONTACT PERSON: Dave Sadoff

DESCRIPTION OF ACTIVITY TO BE PERFORMED: - ATTACH COPIES OF REQUIRED LISTINGS, CERTIFICATES, ETC. TO FULLY EXPLAIN PROJECT. INSUFFICIENT INFORMATION OR DETAIL MAY DELAY APPROVAL OF PERMIT.

Cold-cutting, removal of ASTs

ALL PERMITS ISSUED BY THE FIRE DEPARTMENT SHALL BE PRESUMED TO CONTAIN THE PROVISO THAT THE APPLICANT, HIS AGENTS AND EMPLOYEES SHALL CARRY OUT THE PROPOSED ACTIVITY IN COMPLIANCE WITH ALL THE REQUIREMNTS OF THE FIRE CODE AND ANY OTHER LAWS OR REGULATIONS APPLICABLE THERETO, WHETHER SPECIFIED OR NOT, AND IN COMPLETE ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. THIS PERMIT SHALL NOT BE CONSTRUED AS AUTHORITY TO CANCEL, VIOLATE OR SET ASIDE ANY PROVISIONS OF THE FIRE CODE AND SHALL NOT TAKE THE PLACE OF ANY LICENSE REQUIRED BY LAW. PERMITS ARE NOT TRANSFERABLE AND ANY CHANGE IN USE, OCCUPANCY, OR OPERATION OR OWNERSHIP SHALL REQUIRE A NEW PERMIT. PERMITS MAY BE SUSPENDED OR REVOKED FOR CAUSE AT ANY TIME.

I HEREBY AFFIRM ALL INFORMATION PROVIDED AS A PART OF THIS PERMIT APPLICATION IS TRUE AND CORRECT

Dave A. Sadoff — SIGNITURE OF APPLICANT

9/1/98 — DATE

SPECIAL PERMIT REQUIRMENTS MAY BE LISTED ON THE REVERSE SIDE.
COMPLIANCE WITH THESE REQUIREMENTS IS A CONDITION OF THIS PERMIT.

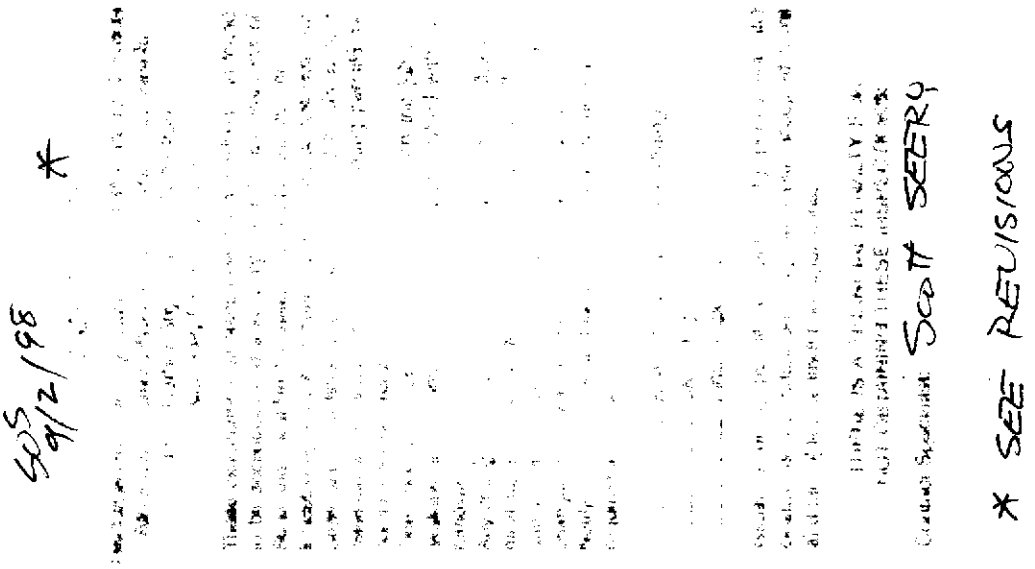
APPROVAL DATE: _____ Rejection Date: _____ Reviewed By: _____

EXPIRATION DATE: _____ Permit Fees Due: $840.00 Date Paid: _____

SIGNATURE OF INSPECTOR: _____ **DATE:** 9/1/98

(PERMIT NOT VALID WITHOUT APPROVED SIGNATURE)

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
ENVIRONMENTAL HEALTH SERVICES
1131 HARBOR BAY PARKWAY, RM 250
ALAMEDA, CA 94502-6577
PHONE # 510/567-6700



* SEE REVISIONS

SCOTT SEERY

9/2/98

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

JACK HOLLAND SR OIL CO, INC (SUSPENDED)

1. Name of Business Estate of Jack Holland, Sr.

   Business Owner or Contact Person **(PRINT)** ANN MARIE HOLLAND TIERS, Executor

2. Site Address 16301 E 14th ST.

   City SAN LEANDRO, CA Zip 94578 Phone _____

3. Mailing Address SAME

   City _____ Zip _____ Phone _____

4. Property Owner Estate of Jack Holland, Sr. , BARBARA HOLLAND

   Business Name (if applicable) _____

   Address 16301 E. 14th ST. (same address for both owners)

   City, State San Leandro, CA Zip 94578

5. Generator name under which tank will be manifested

   Estate of Jack Holland, Sr. AND/OR BARBARA HOLLAND

   EPA ID# under which tank will be manifested C A 0 0 0 1 0 8 5 2 4 0

6. Contractor ZACCOR COMPANIES, INC.

Address 2900 MAIN ST.

