DAMES & MOORE A PROFESSIONAL LIMITED PARTNERSHIP
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July 22, 1988
Job No. 17212-001-43

Mr. Ariv Levi
Hazardous Materials Program
Alameda County Health Care
Services Agency
Department of Environmental Health
470 27th Street, Third Floor
Oakland, California 94612

Re: Supplemental Sampling Plan
Learner Company Property
768 46th Avenue, Oakland, CA

Dear Mr. Levi:

As discussed by telephone today, Dames & Moore is submitting on behalf of our cleint, the Learner Company, a supplemental sampling plan designed to characterize the shallow soils along the narrow strip of land located on the southern portion of the Learner Company property. Also please find enclosed a copy of our report entitled "Environmental Site Assessment and Sampling Plan, 768 46th Avenue, Oakland, California," dated June 3, 1988.

To characterize the shallow soils along the narrow strip, Dames & Moore proposes to divide the strip into 3 equal parcels as shown on the attached Figure. From each parcel two discrete samples from the upper 12 inches of soil will be collected using a stainless steel hand auger. The two subsamples from each parcel will be composited on an equal weight basis into one sample by the laboratory and analyzed for total recoverable hydrocarbons (EPA Method 418.1) and PCBs (EPA Method 8080). A total of 3 composite samples will be analyzed. Additional soil samples will be collected along the strip in areas determined to be visibly contaminated. Sample handling procedures described in our June 3, 1988 Sampling Plan will be adhered to during sampling of the strip.

Please call if you have any questions regarding this sampling plan or the enclosed report.

Very truly yours,

DAMES & MOORE

Bruce Scarbrough

Bruce Scarbrough
Project Geologist

BES:fs
Enclosures
cc: Roger Carrick, Heller, Ehrman, White & McAuliffe

SAMPLING PLAN
THE LEARNER COMPANY PROPERTY
768 46th Avenue
Oakland, California

1.0 INTRODUCTION

This Sampling Plan, prepared by Dames & Moore for The Learner Company, presents a proposed scope of work for a soil sampling program at the Learner property ("the site") located at 768 46th Avenue in Oakland, California.

In January 1988, the Alameda County Department of Environmental Health inspected the site and collected a soil and ponded surface water sample from an area visibly contaminated with oil. Both the soil and water were reported to contain 10% by volume of oil and grease. On May 13, 1988 the Alameda County Department of Environmental Health issued a Notice of Violation to the Learner Company which requested the submission of a sampling and correction plan.

In May, 1988, Learner retained Dames & Moore to perform an Environmental Site Assessment to identify known and potential sources of soil and groundwater contamination at the site. As part of the Environmental Assessment, Dames & Moore has prepared this Sampling Plan to respond to the concerns of the Alameda County Department of Environmental Health.

2.0 PURPOSE

The purpose of this Sampling Plan is to investigate the vertical and horizontal extent of hydraulic oil contamination in the vicinity of the former bailer in order to develop appropriate cleanup alternatives.

3.0 SAMPLING AND ANALYSIS PLAN

3.1 Test Pit Sampling

To investigate the vertical extent of the hydraulic oil contamination in the vicinity of the bailer, approximately four (4) exploratory pits will be excavated utilizing a backhoe within the visibly stained area around the former bailer. The proposed exploratory pit locations are shown on Figure 1, although exact locations for each pit will be determined in the field. The depth of each exploratory pit will be field determined based on visual observations, but will not extend below the groundwater surface. A log of each exploratory pit will be maintained by a Dames & Moore onsite geologist.

A minimum of two (2) soil samples from each exploratory pit will be retained for chemical analyses. If contamination visibly extends to the groundwater surface, a soil sample for analysis will be collected directly above the groundwater surface.

Soil samples from each exploratory pit will be collected either directly from the pit sidewall or out of the backhoe bucket depending on the final depth of the exploratory pit. Soil samples will be transferred to laboratory supplied clean glassware using stainless steel trowels. The backhoe bucket and sampling trowels will be decontaminated between each sampling location according to the procedures set forth in Section 3.6.

3.2 Hard Auger Sampling

To investigate the horizontal extent of the hydraulic oil contamination, a minimum of seven (7) surficial soil samples will be collected using a stainless steel hand auger. The proposed sampling locations are shown on Figure 1, although the exact locations will be field determined. Soil samples collected using the hand auger will be collected from the upper 24 inches of soil.

Soil will be transferred from the auger directly into laboratory supplied glassware using a stainless steel trowel. The hand auger and trowel will be decontaminated between each sampling location according to the procedures set forth in Section 3.6.

3.3 Methodology for Handling Samples

After soil samples are collected in the appropriate containers, each container will be labeled with the following information: Dames & Moore's job number, sample number, date and time collected, name of collector, and any pertinent remarks. A record of all sampling activities will be maintained in a daily field memo by field personnel.

Soil samples will be stored temporarily onsite in an ice chest cooled to approximately 4 degrees Centigrade.

Chain of custody records will be maintained for all samples collected. Each chain of custody form will be filled out by the sample collector before releasing the samples for storage or transportation. The form will then be routed with the samples through storage, transportation, and laboratory analysis.

3.4 Sample Analysis

All soil samples collected at the site will be analyzed by a DHS state certified testing laboratory for total petroleum hydrocarbons via EPA Method 418.1. In addition, 25 percent of the samples will be analyzed for PCB's using EPA Method 8080.

3.5 Duplicate Samples

Duplicate soil samples will be collected and analyzed to check for variability in soil parameter levels. Duplicate samples will be collected

immediately after the primary sample from the same location with the same equipment and procedures. Ten percent of the samples will be duplicates. The duplicate samples will be analyzed for the same parameters as the primary sample.

3.6 Equipment Decontamination

The backhoe bucket used to excavate the test pits will be thoroughly steam-cleaned prior to beginning the work between each test pit location. The stainless steel hand auger and sampling trowels will be decontaminated prior to each use using the following procedure:

1. Wash in TSP solution with brush;
2. Rinse with tap water;
3. Rinse with acetone;
4. Air dry;
5. Rinse with deionized water; and
6. Air dry.

4.0 REPORT

A report will be prepared to present the methods, results, and conclusions of the Sampling Plan implementation. This report will include recommendations for cleanup of the area impacted by leakage of the hydraulic oil and recommendations for any additional investigation work, if necessary.

5.0 HEALTH AND SAFETY PLAN

A site specific Health and Safety Plan prepared by Dames & Moore is presented as an appendix to this Sampling Plan.