

PORT OF OAKLAND

July 29, 1994

Barney Chan
Hazardous Materials Specialist
Alameda County Health Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda CA 94502

Dear Mr. Chan:

**SUBJECT: PROPOSED WORK PLAN FOR ADDITIONAL SOIL INVESTIGATION,
SEABREEZE YACHT CENTER (Env. Proj. # 92-109)**

Enclosed please find a work plan for additional investigation at the Seabreeze Yacht Center site.

As we discussed over the telephone earlier this week, the Port has reviewed the history of the site and learned that an aboveground pipeline conveyed Bunker C oil from the concrete containment structure to the former PG&E plant. In order to determine whether Bunker C oil may be present at the site, the Port proposes to collect approximately 19 samples and analyze for total petroleum hydrocarbons as Bunker C.

Please review this work plan and provide us with your comments/approval as soon as possible. Please contact me at (510) 272-1220 if you have any additional questions.

Sincerely

Dan Schoenholz
Associate Environmental Scientist

Enclosure

cc(w/enclosure): Rich Hiett, RWQCB
(w/o enclosure): Yane Nordhav, Baseline
Michele Heffes
Robert Martinez

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BASELINE

ENVIRONMENTAL CONSULTING

12 July 1994
S9171-00

Mr. Dan Schoenholz
Port of Oakland
Environmental Department
530 Water Street
Oakland, CA 94607

Subject: Work Plan for Additional Soil Investigation, Seabreeze Yacht Center, Inc., Oakland, California.

Dear Dan:

At your request we have prepared a work plan to further characterize the near surface soils at the subject site. The purpose of the proposed investigation would be to determine the spatial distribution of petroleum hydrocarbon, as "Bunker C", in the near surface soils within the study area (Figure 1). Previous subsurface investigations at the site have identified oil and grease (non-speciated) at two locations at the site and petroleum hydrocarbons as diesel, motor oil, and Bunker C around the concrete containment in the southern portion of the site. It is unknown whether the oil and grease identified on the site could be a petroleum hydrocarbon. Petroleum hydrocarbons (Bunker C) were previously stored in a tank within the concrete containment and conveyed to a PG&E steam plant (Figure 1) along an aboveground pipeline.

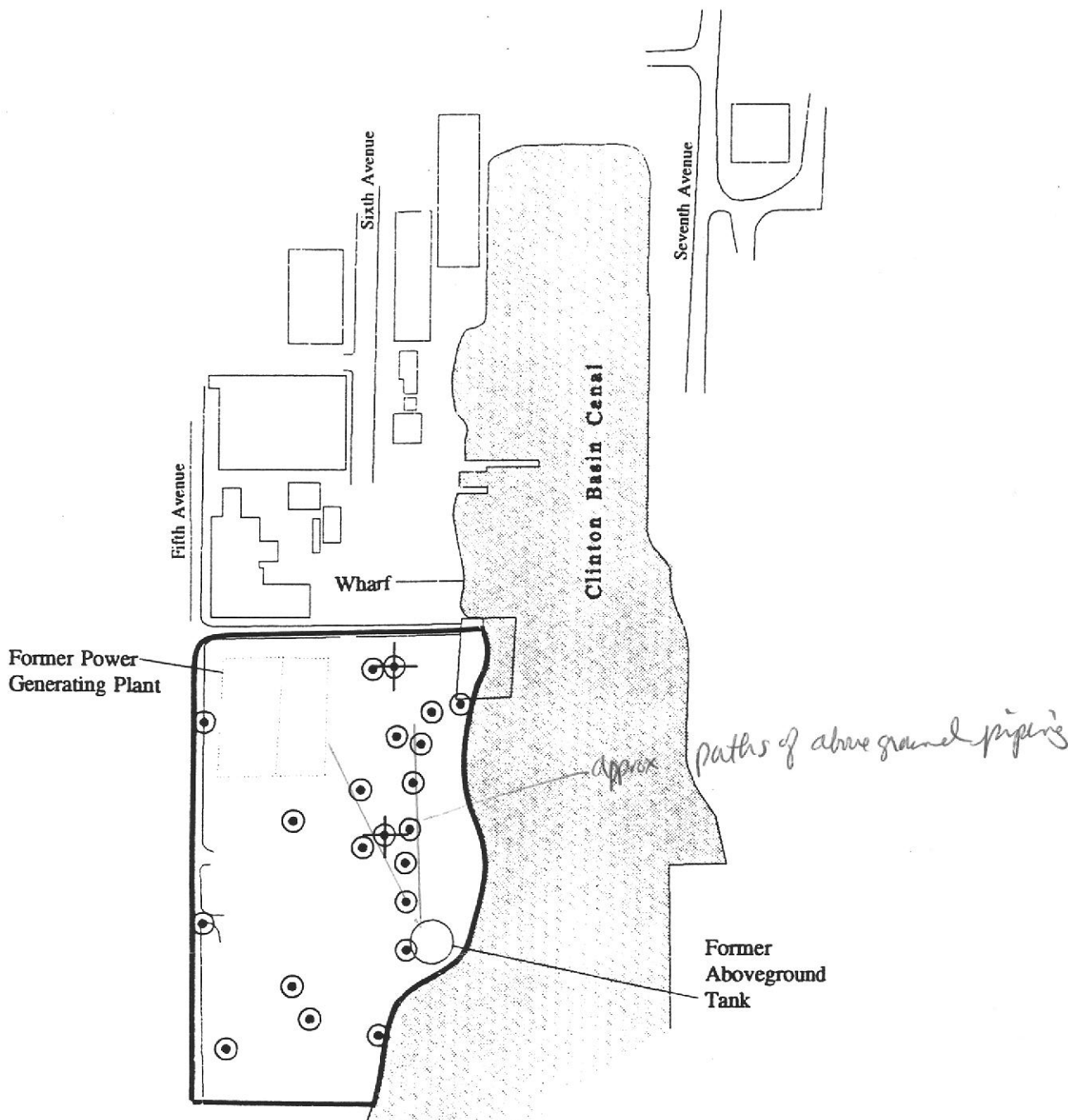
Sampling Plan

A systematic random sampling scheme, consistent with EPA SW-846 methodology has been developed for the near surface soils at the site. Since groundwater is encountered at approximately five feet below the ground surface at the site, all soil samples would be collected at depths shallower than five feet. Systematic random sampling was selected for the following reasons:




- Allows better coverage of the site than simple random sampling;
- Incorporates random selection of points within cells to reduce sampling bias;
- Allows for determination of mean, standard deviation, and sample parameters.

The sample locations were determined by dividing the site into cells. Fourteen cells of approximately equal area were established. A random sampling location and depth were chosen within each cell using a random number generator on an HP-11C calculator.

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Legend

-  Location Previously Identified as Containing Oil and Grease
-  Proposed Sampling Location
-  Sampling Area



Seabreeze Yacht Center, Inc.
280 Sixth Avenue
Oakland, California