City ALAMEDA, CA 94501 Phone (510) 522-6210

License Type A, HAZ ID# 589237

7. Consultant (if applicable) ENVIRONMENTAL BIO-SYSTEMS, INC.

Address P.O. BOX 7171

City, State SAN JOSE, CA 95150-7171 Phone (408) 979-8600

8. Main Contact Person for Investigation (if applicable)

Name DAVE A. SADOFF Title PROJECT MGR., R.G., C.P.G.

Company ENVIRONMENTAL BIO-SYSTEMS, INC.

Phone (510) 317-1455

9. Number of underground tanks being closed with this plan 8

Length of piping being removed under this plan APPROX. 150 FEET

Total number of underground tanks at this facility (**confirmed with owner or operator) 8

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

**** Underground storage tanks must be handled as hazardous waste ****

a) Product/Residual Sludge/Rinsate Transporter

Name EVERGREEN ENVIRONMENTAL EPA I.D. No. CAD982413262

Hauler License No. 0242 License Exp. Date 7/99

Address 6880 SMITH AVENUE

City NEWARK State CA Zip 94560

b) Product/Residual Sludge/Rinsate Disposal Site

Name EVERGREEN ENVIRONMENTAL EPA ID# CAD980887418

Address 6880 SMITH AVENUE

City NEWARK State CA Zip 94560

c) Tank and Piping Transporter

Name Ecology Control Industries EPA I.D. No. CAD 982030173

Hauler License No. 1533 License Exp. Date 7/31/99

Address 255 Parr Blvd.

City Richmond State CA Zip 94801

d) Tank and Piping Disposal Site

Name Ecology Control Industries EPA I.D. No. CAD009466392

Address 255 Parr Blvd.

City Richmond State CA Zip 94801

11. Sample Collector

Name DAVE SADOFF

Company ENVIRONMENTAL BIO-SYSTEMS, INC.

Address P.O. BOX 7171

City SAN JOSE State CA Zip 95150 Phone (510)317-1455

12. Laboratory

Name ANALYTICAL SCIENCES

Address P.O. BOX 750336

City PETALUMA State CA Zip 94975-0336

State Certification No. ELAP # 2118

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

If yes, describe.

14. Describe methods to be used for rendering tank(s) inert:

DRY ICE PER FIRE DEPT. REQUIREMENTS

Also (SEE: July 15, 1998 "Hazard Alert" from Cal OSHA regarding power or pressure washing)

Before tanks are pumped out and inerted, all associated piping must be flushed back into the tank(s). All accessible piping must then be removed. Inaccessible piping must be permanently plugged using grout.

The Bay Area Air Quality Management District, 415/771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. **It is the contractor's responsibility to have a functional combustible gas indicator on-site to verify that the tank(s) is inerted.**

15. Tank History and Sampling Information *** **(see instructions)** ***

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Samples
Capacity	Use History include date last used (estimated)		
10,000 GAS	1960-1985	SOIL, ≤ 2' INTO NATIVE	BOTH ENDS, MIDDLE
10,000 GAS	1960-1985	"	"
10,000 GAS	1960-1985	"	"
5,000 KEROS.	1960-1985	"	"
5,000 KEROS.	1960-1985	"	"
5,000 DIES.	1960-1985	"	"
6,000 DIES	1960-1985	"	"
12,000 STOD.	1960-1985	"	"

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

Excavated/Stockpiled Soil	
Stockpiled Soil Volume (estimated) 50 YARDS (GAS USTs) 20 YARDS (DIESEL) 20 YARDS (KEROSENE) 10 YARDS (STODDARD)	Sampling Plan 4-POINT COMPOSITE 4-POINT COMPOSITE 4-POINT COMPOSITE 4-POINT COMPOSITE

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

Will the excavated soil be returned to the excavation immediately after tank removal? [ ] yes [X] no [ ] unknown

If yes, explain reasoning _____

_____

If unknown at this point in time, please be aware that **excavated soil may not be returned to the excavation without prior approval from this office. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling activities.**

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.

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

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
GASOLINE	5030	8015(M)	1.0 mg/kg
BTEX, MTBE	5030	8020 (MTBE CONFIRM 8260)	0.005 mg/kg
DIESEL	3550	8015(M)	1.0 mg/kg
KEROSENE	3550	8015(M)	1.0 mg/kg
STODDARD	3550	8015(M)	1.0 mg/kg
Total Pb	—	AA or ICAP	

18. Submit Worker's Compensation Certificate copy

Name of Insurer State Compensation Insurance Fund

19. Submit Plot Plan ***(See Instructions)***

20. Enclose Deposit (See Instructions)

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

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

23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one-B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner)

I declare that to the best of my knowledge and belief that 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 approval from the Environmental Protection Division 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.

CONTRACTOR INFORMATION

Name of Business ENVIRONMENTAL BIO-SYSTEMS, INC.

