CLEARWATER
GROUP
Environmental Services

January 10, 2007

Dr. Lowell Shira
Assistant Superintendent
San Lorenzo Unified School District
15510 Usher Street
San Lorenzo, California 94580

Via email: lshira@slzusd.org

Re: Access agreement to drill six environmental soil borings on District property (Edendale Middle School grounds). Alameda County Health Care Services, Environmental Protection (ACEH) requested environmental investigation of the former Holland Oil site.

Subject: ACEH Fuel Leak Case No. RO0000212, Holland Oil, 16301 14th Street, San Leandro, CA (Estate of Jack Holland represented by Mr. Edward Martins, atty., and Mrs. Ann Marie Holland Tiers, executrix)

Dear Dr. Shira:

Clearwater Group (Clearwater) has been engaged by Mrs. Ann Marie Holland Tiers to perform an environmental investigation of the former Holland Oil site, at 16301 East 14th Street, San Leandro, CA. The investigation has progressed from an on-site subsurface investigation to an on- and off-site subsurface investigation; the objective is to assess potential groundwater contamination moving off-site. (See **Attachment A**, letter of October 28, 2005, from ACEH.) The Holland Oil site is located adjacent to Edendale Middle School. As part of the investigation, ACEH requests that six soil borings be drilled on the Edendale School grounds, near its property line with the Holland Oil and Endo's Auto Repair properties.

The ACEH case number is RO0000212, and the regulatory contact at ACEH is Mr. Jerry Wickham, Professional Geologist (PG) (510-567-6791). Please see **Attachment A**, a letter dated June 7, 2006, from the ACEH requesting the environmental investigation.

Clearwater, on behalf of the client, requests that the San Lorenzo Unified School District grant access to Clearwater and its subcontractor to enter and drive across the school

229 Tewksbury Avenue ◆ Point Richmond, California 94801 ◆ Telephone: 510-307-9943 ◆ Fax: 510-232-2823

grounds, drill six soil borings, and collect soil and groundwater samples from those borings located on the school property. We have attached an aerial photograph with the proposed boring locations indicated as well as a parcel map with the same markings (**Attachment B**) for your ease in identifying the work area.

Also attached (**Attachment C**) is a copy of Clearwater's Soil and Groundwater Investigation Workplan Addendum. The Workplan Addendum updates a previous Environmental Bio-Systems, Inc. Workplan for the site (**Attachment D**). Clearwater estimates that the borings can be completed in one or two days. A Clearwater PG will be on site to direct and document the field work. Also attached is **Attachment E**, a Site Safety Plan, which Clearwater prepared specifically for the proposed upcoming field work.

The drilling subcontractor will use a Geoprobe drill rig soil sampling system mounted on a pick-up truck to drive a 2-inch diameter probe (with acetate sleeves) into the ground, to collect the soil samples. After the soil samples are collected, the probe is withdrawn and the boring is grouted with cement to approximately two feet below the ground surface. The ground surface will be restored to its original condition. We propose to fill the hole to the ground surface with a sand and soil mixture to match the site conditions. ACEH and Alameda County Public Works Agency (ACPWA) inspectors will witness the soil boring grouting procedures. The drill rig is mounted in a four-wheel-drive truck and is heavy enough to leave impressions in soft surfaces. Any buried irrigation systems which could be encountered should be identified prior to field work so that the irrigation piping can be avoided and remain intact during the drilling event. If the school is in session, the field work can be scheduled on a weekend or teacher improvement day.

We are accustomed to supplying property owners, such as the San Lorenzo Unified School District, with an additionally insured provision to the Insurance Certificate and would need your guidance on language for that (see **Attachment F** for the forms). Clearwater is in the process of selecting a state-licensed drilling subcontractor to perform the borings. The subcontractor will have a State C-57 license and carry their own insurance, copies of which can be provided to the district once the subcontractor has been selected.

We have attached a template access agreement for your use (**Attachment G**). At your earliest possible convenience we need a response on the following: 1) How soon could we expect a completed access agreement and 2) the District's edit to the document so that work can commence promptly. Please address all correspondence to me with a copy to Mr. Edward Martins, the attorney for the Estate, and Mr. Wickham, the regulator at ACEH overseeing the work on the site.

If you have any questions or concerns, I can be contacted at 510-307-9943, ext. 237.

CLEARWATER
GROUP
Environmental Services

Sincerely,
CLEARWATER GROUP

Robert L. Nelson, PG #6270, CEG #2087
Senior Geologist
rnelson@clearwatergroup.com

Cc: Mr. Edward Martins
Atty. for the Estate of Jack Holland, Sr.
Edward E. Martins, Inc.
1164 A Street
Hayward, CA 94541

Mr. Jerry Wickham, PG,
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Attachments:

A: Letters from Alameda County Environmental Health dated June 7, 2006, and October 28, 2005

B: Google Earth Photograph with Proposed Boring Locations and parcel map with the same markings

C: Workplan Addendum, Response to Technical Comments Regarding the Environmental Bio-Systems, Inc Document Entitled "WorkPlan: Additional Subsurface Investigation Groundwater Monitoring Well Installation", May 24, 2006, Clearwater Group

D: Work Plan: Additional Subsurface Investigation Ground Water Monitoring Well Installation, March 3, 2003, Environmental Bio-Systems, Inc.

E: Site Safety Plan, Additional Subsurface Investigation and Groundwater Monitoring Well Installation, May 24, 2006, Clearwater Group

F: Insurance Certificate and Additionally Insured Request Form
Request for information Form

G: Draft Access Agreement

ATTACHMENT A

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

October 28, 2005

Ms. Ann Marie Holland Tiers
Estate of Jack Holland
1498 Hamrick Lane
Hayward, CA 94544

Ms. Barbara Holland
20993 Foothill Road
Hayward, CA 94541

Subject: Fuel Leak Case No. RO0000212, Holland Oil, 16301 East 14th Street, San Leandro, CA

Dear Ms. Tiers and Ms. Holland:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the subject site and the document entitled, "Work Plan: Additional Subsurface Investigation Groundwater Monitoring Well Installation," dated March 3, 2003 and prepared by Environmental Bio-systems, Inc. The Work Plan presents plans for an additional subsurface investigation of the above-referenced site to include soil borings and monitoring well installation.

ACEH concurs with the proposed scope of work provided that the technical comments below are fully addressed. We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

TECHNICAL COMMENTS

1. **Proposed Soil Boring Locations.** ACEH concurs with the proposed boring locations but requests that borings be added in the western (downgradient) portion of the site. In order to assess the extent of soil contamination near the western boundary of the site and to assess potential groundwater contamination moving off-site, a transect of direct push borings is to be located near the western property boundary. Please include one additional boring between proposed locations SC54 and SC50, one additional boring between proposed locations SC50 and SC55, and one additional boring south of proposed location SC55. Please submit a revised map of proposed sampling locations for ACEH approval prior to field activities.

2. **Laboratory Analysis of Soil Samples.** The Work Plan indicates, "at least one soil sample will be submitted for laboratory analyses from each borehole just above the soil/groundwater interface." ACEH requests that soil samples collected from depths of 2 feet bgs, 5 feet bgs, and the capillary fringe be submitted for laboratory analyses. In addition, ACEH requests that soil samples be submitted for laboratory analyses for all depth intervals where staining, odor, or elevated PID readings are observed. If staining, odor, or elevated PID readings are observed over an interval of several feet, a sufficient number of soil samples from this interval should be submitted for laboratory analyses to characterize the contamination within this

interval. Please include results in the Soil and Groundwater Investigation Report requested below.

3. **Grab Groundwater Samples in Direct Push Soil Borings.** The Work Plan is not clear regarding the collection of grab groundwater samples from direct push soil borings. Section 5.1 entitled "Drilling" states that "Eleven direct push technology (DPT) soil and groundwater samples will be collected designated SC45 to SC55." However, there is no description of the method for groundwater sampling from DPT borings in the remainder of the Work Plan. ACEH requests that grab groundwater samples be collected within 5 feet of the water table from each direct push soil boring. Please submit a description of the proposed method for grab groundwater sampling for ACEH approval prior to field activities.

4. **Vertical Delineation.** The Work Plan does not include a scope of work to characterize the vertical extent of contamination. ACEH requests that, at a minimum, three borings be extended to a depth of approximately 40 feet below ground surface to characterize the vertical extent of soil and groundwater contamination. Please propose at least two locations within areas of known shallow contamination and one location within the western portion of the site. Soils are to be continuously sampled and logged to assess the vertical extent of contamination. The soil boring logs are to be used to target coarse-grained layers below the water table for depth-discrete groundwater sampling. Each coarse-grained layer that may represent a significant contaminant migration pathway is to be targeted for depth-discrete groundwater sampling. Depth-discrete groundwater samples are to be collected in a boring(s) adjacent to the logged soil boring using techniques that will prevent cross-contamination of separate water-bearing zones and contamination of the depth-discrete groundwater sample by contaminated groundwater from a shallower interval. Please present the proposed locations for vertical delineation on the revised sample location map requested in technical comment 1 and submit a description of the proposed method for depth-discrete groundwater sampling for ACEH approval prior to field activities.

5. **Monitoring Well Installation.** ACEH concurs with the proposed installation of monitoring wells MW-6 and MW-7. However, the screened intervals for these wells are not to exceed 10 feet in length. The need to install monitoring wells MW-8 through MW-10 will be evaluated based upon the results of grab groundwater sampling along the western boundary of the property.

6. **Laboratory Analyses.** Due to potentially higher turbidity, ACEH does not recommend that grab groundwater samples be analyzed for PCBs, SVOCs, or total oil and grease. Please include 1,2-dichloroethane and ethylene dibromide as analytes for soil and groundwater samples. Please include lead as an analyte for soil samples. Please provide a revised summary of planned analytes for soil and groundwater samples for ACEH approval prior to field activities.

7. **Groundwater Monitoring.** Following implementation of the proposed subsurface characterization, quarterly groundwater monitoring will be required for this site.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Jerry Wickham), according to the following schedule:

- **March 23, 2006** – Soil and Groundwater Investigation Report
- **60 days following regulatory approval of Soil and Groundwater Investigation Report** – Corrective Action Plan

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to

present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham

Jerry Wickham, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Alyce Sandbach, Deputy District Attorney, Consumer & Environmental Protection Division, 7677 Oakport Street, Suite 400, Oakland, CA 94502-6577

Edward Martins, Law Offices of Edward Martins, 22698 Mission Blvd., Hayward, CA 94541

Hal Reiland, Reiland and Reiland, P.O. Box 5490, Pleasanton, CA 94566

James Jacobs, Environmental Bio-Systems, Inc, 707 View Point Road, Mill Valley, CA 94941

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)
Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. This e-government initiative is aimed at making our programs more effective and efficient. The electronic copy is intended to replace the need for a paper copy and is expected to be relied upon for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted as **a single portable document format (PDF) with no password protection**. (If you cannot submit in PDF format, please check with us to see if we can accommodate your report format).
- It is **preferable** that reports be converted to PDF format from their original format, (E.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **should** be included and **must** have either original or electronic signature. Alternatively, the paper copy of the signature page and perjury statement can be mailed separately.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**. If you cannot comply with this you may continue to submit paper documents.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date
  (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

1. Obtain User Name and Password:
   - Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
     a) Send an e-mail to dehloptoxic@acgov.org
        or
     b) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
   - In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses,** and the **Case Numbers (RO# available in Geotracker) you will be posting for.**
   - Note: Both the User Name and Password are Case Sensitive.

2. Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+) or equivalent browser, go to ftp://alcoftp1.acgov.org
   b) Click on File, then on Login As.
   c) Enter your User Name and Password.
      Note: Both are Case Sensitive.
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3. Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail
      - Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org
        (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**.
      (e.g., Subject: RO1234 Report Upload)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

June 7, 2006

Ms. Ann Marie Holland Tiers
Estate of Jack Holland
1498 Hamrick Lane
Hayward, CA 94544

Ms. Barbara Holland
20993 Foothill Road
Hayward, CA 94541

Subject: Fuel Leak Case No. RO0000212, Holland Oil, 16301 East 14th Street, San Leandro, CA – Work Plan Approval

Dear Ms. Tiers and Ms. Holland:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the subject site and the document entitled, "Workplan Addendum," dated June 5, 2006, which was prepared on your behalf by Clearwater Group. This Workplan Addendum presents responses to ACEH technical comments (dated October 28, 2005) on the previous Workplan entitled, "Work Plan: Additional Subsurface Investigation Groundwater Monitoring Well Installation," dated March 3, 2003 and prepared by Environmental Bio-systems, Inc. The "Workplan Addendum," dated June 5, 2006, adequately incorporates or addresses the technical comments in our October 28, 2005 correspondence.

Due to the lack of compliance with previous ACEH requests, ACEH recommended in May 23, 2006 correspondence that the Underground Storage Tank Cleanup Fund no longer reimburse you for future work until the site is brought back into compliance. Based on the submittal of an approved Workplan Addendum, the case has been brought back into compliance with ACEH requests. In order for the case to remain in compliance, the proposed field investigation must be initiated by July 24, 2006 and a Soil and Groundwater Investigation Report submitted by October 7, 2006. Please provide 72-hour advance written notification to this office (e-mail preferred to jerry.wickham@acgov.org) prior to the start of field activities.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **October 7, 2006** – Soil and Groundwater Investigation Report

- **November 15, 2006** – Quarterly Groundwater Monitoring Report – Third Quarter 2006
- **February 15, 2007** – Quarterly Groundwater Monitoring Report – Fourth Quarter 2006

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature,

and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Alyce Sandbach, Deputy District Attorney, Consumer & Environmental Protection Division, 7677 Oakport Street, Suite 400, Oakland, CA 94502-6577

Sunil Ramdass, SWRCB Cleanup Fund, 1001 I Street, 17th floor, Sacramento, CA 95814-2828

Shari Knierem, SWRCB Cleanup Fund, 1001 I Street, 17th floor, Sacramento, CA 95814-2828

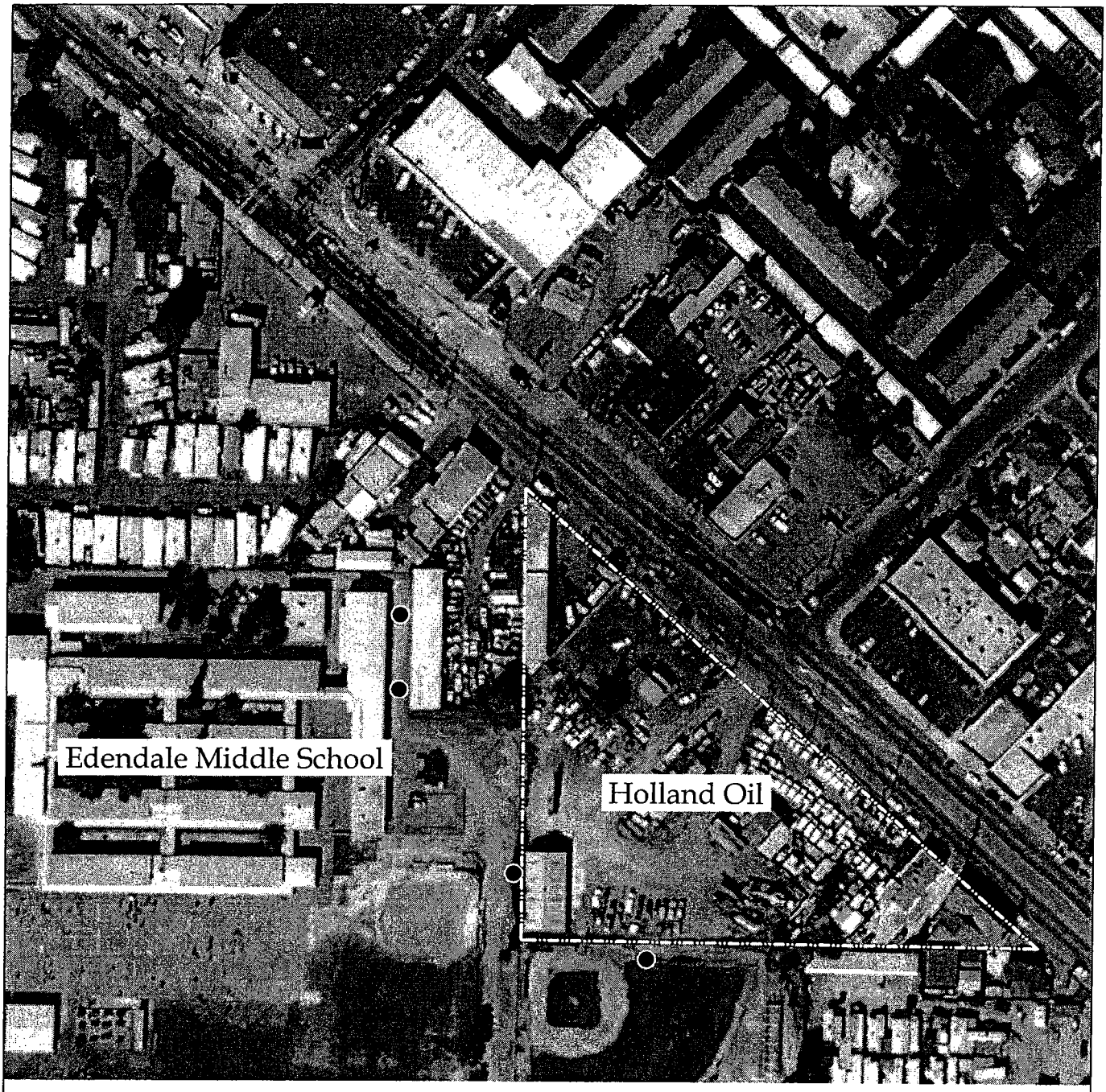
Edward Martins, Law Offices of Edward Martins, 1164 A Street, Hayward, CA 94541

