1828 TRIBUTE ROAD SUITE A
SACRAMENTO, CA 95815
916-649-3570
800-395-3570
FAX:(916) 649-3819

Need a copy of Plate 3
Proposed MW locations.

April 8, 1998
NWE 05-000428

Mr. Barney Chan
Hazardous Materials Specialist
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94302-6577

Subject: **Proposal for Additional Assessment**
444 Hegenberger Road, Oakland, California

Dear Mr. Chan:

Northwest Envirocon, Incorporated (NWE) has been authorized to perform additional subsurface investigation at the subject site (Plates 1 and 2). Previous phases of this investigation, consisting of collection of soil and groundwater samples, was performed in April, September, and October, 1997, in accordance with approved work plans. This letter is written in response to your correspondence dated February 20, 1998, and contains a proposal for additional assessment at the subject Property.

Project Background

In April 1997, four soil borings (SB-1 through SB-4 on Plate 2) were advanced at the subject property to collect soil and groundwater samples. After sample collection, each soil boring was abandoned by completely filling with a mixture of cement and bentonite. Soil sample analytical results indicated the presence of total petroleum hydrocarbons as gasoline (TPHg) at concentrations ranging from 1.7 to 260 mg/Kg, total petroleum hydrocarbons as diesel (TPHd) at concentrations ranging from 2.1 to 120 mg/Kg, and oil and grease at concentrations ranging from 93 to 220 mg/Kg. Each groundwater sample collected contained benzene at concentrations ranging from 35 to 1,600 µg/L.

On the basis of these results, additional investigation was performed in July and October 1997, including a geophysical survey, exploratory trenching, and collection of soil and groundwater samples. The geophysical survey and exploratory trenching indicated that underground storage tanks are not present beneath the property, but metal debris (discarded piping, auto parts, and scrap metal) is present beneath the surface at the site. A total of twelve soil borings (SB-5 through SB-16 on Plate 2) were advanced in October 1997 at the subject Property to depths of 10 to 12 feet below grade. After sample collection, each soil

boring was abandoned by completely filling with a mixture of cement and bentonite. A total of 14 soil samples were submitted for laboratory analysis. TPHg was present in these samples at concentrations ranging from 1.1 to 930 mg/Kg. Soil samples collected from two soil borings (SB-15 and SB-16) did not contain detectable concentrations of TPHg or other petroleum constituents. Twelve groundwater samples were collected and submitted for laboratory analysis. TPHg was present in ten of the twelve soil samples analyzed at concentrations ranging from 190 to 52,000 µg/L. Groundwater samples collected from soil borings SB-15 and SB-16 did not contain detectable concentrations of petroleum constituents.

Proposed Scope of Work

The intended scope of work is outlined below. Field work will be conducted in accordance with the sampling methods described in Attachment A.

Task I

Acquire applicable permits from Alameda County and update the existing site specific Health and Safety Plan. As part of this task, NWE will also notify underground utility locating services, contract with a licensed driller, and schedule field activities.

Task II

Advance eight borings (proposed locations MW-1 through MW-8 on Plate 3) to a depth of approximately 20 feet below grade (10 feet below the first occurrence of ground water each soil boring). Each soil boring will be advanced by a hollow-stem auger drilling rig under the supervision of a licensed driller. Soil samples will be collected beneath fill material at vertical intervals of 5 feet as the boring is advanced. Collected soil samples will be preserved for descriptive purposes and possible laboratory analysis. Collected soil samples will be screened in the field for the presence of organic vapors using a photo-ionization detector (PID). Selected soil samples (if any), will be placed on ice and transported to a California-certified laboratory under proper chain-of-custody procedures for analysis.

analyze if PID > 500

Task III

Each on-site soil boring will be completed as a 4-inch-diameter, flush-grade monitoring well using 15 feet of factory-slotted, polyvinyl chloride (PVC) well screen and approximately 5 feet of blank PVC well casing. The well screen will be positioned with 10 feet of screen below the water table and 5 feet of screen above the

wells 4"?

water table. The annular space opposite the screened portion of each monitoring well will be filled with gravel pack to extend two feet above the well screen. Above the gravel pack, a 2-foot-thick well seal will be installed to prevent percolation of surface water into the annular space. Well construction will be completed at the surface with a traffic-rated well box and a locking casing seal.