Name of Individual DAVE A. SADOFF

Signature Dave A. Sadoff Date 8/11/98

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business Estate of Jack Holland, Sr. & BARBARA HOLLAND

Name of Individual CO-TENANTS OWNERSHIP

Signature Barbara M. Holland Trustee Date 8/17/98

EXECUTRIX ESTATE OF JACK HOLLAND SR

INSTRUCTIONS

General Instructions

* Three (3) copies of this plan plus attachments and a deposit must be submitted to this Department.

* Any cutting into tanks requires local fire department approval.

* One complete copy of your approved plan must be at the construction site at all times; a copy of your approved plan must also be sent to the landowner.

* State of California Permit Application Forms A and B are to be submitted to this office. One Form A per site, one Form B for each removed tank.

Line Item Specific Instructions

2. SITE ADDRESS
Address at which closure is taking place.

5. EPA I.D. NO. under which the tanks will be manifested
EPA I.D. numbers may be obtained from the State Department of Toxic Substances Control, 916/324-1781.

6. CONTRACTOR
Prime contractor for the project.

10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES

a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.

c) Tanks must be hauled as hazardous waste.

d) This is the place where tanks will be taken for cleaning.

15. TANK HISTORY AND SAMPLING INFORMATION
Use History - This information is essential and must be accurate. Include tank installation date, products stored in the tank, **and the date when the tank was last used.**

Material to be sampled - e.g. water, oil, sludge, soil, etc.

Location and depth of samples - e.g. beneath the tank a maximum of two feet below the native soil/backfill interface, side wall at the high water mark, etc.

16. CHEMICAL METHODS AND ASSOCIATED DETECTION LIMITS
See attached Table 2.

17. SITE HEALTH AND SAFETY PLAN
A site specific Health and Safety plan must be submitted. We advocate the site health and safety plan include the following items, at a minimum:

a) The name and responsibilities of the site health and safety officer;

b) An outline of briefings to be held before work each day to appraise employees of site health and safety hazards;

c) Identification of health and safety hazards of each work task. Include potential fire, explosion, physical, and chemical hazards;

d) For each hazard, identify the action levels (contaminant concentrations in air) or physical conditions which will trigger changes in work habits to ensure workers are not exposed to unsafe chemical levels or physical conditions;

e) Description of the work habit changes triggered by the above action levels or physical conditions;

f) Frequency and types of air and personnel monitoring - along with the environmental sampling techniques and instrumentation - to be used to detect the above action levels. Include instrumentation maintenance and calibration methods and frequencies;

g) Confined space entry procedures (if applicable);

h) Decontamination procedures;

i) Measures to be taken to secure the site, excavation and stockpiled soil during and after work hours (e.g. barricades, caution tape, fencing, trench plates, plastic sheeting, security guards, etc.);

j) Spill containment/emergency/contingency plan. Be sure to include emergency phone numbers, the location of the phone nearest the site, and directions to the hospital nearest the site;

k) Documentation that all site workers have received the appropriate OSHA approved trainings and participate in appropriate medical surveillance per 29 CFR 1910.120; and

l) A page for employees to sign acknowledging that they have read and will comply with the site health and safety plan.

The safety plan must be distributed to all employees and contractors working in hazardous waste operations on site. **A complete copy of the site health and safety plan along with any standard operating procedures shall be on site and accessible at all times.**

NOTE: These requirements are excerpts from 29 CFR Part 1910.120(b)(4), Hazardous Waste Operations and Emergency Response; Final Rule, March 6, 1989. Safety plans of certain underground tank sites may need to meet the complete requirements of this Rule.

19. PLOT PLAN

The plan should consist of a scaled view of the facility at which the tank(s) are located and should include the following information:

a) Scale;

b) North Arrow;

c) Property Lines;

d) Location of all Structures;

e) Location of all relevant existing equipment including tanks and piping to be removed and dispensers;

f) Streets;

g) Underground conduits, sewers, water lines, utilities;

h) Existing wells (drinking, monitoring, etc.);

i) Depth to ground water; and

j) All existing tank(s) and piping in addition to the tank(s) being removed.

TABLE #2
RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR UNDERGROUND TANK LEAKS

HYDROCARBON LEAK	SOIL ANALYSIS	WATER ANALYSIS
Unknown Fuel	TPH G GCFID(5030) TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH G GCFID(5030) TPH D GCFID(3510) BTX&E 602, 624 or 8260
Leaded Gas	TPH G GCFID(5030) BTX&E 8020 OR 8240 TPH AND BTX&E 8260 TOTAL LEAD AA ------Optional------- TEL DHS-LUFT EDB DHS-AB1803	TPH G GCFID(5030) BTX&E 602 or 624 TOTAL LEAD AA TEL DHS-LUFT EDB DHS-AB1803
Unleaded Gas	TPH G GCFID(5030) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH G GCFID(5030) BTX&E 602, 624 or 8260
Diesel, Jet Fuel and Kerosene	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602, 624 or 8260
Fuel/Heating Oil	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602, 624 or 8260
Chlorinated Solvents	CL HC 8010 or 8240 BTX&E 8020 or 8240 CL HC AND BTX&E 8260	CL HC 601 or 624 BTX&E 602 or 624 CL HC AND BTX&E 8260
Non-chlorinated Solvents	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602 or 624 TPH and BTX&E 8260
Waste and Used Oil or Unknown (All analyses must be completed and submitted)	TPH G GCFID(5030) TPH D GCFID(3550) TPH AND BTX&E 8260 O & G 5520 D & F BTX&E 8020 or 8240 CL HC 8010 or 8240	TPH G GCFID(5030) TPH D GCFID(3510 O & G 5520 B & F BTX&E 602, 624 or 8260 CL HC 601 or 624
	ICAP or AA TO DETECT METALS: Cd, Cr, Pb, Zn, Ni METHOD 8270 FOR SOIL OR WATER TO DETECT:	
	PCB*	PCB
	PCP*	PCP
	PNA	PNA
	CREOSOTE	CREOSOTE

* If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)

Reference: Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, 10 August 1990

20. DEPOSIT

A deposit, payable to "Treasurer of Alameda County" for the amount indicated on the Alameda County Underground Storage Tank Fee Schedule, must accompany the plans.