Hal Reiland, Reiland and Reiland, P.O. Box 5490, Pleasanton, CA 94566

Robert Nelson, Clearwater Group, 229 Tewksbury, Pt. Richmond, CA 94801

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

ATTACHMENT B



● Proposed Soil Boring Locations on Edendale Middle School Grounds

—·—· Property Line

0 200 400 Feet

Approximate Scale

N

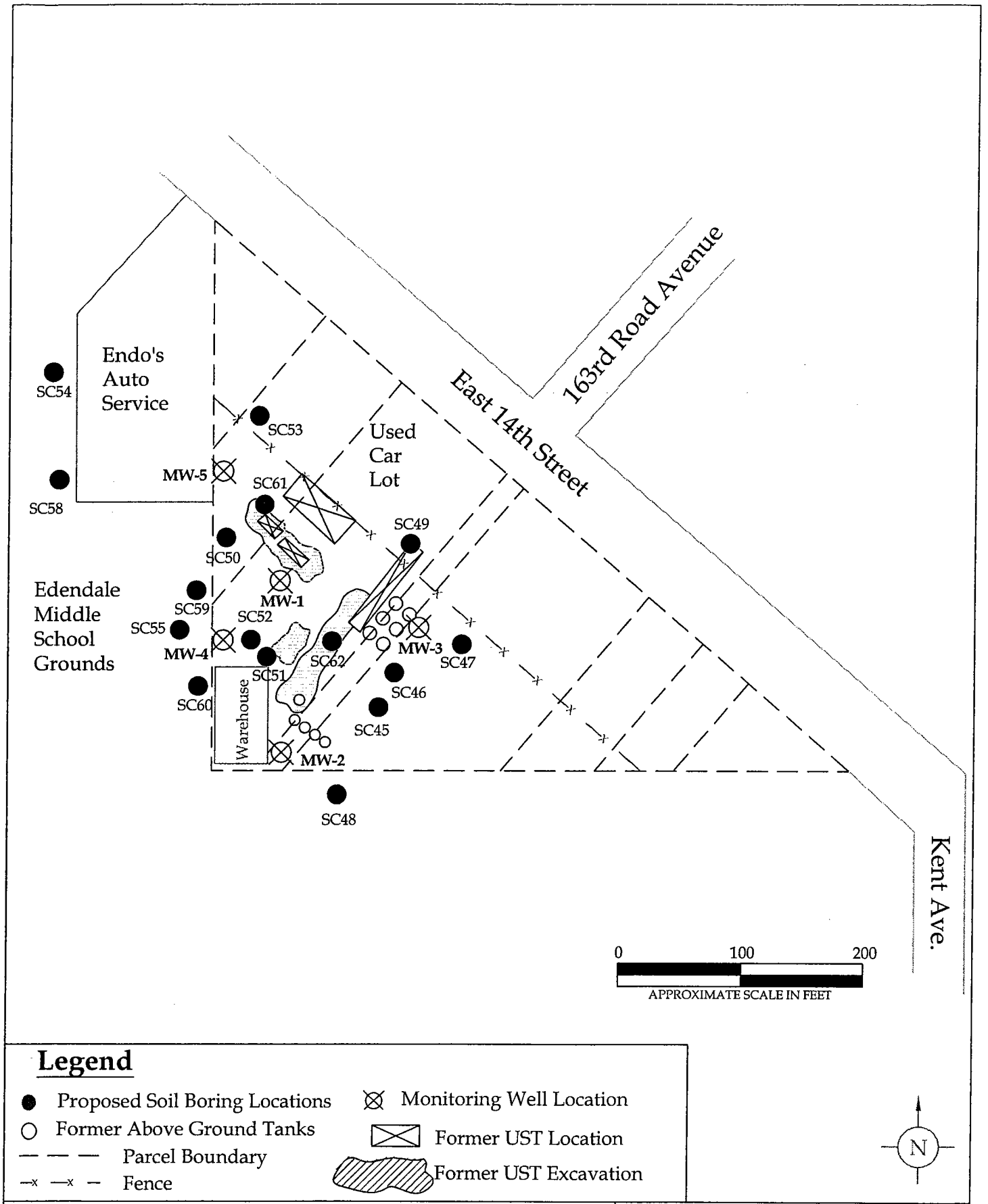
Photo Source: Google Earth 2006 3.0.0762

Attachment G - Satellite Photo With Proposed Boring Locations

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

CLEARWATER GROUP		
Project No.	Figure Date	Figure
CB015D	**1/07**	**1**

\\Tagi\Shares\Department\Jobs\CB015 Holland Oil\PDF drawings\Fig 1 Attachment G - Satellite Photo With Proposed Boring Locations



Proposed Soil Boring/Monitoring Well Locations

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

CLEARWATER GROUP

Project No.	Figure Date	Figure
CB015x	1/07	x

H:\Department\Jobs\CB015 Holland Oil\PDF drawings\Porposed Soil Boring and Monitoring Well Location

ATTACHMENT C

CLEARWATER
GROUP
Environmental Services

June 5, 2006

Mr. Jerry Wickham, P.G.
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Fuel Leak Case No. RO000212
Holland Oil
16301 East 14th Street
San Leandro, California

Dear Mr. Wickham;

The Clearwater Group is pleased to present its **Workplan Addendum**, Response to technical comments regarding the document entitled "Work Plan: Additional Subsurface Investigation Groundwater Monitoring Well Installation", dated March 3, 2003, by Environmental Bio-Systems, Inc., of Mill Valley, California, for the Holland Oil site, located at 16310 East 14th Street, San Leandro, California. Accompanying the **Workplan Addendum** is a Penalty of Perjury Statement signed by Ms. Ann Marie Holland Tiers, the Executor of the Holland Estate. Please contact me if you have any questions or concerns.

Sincerely,

Robert L. Nelson

Robert L. Nelson, PG, CEG
Senior Geologist

cc: Edward Martins

229 Tewksbury Avenue ◆ Point Richmond, California 94801 ◆ Telephone: 510-307-9943 ◆ Fax: 510-232-2823

ANN MARIE HOLLAND TIERS
Executor of the
Estate of John Holland Sr.
1498 Hamrick Lane
Hayward, CA 94544
(510) 782 4307

Penalty of Perjury Statement to be attached to the Work Plan Addendum re 16301 East 14th St. San Leandro, CA

I declare under penalty of perjury that the information and or recommendation contained in the attached document or report is true and correct to the best of my knowledge and that this declaration was executed on June 1, 2006, at Hayward, Alameda County, California.

Ann Marie Holland Tiers
Ann Marie Holland Tiers, Executor
of the Estate of John Holland Sr.

CLEARWATER
GROUP
Environmental Services

Fuel Leak Case No. RO000212
Holland Oil
16301 East 14th Street
San Leandro, California

Clearwater Group Project No. CB015D

WORKPLAN ADDENDUM

Response to technical comments regarding the document entitled "Work Plan: Additional Subsurface Investigation Groundwater Monitoring Well Installation" dated March 3, 2003, by Environmental Bio-Systems, Inc., Mill Valley, California.

This Workplan Addendum was prepared in response to comments from Alameda County Health Care Services, Environmental Health Services (ACEH), in a letter dated October 23, 2005.

Comment 1: Proposed Soil Borings

Clearwater Group (Clearwater) will drill three additional direct push soil borings (SC58 through SC60) to 12 feet below ground surface (bgs) to collect soil and groundwater samples along the western edge of the property (Figures 1 and 2). The additional borings and previously proposed borings SC55, SC50, SC54 and SC52, will be used to create a transect near the western property edge to assess whether shallow groundwater contamination is moving offsite. The additional borings will be between borings SC54 and SC50, between SC50 and SC55, and one location south of SC55.

Comment 2: Laboratory Analysis of Soil Samples

Soil samples collected from all of the proposed borings, from depths of 2 feet bgs, 5 feet bgs, and the capillary fringe, will be submitted for laboratory analysis. In addition, at locations where staining, odor, or elevated photo-ionization detector (PID) readings are observed, soil samples will be submitted for analysis. If staining, odor, or elevated PID readings are observed over an interval of several feet, a sufficient number of soil samples from this interval will be submitted for analysis to characterize the contamination within this interval. All of this data will be submitted in the Soil and Groundwater Investigation Report, requested in the 28 November 2005 ACEH staff letter.

229 Tewksbury Avenue ◆ Point Richmond, California 94801 ◆ Telephone: 510-307-9943 ◆ Fax: 510-232-2823

Comment 3: Grab Groundwater Samples in Direct Push Soil Borings

A temporary, 1-inch diameter PVC casing will be set in each borehole. The casing will have a slotted screen section (0.010 inch slots), which will be set to the sample interval depth. The grab groundwater samples will be collected within 5 feet of the water table in each soil boring. Each grab water sample will be collected from within the temporary casing using a stainless steel bailer, then decanted into laboratory supplied sample containers. Following sample collection the casing will be removed and the borehole grouted with a lean cement grout.

Comment 4: Vertical Delineation

Proposed Soil Boring Method

Proposed soil boring SC52, which was proposed to a depth of 12 feet, will be extended to 40 feet bgs. In addition, two new borings (SC61 and SC62; Figure 2) will also be drilled to 40 feet bgs. At each boring location a continuous soil conductivity test boring will be made to approximately 40 feet bgs, prior to driving a separate nearby boring to collect soil and groundwater samples. The continuous soil conductivity log will be used to identify coarse grained (higher porosity) soil intervals from which to collect depth discrete groundwater samples. The conductivity log will be visually correlated with soil samples from the borings. The advantage of the continuous soil conductivity log method is that a continuous log of the boring can be made. Cone penetration test (CPT) borings may be used in place of the continuous soil conductivity test borings.

The direct push soil borings are to be continuously sampled and logged to assess the vertical extent of contamination. Representative soil samples will be used to correlate the continuous soil conductivity log with actual site lithology.

Proposed Method of Depth-Discrete Groundwater Sampling

Water samples will be collected with a discrete interval groundwater sampler, such as a Geoprobe Dual Tube Profiler. The Profiler is a direct push groundwater sampling tool capable of collecting multiple depth-discreet grab groundwater samples in a single borehole and can be driven by a direct push drill rig. In addition, the Profiler will be used to perform slug tests over selected vertical intervals to determine the permeabilities of the selected intervals. After all of the samples have been collected, the boring will be sealed with neat cement grout.

Comment 5: Monitoring Well Installation

Clearwater proposes driving a continuous soil conductivity test boring near each well location (MW-6 and MW-7) prior to drilling and installing the groundwater monitoring well. The conductivity log will provide a continuous record of the soil conductivity penetrated, allowing coarse grained intervals to be accurately located.

If single coarse grained intervals of less than 10 feet in thickness are located, a 2-inch diameter groundwater monitoring well will be constructed with its screened interval set within the coarse grained interval. The screened interval will not exceed 10 feet in length for either of these new wells.

If multiple thick, coarse grained intervals are located, the well will be constructed with Multi-Channel Tubing or cluster wells will be used. Cluster wells consist of nearby separate wells set to different depth intervals. Multi-Channel Tubing wells may have up to 7 depth specific screen intervals from which discreet groundwater samples may be collected. The wells are constructed with distinct filter packs separated by bentonite pellet seals within the same borehole.

The need to install groundwater monitoring wells MW-8 through MW-10 will be evaluated, based on the results of grab groundwater sampling along the western boundary of the property. These wells will not be installed until the results of the soil boring event analytical results are evaluated.

Comment 6: Laboratory Analysis

As requested by ACEH, the grab groundwater samples will not be analyzed for PCBs (polychlorophenols), SVOCs (semi-volatile organic compounds), or total oil and grease, due to potential problems with high turbidity in the samples. Clearwater recommends that the groundwater samples collected from developed groundwater monitoring wells MW-6 and MW-7 (as opposed to the grab groundwater samples) be analyzed for PCBs, SVOCs, and total oil and grease.

All soil and groundwater samples will be analyzed for 1,2-dichloroethane and ethylene dibromide. All soil samples will be analyzed for lead.

Clearwater will provide a revised summary of the planned soil and groundwater sample analytes for ACEH approval, prior to beginning the field activities.

CLEARWATER
GROUP
Environmental Services

Comment 7: Groundwater Monitoring

Existing wells MW-1 through MW-5 have not been sampled in approximately 5 years. Clearwater will evaluate wells MW-1 through MW-5 to determine if they require redevelopment. If these wells are partially filled with sediment, turbid, or slow to produce water they will be redeveloped when the new wells are developed.

Following implementation of the proposed subsurface characterization, a quarterly groundwater monitoring program will be implemented. Clearwater proposes that a minimum of one year of quarterly monitoring be performed to evaluate an annual cycle of groundwater conditions. Prior to conducting the first groundwater monitoring event, a survey event will be performed in accordance with California Assembly Bill AB2886. The survey event will include the collection of the latitude and longitude coordinates and elevation data, referenced to mean sea level, of each groundwater monitoring. Site reference marks, such as structures and fence lines will also be surveyed. The well survey will be performed under the direction of either a California Professional Geologist or Professional Engineer.

Each monitoring event will include a determination of groundwater gradient and contour elevations. A Soil and Groundwater Investigation Report summarizing these findings will follow by July 10, 2006, per the extension granted on October 28, 2005. If additional wells MW-8 through MW-10 are approved by the ACEH, another extension will be requested.

Sincerely,

Clearwater Group

REGISTERED GEOLOGIST
ROBERT L. NELSON
No. 2087
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

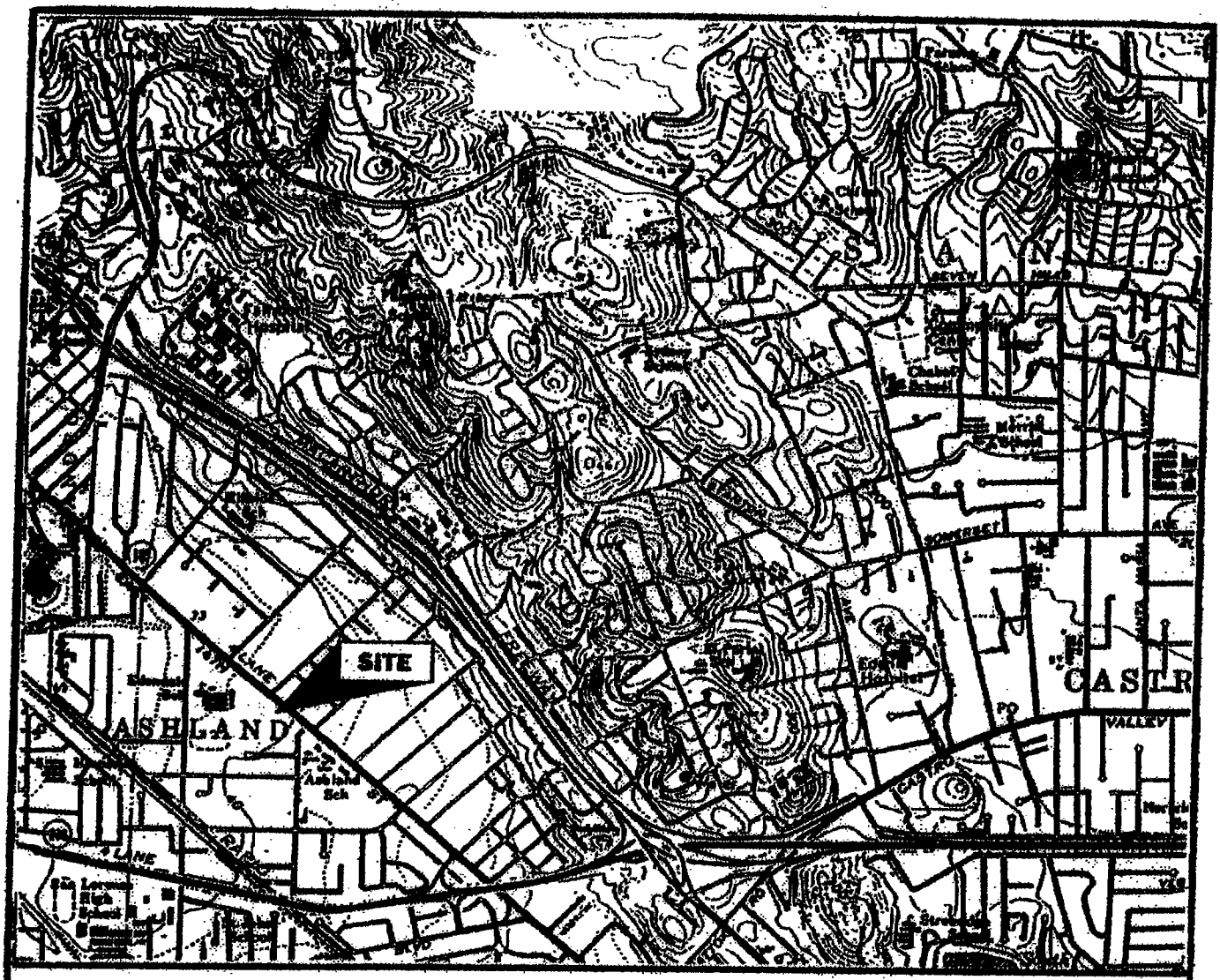
PROFESSIONAL GEOLOGIST
JAMES ALAN
JACOBS
NO. 88
CERTIFIED
HYDROGEOLOGIST
STATE OF CALIFORNIA

Robert L. Nelson, P.G. #6270, C.E.G. #2087
Senior Geologist

James A. Jacobs, P.G. #4815, C.H.G. #88
Principal Hydrogeologist.

Attachments:

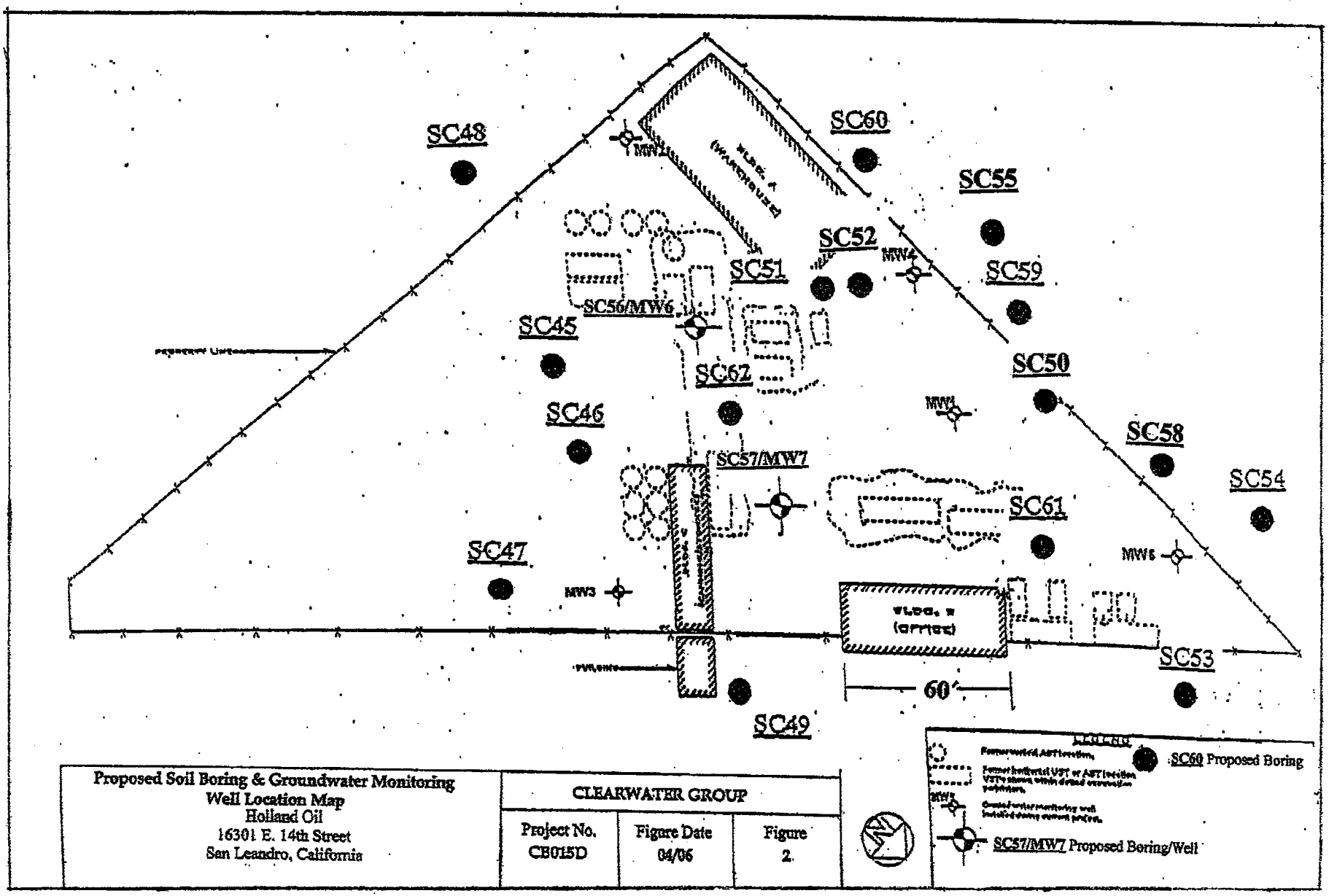
Figure 1. Site Location Map
Figure 2. Proposed Soil Boring and Groundwater Monitoring Well Location Map



Source: USGS Hayward, California 7.5-Minute Quadrangle Map

*Modified from Environmental Bio-Systems, Inc.