The off-site monitoring wells will be completed in a similar fashion, except with 2-inch-diameter well screen and casing. Off-site well specifications may be subject to special conditions imposed by the entity granting right-of-entry. After installation, the top of each monitoring well casing riser will be surveyed relative to a local arbitrary bench mark to the nearest hundredth of a foot.

Soil cuttings and decontamination/development water will be stored on site in 55-gallon drums, properly labeled and sealed, pending receipt of analytical results and characterization for disposal.

Task IV

Prior to development of each monitoring well, depth to groundwater will be measured to the nearest hundredth of a foot. Each monitoring well will then be developed by manual bailing until the recovered water is free of sediment and the pH and conductivity of the recovered groundwater stabilize. A clean, disposable bailer will then be used to collect a groundwater sample from each monitoring well. The collected ground water samples (and selected soil samples, if any) will be placed on ice and transported to a California-certified laboratory under proper chain-of-custody procedures for analysis.

Task V

Spls if observed cont & w/i vadose zone

The ground water samples (and ~~selected~~ soil samples, if any) will be submitted for laboratory analysis of TPHg, TPHd, total petroleum hydrocarbons as motor oil (TPHm), methyl-tertiary-butyl ether (MTBE), benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA methods 8015-modified and 602, respectively. The analyses will be performed on a standard turn-around basis.

Task VI

After receipt of analytical results, NWE will compile and evaluate site data and prepare a letter report which will be submitted to Alameda County for review. The report will contain the results of the field work, including a description of materials encountered during advancement of the soil borings, and an assessment of sampled soil and ground water quality.

Schedule

Completed permits for the soil boring and monitoring well installation will be submitted (along with applicable fees, if any) under separate cover within 5 days of receipt of approval of this work plan. Field work will be scheduled within 10 working days of permit approval and receipt of right-of-entry from appropriate entities. Field work is anticipated to take 2 days. Complete analytical results will be available within 10 days of completion of field work. NWE will prepare a results report within 10 working days of receipt of all field and laboratory data.

If you have any questions, please contact the undersigned at (916) 649-3570.