21. Blank Unauthorized Leak/Contamination Site Report forms may be obtained in limited quantities from this office or from the San Francisco Bay Regional Water Quality Control Board (510/286-1255). Larger quantities may be obtained directly from the State Water Resources Control Board at (916) 739-2421.

22. TANK CLOSURE REPORT

The tank closure report should contain the following information:

a) General description of the closure activities;

b) Description of tank, fittings and piping conditions. Indicate tank size and former contents; note any corrosion, pitting, holes, etc.;

c) Description of the excavation itself. Include the tank and excavation depth, a log of the stratigraphic units encountered within the excavation, a description of root holes or other potential contaminant pathways, the depth to any observed ground water, descriptions and locations of stained or odor-bearing soil, and descriptions of any observed free product or sheen;

d) Detailed description of sampling methods; i.e. backhoe bucket, drive sampler, bailer, bottle(s), sleeves

e) Description of any remedial measures conducted at the time of tank removal;

f) To-scale figures showing the excavation size and depth, nearby buildings, sample locations and depths, and tank and piping locations. Include a copy of the plot plan prepared for the Tank Closure Plan under item 19;

g) Chain of custody records;

h) Copies of signed laboratory reports;

i) Copies of "TSDF to Generator" Manifests for all hazardous wastes hauled offsite (sludge, rinsate, tanks and piping, contaminated soil, etc.); and

j) Documentation of the disposal of/and volume and final destination of all non-manifested contaminated soil disposed offsite.

EXPLANATION FOR TABLE #2: MINIMUM VERIFICATION ANALYSIS

1. OTHER METHODOLOGIES are continually being developed and as methods are accepted by EPA or DHS, they also can be used.

2. For DRINKING WATER SOURCES, EPA recommends that the 500 series for volatile organics be used in preference to the 600 series because the detection limits are lower and the QA/QC is better.

3. APPROPRIATE STANDARDS for the materials stored in the tank are to be used for all analyses on Table #2. For instance, seasonally, there may be five different jet fuel mixtures to be considered.

4. To AVOID FALSE POSITIVE detection of benzene, benzene-free solvents are to be used.

5. TOTAL PETROLEUM HYDROCARBONS (TPH) as gasoline (G) and diesel (D) ranges (volatile and extractible, respectively) are to be analyzed and characterized by GCFID with a fused capillary column and prepared by EPA method 5030 (purge and trap) for volatile hydro- carbons, or extracted by sonication using 3550 methodology for extractable hydrocarbons. Fused capillary columns are preferred to packed columns; a packed column may be used as a "first cut" with "dirty" samples or once the hydrocarbons have been characterized and proper QA/QC is followed.

6. TETRAETHYL LEAD (TEL) analysis may be required if total lead is detected unless the determination is made that the total lead concentration is geogenic (naturally occurring).

7. CHLORINATED HYDROCARBONS (CL HC) AND BENZENE, TOLUENE, XYLENE AND ETHYLBENZENE (BTX&E) are analyzed in soil by EPA methods 8010 and 8020 respectively, (or 8240) and in water, 601 and 602, respectively (or 624).

8. OIL AND GREASE (O & G) may be used when heavy, straight chain hydrocarbons may be present. Infrared analysis by method 418.1 may also be acceptable for O & G if proper standards are used. **Standard Methods" 17th Edition, 1989, has changed the 503 series to 5520.**

9. **PRACTICAL QUANTITATION REPORTING LIMITS are influenced by matrix problems and laboratory QA/QC procedures. Following are the Practical Quantitation Reporting Limits:**

	SOIL PPM	WATER PPB
TPH G	1.0	50.0
TPH D	1.0	50.0
BTX&E	0.005	0.5
O & G	50.0	5,000.0

Based upon a Regional Board survey of Department of Health Services Certified Laboratories, the Practical Quantitation Reporting Limits are attainable by a majority of laboratories with the exception of diesel fuel in soils. The Diesel Practical Quantitation Reporting Limits, shown by the survey, are:

ROUTINE	MODIFIED PROTOCOL
≤ 10 ppm (42%)	≤ 10 ppm (10%)
≤ 5 ppm (19%)	≤ 5 ppm (21%)
≤ 1 ppm (35%)	≤ 1 ppm (60%)

When the Practical Quantitation Reporting Limits are not achievable, an explanation of the problem is to be submitted on the laboratory data sheets.

10. LABORATORY DATA SHEETS are to be signed and submitted and include the laboratory's assessment of the condition of the samples on receipt including temperature, suitable container type, air bubbles present/absent in VOA bottles, proper preservation, etc. The sheets are to include the dates sampled, submitted, prepared for analysis, and analyzed.