SITE LOCATION MAP Holland Oil 16301 E. 14th Street San Leandro, California	CLEARWATER GROUP		
	Project No. CB015D	Figure Date 04/06	Figure 1



Proposed Soil Boring & Groundwater Monitoring Well Location Map Holland Oil 16301 E. 14th Street San Leandro, California	CLEARWATER GROUP		
	Project No. CB015D	Figure Date 04/06	Figure 2.

SC60 Proposed Boring

SC57/MW7 Proposed Boring/Well

ATTACHMENT D

WORK PLAN: ADDITIONAL SUBSURFACE INVESTIGATION GROUND WATER MONITORING WELL INSTALLATION

Estate of J. Holland Sr.
16301 East 14th Street
San Leandro, California

Project #648

PREPARED BY ENVIRONMENTAL BIO-SYSTEMS, INC.
FOR
MS. ANNE MARIE HOLLAND

James A. Jacobs
Certified Hydrogeologist No. 88

CERTIFIED HYDROGEOLOGIST
JAMES A. JACOBS
NO. 88
STATE OF CALIFORNIA

March 3, 2003

ENVIRONMENTAL BIO-SYSTEMS, INC.
707 View Point Road, Mill Valley, CA 94941
Tel: 415-381-5195; Fax: 415-381-5816; email: augerpro@sbcglobal.net1

TABLE OF CONTENTS

1. INTRODUCTION ---- 1
1.1 Scope of Work ---- 1
1.2 Previous Environmental Work ---- 2
2. WORKPLAN ---- 7
3. PERMITS AND NOTIFICATIONS ---- 7
4. HEALTH AND SAFETY PLAN ---- 8
5. FIELD ACTIVITIES ---- 8
5.1 Drilling ---- 8
5.1.1 Soil Sampling ---- 11
5.1.2 Drill Cuttings ---- 12
5.2 Well Installation ---- 12
5.2.1 Well Locations ---- 12
5.2.2 Well Construction ---- 12
5.2.3 Well Development ---- 12
5.2.4 Well Sampling ---- 12
5.2.5 Purge and Decontamination Water ---- 13
5.3 Sample Analyses ---- 13
5.4 Decontamination Procedures ---- 14
5.5 Well Survey ---- 14
6. SCHEDULE AND DOCUMENTATION ---- 15
7. CONDITIONS ---- 16
8. REFERENCES ---- 17

APPENDICES

APPENDIX A. FIGURES
FIGURE 1. SITE LOCATION MAP
FIGURE 2. SITE MAP
FIGURE 3. BORING AND WELL LOCATION MAP
FIGURE 4. MAP OF PROPOSED BORINGS AND WELLS
FIGURE 5. PROPOSED BORINGS/WELLS ON IMPACT MAP
FIGURE 6. WELL CONSTRUCTION DIAGRAM
APPENDIX B. SITE SAFETY PLAN

1. INTRODUCTION

Environmental Bio-Systems, Inc. (EBS) has been retained by Ms. Anne Marie Holland (the client) to prepare this workplan for an additional subsurface exploration and ground water monitoring well installation and sampling at 16301 East 14th Street in San Leandro, California (the site). A site location map and site map are included as Figures 1 and 2 of Appendix A.

This work plan has been prepared pursuant to a request by the Alameda County Health Care Services Agency (ACHCSA). The proposed scope of work is intended to provide better vertical and lateral delineation of the petroleum hydrocarbons found in soil and ground water at the site that was documented in the EBS Subsurface Exploration and Monitoring Well Installation report dated May 4, 2001. This characterization is necessary to better define the extent of the impact and the volumes of impacted soil and groundwater before a Corrective Action Plan (CAP) can be developed. In addition, EBS will propose a schedule of groundwater monitoring on the Subject Property.

The principal project contacts are:

Client - Ms. Anne Marie Holland, Executress, 1498 Hamrick Lane, Hayward, CA 94544, 510-782-4307.

Consultant - Mr. James A. Jacobs, Project Geologist, Environmental Bio-Systems, Inc., 707 View Point Road, Mill Valley, CA 94941, 415-381-5195.

1.1 Scope of Work

A brief summary of major tasks encompassed in this project includes:

1. Workplan submission and approval by ACHCSA.;
2. Development of site-specific safety plan;
3. Permitting of activities;
4. Borehole utility clearance;
5. Continuously coring soil at eleven locations (designated SC45 to SC55);
6. Install two new 2-inch diameter monitoring wells (MW6 through MW7 on-site to verify on-site groundwater plume conditions.
7. Sampling pre-existing wells MW1 through MW5;

8. Analyzing soil and groundwater samples for one or more of the following analytes:
    a. Total petroleum hydrocarbons as gasoline (TPHg);
    b. Total petroleum hydrocarbons as diesel (TPHd);
    c. Total petroleum hydrocarbons as kerosene (TPHk);
    d. Total petroleum hydrocarbons as Stoddard solvent (TPHss);
    e. Benzene, toluene, ethylbenzene and total xylenes (BTEX);
    f. Methyl tertiary butyl ether (MTBE); and
    g. Total oil and grease (TOG).

9. Review the data and prepare a report of the findings, including information obtained during the quarterly groundwater monitoring;

10. If required by the regulator, drill additional borings (SC58, SC59 and SC60) and convert into 2-inch diameter wells (MW8, MW9 and MW10) on the adjacent Edendale School.

11. Have meetings and discussions with the client, regulators, planners, and others to determine the future use and site closure requirements of the property; and

12. Based on the future use of the property and the regulatory action levels for site closure, develop a Corrective Action Plan (CAP) to address and evaluate various remedial options that will move the site toward the goal of site closure.

1.2 Previous Environmental Work

1990

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

February 1996
Compliance & Closure, Inc. (CCI) directed the location 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 activities 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. Groundwater 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. Groundwater 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/LBTEX components, respectively, and 500 µg/L TPHd.

August-September 1997

EBS directed Site mitigation activities. One hundred and forty three 55-gallon steel drums and approximately 60 smaller containers were inventoried at the Site. Approximately 4,636 total gallons of the contents were identified as oily water. Another 650 gallons of the drum contents were identified as oily water contaminated with halogenated constituents. Approximately 100 total gallons (two 55-gallon drums) of oily water were contaminated with PCBs. A single 55-gallon drum contained approximately 50 gallons of sodium hypochlorite. All containers and their contents were removed from the site and transported to appropriate recycling and/or disposal facilities.

Approximately 2,690 gallons of liquid and sludge was also removed from eight site underground storage tanks (USTs). All 8 USTs were subsequently excavated and removed from the site.

Approximately 5,200 gallons of liquid and sludge were removed from the 20 above ground storage tanks (ASTs). All 20 ASTs were then demolished and disposed of as scrap metal.

Two of the tanks (T2 and T3) were observed to have large holes in their bottoms. Tank T1 additionally exhibited severe pitting along its surface. A sheen was noted on ground water that was encountered in each of the 5 tank pits. Slight to moderate petroleum odor and greenish discoloration were observed in soils excavated from around each of the USTs.

A total of nine soil samples were collected from beneath USTs T I, 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 total petroleum hydrocarbons as Stoddard solvent (TPHss); and up to 11 mg/kg Pb.

Composite samples were collected from both UST overburden soil piles. The four-point composite soil sample collected from the Stoddard solvent tank stockpile was not found to contain reportable concentrations of either TPHss or BTEX. The four-point composite soil sample collected from the kerosene tank overburden was found to contain 5,200 mg/kg TPHk.

Samples were collected from accumulated water within the pits from which tanks T1 and T2 were removed. Additional water samples were taken from the remaining 3 pits that formerly held tanks T3 and T4, T5 and T6 and T7 and T8, respectively. 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/LBTEX, respectively; up to 1,600,000 µg/LTPHD; and 490,000 µg/L TPHss. Neither MTBE nor Pb was found in any of the analyzed water samples at levels exceeding laboratory reporting limits.

Soil overburden was placed back into the pits with the concurrence of the ACHCSA and Client agreement that further assessment and remediation would be performed as found appropriate. No soil compaction was performed at that time, per Client request.

January 2001

Forty-four exploratory soil cores and two soil borings were drilled and sampled at the site between 8 January and 11 January 2001. Soils encountered dining coring and drilling typically included silty clay with minor angular clasts to approximately 3 feet bgs, at which depth gravely silty clay was encountered. Minor thin interbeds

of gravels were found in several cores at approximately 4 to 4.5 feet bgs; a fine-grained sand was encountered in several cores at approximately 8.5 feet bgs. A stiff dark gray clay was typically encountered at approximately 11.5. feet bgs, and extended to the deepest drilled depth (20 feet bgs). The depths at which each lithology change occurred were not consistent throughout the Site. Groundwater was first encountered at between approximately 9 and 11 feet bgs within the cores and borings. OVM screening of soil samples yielded between 0 and > 1,000 ppm, expressed in isobutylene equivalents.

A total of 131 soil samples were collected from the borings and analyzed for one or more of the following: TPHg, TPHd, TPHk, TPHss, BTEX, MTBE, TOG, PCBs, HVOCs, Cd, Cr, Ni, Pb, Zn, Percent Organic, Percent Total Porosity, Dry Density, and Percent Moisture Content. Soil was not sampled from core SC43. A field determination was made that soil from this core exhibited obvious indications of petroleum impact and that such impact would skew physical parameter analyses. Replacement soil core SC44 was subsequently drilled to the east of SC43 and sampled for physical parameters.

Analysis of samples from both cores and borings showed the presence of up to 13,000 mg/kg TPHG, 8,400 mg/kg TPHD. 2,900 mg/kg TPHK, 8,300 mg/kg TPHss, 61 mg/kg benzene, 35 mg/kg toluene, 240 mg/kg ethyl benzene, 1,100 mg/kg xylenes, 44,000 mg/kg TOG, and 310 µg/kg PCBs. Heavy metals were found at low levels in all but samples SC3-2' and SC6-2' where elevated concentrations of chromium and nickel were found, respectively. Results of HVOC analyses showed only low-level concentrations. None of the submitted soil samples were found to contain reportable concentrations of MTBE.

High boiling fraction hydrocarbons speciated in soil samples as either kerosene or stoddard solvent were found almost exclusively beneath single point sources of these products. Interpretations of the lateral spread of the three most prevalent contaminants found in soil samples (TPHg, high boiling hydrocarbons and TOG) show prolific impact emanating outward from around at least three source areas of

the Site. Groundwater monitoring wells MW4 and MW5 were constructed on 12 January 2001 and developed on 16 January 200 1.

Groundwater samples were collected from wells MW1 through MW5 on 8 February 2001 and analyzed for TPHg, TPHd, TPHk, TPHss, BTEX, MTBE, TOG and PCBs. Results of analyses run showed the presence of up to 8,200 µg/L TPHg, 5,100 µg/L TPHss, 83 µg/L benzene, 60 µg/L toluene, 33 µg/L ethylbenzene, 110 µg/L xylenes, and 28 mg/LTOG. The highest levels of impact to groundµwater by compounds of concern were found in the sample collected from well N4W 1. This sample was found to contain 8,200 µg/L TPHg; 83, 60, 33 and 110 µg/L BTEX, respectively; 5,100 µg/L TPHss; and 28 mg/L TOG. The location of this well lies nearest to, and downgradient from the known source areas identified in the EBS exploration of January 2001.

Groundwater samples from wells MW4 and MW5, located further downgradient from MW1, were found to contain low to moderate levels of contaminants. The sample collected from MW5 was, however, found to contain 9.2 µg/L MTBE. Wells MW2 and MW3, located cross gradient from the known sources, were not found to contain reportable concentrations of any target chemicals. Groundwater flow beneath the site was calculated to the northwest with a gradient of 0.007 ft/ft at the time of measurement on 8 February 2001.

2. WORKPLAN

This workplan for the upcoming work has been submitted to Mr. Scott Seery, Hazardous Materials Specialist, of the ACHCSA.

3. PERMITS AND NOTIFICATIONS

EBS will secure drilling permits from the Alameda County Public Works Agency prior to commencement of field activities, but after approval of the workplan by

the ACHCSA. All interested parties and regulatory agencies will be notified prior to any start of field work.

4. HEALTH AND SAFETY PLAN

A site-specific health and safety plan has been developed and included in Appendix B. The site-specific health and safety plan addresses the necessary safety procedures for anticipated hazards associated with the fieldwork during the course of the proposed subsurface exploration program. All field workers will attend tailgate safety meetings held at the begininning of each day of coring and/or drilling. The workers will indicate their comprehension of the safety plan contents by using the health and safety plan sign-in form.

5. FIELD ACTIVITIES

The scope of work contained within this work plan is intended to evaluate the vertical and lateral extent of soil and groundwater impact on site as well as off-site.

5.1 Drilling

Eleven direct push technology (DPT) soil and groundwater samples will be collected designated SC45 to SC55 (Figures 3, 4, and 5, Table 1). The samples will be collected in areas to better define the extent of contamination to 12 feet below ground surface. Off-site borings are noted: one on the ball field property (SC48), and two DPT samples (SC54 and SC55) on the school property. Two hollow stem auger boreholes (SC56 and SC57), converted to 2-inch diameter wells (MW6 and MW7) are proposed in the middle of the plume to verify conditions in the groundwater (Figure 6). Selected soil samples will be collected in borings SC56 and SC57 as these borings were designed to evaluate groundwater within the plume and the soils have been characterized in the area. Depending on the findings of SC54 and SC55, 3 optional wells on the Edendale School property are shown, if required by the regulator. The hollow stem auger drilling can be performed three to four weeks after the DPT drilling, allowing for optimum placement of the wells, and evaluation of wells on the Edendale School, if required.

TABLE 1 – BORING AND WELL LOCATIONS

BORING NUMBER	LOCATION	PROPOSED DEPTH	RATIONALE
Direct Push Technology (DPT) probe rigs: soil and groundwater samples			
SC45	15 ft. east of SC5-SC6	12 ft. bgs	Find ND line to east near tanks T7 and T8
SC46	30 ft. east of SC26-SC29	12 ft. bgs	Find ND line to east of Bldg. C
SC47	30 ft. southeast of MW3	12 ft. bgs	Find ND line southeast of monitoring well MW3
SC48 (off site; ball park)	40 ft. southeast of MW2	12 ft. bgs	Find ND line southeast of MW2
SC49 (used car lot)	25 ft. north of SC14	12 ft. bgs	Find ND line north of SC14; Dan's Auto Repair Bldg.
SC50	40 ft. north of MW4	12 ft. bgs	Find ND line along property boundary; 15 ft. west of MW1; 35 ft. north of MW4
SC51	5 ft. northwest of northern tip of Bldg A (Warehouse); 20 ft. southeast of MW4	6-8 ft To total depth in landing area (underlain by concrete)	Characterize contained soil north of Bldg. A (warehouse), southeast of MW4
SC52	10 ft north of center of Bldg A (Warehouse); 8 ft. southeast of MW4	6-8 ft To total depth in landing area (underlain by concrete)	Characterize contained soil north of Bldg. A (warehouse), southeast of MW4
SC53 (used car lot)	30 ft. northeast of MW5	12 ft. bgs	Characterize the soil and groundwater in

			the corner, north of MW5
SC54 (off site; Edendale School)	20 ft. northwest of MW4	12 ft. bgs	Find ND line northwest of MW4
SC55 (off site; Edendale School)	20 ft. west of MW4	12 ft. bgs	Find ND line northwest of MW5
Hollow Stem Auger Boreholes/Wells			
SC56 (MW6)	20 ft. northwest of SC5	15 ft. bgs	Characterize water concentration in plume
SC57 (MW7)	5 ft.southwest of SC35	15 ft. bgs	Characterize water concentration in plume
NEXT PHASE-IF NEEDED: OPTIONAL- If appropriate to put wells on adjacent school property.			
OPTIONAL: SC58 (MW8) (off site; Edendale School)	30 ft northwest of MW4	15 ft. bgs	Find ND downgradient line; Characterize water concentration in downgradient direction;
OPTIONAL: SC59 (MW9) (off site; Edendale School)	60 ft northwest of MW1	15 ft. bgs	Find ND downgradient line; Characterize water concentration in downgradient direction;
OPTIONAL: SC60 (MW10) (off site; Edendale School)	30 ft northwest of MW5	15 ft. bgs	Find ND downgradient line; Characterize water concentration in downgradient direction;

NOTE: Off site wells are always problematic for security issues and not recommended unless required by the regulator.			

The elevations of the new wells, and of existing ground water monitoring wells will be measured by and the direction and gradient of ground water flow will subsequently be calculated. All work will be performed under the supervision of a California Certified Hydrogeologist.

5.1.1 Soil Sampling

Soil samples from the DPT probe rig will be collected using a probe-type macro-core soil sampler. Liners are constructed of PETG, an inert transparent plastic. Soil samples from the hollow stem auger rig will be collected from the borings using a California split-spoon sampler holding three stainless steel tubes. Upon removal from the sampler, the bottom ends of the tubes will be sealed with Teflon sheets and tight fitting caps. Each tube will be labeled with a unique designation for this project and stored in an insulated cooler on top of ice. A chain of custody will be generated in the field and will accompany all samples during transit to the laboratory. A photoionization detector (PID) will be on-site to measure organic vapors and for safety purposes.

A thermometer will be placed into the cooler with the samples. The laboratory representative receiving the samples will be asked to read the temperature inside the cooler, and to record it on the sample chain of custody.

At least one soil sample will be submitted for laboratory analyses from each borehole from just above the soil/ground water interface. Ground water is anticipated to be encountered at approximately 6.5 feet below ground surface (bgs). Additional soil samples from other horizons may be submitted if field observations (e.g. elevated PID readings, soil discoloration) indicate the possibility of petroleum hydrocarbon impact.

5.1.2 Drill Cuttings

All soil cuttings generated during drilling will be contained within Department of Transportation (DOT) approved 55-gallon drums. Subsequent to profiling, the drums will be transported and disposed/recycled at an approved facility.

5.2 Well Installation

5.2.1 Well Locations

Groundwater well locations are described above in Table 1.

5.2.2 Well Construction

The new wells will be constructed of 2-inch diameter PVC screen and casing. The methods of construction used will be in accordance with the standards and guidelines of the ACWD and the California Department of Water Resources.

The wells will be installed after advancing the augers to a depth of approximately 10 feet below where first water is encountered. The screened interval of the wells will be extended to approximately 2 feet above the depth at which water is encountered within the borings. Completion of the wells will include a filter pack of #2/12 or #3 sand to a depth of 1 foot above the tops of the screens, 0.5 foot bentonite clay spacers, Portland cement seal to grade, traffic boxes set in concrete, and locking well caps with a water-tight seals.

5.2.3 Well Development

The new wells will be developed after allowing at least 72 hours to elapse following completion of the ground water monitoring well installation. Development of the wells will be performed using alternate surging and bailing. The wells will be purged until free of sediment or until measured parameters of pH, temperature, and conductivity have been noted to have stabilized.

5.2.4 Well Sampling

Sampling of all wells (new and old) will be performed subsequent to allowing a period of at least 48 hours for stabilization following development. A field log will be maintained by the sampling technician during purging and sampling.