Regards,

NORTHWEST ENVIROCON, INCORPORATED

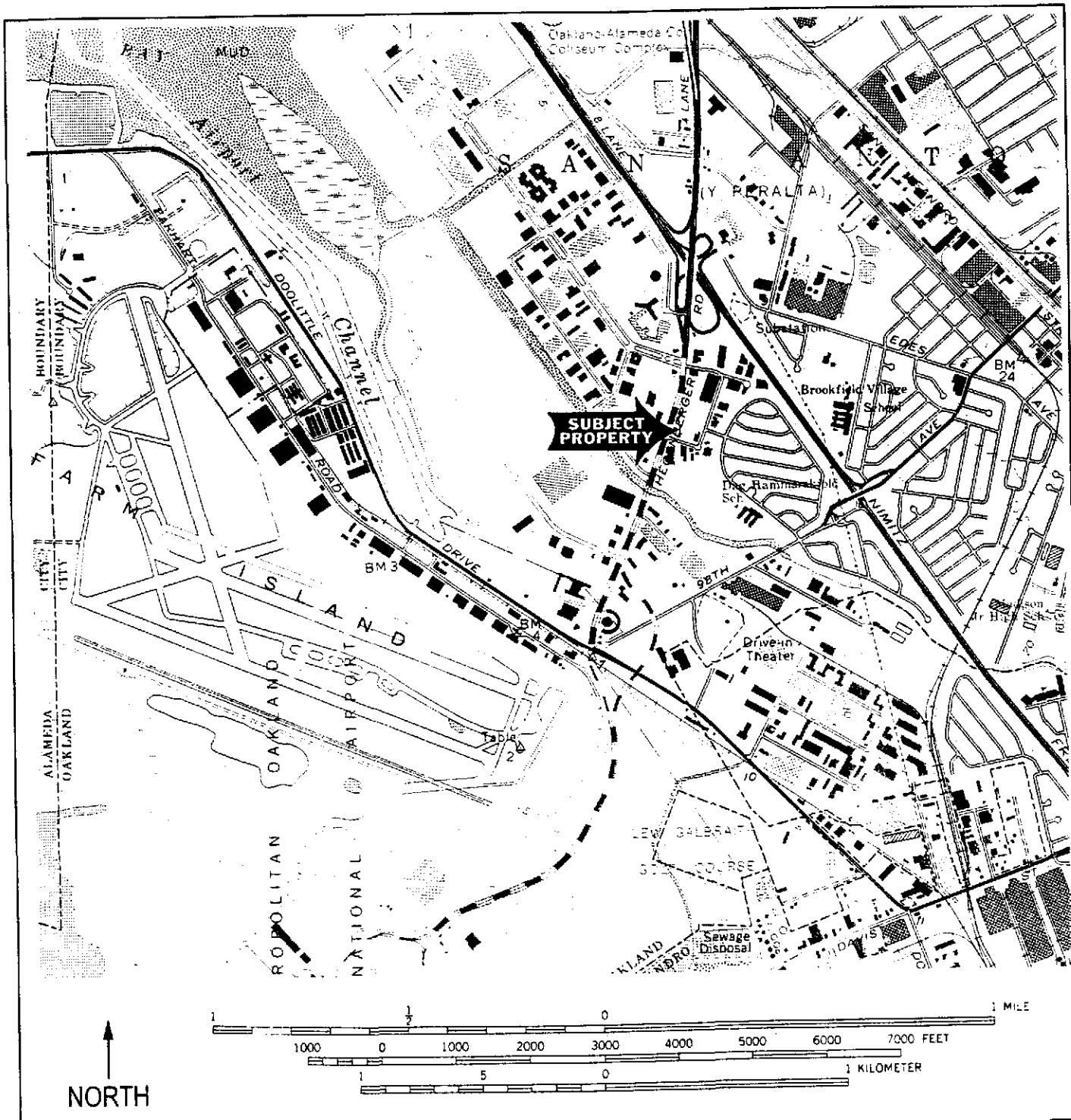
for

Dale A. van Dam, R.G.
Hydrogeologist

DAvD:davd

Attachments

cc: Mr. Pat Murray, McMorgan and Company