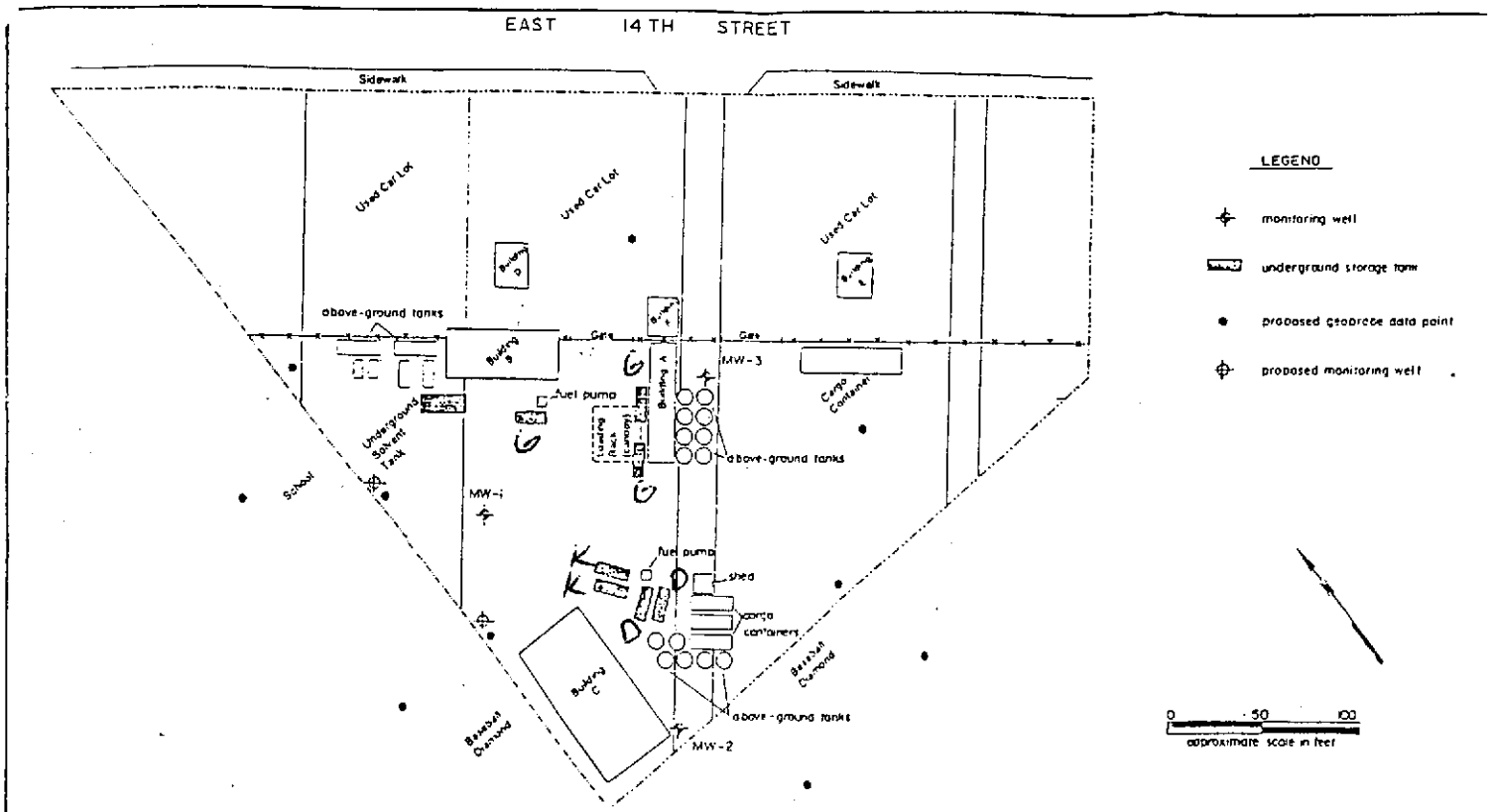
11. IF PEAKS ARE FOUND, when running samples, that do not conform to the standard, laboratories are to report the peaks, including any unknown complex mixtures that elute at times varying from the standards. Recognizing that these mixtures may be contrary to the standard, they may not be readily identified; however, they are to be reported. At the discretion of the LIA or Regional Board the following information is to be contained in the laboratory report:

    The relative retention time for the unknown peak(s) relative to the reference peak in the standard, copies of the chroma- togram(s), the type of column used, initial temperature, temperature program is C/minute, and the final temperature.

12. REPORTING LIMITS FOR TPH are: gasoline standard ≤ 20 carbon atoms, diesel and jet fuel (kerosene) standard ≤ 50 carbon atoms. It is not necessary to continue the chromatography beyond the limit, standard, or EPA/DHS method protocol (whichever time is greater).

EPILOGUE

ADDITIVES: Major oil companies are being encouraged or required by the federal government to reformulate gasoline as cleaner burning fuels to reduce air emissions. MTBE (Methyl-tertiary butyl ether), ETHANOL (ethyl alcohol), and other chemicals may be added to reformulate gasolines to increase the oxygen content in the fuel and thereby decrease undesirable emissions (about four percent with MTBE). MTBE and ethanol are, for practical purposes, soluble in water. The removal from the water column will be difficult. Other compounds are being added by the oil companies for various purposes. The refinements for detection and analysis for all of these additives are still being worked out. If you have any questions about the methodology, please call your Regional Board representative.