Observations of the presence or absence and/or thickness of free or emulsified product as well as the presence of sheen will be included on the sampling log. Other pertinent information including well recharge rates, pH, temperature, conductivity, and physical conditions at the time of sampling will also be recorded.

A minimum of 4 casing volumes will be purged from the new wells prior to collection of samples. Current wells will have a minimum of three well volumes removed prior to sampling. When periodic measurements of pH, temperature, and conductivity are found to have stabilized, a water sample will be collected from the well using a new disposable bailer. No sample will be collected for laboratory analysis from wells exhibiting measurable free product.

New wells, which fail to recharge sufficiently prior to the purging of at least 4 well casing volumes (new wells) or 3 well casing volumes (current wells) will be allowed to recover to 80% of their initial water level prior to sampling.

5.2.5 Purge and Decontamination Water

All purge and decontamination water generated during this project will be contained within Department of Transportation (DOT) approved 55-gallon drums. The drums will be labeled and stored on-site. The drums will be secured. Subsequent to profiling, the drums will be transported and disposed or recycled at an approved facility.

5.3 Sample Analyses

All soil and ground water samples will be transported in a refrigerated environment by chain-of-custody procedures to Kiff Analytical, Davis California. Kiff Analytical is certified by the California environmental laboratory accreditation program (ELAP).

All samples submitted for laboratory analysis will be analyzed for the following:

a. Total petroleum hydrocarbons as gasoline (TPHg) EPA 8015m;
b. Total petroleum hydrocarbons as diesel (TPHd) EPA 8015m;
c. Total petroleum hydrocarbons as kerosene (TPHk) EPA 8015m;
d. Total petroleum hydrocarbons as Stoddard solvent (TPHss) EPA 8015m;

e. Benzene, toluene, ethylbenzene and total xylenes (BTEX) EPA 8260B;
f. Methyl tertiary butyl ether (MTBE) EPA 8260B; and
g. Total oil and grease (TOG) SM5520F.
h. Selected samples to be analyzed for semi-volatiles (8270) and PCBs, only if the sample has reportable concentration of TPHd, or the laboratory observes an individual chromatographic peak. Based upon past site analytical data, sufficient positive TPHd sample results are anticipated to warrant significant SVOC analysis.

5.4 Decontamination Procedures

All downhole drilling and sampling equipment will be cleaned using an Alconox solution, tap water rinse, and deionized water rinse prior to the drilling of each boring. All decontamination water will be stored on-site in labeled drums approved by the Department of Transportation (DOT) for this purpose.

5.5 Well Survey

The top of well casing (TOC) of the newly installed wells will be surveyed to Mean Sea Level by surveyors under the direction of a Registered Geologist. Groundwater elevations within the wells will then be calculated, and a ground water flow direction and gradient map will be generated for inclusion in the final report.

6. SCHEDULE AND DOCUMENTATION

A plan has been prepared (Table 2) showing the proposed schedule of activities. A final report documenting the observations, results, conclusions, and recommendations will be prepared and submitted upon completion of field work. The report will include scaled diagrams, laboratory analytical reports, and chain of custody documentation.

TABLE 2 – SCHEDULE OF ACTIVITIES

ACTIVITY	PROPOSED DATE
Workplan Submission	mid March, 2003
Regulatory discussions, review, and approval	Pending approval by regulator
Prepare permits; provide notifications to all parties, approvals for off site borings/wells; mark borings, line locate borings/wells	Within 30 days of regulatory approval
2nd Quarter, 2003: Sample existing wells (MW1-MW5); pending approval for payment by client and USTCF (cleanup fund).	Estimated May 15, 2003
Perform field work: direct push drilling	Within 60 days of regulatory approval
Send samples to lab; review results	Within 75 days of regulatory approval
Perform field work: hollow stem auger drilling: install new monitoring wells	Within 90 days of regulatory approval
Send samples to lab; review results	Within 105 days of regulatory approval
Prepare report	Within 120 days of regulatory approval
3rd Quarter; Sample new and current wells	Estimated August 15, 2003
Submit Subsurface Investigation Report	Within 180 days of regulatory approval
4th Quarter, Sample all wells	November 15, 2003
Prepare Corrective Action Plan (CAP)	December 31, 2003
NOTE: The consultant is proposing this schedule based on prompt and ongoing payments of invoices. Delays in payments may interfere with the schedule.	

7. CONDITIONS

EBS will perform the stated scope of work in accordance with generally accepted standards of current environmental practice in Northern California. Conclusions and recommendations presented by EBS are time-dependent and should not be considered valid after a 1-year period from issue of the summary report. After 1 year from the issue of this report, site conditions and recommendations contained within the report should be reviewed.

The proposed study will be performed solely for the purpose of evaluating environmental conditions of the site subsurface relative to hydrocarbon impact. No engineering or geotechnical references will be implied or should be inferred.

Evaluation of the condition of the site, for the purpose of the proposed 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.

The proposed study will be performed, and the report would be prepared for the sole use of our Client, Ms. Anne Marie 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 any and all recommendations to governmental agencies and other parties, as appropriate.

Recommendations stated in the proposed summary report will represent 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 be 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 and subsurface obstacles. EBS is not responsible for the accuracy of any property line, easement, or other marker identified by the client.

8. REFERENCES

Alameda County Health Care Agency, 1999, Letter to Anne Marie Holland, 15 March, 1999.

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

Compliance & Closure, Inc., 1998, Summary of Environmental Investigation, Former Jack Holland Sr. Oil Company, 16301 East 14th Street, San Leandro, California,4 June, 1998.

Environmental Bio-Systems, Inc. 2001, Surface Exploration and Monitoring Well Installation, Project #150-561B-R1, Holland Property, 16301 East 14th Street, San Leandro, California, 4 May 2001.

Environmental Bio-Systems, Inc. 1999, Workplan: Subsurface Exploration, Holland Property, 16301 East 14th Street, San Leandro, California, 18 November 1999.

Environmental Bio-Systems, Inc. 1998, Site Mitigation Report; Holland Property, 16301 East 14th Street, San Leandro, California, 9 December 1998.

Environmental Bio-Systems, Inc. 1996, Underground Storage Tank Removal, Project #119-379A, Holland Property, 16301 East 14th Street, San Leandro, California, 5 December 1996.

Environmental Bio-Systems, Inc. 1996, Excavation of Hydrocarbon Impacted Soils, Project #119-405A, Holland Property, 16301 East 14th Street, San Leandro, California, 6 May 1996.

Environmental Bio-Systems, Inc. 1996, Subsurface Exploration, Project #119-396A, Holland Property, 16301 East 14th Street, San Leandro, California, 22 February 1996.

Norris, Robert M., and Webb, Robert W., 1976, Geology of California, John Wiley & Sons, New York.

United States Geological Survey (USGS), 1980, Topographic Map, Newark, California 7.5 minute series with 20-foot contour intervals, 1959, photo revised 1980.

ENVIRONMENTAL BIO-SYSTEMS, INC. Since 1989
707 View Point Road, Mill Valley, CA 94941
Tel: 415-381-5195 Fax: 415-381-5816 e-mail: augerpro@sbcglobal.net

Friday, March 07, 2003

Mr. Scott Seery, CHMM
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RE: DISTRIBUTION LIST: Workplan and Additional Subsurface Investigation
Estate of Jack Holland Sr. Oil Company
16301 E. 14th Street
San Leandro, California

Environmental Bio-Systems, Inc. (EBS) is pleased to submit this workplan to address regulatory requirements on the Subject Property. Copies of the above the workplan have been prepared and sent to the following individuals. I have been reassured that Mr. Martins will coordinate copies of this workplan with other owners.

(1) copy to: Ms. Anne Marie Holland
Estate of Jack Holland
1498 Hamrick Lane
Hayward, CA 94544

(2) copies to: Mr. Edward E. Martins
Law Offices of Edward E. Martins
22698 Mission Blvd.
Hayward, CA 94541

(1) copy to: Ms. Jessica Chiaro
Clearwater Group (assisting client with USTCF paperwork)
229 Tewksbury Ave.
Pt. Richmond, CA 94801

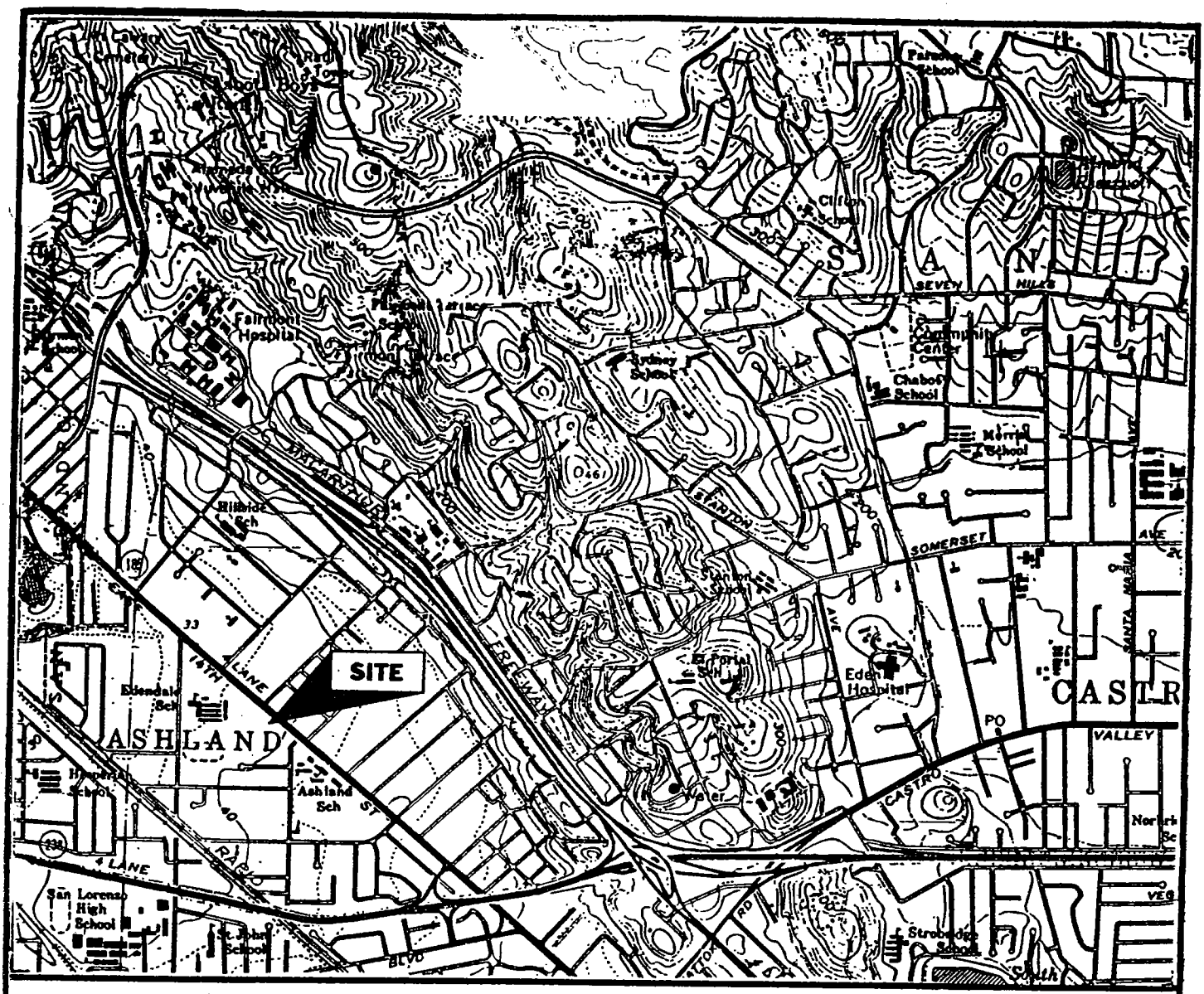
(1) copy to: Mr. Chuck Headlee
Regional Water Quality Control Board; RWQCB Region 2; San Francisco Region
1515 Clay Street , Suite 1400
Oakland, CA 94612

Please call me at (415) 381-5195 if you have any questions.

Sincerely,

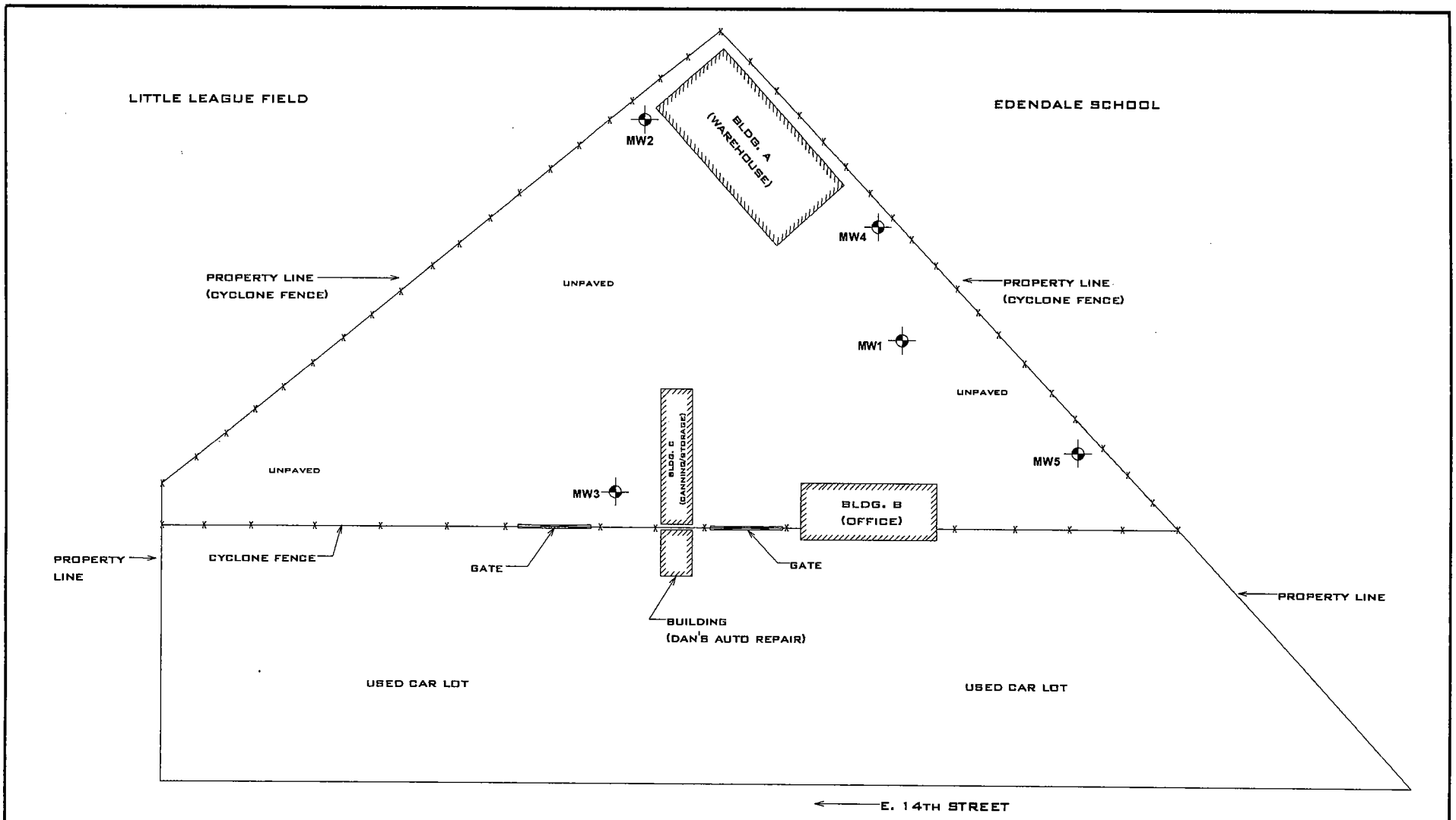
James A. Jacobs, C.H.G. #88; R.G. #4815
Certified Hydrogeologist

APPENDIX A



Source: USGS Hayward, California 7.5-Minute Quadrangle Map

ENVIRONMENTAL BIO-SYSTEMS, INC.	DATE: 5/4/01	FIGURE 1: SITE LOCATION MAP
	DRAWN BY: DAS	ESTATE OF J. HOLLAND, SR. 16301 E. 14th STREET SAN LEANDRO, CALIFORNIA
	SCALE: 1"=2,000' (N)	



ENVIRONMENTAL BIO-SYSTEMS, INC.	DATE: 3/03/03	FIGURE 2: SITE MAP
	DRAWN BY: JAJ	
	PROJECT#: EBS 648	ESTATE OF J. HOLLAND SR. 16301 E. 14th STREET SAN LEANDRO, CALIFORNIA
	SCALE: AS SHOWN	

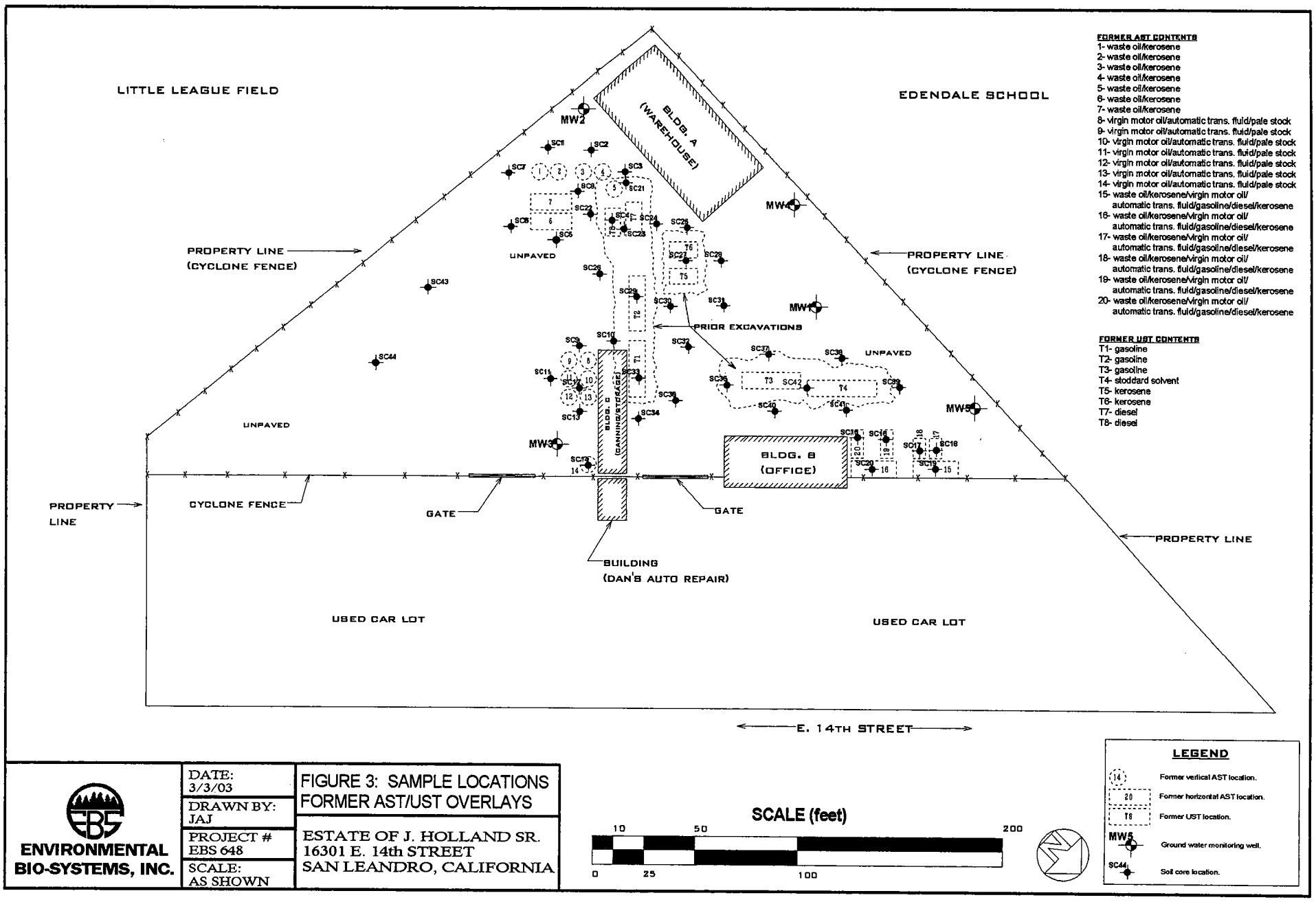
SCALE (feet)

10 50 200

0 25 100

LEGEND

MW5 Ground water monitoring well.