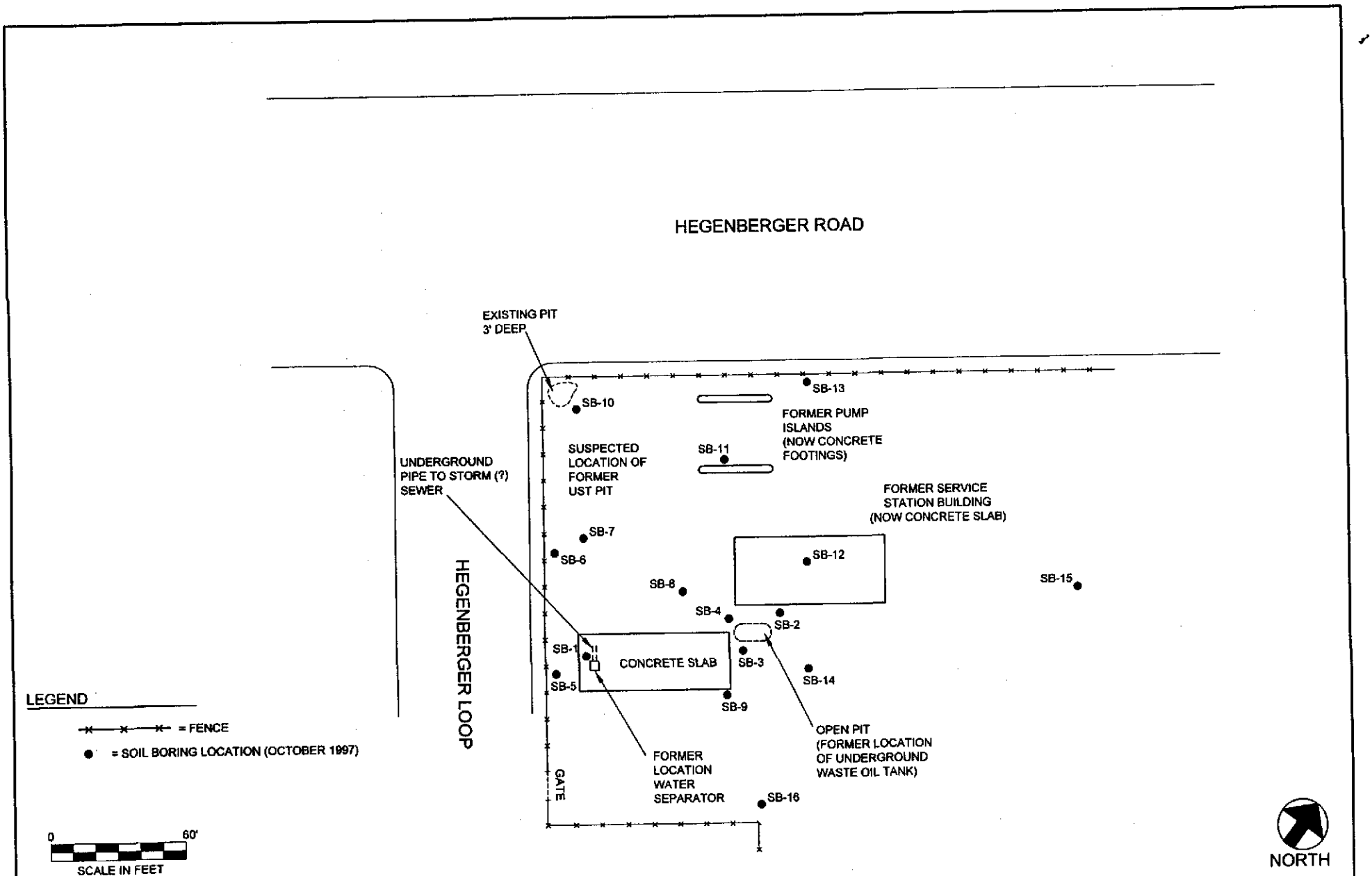
Northwest Envirocon, Inc.
Environmental Consulting

USGS 7.5 Minute Topographic Map
San Leandro Quadrangle
444 Hegenberger Road
Oakland, California