G = GAS
K = KEROSENE
D = DIESEL

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

Submitted
FAX 8/24/98

REGULATION 8, RULE 40
Aeration of Contaminated Soil and Removal of Underground Storage Tanks

NOTIFICATION FORM
X Removal or Replacement of Tanks
___ Excavation of Contaminated Soil

SITE INFORMATION

SITE ADDRESS 16301 East 14th St.
CITY, STATE San Leandro, Ca ZIP 94577
OWNER NAME Jack + Barbra Holland - Holland Oil
SPECIFIC LOCATION OF PROJECT 16301 East 14th St

TANK REMOVAL
SCHEDULED STARTUP DATE 8-31-98
VAPORS REMOVED BY:
[ ] WATER WASH
[X] VAPOR FREEING (CO^2)
[ ] VENTILATION

CONTAMINATED SOIL EXCAVATION
SCHEDULED STARTUP DATE _____
STOCKPILES WILL BE COVERED? YES ____ NO ____
ALTERNATIVE METHOD OF AERATION (DESCRIBE BELOW):
_____
(MAY REQUIRE PERMIT)

CONTRACTOR INFORMATION

NAME ZACCOR COMPANIES Inc. CONTACT Helen Mar Gary Z
ADDRESS 2900 Main St. PHONE (510) 522-6210
CITY, STATE, ZIP Alameda, Ca 94501

CONSULTANT INFORMATION
(IF APPLICABLE)

NAME EBS CONTACT Tim Babcock
ADDRESS PO Box 7171 PHONE (408) 979-8600
CITY, STATE, ZIP San Jose, Ca 95150-7171

FOR OFFICE USE ONLY

DATE RECEIVED FAX _____ BY _____ (init.)
DATE POSTMARKED _____ BY _____ (init.)
CC: INSPECTOR NO. _____ DATE _____ BY _____ (init.)
UPDATE: CONTACT NAME _____ DATE _____ BY _____ (init.)
BAAQMD N # _____ DATA ENTRY _____

• See reverse for instructions

J# 28748

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

Date: Oct 1, 1998

ID number: 7761

TO: Zaccor Corp.
2900 Main Street
Alameda, CA 94501

ATTN:

Asbestos Demolition & Renovation Notification:

J# 28748 Site Owner - Jack & Barbara Holland
Job Site - 16301 E 14th Street
San Leandro, CA 94577
same address

Start/End Dates - Aug 31, 1998 to Sep 14, 1998
Reference Number - 16301 E 14th

**** A C K N O W L E D G E M E N T ****

==========
>>>>>>>> THIS IS NOT A BILL <<<<<<<<<
==========

This is to acknowledge full receipt of the asbestos operation fee required by the District's Regulation 3.

Invoice# 15388, paid $150.00, CH# 16898

---- KEEP THIS COPY FOR YOUR RECORDS ---

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

J# 28748

AUG 15, 1998

Zaccor Corp.
2900 Main Street
Alameda, CA 94501

ACKNOWLEDGEMENT

Bay Area Air Quality Management District acknowledges receipt of your Asbestos Demolition/ Renovation Plan described as: Demolition

site address	16301 E 14th Street San Leandro, CA 94577
start date	Aug 31, 1998
completion date	Sep 14, 1998
removal amounts	0 **linear ft.** 0 **square ft. friable acm**

Should it become necessary to revise this plan, please do so in the spaces provided below and immediately send a copy to the District by fax or by mail. Do not revise notifications which are exempt or for which you have not yet received acknowledgement.

ASBESTOS NOTIFICATION REVISION BAAQMD J# 28748

revision #	start date	completion date	removal amounts
1	__/__/__	__/__/__	_____ lin. ft. _____ sq. ft.
2	__/__/__	__/__/__	_____ lin. ft. _____ sq. ft.
3	__/__/__	__/__/__	_____ lin. ft. _____ sq. ft.
4	__/__/__	__/__/__	_____ lin. ft. _____ sq. ft.
5	__/__/__	__/__/__	_____ lin. ft. _____ sq. ft.

NOTE: This form is not intended as a verification of either the completeness of your original notification or of its compliance with District Regulation 11-2 .

APPENDIX G
ASBESTOS SURVEY

HMA INC
HAZARDOUS MATERIALS ASSESSMENT. INC.

Tim Babcock
Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171

August 13, 1998

RE: ASBESTOS SURVEY #8092

On August 12, 1998, HMA was asked to provide an inspection and report on present and/or potential asbestos hazards relative to asbestos containing building materials (ACBM) of client selected segments of a project site located at 16301 East 14th Street, San Leandro, California.

PROTOCOL:

It was reported that selected portions of designated structures have been scheduled for demolition. Therefore, the survey was conducted in conformance with the Bay Area Air Quality Management District's Regulation 11, Rule 2, Section 303.8. The survey was conducted by an asbestos consultant who has been certified by the State of California's Division of Occupational Safety and Health, and accredited under the EPA AHERA program for building inspection and management planning for asbestos. PLM laboratory analysis was conducted by an independent NVLAP accredited facility.