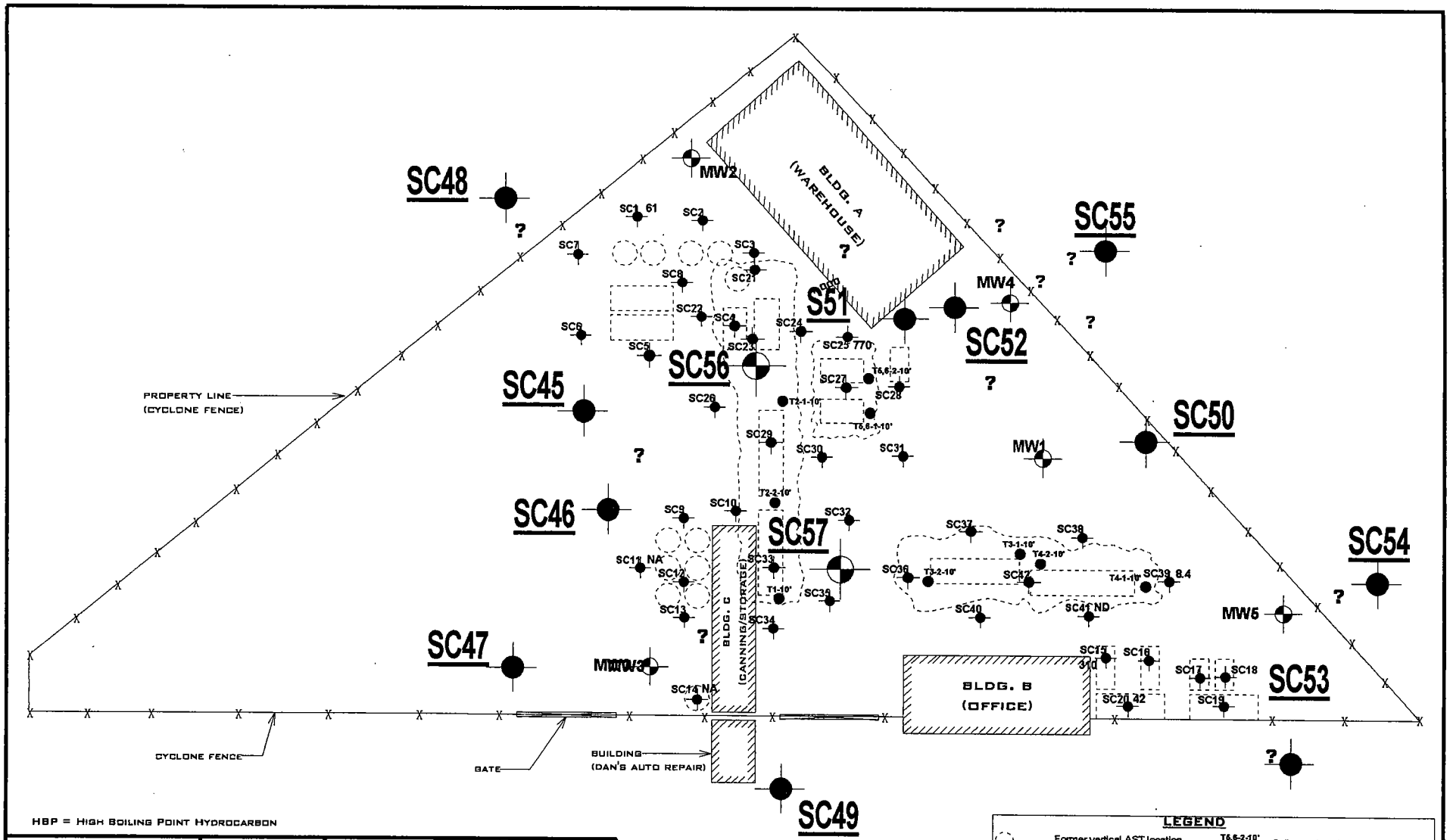


ENVIRONMENTAL BIO-SYSTEMS, INC.

DATE: 3/3/03
DRAWN BY: JAJ
PROJECT # EBS 648
SCALE: AS SHOWN

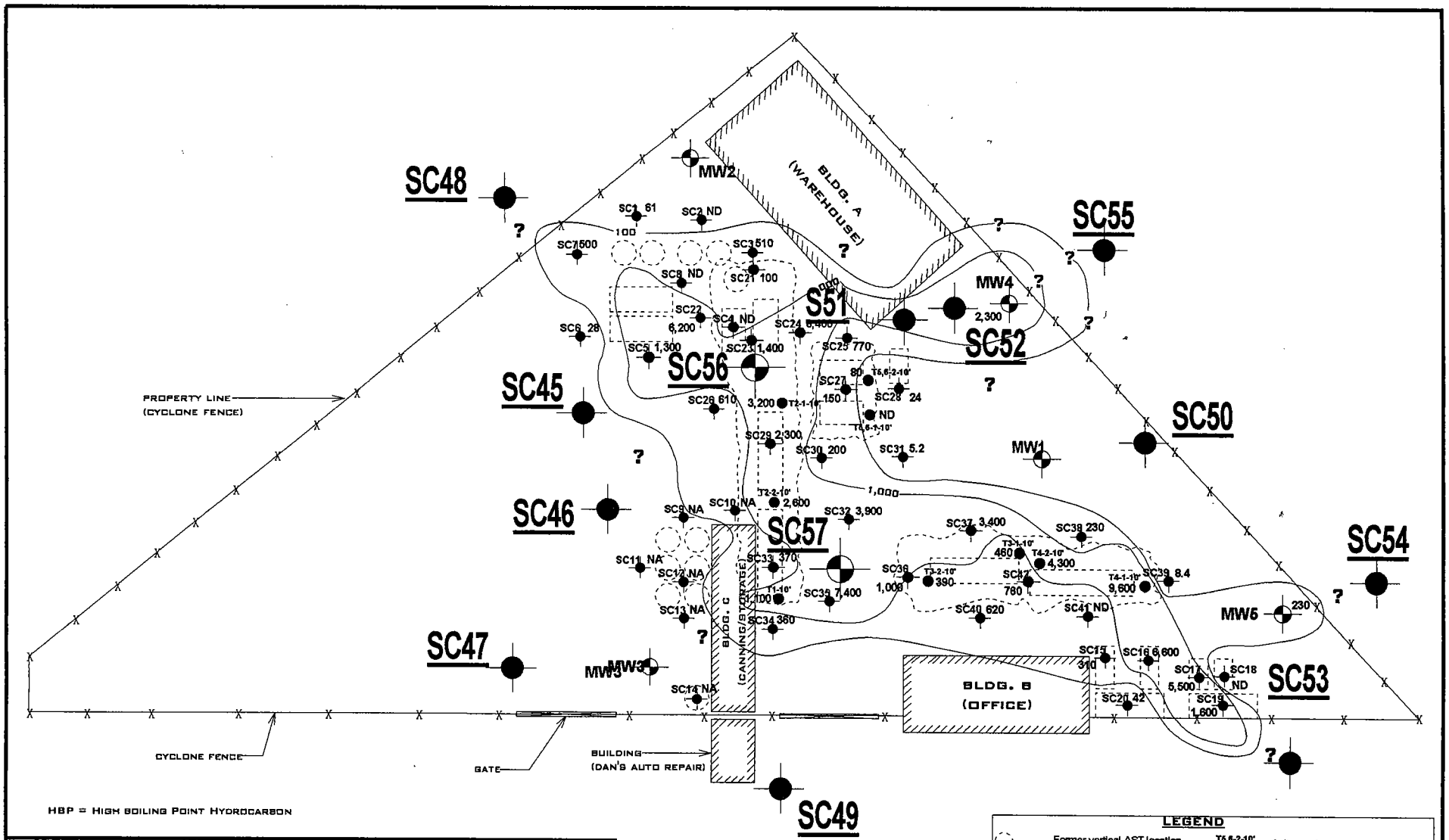
FIGURE 3: SAMPLE LOCATIONS FORMER AST/UST OVERLAYS

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



ENVIRONMENTAL BIO-SYSTEMS, INC.

DATE: 3/03/03	FIG. 4: PROPOSED BORING AND WELL LOCATIONS
DRAWN BY: JAJ	
PROJECT # EBS 648	ESTATE OF J. HOLLAND SR. 16301 E. 14th STREET SAN LEANDRO, CALIFORNIA
SCALE: 1" = 30'	

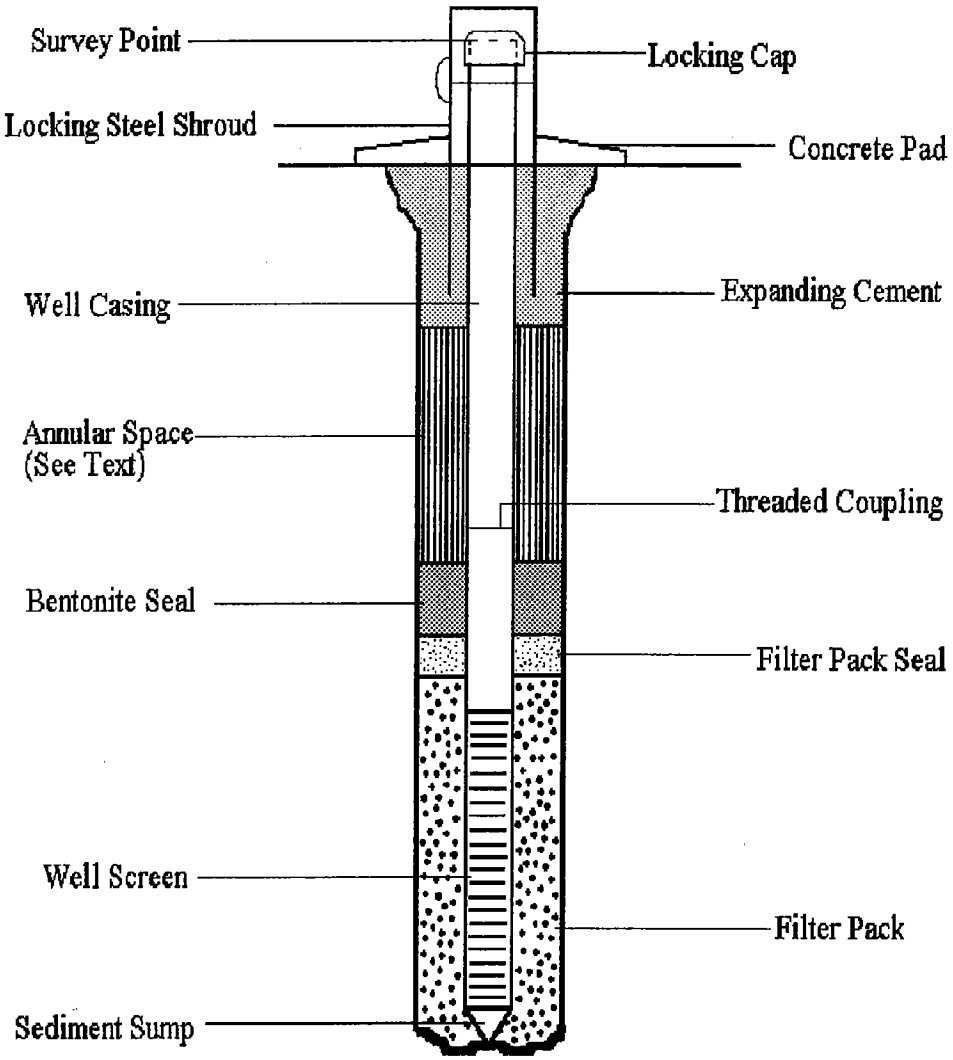


ENVIRONMENTAL BIO-SYSTEMS, INC.

DATE: 3/03/03	FIG. 5: ISOCONCENTRATION MAP- HBP HYDROCARBONS; 8-12' SOIL
DRAWN BY: JAJ	
PROJECT # EBS 648	ESTATE OF J. HOLLAND SR. 16301 E. 14th STREET SAN LEANDRO, CALIFORNIA
SCALE: 1" = 30'	

FIG. 6 - MONITORING WELL INSTALLATION DIAGRAM

Date	3/5/03	Total Depth	15'	Casing type	Sch 40 PVC
Client	Holland Oil	Screen from/to	5-15'	Blank ft.	2-in dia.; 5'
Well No.	MW6, MW7	Filter Pack	4-15'	Screen ft.	2-in dia; 10'
Permit No.		Bentonite	3.5-4'	Slot size	0.010"
Storage soil	55 gal drums	Grout	Portland II	Bags cement	2 per well
Consultant	EBS	Drill Rig Type	HSA	Bentonite	0.5'
Driller	FAST-TEK	Auger ID/OD	4.25"; 7.63"	Bags sand	6 per well
Geologist	J. Jacobs	Sampler	CA split spn	Filter pack	2/12 sand
Screening	PID	Completion	Flush mount	Development	Surge block

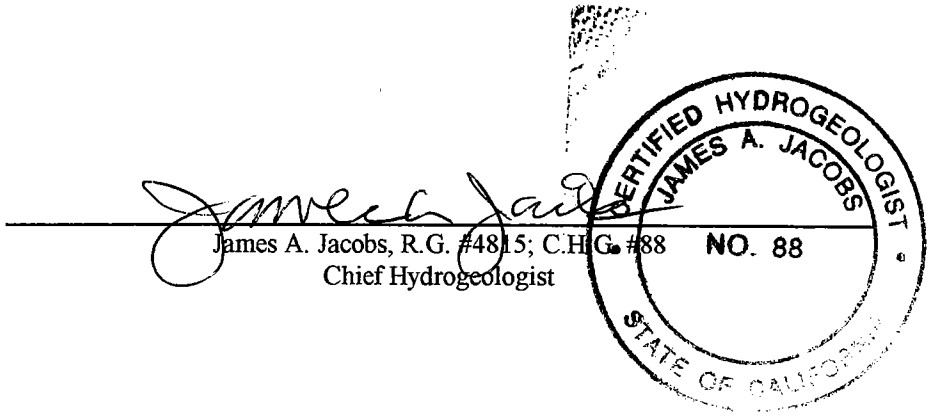


APPENDIX B

SITE SAFETY PLAN:
GROUNDWATER ASSESSMENT
AND MONITORING WELL INSTALLATION

at
Estate of J. Holland, Sr.
16301 East 14th Street
San Franicisco, California

PREPARED BY ENVIRONMENTAL BIO-SYSTEMS, INC.
FOR
ESTATE OF J. HOLLAND, SR.



James A. Jacobs, R.G. #4815; C.H.G. #88
Chief Hydrogeologist

5 March 2003

TABLE OF CONTENTS

SECTION **PAGE**

1. GENERAL INFORMATION ---- 1
2. PURPOSE ---- 1
3. SCOPE OF WORK ---- 1
   3.1. Preparation for Field Work ---- 2
4. SAFETY PROCEDURES ---- 2
   4.1. Site Safety Officer ---- 2
   4.2. Site Hazards ---- 2
      4.2.1. Anticipated Chemical Compounds ---- 2
      4.2.2. Anticipated Physical Hazards ---- 4
   4.3. Required Protective Equipment ---- 4
      4.3.1. Respiratory Protection ---- 5
   4.4. Atmospheric Monitoring ---- 6
   4.5. Minimum Safety Procedures ---- 6
5. SITE SAFETY MEETING ---- 7
6. WORK ZONES AND BARRICADES ---- 7
7. DECONTAMINATION ---- 7
8. EMERGENCY RESPONSE PROCEDURES ---- 7
   8.1. Nearest Hospital ---- 8
   8.2. Emergency Telephone Numbers ---- 9
9. LIMITATIONS ---- 9

1. GENERAL INFORMATION

This Site Safety Plan (SSP) describes basic safety requirements for the drilling and sampling of eleven soil borings using a Direct Push Technology (DPT) probe rig and two exploratory boreholes and the conversion of the two boreholes into 2-inch diameter groundwater monitoring wells at the Estate of J. Holland, Sr. at 16301 East 14th Street in San Leandro, California. This work is being conducted in accordance with a signed contract dated February 7, 2003 between Environmental Bio-Systems, Inc. (EBS) and Ms. Nate Holland, Executress of the Estate of J. Holland, Sr. (the Client). The provisions of this plan apply to all individuals working on this phase of the project. Subcontractors may elect to increase the safety requirements for their work with the prior consent of EBS as described and accepted in writing.

The 3-acre site is currently used for storage of equipment and sale of used cars. The property is owned by the Client and others.

This SSP describes the expected potential hazards that may be encountered on site. Field work is expected to begin in the Spring, 2003 and be completed according to the schedule in the Workplan. If site working conditions, or the scope of work for this phase of the project change before or during the field work, this SSP will be revised in keeping with these changes.

1. PURPOSE

The proposed scope of work included in this work plan is intended to assess the lateral and vertical impact of petroleum hydrocarbons (jet fuel) to the subsurface near an underground storage tank (UST), which reportedly suffered an unauthorized release, and at two unpaved areas showing visible discoloration at the site.

2. SCOPE OF WORK

Briefly, the anticipated field work to be performed at the site will include the following tasks:

- Clearance of the areas using electromagnetic instruments.
- Coring through the asphalt or concrete (as needed) to prepare for the borings.
- Drilling of 11 exploratory soil borings with a DPT rig, and 2 with a hollow stem auger rig.
- Field screening of soil samples with a photoionization detector.
- Collection and analysis of soil samples. Stockpiling of soil cuttings and decontamination water on-site in labeled DOT-approved drums.
- Developing and sampling of the five existing groundwater monitoring wells and the two new ones.
- Surveying the new wells and using GPS to verify the location of all wells.

2.1. Preparation for Field Work

Authorities including state and local regulatory agencies and any pertinent private entities will be notified of the intendedwork. Permission and permits to perform the work will be obtained as necessary. Advisement will include notifying these parties of our intent to perform the field work with this SSP in place. Both a private utility locator, Underground Service Alert (USA) will be used to clear proposed borehole locations prior to drilling. Knowledgeable Estate of J. Holland, Sr. staff members may be asked as to their knowledge of buried obstacles. Staging and decontamination areas will also be anticipated.