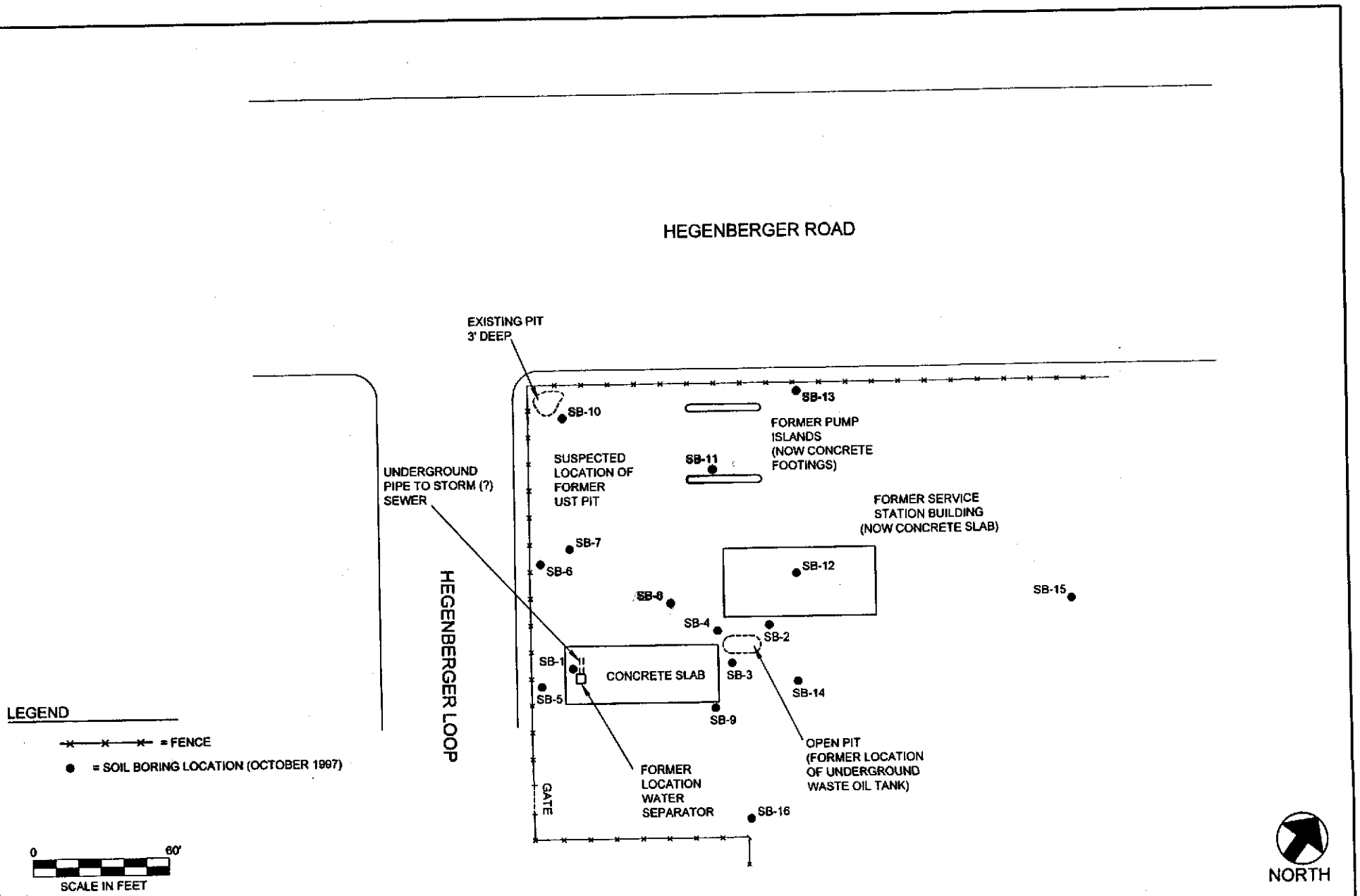
JOB NUMBER: 05-000428

DATE: December 1997

PLATE: 1



NORTHWEST ENVIROCON, INC. 1828 TRIBUTE ROAD, SUITE A, SACRAMENTO, CA. 95815 (916) 649-3570 FAX: (916) 649-3819	SITE: FORMER SERVICE STATION 444 HEGENBERGER ROAD OAKLAND, CALIFORNIA	DATE: DECEMBER 1997	PROJECT#: 05-000428
		SCALE: 1"= 60'	PLATE: 2
DRAWN: CEB	APPROVED: KFG	CLIENT: THE VOIT COMPANIES	DRAWING TITLE: SITE MAP



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ATTACHMENT A

SAMPLING METHODS

NORTHWEST ENVIROCON
STANDARD OPERATING PROCEDURES
FOR FIELD WORK

TABLE OF CONTENTS

1.0 SAFETY PROCEDURES

1.1 Safety Training And Medical Monitoring

All of NWE's field personnel will be trained in health and safety procedures in accordance with 29 CFR 1910.12. Records of this training, and related medical monitoring, will be kept in employee personnel files. Any subcontracting company selected for the project also must be in compliance with 29 CFR 1910.12. However, it is the responsibility of the subcontracting firm to provide its employees with safety equipment, training, and supervision.