INSPECTION and SAMPLES:

The site at the listed address consists of at least four (4) buildings, three of which were identified on the exterior with the listed address numbers. One building (south) was a multi-component wood frame structure housing an auto repair facility; the north building was similar to a multiple component wood frame single family residence; the east building was a metal warehouse building; and the fourth building was a small, 8 foot by 10 foot wood frame building between tanks T-6 and T-8. Additionally there was a fuel loading platform with overhead canopy; at least 21 above ground storage tanks; mobile tanks and/or tanker trucks; and one or more mobile residential facilities.

The fuel loading canopy, the small 8 foot by 10 foot fourth building, and the western end of the first (or South) building were the only structures identified as subject to potential demolition. All other building structures and/or portable structures are excluded from this

1933 Davis Street, Suite 303, San Leandro, California 94577-1259
Office (510) 638-4801 ○○○○○ Fax (510) 638-4803

survey.

NOTE: There was an abundance of other materials and items on this site which are outside the general category of *building materials* in use as such in the identified structures, ranging from cement bags to automobile parts. Items not in use as building material components in the identified structures are not included in this survey.

Building One:

Building One (1) was a wood frame structure built in several stages or components. The western end roofing was a composite panel material which also extended to the southern siding of the western end. Results of laboratory analysis were reported as no asbestos detected. The eastern end, north side roofing was a green composite panel. Analysis found no asbestos detected. The eastern end, south side siding was a black composite panel (with some green paint overlay). Analysis identified no asbestos detected.

Only the western half of this building was accessible for inspection. The interior wall (see diagram for sample 8092-09) was covered with approximately 5 square feet of gray moisture barrier paper. Laboratory findings were no asbestos detected.

No hot water heater was identified.

No piping insulation was identified.

No heating system was present.

No windows (window grout) was present.

Flooring was concrete/dirt.

Building Four:

The small 8 foot by 10 foot building was wood frame with wood siding and composition shingle roof. Results of analysis of the roofing were reported as no asbestos detected.

Interior was wood with a small amount of remaining wood panel. Flooring was rotted wood.

No other suspect materials were identified.

Fuel dock:

The fuel dock was a wood platform, with an overhead canopy of corrugated metal. Old fueling hoses were abraded, with fibrous cores exposed. Sample analysis found no asbestos detected.

No piping insulation was present.

No other suspect building materials were identified.

Tanks:

21 above ground storage tanks were located on the site (exclusive of portable tanks and/or small tanks of less than 500 gallon capacity). Tank T-6 was insulated with a black tar substance with fibrous binder component. Sample analysis found no asbestos detected.

Tanks T-1 and T-2 each had a tar-based coating on the exposed eastern side. Analysis indicated no asbestos detected on either tank.

No other structures or portions of structures were reported to be subject to demolition, therefore were not included in the survey.

SUMMARY

Samples were collected of the suspect materials and none were found to contain greater than 1% asbestos.

Further, no materials sampled were found with asbestos content greater than 0.1%.

If there is additional information needed or if we can be of further assistance please feel free to contact us.

Sincerely,

Scott W. Compton
President
Certified Asbestos Consultant 92-0018

* The inspection and inspection report is for the sole use and benefit of Client and is not intended for use by anyone but Client. Under no circumstances shall the inspection or report be for the benefit of any third party.
Note: Only those materials with greater than 1% asbestos content are considered to be asbestos for purposes of EPA and BAAQMD regulations for demolition, renovation and disposal. CAL-OSHA, however, has issued an interpretive letter indicating that they will require those materials with greater than 0.1% asbestos content to be removed by a Cal-OSHA registered abatement contractor, even though Class I, II, III or IV asbestos abatement procedures are not required.

HMA INC
HAZARDOUS MATERIALS ASSESSMENT, INC.

Tim Babcock
Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171

August 13, 1998

RE: ASBESTOS SURVEY #8092

On August 12, 1998, HMA collected bulk samples of material and was asked to obtain laboratory analysis for possible asbestos content.

Analysis was performed by an independent NVLAP accredited laboratory and results are reported as:

Sample No.	Material	Area	% Asbestos[1]	Type
8092-01	shingle	small green building	none detected	
8092-02	coating	tank T-6	none detected	
8092-03	coating	tank T-1	none detected	
8092-04	coating	tank T-2	none detected	
8092-05	shingle	gray comp. bldg 1 west	none detected	
8092-06	fuel hose	fuel dock	none detected	
8092-07	shingle	green comp. bldg 1 NE	none detected	
8092-08	shingle	black comp. bldg 1 SE	none detected	
8092-09	tar paper	gray tarpaper, bldg 1	none detected	

If there is additional information required, or if we can be of further assistance, please feel free to contact us.

Sincerely,

Scott W. Compton
Certified Asbestos Consultant 92-0018

1 Comments: Analysis employs Polarized Light Microscopy, and is performed by an analyst qualified under the EPA bulk asbestos proficiency testing program at an NVLAP accredited laboratory. In cases where sample analysis finds asbestos present, but in concentrations of less than one percent (<1%), such samples are designated at "trace" amounts.