3. SAFETY PROCEDURES

3.1. Site Safety Officer

The Project Manager for EBS will oversee project safety measures on site as the designated Site Safety Officer. The Site Safety Officer is responsible for implementing this Site Safety Plan, for providing a copy of this Plan to subcontractors and other project participants as needed, and for advising site workers on health and safety matters. The Site Safety Officer has the authority to suspend or modify work practices if site safety conditions change or to dismiss subcontractors whose conduct does not meet the requirements specified in this Plan.

The Site Safety Officer will also convey information in this Plan to the EBS personnel assigned to the project and to the senior representative of each subcontractor on the project. The Site Safety Officer will address the following safety procedures on site:

- Provisions of the SSP, Company health and safety policies, and specific procedures.
- Safety supplies and equipment inventory on site.
- Daily safety meetings and advising workers regarding hazards.
- Site control, decontamination, and contamination-reduction procedures.
- Reporting accidents and incidents.

3.2. Site Hazards

This assessment is based upon the suspected environmental hazards at the site. Field screening of soil and breathing zones will be performed using a portable PID.

3.2.1. Anticipated Chemical Compounds

The contaminants expected to be encountered on-site are petroleum hydrocarbons.

3.2.1.1. Exposure Pathways

The potential exposure pathways are inhalation and skin contact. Protective clothing specified in this Plan will be mandatory for field personnel. In addition, respirators should be within easy reach in case odors reach irritating levels or irritation of the respiratory tract occurs.

Anticipated contaminants listed in the NIOSH Pocket Guide to Chemical Hazards are described briefly below. Information regarding the physical characteristics, incompatibilities, toxic effects, routes of entry, and target organs has been summarized and included.

Important Note: Whereas information used to compile the following list of anticipated chemical compounds to be encountered is limited to those identified in previous work at the site, it is possible that other compounds may be present at unknown concentrations. Skin contact with soil and dust should be minimized using appropriate level D PPE. The presence of discoloration and/or unusual odors, or physical sensations must be reported to the Site Safety Officer immediately upon detection.

Benzene
Benzene is colorless, aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers, chlorine, and bromine with iron. Benzene is irritating to the eyes, nose, and respiratory system. Prolonged exposure may result in giddiness, headache, nausea, staggering gait, fatigue, bone marrow depression, or abdominal pain. Routes of entry include inhalation, absorption, ingestion, and skin or eye contact. Its targets are blood, the central nervous system, skin, bone marrow, eyes, and respiratory system. Benzene is carcinogenic.

Toluene
Toluene is a colorless, aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers. Prolonged exposure may result in fatigue, confusion, euphoria, dizziness, headache, dilation of pupils, eye tearing, insomnia, dermatitis, or photophobia. Routes of entry are inhalation, absorption, ingestion, and skin or eye contact. The target organs are the central nervous system, liver, kidneys, and skin.

Ethylbenzene
Ethylbenzene is a colorless aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers and irritates the eyes and mucous membranes. Prolonged exposure may result in headache, dermatitis, narcosis, or coma. Routes of entry include inhalation, ingestion, and skin or eye contact. The target organs are the eyes, upper respiratory system, skin, and the central nervous system.

Xylene Isomers
Xylene is a colorless, aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers and irritates the eyes, nose, and throat. Prolonged exposure may result in dizziness, excitement, drowsiness, staggering gait, corneal vacuolization, vomiting, abdominal pain, or dermatitis. Routes of entry are inhalation, absorption, ingestion, and skin or eye contact. Its targets are the central nervous system, eyes, gastrointestinal tract, blood, liver, kidneys, and skin.

Methyl Tert-Butyl Ether
Methyl Tert-Butyl Ether (MTBE) is a gasoline additive. It is colorless liquid, Do not breathe vapor, do not get in eyes, on skin, on clothing. Keep away from heat, sparks and open flame. Harmful if swallowed, inhaled or absorbed through skin. Vapor or mist is irritating to the eyes, mucous membranes and upper respiratory tract. Causes skin irritation. Exposure can cause nausea, vomiting, dizziness, CNS depression. Aspiration or inhalation may cause chemical pneumonitis. Rapidly absorbed following oral exposure. This product is or contains a component that has been reportedto be possibly carcinogenic based on its IARC, ACGIH, NTP or EPA classification. Its target organs are kidneys, central nervous system. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

3.2.2. Anticipated Physical Hazards

General hazards associated with the operation of machinery and drilling equipment at the site will be encountered. In addition, inclement weather may present slip/trip hazards.

3.3. Required Protective Equipment

Field personnel and visitors who enter the designated work areas are required to wear the following protective clothing and equipment: hard hats, steel-toed boots, and safety glasses (modified Level-D).

The following clothing and equipment must be worn by workers: hard hats, steel toed boots of neoprene or polyvinyl chloride (or chemically resistant over boots if leather steel-toed boots are worn), safety glasses, gloves, (neoprene, nitrile or polyvinyl chloride), and standard Tyvek coveralls during any activity with a splash hazard (modified Level-D). As noted above, respirators with appropriate cartridges must be readily available and usable in case site conditions require their use. Subcontractors are responsible for providing the required safety equipment for their employees.

3.3.1. Respiratory Protection

EBS employees are required to have a physical at the expense of Environmental Bio-Systems, Inc. before respirators are issued to them. As part of their safety training, they are given information on proper methods of wearing and caring for their respirators. Training topics include the following: applicable OSHA regulations 1910.120 and 1910.134, selection of respiratory equipment that is appropriate to the respiratory hazards that may be encountered at the work site, proper fitting of respirators, functions and limitations of respirators, and methods of cleaning, disinfecting, inspecting, maintaining and storing respirators.

Respirators must not be used when atmospheres are, or may become, immediately dangerous to life or health or in atmospheres where the identity or concentration of contaminates is unknown. Respirators may not be used in atmospheres containing less than 19.5% oxygen.

Cartridges or canisters for respirators are selected and supplied to EBS employees by Environmental Bio-Systems, Inc. Failure to choose or use a respirator equipped with cartridges or filters suitable for the contaminants on-site may result in little or no protection against the contaminated atmosphere. Cartridges designed and specified for protection against specified gases and vapors are not appropriate for protection against airborne particles or other gases or vapors beyond the scope of that type of cartridge. The Site Safety Plan specifies the contaminants to be encountered, and the Site Safety Officer will provide the cartridges, canisters or filters appropriate to these contaminants if use of respirators may be necessary.

Conditions of use of respirators include but are not limited to the following:

- The concentration of contaminants in the atmosphere.
- Temperature and humidity of the ambient atmosphere.
- Any previous use of the cartridges and filters.
- The time since removing the cartridges or filters from their protective packaging.
- The level of physical activity of the wearer.
- Other characteristics of the wearer.

The respirator may have failed, cartridges may be inappropriate, or abnormal conditions may exist if the wearer observes any of the following conditions:

- Chemicals can be smelled or tasted.
- Eyes, nose, or throat become irritated.
- Breathing is difficult.
- The air being inhaled becomes uncomfortably warm.
- Headaches, dizziness, cramps, nausea, or blurred vision occur.
- Skin becomes discolored.
- Motor coordination, personality, or demeanor change.

- Speech ability changes.
- Excessive salivation is experienced.
- Others observe changes in pupillary response of the wearer.

If any of the above conditions are noted, the wearer of the respirator must leave the work zone for fresh air and advise the Site Safety Officer immediately of the incident. The Site Safety Officer will reevaluate safety conditions on-site.

3.4. Atmospheric Monitoring

Breathing zone atmosphere will be periodically monitored using a Thermo-Analytical Model D PID, calibrated at the beginning of the project to 100 ppm isobutylene scan gas. Should vapors within the breathing zone exceed 50 ppm for more than 10 minutes, field workers will don half-face respirators with OV-HEPA cartridges. Cartridges shall be changed upon breakthrough of odors, or increase in breathing resistance.

3.5. Minimum Safety Procedures

The following minimum safety requirements must be observed during field work:

1. Eating, drinking, and smoking will be restricted to a designated area outside of the work zone.

2. Workers will wash hands and faces before eating, drinking, or smoking in the designated area.

3. The Project Manager will take precautions to detect and either remedy, or isolate the following safety hazards:

   - Wet or oily surfaces that may cause slipping, falling objects including equipment and tools, falls from heights, tripping hazards, and faulty or inadequate protective equipment and tools.
   - Dust, dirt, liquids or other potentially contamiNated materials should not be removed from clothing or equipment by blowing or shaking.

4. Gross decontamination and removal of all personal protective equipment will be performed before leaving the site. ContamiNated clothing will be removed and collected in a drum for disposal.

5. Workers should inform the Project Manager and each other of symptoms indicating toxic materials, excessive heat, or other conditions that may be endangering health and safety. Such symptoms include dizziness, headaches, blurred vision, nausea, cramps, irritations (of skin, eyes, or respiratory tract), discoloration of skin, behavioral changes, loss of motor coordination, or changes in salivation, pupillary response, or speech.

4. SITE SAFETY MEETING

Field work each day will begin with a project-specific site safety meeting. Field personnel from EBS and its' subcontractors will attend the meeting to be briefed on the provisions of this Site Safety Plan, to review the project tasks, and to discuss any safety issues or questions. The meeting will be led by the Site Safety Officer. In addition fit-testing of respiratory protective devices will be conducted as part of the safety orientation meeting when the use of a respirator may be required. On-site safety meetings are essential to alerting personnel to the hazards associated with the expected contaminants.

5. WORK ZONES AND BARRICADES

Exclusion zones will be desigNated around the drilling areas. Only essential workers equipped with the specified safety equipment will be allowed in these exclusion zones.

Cones, wooden barricades, or a suitable alternative will be used to deny public access to work areas. If for any reason the safety of the public (such as a motorist or pedestrian) may be endangered, work will cease until the situation is remedied. Cones and warning signs will be used when necessary to redirect motorist or pedestrians and in keeping with any permit requirements.

6. DECONTAMINATION

Gross decontamination will be done on-site at the conclusion of work including work breaks, tasks or use of particular equipment, and the work day. Gross decontamination will include washing contamiNated equipment with an Alconox solution. Steam cleaning is an acceptable alternative for heavy equipment and tools. Disposal on-site in drums is also an acceptable alternative for items such as gloves and Tyvek suits.

7. EMERGENCY RESPONSE PROCEDURES

If emergency releases or accidents such as fires, explosions, or property damage occur, the Site Safety Officer and Management of EBS must be notified immediately. If necessary, local fire or response agencies should be called, and the Client should be advised as soon as time permits. If physical injury occurs, first aid should be administered and the injured worker should be transported to the nearest hospital or emergency medical clinic for treatment. A physicians attention is required regardless of the severity of the injury.

If personnel are exposed to hazardous materials on-site, typical responses should include the following:

- For skin or eye contact, wash and rinse affected area(s) thoroughly with copious amounts of soap and water, then provide appropriate medical attention. Eyes and skin should be rinsed for a minimum of 15-minutes after chemical contamination.
- If inhalation occurs, move the person to fresh air, decontamiNate external areas, and transport to the hospital.
- If ingestion occurs, decontamiNate external areas and transport the worker to the hospital.
- If puncture wounds or lacerations occur, decontamiNate external areas and transport the worker to the hospital.

7.1. Nearest Hospital

The Hospital nearest the job site is:
San LeandroHospital, 13855 East 14th Street, San Leandro, California A map showing the route form the work site to the hospital is attached.

Directions to Hospital:

A map showing this route is attached.

Go southest 1.1 miles to the hospital; Driving time: 2 minutes

The telephone number of this hospital is: (510) 357-6500. Or call 911.

7.2. Emergency Telephone Numbers

The Project Manager and Site Safety Officer for this project will be James A. Jacobs. Important telephone numbers have been listed below.

- **Police, Fire, and Ambulance 911**
- **Environmental Bio-Systems, Inc..... (415) 381-5195**
- **Jim Jacobs, mobile ..... (510) 590-1098**
- **Jim Jacobs, pager ..... (415) 451-6431**
- **San Leandro Hospital ..... (510) 357-6500**
- **Poison Control Center..... (800) 523-2222**
- **CHEMTREC ..... (800) 424-9300**

Note: Only call CHEMTREC if no other source of emergency information can be reached. CHEMTREC stands for Chemical Transportation Emergency Center, a public service of the Chemical Manufacturer's Association. CHEMTREC can usually provide hazard information, warnings, and guidance when given the identification number or the name of the product and the nature of the problem. CHEMTREC can also contact the appropriate experts.

8. LIMITATIONS

This Site Safety Plan was developed in accordance with generally accepted standards of current safety practice in the State of California. The terms of this Plan should not be considered valid after one year because of the changing regulations in environmental and safety practice. EBS is not able to elimiNate the risks associated with environmental and hazardous waste or toxic sites. No guarantees or warrants, express or implied, are provided with this Plan.

SAFETY PLAN SIGN-IN SHEET

Safety Plan has been reviewed by the following persons:

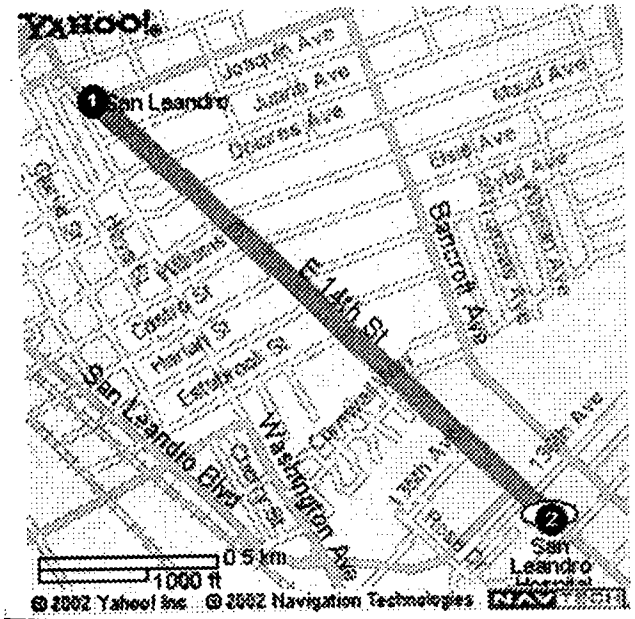
Environmental Bio-Systems, Inc. **Date:**
Project Manager: _____ _____

Others: _____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

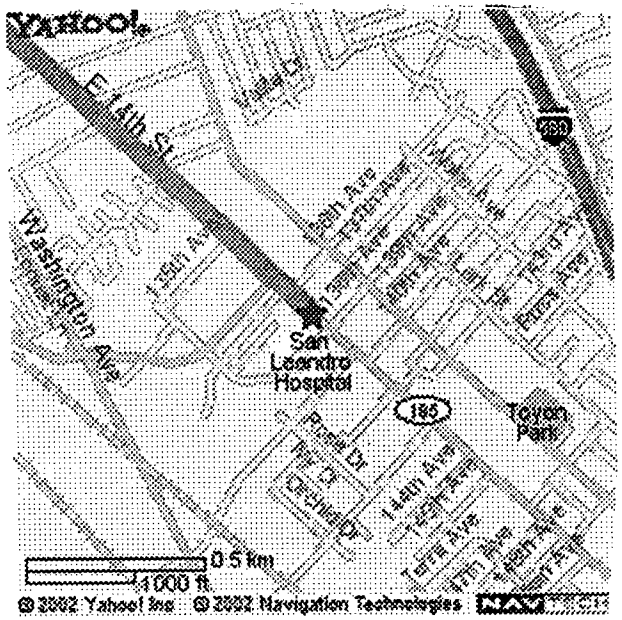
This Site Safety Plan may be amended or modified in writing. Any amendments or modifications are attached and are listed below. These items have also bee reviewed and approved by the personnel named above.

Attached Amendments or Modifications: None as of 5 March 2003

Full Route



Destination - Interactive Map



San Leandro Hospital

Directions		Miles	
1.	Start on **E 14TH ST**	1.1	↑

Distance: 1.1 miles **Approximate Travel Time:** 2 mins

ENVIRONMENTAL BIO-SYSTEMS, INC.	DATE: 3/03/03 DRAWN BY: JAJ PROJECT#: EBS 648 No scale implied	FIGURE HOSPITAL DIRECTIONS MAP ESTATE OF J. HOLLAND SR. 16301 E. 14th STREET SAN LEANDRO, CALIFORNIA

San Leandro Hospital 13855 East 14th Street, San Leandro, CA 94578 (510) 357-6500

ATTACHMENT E

CLEARWATER
GROUP
Environmental Services

SITE SAFETY PLAN

ADDITIONAL SUBSURFACE INVESTIGATION AND GROUNDWATER MONITORING WELL INSTALLATION

Estate of J. Holland, Sr.
Holland Oil
16301 East 14th Street
San Leandro, California

PREPARED BY THE CLEARWATER GROUP
FOR THE
ESTATE OF J. HOLLAND, SR.

Robert L. Nelson, P.G. #6270, C.E.G. #2087
Senior Geologist

James A. Jacobs, P.G. #4815, C.H.G. #88
Chief Hydrogeologist

May 24, 2006

229 Tewksbury Avenue ◆ Point Richmond, California 94801 ◆ Telephone: 510-307-9943 ◆ Fax: 510-232-2823

CLEARWATER
GROUP, INC.
Environmental Services

TABLE OF CONTENTS

SECTION	PAGE
GENERAL INFORMATION	1
PURPOSE	1
SCOPE OF WORK	1
Anticipated Field Work	1
Preparation for Field Work	2
SAFETY PROCEDURES	2
Site Safety Officer	2
SITE HAZARDS	3
Contaminant Hazards	3
Benzene	3
Toluene	3
Ethylbenzene	4
Xylene Isomers	4
Methyl Tert-Butyl Ether	4
Physical Hazards	4
Heat Stress	5
Heat Stress Monitoring	5
Heat Stress Prevention	6
Fire Hazards	6
Electrical Hazards	6
Biological Hazards	7
PERSONNEL PROTECTIVE EQUIPMENT	7
RESPIRATORY PROTECTION	7
Atmospheric Monitoring	7
Use of Respirator Action Level and Respirator Cartridge Selection	7
Respirator Use	7
SAFETY PROCEDURES	9
SITE SAFETY MEETING	10
WORK ZONES AND BARRICADES	10
DECONTAMINATION	10

CLEARWATER
GROUP, INC.
Environmental Services

EMERGENCY RESPONSE PROCEDURES----------10
Hazardous Material Exposure ----------11
First Aid – Physical Injury----------11
Nearest Hospital ----------12
Emergency Telephone Numbers----------13
LIMITATIONS ----------13

CLEARWATER
GROUP, INC.
Environmental Services

GENERAL INFORMATION

The 3-acre site is currently used for storage of equipment and the sale of used cars. The work is being conducted in accordance with a signed contract between the Clearwater Group (Clearwater) and Ms. Anne Marie Holland, Executor of the Estate of J. Holland, Sr. (Client).

The work will be conducted in accordance with Environmental Bio-System's, Inc.'s (Mill Valley, California), March 3, 2003, *Work Plan: Additional Subsurface Investigation, Ground Water Monitoring Well Installation* and Clearwater's, April 21 2006, *Work Plan Addendum, Response to Technical Comments.*

This Site Safety Plan (SSP) describes the safety requirements for the drilling and sampling of fourteen soil borings using a Direct Push Technology (DPT) probe rig and installing two 2-inch diameter groundwater monitoring wells (MW-6 and MW-7). Continuous soil conductivity probes will also be driving at three 40 foot deep soil borings (SC-52, SC-61 and SC-62) and at the two groundwater monitoring well installations. In addition, the wells will be developed and one year of groundwater monitoring will occur.