1.2 Preparatory Safety Procedures

Work Plans, Permits and Inspections. If necessary, the project manager will obtain approval of a work plan, and will acquire any necessary permits from regulatory authorities. In addition, the project manager (or other appointed personnel) will arrange for any necessary regulatory inspections.

Underground Utilities. Before field work begins, USA (Underground Service Alert) will be contacted to identify the underground utilities at the site. As appropriate, other techniques may be used to supplement the USA service. These could include: reviewing facility records; interviewing facility personnel, and/or employing geophysical utility location techniques.

Health and Safety Plans. A site-specific health and safety plan will be completed for each project involving field work. Once completed, the project manager will distribute a copy of the plan to all project personnel, who will familiarize themselves with its contents.

The health and safety plan will include the following elements:

- the name and address of the site;
- the name of the project manager, project engineers, and subcontracting workers;
- a description of the site;
- the known and suspected environmental conditions at the site;
- the steps to be taken to reduce risk from contaminant exposure;
- the physical hazards at (or near) the site;
- the steps to be taken to reduce risk of injury from physical hazards;
- the planned site activities;
- the required safety equipment;
- the appropriate conditions for using the safety equipment;
- the required safety procedures;
- any special procedures and precautions to be taken;
- the permissible exposure limits allowed;
- the contingency procedures and training;
- the emergency phone numbers
- the directions to the nearest hospital;
- the signatures of field personnel

1.3 On-Site Safety Procedures

Safety Meetings. On-site safety meetings will be held at the start of each working day, and at the beginning of new work activities.

Confined Spaces. On-site personnel will observe regulations governing confined spaces. Personnel will not enter unshored trenches or vertical-walled excavations deeper than four feet.

Utility Avoidance. Soil borings (except manual borings) and/or trenches will be located at least 10 feet from overhead utility lines. Subsurface excavations will be placed at safe distance from any identified or suspected underground utilities. Since underground utility identification procedures are not always completely accurate, extreme caution will be taken when beginning to drill or excavate a new area. Field personnel will use hand augers or probes to advance all borings to a depth of five feet below grade. Drilling will then proceed with caution through the upper five to ten feet of soil.

Utility Damage. If a utility line is damaged during field work, creating an emergency situation, the field personnel will contact the local emergency service. Then, field personnel will notify other on-site persons who may be affected by the situation, and take appropriate steps to insure the personal safety of all persons affected by the situation. If a utility is damaged, but no emergency conditions exist, the appropriate company or government agency will be quickly notified.

Procedure for Dealing with Injured Personnel. Any employee injured on the site will be immediately given first aid. If the injuries allow, the employee will be removed from the contaminated zone, decontaminated (if required), and transported to the nearest hospital (if warranted). Emergency personnel will be contacted in the case of extreme injury, including any serious injury involving the spine or head. Emergency personnel will also be contacted if there is a risk of fire or explosion, an electrical hazard, a gas leak, a need for victim extrication, or a risk of injury to rescuing personnel.

2.0 SOIL BORING PROCEDURES

Before site drilling begins, any appropriate permits will be obtained. If necessary, a work plan will be submitted to the appropriate regulatory agency, and approval of this work plan will be obtained.

Soil borings will be drilled using the drilling method specified in the project work plan proposal. The drilling subcontractors used, if any, will be in compliance with the appropriate health and safety and licensing regulations.

The depths of the borings will depend on site conditions, and the nature of the investigation. A geologist will log the soils encountered by examining soil samples and cuttings. The geologist will also note any evidence of soil discoloration, or unusual odors. In addition, the cuttings and soil samples will be screened for volatile constituents, using a photoionization device. The presence of groundwater in the bore hole will be noted.