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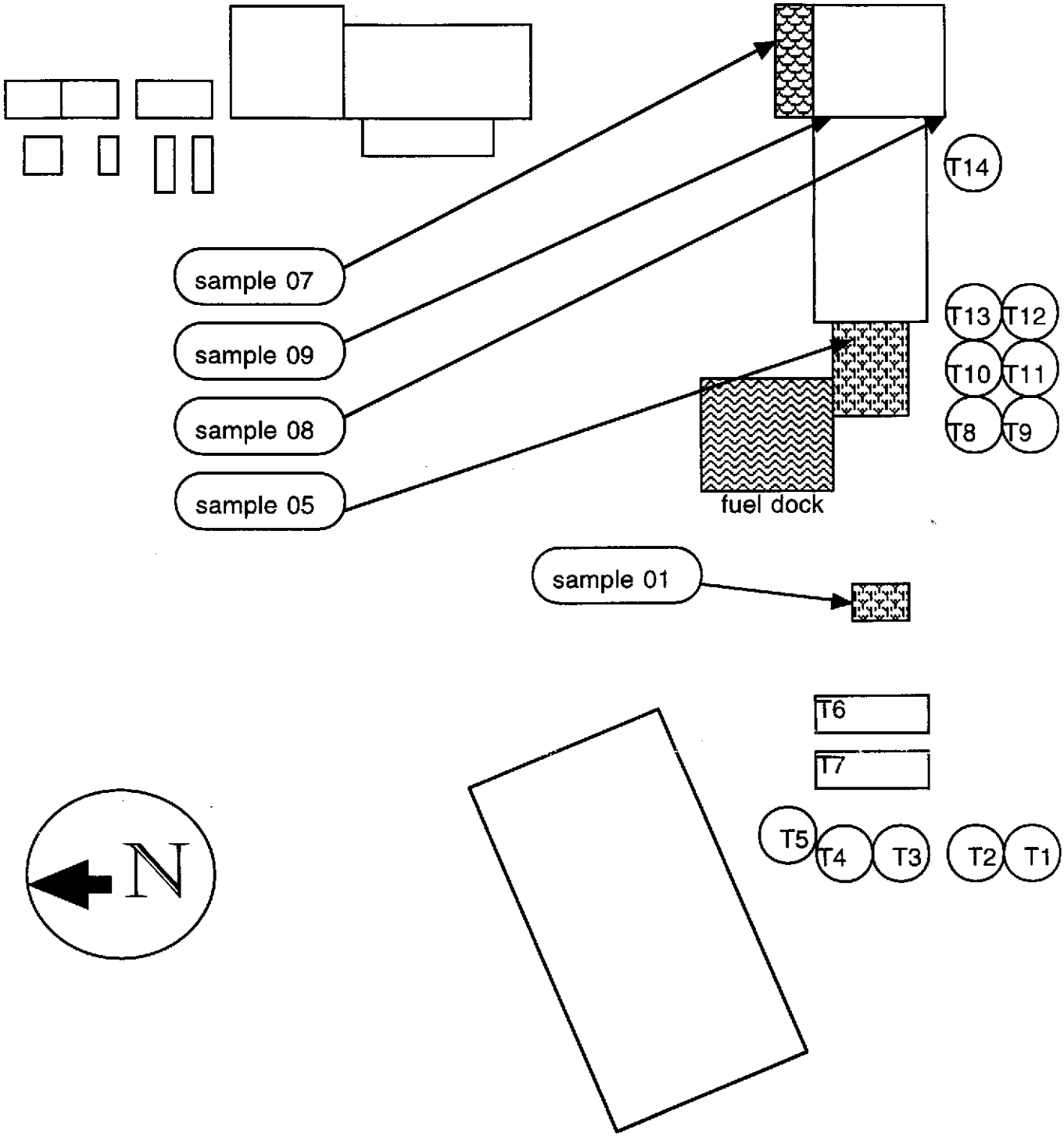
HMA
Project 8092
Schematic, no scale

East 14th Street



APPENDIX H
ACHCSA INSPECTION REPORT

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

II, III

Site ID # 2423 Site Name Holland Oil Today's Date 7/7/98

Site Address 6201 E. 14th St.

City San Leandro Zip 94578 Phone

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

Inspection Categories:

____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials
____ III. Underground Storage Tanks

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

Comments:

Contact Tom Sudhoff II

Title EHS Prod. Mgr. II

Signature

II, III

Inspector

Signature

white	-env.health
yellow	-facility
pink	-files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

Hazardous Materials Inspection Form

II, III

Site ID # 2423 Site Name ______ Today's Date 7/7/95

Site Address 16301 E 14th St

City S Leandro Zip 94575 Phone ______

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

Inspection Categories:

_____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER

_____ ~~II~~. Hazardous Materials Business Plan, Acutely Hazardous Materials

__✓__ III. Underground Storage Tanks

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

Comments:

[illegible]

the T4 excavation, and [illegible]

sampling as follows. (T1)(T2) [illegible]

(T4) - 2 soil, 1 GW, (T5)(T6) [illegible]

Analysis (T1)(T2)(T3)(T5)(T6)(T7)(T8) - [illegible]

(T4) - TPH-SS BTEX total Pb

II, III

Contact [illegible]

Title EGS [illegible]

Signature [illegible]

Inspector [illegible]

Signature [illegible]

1

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

II, III

Site ID # 2423 Site Name Texaco Today's Date 9/9/98

Site Address 16301 E 14th St

City S Leandro Zip 94578 Phone _____

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

Inspection Categories:

____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials
__✓__ III. Underground Storage Tanks

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

Comments:

Contact Dave Sidoff

Title EBS Proj mngr

Signature _____

Inspector _____

Signature _____

II, III