The provisions of this plan apply to all individuals working on this phase of the project. Subcontractors may elect to voluntarily increase the safety requirements for their work, with the prior consent of Clearwater. Field work is expected to begin in the Spring of 2006. If site working conditions, or the scope of work for this phase of the project change before, or during, the field work this SSP will be revised.

PURPOSE

The proposed scope of work included in the Work Plan and Work Plan Addendum is intended to assess the lateral and vertical impact of petroleum hydrocarbons to the subsurface from an underground storage tank (UST), which reportedly suffered an unauthorized release, and at two unpaved areas showing visible discoloration.

SCOPE OF WORK

Anticipated Field Work

The anticipated field work to be performed at the site will include the following tasks:

- Clearance of buried utilities in the investigation areas using utility detecting instruments.
- Coring through the asphalt or concrete to prepare for the borings, where needed.
- Driving continuous soil conductivity borings with a DPT rig.

CLEARWATER
GROUP, INC.
Environmental Services

- Driving and collecting soil and grab groundwater samples from 14 exploratory soil borings with a DPT rig.
- Installing 2 groundwater monitoring wells with either a DPT rig or a with a hollow stem auger rig.
- Field screening the soil samples with a photoionization detector (PID).
- Temporary stockpiling of soil cuttings and decontamination rinsate water (investigation derived waste) on-site in labeled DOT-approved 55 gallon drums.
- Redeveloping of the five existing groundwater monitoring wells and development of the two new wells.
- Surveying the existing and new wells and site features with a global positioning system (GPS) to verify their location.
- One year of quarterly groundwater monitoring of the monitoring wells.
- Disposal of all investigation derived waste.

Preparation for Field Work

State and local regulatory agencies and pertinent private entities will be notified of the intended work. Permission and permits to perform the work will be obtained as necessary. A private utility locator and Underground Service Alert (USA) will be used to clear proposed borehole locations prior to drilling. Persons knowledgeable about the estate of J. Holland, Sr. may be asked about their knowledge of buried obstacles. The establishment of staging and decontamination areas is also anticipated.

An access agreement will be obtained from the San Lorenzo Unified School District to drill soil borings on the grounds of Edendale Middle School prior to any work occurring on the school grounds.

SAFETY PROCEDURES

Site Safety Officer

The Clearwater Project Manager will serve as the designated Site Safety Officer (SSO). The SSO is responsible for implementing the SSP, providing a copy of the SSP to subcontractors and other project participants as needed, and advising site workers on site-specific health and safety matters. The Site Safety Officer has the authority to suspend or modify work practices if site safety conditions change or to dismiss subcontractors whose conduct does not meet the requirements specified in this SSP.

CLEARWATER
GROUP, INC.
Environmental Services

The SSO will also convey the information in this SSP to Clearwater personnel assigned to the project and to the senior representative of each subcontractor on the project. The Site Safety Officer will address the following safety procedures on site:

- Provisions of the SSP, Clearwater's health and safety policies, and site specific procedures.
- Daily safety meetings and advising workers regarding site hazards.
- Site control, decontamination, and contamination-reduction procedures.
- Reporting accidents and incidents.

SITE HAZARDS

Contaminant Hazards

The contaminants expected to be encountered on-site are petroleum hydrocarbons. Information used to compile the following list of anticipated chemical compounds that may be encountered is limited to those identified in previous work at the site. It is possible that other compounds may be present at unknown concentrations. Skin contact with soil and dust should be minimized using Level D, or greater, personnel protective equipment (PPE). The presence of discoloration and/or unusual odors, or physical sensations must be reported to the Site Safety Officer immediately upon detection.

Potential site contaminants are described briefly below. These contaminants are described in the NIOSH Pocket Guide to Chemical Hazards. Information regarding the physical characteristics, incompatibilities, toxic effects, routes of entry, and target organs has been summarized below.

Benzene

Benzene is a colorless, aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers, chlorine, and bromine with iron. Benzene is irritating to the eyes, nose, and respiratory system. Prolonged exposure may result in giddiness, headache, nausea, staggering gait, fatigue, bone marrow depression, or abdominal pain. Routes of entry include inhalation, absorption, ingestion, and skin or eye contact. Target organs are the blood, central nervous system, skin, bone marrow, eyes, and respiratory system. Benzene is carcinogenic.

Toluene

Toluene is a colorless, aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers. Prolonged exposure may result in fatigue, confusion, euphoria, dizziness, headache, dilation of pupils, eye tearing, insomnia, dermatitis, or photophobia. Routes of entry are inhalation, absorption, ingestion, and skin or eye contact. The target organs are the central nervous system, liver, kidneys, and skin.

CLEARWATER
GROUP, INC.
Environmental Services

Ethylbenzene

Ethylbenzene is a colorless aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers and irritates the eyes and mucous membranes. Prolonged exposure may result in headache, dermatitis, narcosis, or coma. Routes of entry include inhalation, ingestion, and skin or eye contact. The target organs are the eyes, upper respiratory system, skin, and central nervous system.

Xylene Isomers

Xylene is a colorless, aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers and irritates the eyes, nose, and throat. Prolonged exposure may result in dizziness, excitement, drowsiness, staggering gait, corneal vacuolization, vomiting, abdominal pain, or dermatitis. Routes of entry are inhalation, absorption, ingestion, and skin or eye contact. Target organs are the central nervous system, eyes, gastrointestinal tract, blood, liver, kidneys, and skin.

Methyl Tert-Butyl Ether

Methyl Tert-Butyl Ether (MTBE) is a gasoline additive that may create an explosive hazard. It is colorless liquid and is harmful if swallowed, inhaled or absorbed through skin. Its vapor or mist causes skin irritation and is irritating to the eyes, mucous membranes and upper respiratory tract. Exposure can cause nausea, vomiting, dizziness, and central nervous system depression. Aspiration or inhalation may cause chemical pneumonitis. MTBE is rapidly absorbed following oral exposure. This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP or EPA classification. Target organs are the kidneys and central nervous system. Its chemical, physical, and toxicological properties have not been thoroughly investigated.

Physical Hazards

The potential for physical injury exists from the operation of moving equipment such as drill rigs, forklifts and trucks. Moving equipment may cause injury by crushing, falling objects, hurtling objects, penetration of subsurface utilities or structures. Inclement weather may create slip/trip and poor visibility hazards.

The use of steel toe boots, hard hats, and safety glasses will be required when in the work area. The work area perimeter shall be defined with the use of traffic cones/barricades (15 feet radius from borehole/work area) and caution tape/work area signage. The perimeter will be moved along with the work area and only authorized personnel will be allowed within the work perimeter. Backup alarms are required on all trucks and forklifts. No person other than the equipment operator shall approach within 5-feet of equipment at any time. A potential for physical injury

may exist from public traffic on the site. The public will be prohibited from entering designated work areas by establishing and monitoring the work area perimeter.

The potential for burns from hot surfaces may exist from the operation of an internal combustion engine. Exhaust air piping will burn exposed flesh. All hot surfaces shall be allowed to cool and/or be handled with thick work gloves.

Personnel should be cognizant of the fact that when protective equipment such as respirators, gloves, and/or protective clothing is worn, visibility, hearing, and manual dexterity are impaired. Each site worker is responsible for the awareness/safety of the other site workers.

Heat Stress

The potential for heat stress is present if the temperature exceeds 80°F, clothing prevents sweat from evaporating, and shade is not available. Some signs and symptoms of heat stress are presented below:

- Heat rash may result from continuous exposure to heat or humid air.
- Heat cramps are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include: muscle spasms, heavy sweating, dizziness, nausea and fainting.
- Heat exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Signs and symptoms include: pale, cool, moist skin; heavy sweating; dizziness; nausea and fainting.
- 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 occurs. Competent medical help must be obtained. Signs and symptoms are: red, hot, unusually dry skin; lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse and coma.

Heat Stress Monitoring

All personnel (including subcontractors) shall be monitored for heat stress. Because workers at the job site are expected to be wearing permeable clothing (e.g., standard cotton or synthetic work clothes), monitoring for heat stress will consist of personnel constantly observing each other for any of the heat stress symptoms discussed above. The SSO shall mandate work slowdowns as needed.

CLEARWATER
GROUP, INC.
Environmental Services

Heat Stress Prevention

- Adequate liquid intake
- Cooling by water misting
- Shade
- Work early and/or late in the day

Fire Hazards

A potential for fire or explosion exists whenever flammable liquids or vapors are present above lower explosions limit (LEL) concentrations and sufficient oxygen is present to support combustion. A potential exists for petroleum hydrocarbon vapors to exceed LEL concentrations within groundwater monitoring wells with the lid bolted tightly. The atmosphere within groundwater monitoring well generally does not contain sufficient oxygen to support combustion. After removing the well lid, stand back so vapors from the well can dissipate prior to initiating groundwater elevation measuring and sampling.

An operative fire extinguisher will be located in each vehicle on site. All personnel shall be familiar with its location and use.

In the event of a fire or explosion, call 911 to summon the local fire department. Be prepared to give the following information: location, nature, and identification of any hazardous materials on site.

If it is safe to do so, site personnel may:

- Use fire fighting equipment to extinguish the fire.
- Remove or isolate flammable or other hazardous materials which may contribute to the fire.

Otherwise, immediate evacuation of the area is indicated.

In the event of an explosion, all personnel shall be evacuated and the fire department notified. No one shall re-enter the area until it has been cleared by explosives safety personnel.

Electrical Hazards

No electrical enclosures will be opened unless the electrical power is disconnected. Power will be verified disconnected with a meter prior to working on any circuits. Check all work locations for overhead wires before starting work. The drill locations will be cleared for elctrical currents by the utility locators.

CLEARWATER
GROUP, INC.
Environmental Services

Biological Hazards

Biological hazards such as insect and/or animal bites and exposure to poisonous plants are more prevalent in rural areas. Personnel shall use caution when entering areas that may shelter indigenous creatures such as snakes, spiders, ticks and/or rodents. Proper precautions shall be taken against exposure to poisonous plants such as poison oak

PERSONNEL PROTECTIVE EQUIPMENT

Use of the personnel protective equipment (PPE) specified in this SSP will be mandatory for field personnel. Visitors who enter designated work areas are required to wear the following protective clothing and equipment; hard hat, steel-toed boots, and safety glasses

During any activity with a splash hazard the following PPE (modified Level-D) must be worn by site workers; hard hat, steel toed boots of neoprene or polyvinyl chloride (or chemically resistant over boots if leather steel-toed boots are worn), safety glasses, gloves, (neoprene, nitrile or polyvinyl chloride), and Tyvek coveralls.

RESPIRATORY PROTECTION

Atmospheric Monitoring

The breathing zone atmosphere will be periodically monitored using a PID, calibrated at the beginning of each day with 100 parts per million (ppm) isobutylene calibration gas.

Use of Respirator Action Level and Respirator Cartridge Selection

Should vapors within the breathing zone exceed a PID reading of 50 ppm for more than 10 minutes, site workers will don half-face respirators with combination Organic Vapor/HEPA cartridges. Workers will upgrade to full face respirators with Organic Vapor/HEPA cartridges if the PID readings exceed 100 ppm for more than 10 minutes. Cartridges shall be changed upon breakthrough of odors, or increase in breathing resistance.

Respirator Use

Site workers are required to have an annual physical examination before respirators are issued to them. As part of their safety training, they are given information on the proper methods of using

CLEARWATER
GROUP, INC.
Environmental Services

and caring for their respirators. Training topics include the following: applicable OSHA regulations 1910.120 and 1910.134, selection of respiratory equipment appropriate to the respiratory hazards encountered at the work site, proper fitting of respirators, functions and limitations of respirators, and methods of cleaning, disinfecting, inspecting, maintaining and storing respirators.

Respirators must not be used when atmospheres are, or may become, immediately dangerous to life or health or in atmospheres where the identity or concentration of contaminates is unknown. Respirators may not be used in atmospheres containing less than 19.5% oxygen. Respirators with appropriate cartridges must be usable and readily available.

Failure to choose or use a respirator equipped with cartridges or filters suitable for the contaminants on-site may result in little or no protection against the contaminated atmosphere. Cartridges designed and specified for protection against specified gases and vapors may not be appropriate for protection against airborne particles or other gases or vapors. The Site Safety Plan specifies the contaminants to be encountered.

Conditions limiting the use of respirators include, but are not limited to the following:

- The concentration and type of contaminants in the atmosphere.
- Temperature and humidity of the ambient atmosphere.
- Any previous use of the cartridges and filters.
- The time since removing the cartridges or filters from their protective packaging.
- The level of physical activity of the wearer.
- Other characteristics of the wearer.

If the wearer observes any of the following conditions while wearing a respirator, the respirator may have failed, the cartridges may be inappropriate, or abnormal conditions may exist:

- Chemicals can be smelled or tasted.
- Nose, or throat becomes irritated.
- Breathing is difficult.
- The air being inhaled becomes uncomfortably warm.
- Headaches, dizziness, cramps, nausea, or blurred vision occur.
- Skin becomes discolored.
- Motor coordination, personality, or demeanor change.
- Speech ability changes.
- Excessive salivation is experienced.
- Others observe changes in pupillary response of the wearer.

If any of the above conditions are noted, the wearer of the respirator must leave the work zone for clean air and advise the Site Safety Officer immediately of the incident. The Site Safety Officer will reevaluate safety conditions on-site.

Subcontractors are responsible for providing all of the required PPE to their employees.

SAFETY PROCEDURES

The following safety procedures must be observed during field work:

- Eating, drinking, and smoking will be restricted to a designated area outside of the work zone.
- Workers will wash hands and faces before eating, drinking, or smoking in the designated area.
- All site workers will take precautions to detect and either remedy, or isolate, any potential site safety hazards.

Site safety hazards may include:

- Wet or oily surfaces that may cause slipping
- Falling objects including equipment and tools
- Falls from heights
- Tripping hazards
- Faulty or inadequate protective equipment and tools

Gross decontamination and removal of all PPE will be performed before leaving the site. Contaminated clothing will be removed and sealed in a container for later disposal. Dust, dirt, liquids or other potentially contaminated materials should not be removed from clothing or equipment by blowing or shaking.

Workers shall inform the Project Manager and each other of symptoms indicating exposure to toxic materials, excessive heat, or other conditions that may endanger health and safety. Symptoms include dizziness, headaches, blurred vision, nausea, cramps, irritations (of skin, eyes, or respiratory tract), discoloration of skin, behavioral changes, loss of motor coordination, or changes in salivation, pupillary response, or speech.

CLEARWATER
GROUP, INC.
Environmental Services

SITE SAFETY MEETING

Each day of field work will begin with a site safety meeting. Clearwater personnel and its subcontractors will attend the meeting to be briefed on the provisions of the Site Safety Plan, review the project tasks, and discuss any safety issues or questions. The meeting will be led by the Site Safety Officer. On-site safety meetings are essential to alerting personnel to the hazards associated with the expected contaminants. All site personnel are required to sign the daily site safety meeting form. Personnel arriving on site after the daily site safety meeting will report to the SSO and sign the daily site safety meeting form before beginning work.

WORK ZONES AND BARRICADES

An exclusion zone will be established around the work areas. Only essential workers equipped with the specified PPE will be allowed in the exclusion zone.

Traffic cones, barricades, caution tape or a suitable alternative will be used to deny public access to work areas. If for any reason the safety of the public (such as a motorist or pedestrian) may be endangered, work will cease until the situation is remedied. Traffic cones and warning signs will be used when necessary to redirect vehicles or pedestrians.

Work on the Edendale Middle School grounds will be done when the school is out of session.

DECONTAMINATION

Gross decontamination will be done on-site at the conclusion of work including work breaks, tasks or use of particular equipment, and the end of the work day. Gross decontamination will include washing contaminated equipment with an Alconox soap and water solution. Steam cleaning is an acceptable alternative for heavy equipment and tools. Investigation derived waste (IDW) items such as gloves and Type suits may be temporarily stored onsite in a sealable container, then later properly disposed of offsite.

EMERGENCY RESPONSE PROCEDURES

If releases of contaminants or accidents such as fires, explosions, or property damage occur, the Site Safety Officer and Management of Clearwater must be notified immediately. If necessary, local fire or response agencies should be called, and the Client should be advised as soon as time permits. If physical injury occurs, first aid should be administered and the injured worker should be transported to the nearest hospital or emergency medical clinic for treatment.

Hazardous Material Exposure

If personnel are exposed to hazardous materials on-site, typical responses should include the following:

- For skin contact, wash and rinse affected area(s) thoroughly with copious amounts of soap and water, then provide appropriate medical attention
- Eyes and skin should be rinsed for a minimum of 15-minutes after chemical contamination with clean water.
- If inhalation of contaminants occurs, move the person to fresh air, decontaminate external areas, and transport the worker to the hospital.
- If ingestion of contaminanats occurs, decontaminate external areas and transport the worker to the hospital
- If puncture wounds or lacerations occur, decontaminate external areas and transport the worker to the hospital.

First Aid – Physical Injury

Animal Bites	Thoroughly wash the wound with soap and water. Flush the area with running water and apply a sterile dressing. Immobilize affected part until a physician has attended the victim. See that the animal is kept alive and in quarantine. Obtain name and address of the owner of the animal.
Burns (minor)	Apply cold water until pain subsides. Cover with a wet sterile gauze dressing. Do not break blisters or remove tissues. Seek medical attention.
Burns (severe)	Do not remove adhered particles of clothing. Do not apply ice or immerse in cold water. Do not apply ointment, grease or Vaseline. Cover burns with thick sterile dressings. Keep burned feet or legs elevated. Seek medical attention immediately.
Cuts	Apply pressure with sterile gauze dressing and elevate the area until bleeding stops. Apply a bandage and seek medical attention.
Eyes	Keep the victim from rubbing the eye. Flush the eye with water. If flushing fails to remove the object, apply a dry, protective dressing and consult a physician.

Fainting	Keep the victim lying down with feet elevated. Loosen tight clothing. If victim vomits, roll him/her onto his/her side or turn his/her head to the side. If necessary wipe out his/her mouth. Maintain an open airway. Bathe face gently with cool water. Unless recovery is prompt, seek medical attention.
Fracture	Deformity of an injured part usually means a fracture. If fracture is suspected, splint the part as it lies. Do not attempt to move the injured part of the person. Seek medical attention immediately.
Insect Bites	Remove stinger, if present. Keep affected part down below the level of the heart. Apply ice bag. For minor bites and stings apply soothing lotions, such as calamine.
Puncture Wounds	If puncture wound is deeper than skin surface, seek medical attention. Serious infection can arise unless proper treatment is received.
Sprains	Elevate injured part and apply ice bag or cold packs. Do not soak in hot water. If pain and swelling persist, seek medical attention.
Unconsciousness	Do not attempt to give any fluid or solid by mouth. Keep victim flat and maintain an open airway. If victim is not breathing, provide artificial respiration by mouth-to-mouth breathing and call for an ambulance immediately

Nearest Hospital

The hospital nearest the job site is:
San Leandro Hospital, 13855 East 14th Street, San Leandro.

Directions to Hospital:

A map showing this route is attached.
Enter East 14th Street, turn left, go northwest 1.9 miles to San Leandro Hospital. Driving time: 3 minutes

The telephone number of this hospital is:
(510) 357-6500. Or call 911.

CLEARWATER
GROUP, INC.
Environmental Services

Emergency Telephone Numbers

The Project Manager and Site Safety Officer for this project will be Robert L. Nelson. Important telephone numbers have been listed below.