Drill cuttings suspected of being contaminated will be placed in DOT-approved drums and stored on site until laboratory results are received. If the cuttings are found to contain actionable levels of contamination, the client will be notified that the cuttings require treatment or disposal as hazardous materials.

Upon the completion of the boring, the bore hole will be backfilled with a mixture of Portland Cement and 5% bentonite, or such other materials specified by local regulatory agencies.

To minimize the possibility of cross-contamination between bore holes, the augers, samplers, sampling tubes and other down-hole drilling equipment will be steamed clean. Sampling tools and other down-hole equipment will also be rinsed in clean water and an industrial-grade detergent (such as Alconox or tri-sodium phosphate) between sampling attempts within the same bore hole. Rinse water from this process will be collected and drummed in DOT-approved drums. If the rinse water is found to be contain actionable levels of contamination, the client will be notified that the water requires treatment or disposal as a hazardous material.

3.0 SOIL SAMPLING PROCEDURES

A standard split-spoon sampler lined with three brass or stainless steel tubes will be driven into the soil with a down-hole hammer. Except in the case of hand-augured samples, blow counts will be recorded as the sampler is driven into the subsurface. Once fully driven into the soil, the sampler will be extracted, and the tubes will be removed and examined by the geologist.

One of the three soil samples obtained will be prepared for potential laboratory analyses. To do this, the end of the tube will be covered with Teflon tape, and then capped. The tube will be labeled and placed on ice.

When analyzing the sample for volatile constituents, such as toluene, care will be taken to avoid the contamination of the sample with a toluene-containing substance, such as felt pen ink and duct tape adhesive. The sample will be exposed to the atmosphere for as short a time as possible, to avoid the volatilization of these constituents.

The remaining soil sample(s) will be used to log the subsurface lithology, and to identify evidence of contamination (if any), as discussed in Section 2.0. The data obtained will be recorded on the boring logs, at the depth of the collected sample.

The samples are to be transported either to a laboratory or to the nearest NWE office, under proper chain of custody procedures (Section 6.1). Samples will be kept under refrigeration at all times.

4.0 GROUNDWATER MONITORING WELL PROCEDURES

4.1 Groundwater Monitoring Well Installation

Before constructing a groundwater monitoring well, all appropriate permits and any other necessary regulatory approval will be obtained. If necessary, arrangements for a regulatory inspection of the well will be made.

The bore holes for monitoring wells will be drilled with a hollow-stem auger drill rig or another appropriate method. During the drilling of the bore holes, soil samples may be collected for analyses or field inspection, as described in Section 3.0.

Once the boring is complete, a casing of PVC pipe (or other appropriate material) will be inserted into the bore hole. The casing will consist of clean, factory-slotted screens and blank casing. The length and placement of the screen interval will correspond to the terms of the well permit. The base of the well will be sealed as appropriate. An appropriate gravel pack, consisting of factory-sorted and washed sand will be placed in the annular space between the casing and the bore hole. The gravel pack will extend at least one foot above the top of the screened interval. In the case of very shallow screened intervals, these general well specifications may be modified with the approval of the permitting agency. Overlying the gravel pack will be a seal of at least one foot of hydrated bentonite pellets, over which will be placed cement or cement grout. The well head will be finished either with a traffic-rated, flush mounted box, or with an above-ground well head protective cover. Any cover used will be locked.

4.2 Groundwater Monitoring Well Development

The newly installed groundwater monitoring well will be developed to remove any drilling-related fluids and to allow for representative area groundwater to enter well. Using a pump or hand bailer, three times the well volume, if possible, will be purged. The purged water will be placed in labeled DOT-approved drums, pending laboratory analyses. If laboratory analyses indicate the purged water contains actionable levels of contamination, the client will be notified that the purged water requires treatment or disposal as hazardous waste.

5.0 GROUNDWATER SAMPLING AND MEASUREMENT PROCEDURES

5.1 Groundwater Sampling Procedure

Using a disposable Teflon bailer, groundwater will be observed for the presence of floating petroleum products or for oily sheens. If observed, the thickness of the product will be noted.