- **Police, Fire, and Ambulance 911**
- **Clearwater Group. ..... (510) 307-9943**
- **Robert Nelson, mobile phone ..... (707) 548-3268**
- **San Leandro Hospital ..... (510) 357-6500**
- **Poison Control Center ..... (800) 523-2222**
- **CHEMTREC ..... (800) 424-9300**

Note: Only call CHEMTREC if no other source of emergency information can be reached. CHEMTREC stands for Chemical Transportation Emergency Center, a public service of the Chemical Manufacturer's Association. CHEMTREC can usually provide hazard information, warnings, and guidance when given the identification number or the name of the product and the nature of the problem. CHEMTREC can also contact the appropriate experts.

1. LIMITATIONS

This Site Safety Plan was developed in accordance with generally accepted standards of current safety practice in the State of California. The terms of this Plan should not be considered valid after one year because of the changing regulations in environmental and safety practice. Clearwater is not able to eliminate the risks associated with environmental and hazardous waste or toxic sites. No guarantees or warrants, express or implied, are provided with this Plan.

CLEARWATER
GROUP, INC.
Environmental Services

SITE SAFETY PLAN SIGN-IN SHEET
Holland Oil
16301 East 14th Street
San Leandro, California

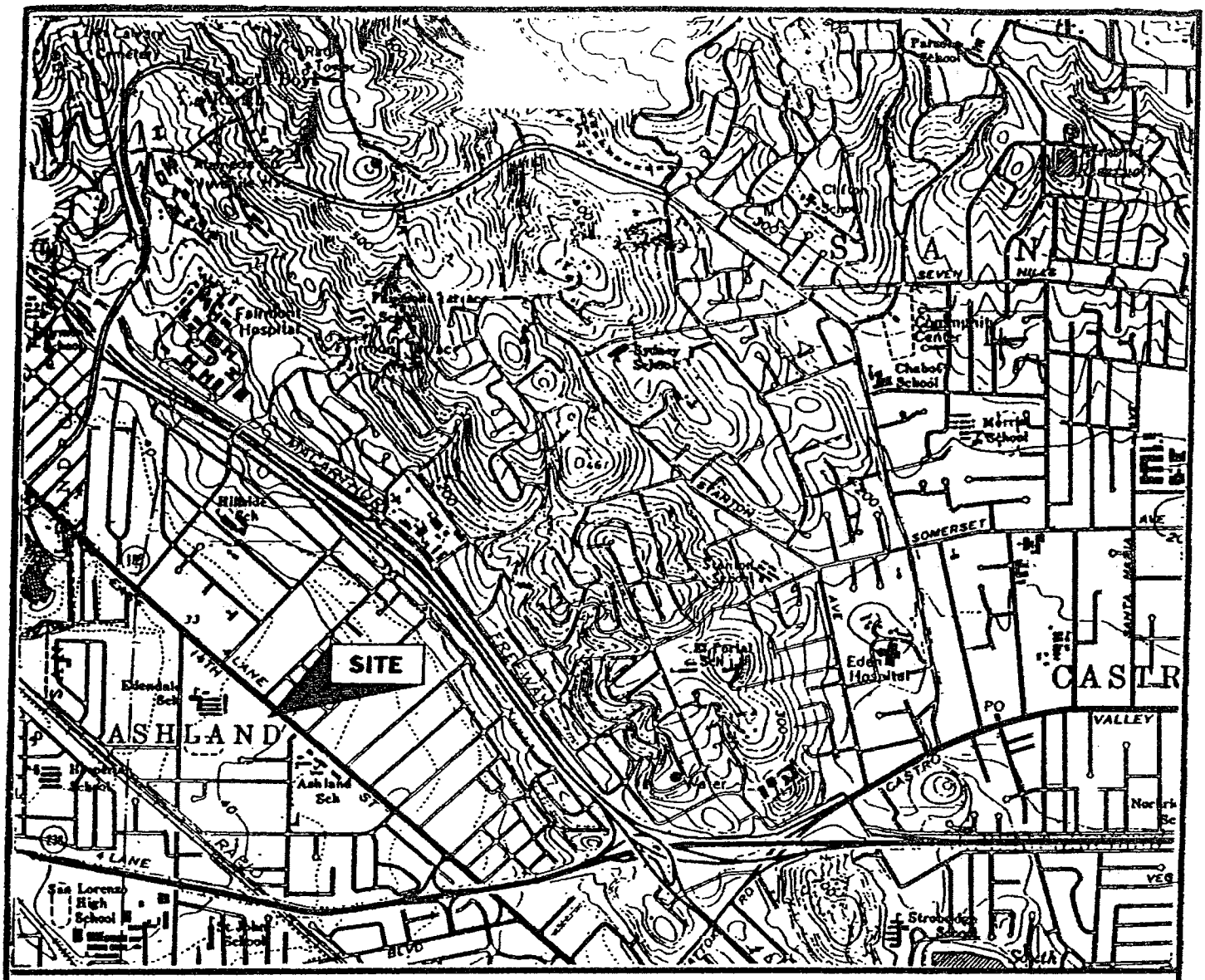
The Site Safety Plan has been reviewed by the following persons:

Date:
Project Manager: _____

Others: _____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

This Site Safety Plan may be amended or modified in writing. Any amendments or modifications are attached and are listed below. These items have also been reviewed and approved by the personnel named above.

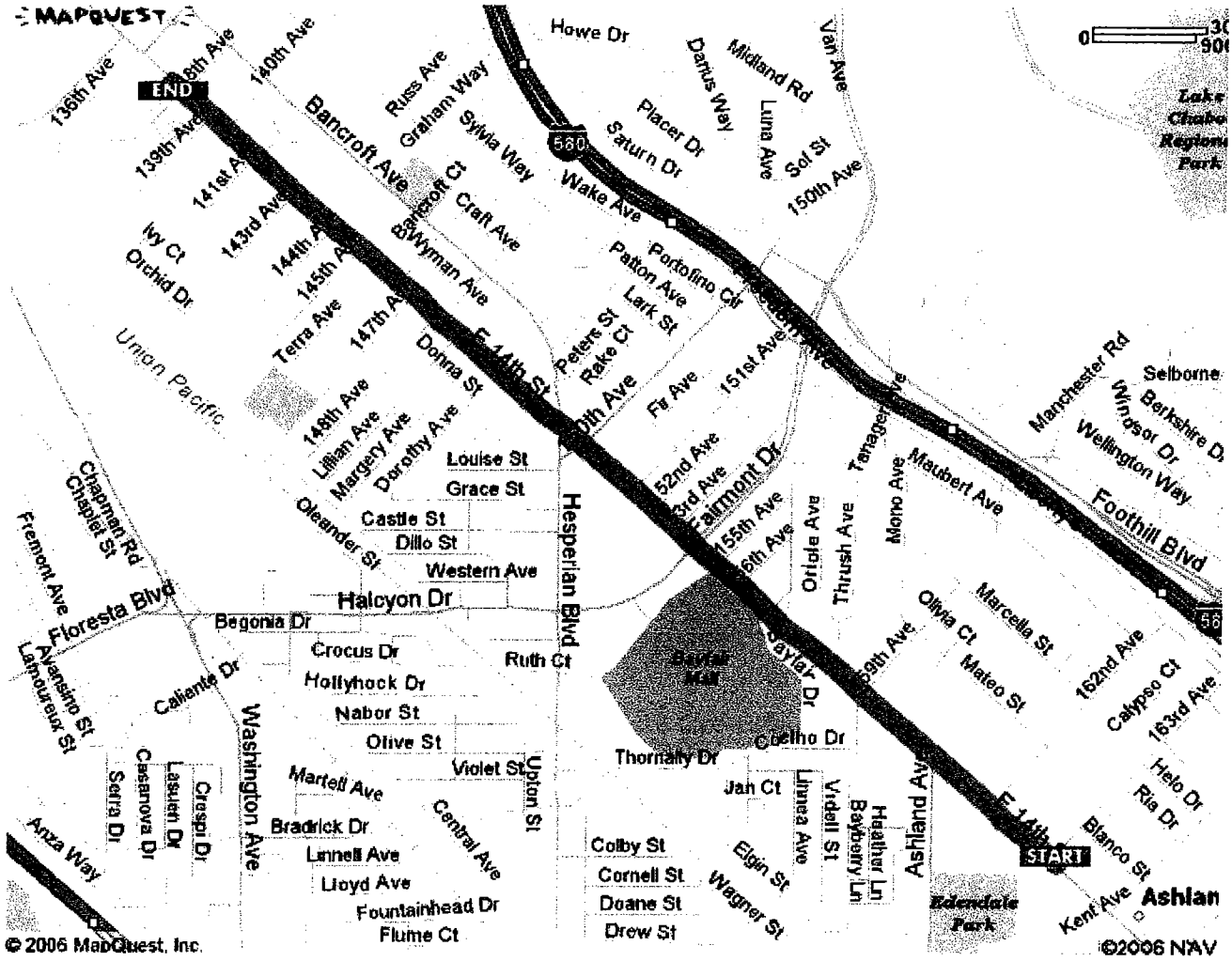
Attached Amendments or Modifications: None as of May 24, 2006



Source: USGS Hayward, California 7.5-Minute Quadrangle Map

*Modified from Environmental Bio-Systems, Inc.

SITE LOCATION MAP Holland Oil 16301 E. 14th Street San Leandro, California	CLEARWATER GROUP		
	Project No. **CB015D**	Figure Date **04/06**	Figure **1**



ROUTE TO HOSPITAL MAP Holland Oil 16301 E. 14th Street San Leandro, California	CLEARWATER GROUP		
	Project No. CB015D	Figure Date 04/06	Figure 2

ATTACHMENT F

CERTIFICATE REQUEST

DATE OF REQUEST:_____

NAME OF INSURED: THE AUGER GROUP, INC.
dba Clearwater Group, Inc., Fast-Tek E.S.S. and Artesian Env. Consultants
MAILING ADDRESS: 229 Tewksbury Avenue
Pt. Richmond, CA 94801
Phone 510-307-9943 Fax 510-232- 2823

FULL NAME AND ADDRESS OF CERTIFICATE HOLDER:

_____
_____
_____
_____
ATTN:_____
Fax to Certificate Holder- Fax#_____
JOB NUMBER:_____
LOCATION:_____
_____

TYPE OF CERTIFICATE OF INSURANCE:
___GL/PL____AUTO____WORKERS COMPENSATION
ADDITIONAL COVERAGE:
1.____ADD AS ADDITIONAL INSURED
2.____OTHER INSTRUCTIONS:_____
_____
_____
_____

REQUESTED BY (PM):_____

COOK DISHAROON FAX #437-1979

San Lorenzo Unified School District
15510 Usher Street
San Lorenzo, CA 94580

Date: _____

Name: The Auger Group dba Fast-Tek, Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801

RE : Request for Information / Additional coverage

☐ Business/Subcontractor's License number and Expiration date

☐ Certificate of Insurance that lists The Auger Group, Inc. (TAGI) and TAGI's client as additional insured under the General Commercial and Automobile Liability policy

☐ General Commercial Liability ($1,000,000 per occurrence and $2,000,000 general aggregate)

☐ Worker's Compensation (amount required by statute)

☐ Automobile Liability ($1,000,000 combined single limits)

☐ Pollution Liability ($3,000,000 per occurrence and general aggregate)

☐ Professional Liability ($3,000,000 per occurrence and general aggregate)

☐ Excess Liability ($1,000,000 per occurrence and general aggregate)

Please check the items needed.

ATTACHMENT G

SITE ACCESS AGREEMENT

THIS SITE ACCESS AGREEMENT ("Agreement") is entered into as [redacted] 2006, by and between the SAN LORENZO UNIFIED SCHOOL DISTRICT ("Licensor"), CLEARWATER GROUP, INC., a California corporation ("Licensee") and the ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY, each referred to herein individually as a "Party"; and collectively as the "Parties."

DRAFT

Recitals

A. Licensor is the fee owner of that certain real property commonly known as16245 E. 14th Street, San Leandro, California and more particularly shown on Exhibit A attached hereto and incorporated herein by this reference (the "Property").

B. The ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY is the owner of that certain real property commonly known as 16301 E 14th Street, San Leandro, California (the "former Holland Oil Site") adjacent to the Property.

C. The ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY, has been required by Alameda County Environmental Services, Environmental Protection to investigate a fuel release from former underground tanks located at the former Holland Oil Site.

D. The ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY has retained Licensee, environmental consultants, as agent of the ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY, to determine if soil and/or groundwater at the Property is impacted by such fuel release.

E. Licensee desires permission to enter onto the Property for the purposes of conducting soil borings to collect soil and groundwater samples.

F. Licensor is willing to grant such permission upon the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the foregoing and of the mutual promises, covenants, conditions and agreements hereinafter set forth, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Grant of License. Licensor hereby grants to Licensee, its agents, employees, and contractors, a nonexclusive license to enter onto the Property on dates to be mutually agreed to by the Parties for the purpose of conducting the soil borings.

2. Scope of License. The License shall be for the conduct of soil borings in accordance with the Scope of Work attached hereto as Exhibit C ("Licensee's Work"). Upon completion of Licensee's Work, Licensee shall grout the 2" diameter holes with neat

cement slurry to within 2 feet of the ground surface. The remaining 2 feet will be filled with a soil and sand mixture to match site conditions, so as to restore the Property to its original level. Licensee shall perform any entry onto the Property and any Licensee's Work in connection therewith so as to minimize, to the greatest extent possible, any interference with any business conducted on the Property. In connection with the entry by Licensee or its agents, or employees onto the Property pursuant to this Agreement, Licensee shall gain agreement of the Licensor as to the dates and times for such entries.

3. Term. The term of this Agreement shall extend from the date hereof to the completion of the Licensee's Work and the return of the Property to its original condition. DRAFT

4. Compliance with Laws. Licensee shall perform the Licensee's Work under this Agreement in compliance with all federal, state and municipal statutes and ordinances, and with all regulations, orders and directives of all authorized governmental agencies, as such statutes, ordinances, regulations, orders and directives now exist or may hereafter be written.

5. Responsibility for Expenses. The ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY shall be jointly and severally responsible for the cost and expense of all Licensee's Work, including, without limitation, reimbursement of Licensor for all costs incurred by Licensor related to this Agreement, including attorney's fees and any other employees of Licensor.

6. Permits. Licensee, at its cost, shall be responsible for obtaining any and all governmental permits and approvals, which may be necessary for Licensee to conduct any of Licensee's Work pursuant to this Agreement.

7. Liens and Claims. Licensee shall not permit any mechanic's, material men's, or other similar liens or claims to stand against the Property for labor or material furnished in connection with any Licensee's Work performed by Licensee under this Agreement, and Licensee shall have any such lien released at Licensee's sole expense. At Licensor's request, Licensee shall execute, and Licensor may record and post at the Property, one or more notices of non-responsibility for the benefit of Licensor in accordance with applicable law.

8. Cooperation. Licensor may have its representatives present to observe any of Licensee's Work.

9. Indemnity. The ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY and the Licensee, jointly and severally, shall indemnify, defend and hold Licensor harmless from and against any and all costs, damages, liabilities, losses, expenses, liens, claims, or any liability arising out of or relating to any violation of law or loss or damage to the Property or any injury or death to any person resulting from any entry on the Property by Licensee, its agents, employees or contractors in the course of performing Licensee's Work, except to the extent that such violation of law or loss or damage to the Property or injury or death is caused by the negligence or willful misconduct of Licensor.

10. Insurance. Licensee shall maintain in full force and effect during the term of this Agreement a Commercial General Liability Insurance policy in the amount of at least Two Million Dollars ($2,000,000.00) combined single limit per occurrence insuring against all liability of Licensee and its agents, employees or contractors, arising out of any entry or inspections of the Property pursuant to the provisions hereof, which policy or policies shall name Licensor as an additional insured, and Licensee shall provide Licensor with evidence of such insurance coverage upon request by Licensor. The limits on insurance in this Paragraph 10 shall in no way limit or restrict the scope of the indemnity set forth in Paragraph 9 hereof.

11. Government Contacts. Except for submission of reports required by applicable law, Licensee shall not contact any governmental authority with respect to the results of any of Licensee's Work without first obtaining the prior written consent of Licensor thereto. Licensor, at Licensor's election, shall be entitled to have a representative participate in any telephone meeting or other contact made by Licensee to any governmental authority and present at any meeting by Licensee with any governmental authority with respect to the Licensee's Work at said site.

12. Assignment, Successor and Assigns. This Agreement shall be binding on the Parties' respective representatives, successors and assigns and shall inure to the benefit of and shall be enforceable by each of them.

13. Execution of Agreement. Each of the undersigned hereby represents and warrants that it is authorized to execute this Agreement on behalf of the respective Party and that this Agreement, when executed by such Party, shall become valid and binding obligations enforceable in accordance with its terms.

14. Notices. Any notices required or permitted to be given hereunder shall be given in writing and shall be delivered (a) in person, (b) by certified mail, postage prepaid, return receipt requested, (c) by facsimile with confirmation of receipt, or (d) by a commercial overnight courier that guarantees next day delivery and provides a receipt, and such notices shall be addressed as follows:

To Licensor: SAN LORENZO UNIFIED SCHOOL DISTRICT
15510 Usher Street
San Lorenzo, California
Attn: Dr. Lowell Shira,
Assistant Superintendant

To Licensee: Clearwater Group, Inc.
229 Tewksbury Avenue
Pt. Richmond, CA 94801
Attn: Olivia Jacobs, CEO

To ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY:
Edward Martins, Inc.
1164 A Street
Hayward, California
Attn: Mr. Edward Martins, Atty
Trustee

DRAFT

15. Confidentiality. Licensee and ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY shall maintain as confidential any and all information obtained about Licensor or the Property in the course of Licensee's Work, and shall not disclose such information to any third party, except as expressly required by applicable law. Notwithstanding the foregoing, Licensee may disclose such information as Licensee deems necessary to the ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY.

16. Counterparts; Facsimile Signatures. This Agreement may be executed in one or more counterparts and delivered by facsimile transmission with original signatures to follow, each of which shall be deemed an original, but all of which together shall constitute but one and the same instrument.

IN WITNESS WHEREOF, the Parties have executed this Agreement effective as of the date first above written.

SAN LORENZO UNIFIED SCHOOL DISTRICT

By: _____
Name: Dr. Lowell Shira
Its: Assistant Superintendant

ESTATE OF JOHN M. HOLLAND SR. OIL COMPANY
a California corporation

By: _____
Name: Edward Martins
Its: Trustee

CLEARWATER GROUP
a California corporation

By: _____
Name: Olivia Jacobs
Its: Chief Executive Officer

EXHIBIT A

TO

SITE ACCESS AGREEMENT

DRAFT

(Parcel Map)

EXHIBIT B

TO

SITE ACCESS AGREEMENT

Location of Soil Borings (Google Earth® basemap)

DRAFT

EXHIBIT C

TO

SITE ACCESS AGREEMENT

DRAFT

Licensee's Workplans (2)

Environmental Bio-Systems, Inc., March 3, 2003, Work Plan: Additional Subsurface Investigation Ground Water Monitoring Well Installation. Estate of J. Holland Sr., 16301 East 14th Street, San Leandro, California

Clearwater Group, May 24, 2006, Work Plan Addendum, Response to Technical Comments Regarding the Document Entitled Work Plan: Additional Subsurface Investigation Ground Water Monitoring Well Installation, by Environmental Bio-Systems, Inc., March 3, 2003.