All sampling equipment will be cleaned before sampling. Any equipment to be used during the sampling of more than one well will be cleaned between wells. The equipment will be cleaned by washing it with laboratory-grade detergent and rinsing with distilled water. If possible, the wells will be sampled beginning with the well considered least contaminated, and ending with the well considered most contaminated. The equipment used to prepare any quality control samples will be cleaned and handled in the same manner as the equipment used to sample the monitoring wells.

Before sampling, groundwater will be purged from each monitoring well until the discharge water is stabilized in terms of its pH, temperature, and conductivity. "Stabilization" is defined as a variation of less than 10 per cent for the values of each category. Water purged from the wells will be stored on site in appropriately labeled, DOT-approved drums. If laboratory analyses indicate the purge water contains actionable levels of contamination, the client will be notified that the water requires treatment or disposal as a hazardous material.

The water samples will be collected using a clean disposable bailer. The samples will be decanted into appropriately sized and preserved containers, in a manner that minimizes the exposure of the water to air. Samplers will ensure that no air bubbles are present in the vials.

5.2 Measuring Depth to Groundwater and Groundwater Gradient

Using a water probe, the depth to groundwater will be measured from the top of the well casing. Water elevations will be corrected for the presence of floating product, if necessary.

A minimum of three groundwater monitoring wells (not containing floating product) are necessary to calculate the groundwater gradient. To ensure an accurate gradient, it is essential that the wells measured for the calculations draw groundwater from the same source.

The elevation of each well head will be surveyed to an accuracy of 0.01 feet. If a topographic benchmark is available, the absolute elevation of the well heads will be determined; otherwise, the relative elevations of groundwater encountered in each monitoring well will be calculated, by subtracting the depth to groundwater in each well from the corresponding well head elevation. The groundwater gradient will then be calculated geometrically.

6.0 SAMPLING HANDLING AND SELECTION PROCEDURES

6.1 Chain of Custody Procedures

The samples collected will be in the custody of NWE staff member, until delivered to the custody of the laboratory. Once collected, the NWE geologist will note the sample number, and the date and the time of collection. The chain of custody form will also identify the samplers name, NWE's address and telephone number, and the project location.

The sampler will retain custody of the samples by doing one or more of the following: keeping the samples in his or her possession; keeping the samples in view; keeping the samples in a locked storage area; or keeping the

samples in an otherwise secured area. If custody is to be transferred to another NWE employee, the recipient employee will sign the chain of custody form, noting the time and date.

The chain of custody will note any special instruction to the laboratory, or any other important details about the samples. All of the following would be examples of special information that will be noted in the form:

- samples which need to be split;
- methods of sample preservation used;
- any sampling problems encountered;
- any noteworthy description of the sample; and
- QA/QC information.

When the custody of the samples is transferred to the laboratory, a laboratory employee will sign and date the chain of custody form, and note the time. A copy of the form will be retained by the laboratory, while another copy of the form will be kept by the project manager. The laboratory employee will inspect the container for evidence of tampering, and sample integrity.

6.2 Sample Preservation and Transportation

Samples will be collected in the appropriate containers, cleaned and preserved according to laboratory recommendations. Once collected, samples will be preserved as the laboratory directs. When sample refrigeration is called for, the samples will be placed on ice in the field, and will be transported to the laboratory or to the nearest NWE office. Once in its custody, it is the responsibility of the laboratory to maintain the temperature of the samples. If transported to the nearest NWE office, the samples will be placed in a cold refrigerator.

The samples will be transported to the laboratory in one of the following ways: by being driven to the laboratory by an NWE employee; by being driven to the laboratory by a laboratory employee or contract courier service; or by being shipped by mail, bus, or other means. When shipped, the container must be sealed to prevent tampering. Seals can be formed by taping the case shut and signing (or otherwise marking) the tape seal. The chain of custody form will be placed within the sample container.

6.3 Laboratory Selection

Only state-certified laboratories will be selected to conduct sample analyses.