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WORK PLAN FOR INITIAL SUBSURFACE INVESTIGATION

This outline should be followed by professional engineering or geologic consultants in preparing work plans to be submitted to the RWQCB and local agencies. Work plans should be signed by a California-registered engineer or geologist.

This outline should be referred to in context with the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks" (June 2, 1988).

PROPOSAL FORMAT

I. Introduction

- A. State the scope of work
- B. Provide information on site location, background, and history
 - Describe the type of business and associated activities that take place at the site, including the number and capacity of operating tanks.
 - 2. Describe previous businesses at the site.
 - 3. Provide other tank information:
 - number of underground tanks, their uses, and construction material;
 - filing status and copy of unauthorized release form, if not previously submitted;
 - previous tank testing results and dates, including discussion of inventory reconciliation methods and results for the last three years.
 - Other spill, leak, and accident history at the site, including any previously removed tanks.

II. Site Description

- A. Describe the hydrogeologic setting of the site vicinity
- B. Prepare a vicinity map (including wells located on-site or on adjoining lots, as well as any nearby streams
- C. Prepare a site map

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- D. Summarize known soil contamination and results of excavation
 - Provide results in tabular form and indicate location of all soil samples (and water samples, if appropriate). Sample dates, the identity of the sampler, and signed laboratory data sheets need to be included, if not already in possession of the County.
 - 2. Describe any unusual problems encountered.
 - Describe methods for storing and disposing of all contaminated soil.

III. Plan for Determining Extent of Soil Contamination

- A. Describe method for determining the extent of contamination within the excavation
- B. Describe sampling methods and procedures to be used
 - If a soil gas survey is planned, then:
 - identify number of boreholes, locations, sampling depths, etc.;
 - identify subcontractors, if any;
 - identify analytical methods;
 - provide a quality assurance plan for field testing.
 - 2. If soil borings are to be used to determine the extent of soil contamination, then:
 - identify number, location (mapped), and depth of the proposed borings;
 - describe the soil classification system, soil sampling method, and rationale;
 - describe the drilling method for the borings, including decontamination procedures;
 - explain how borings will be abandoned.
- C. Describe how clean and contaminated soil will be differentiated, and describe how excavated soil will be stored and disposed of. If on-site soil aeration is to be used, then describe:

Mr. Everett Taylor March 27, 1989 Page 5 of 6 The volume and rate of aeration/turning; The method of containment and cover; Wet-weather contingency plans; 4. Results of consultation with the Bay Area Air Quality Management District. Other on-site treatments (such as bioremediation) require permits issued by the RWQCB. Off-site storage or treatment also requires RWQCB permits. D. Describe security measures planned for the excavated hole and contaminated soil Plan for Characterizing Groundwater Contamination IV. Construction and placement of wells should adhere to the requirements of the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks." A. Explain the proposed locations of monitoring wells (including construction diagrams), and prepare a map to scale B. Describe the method of monitoring well construction and associated decontamination procedures 1. Expected depth and diameter of monitoring wells. Date of expected drilling. 3. Locations of soil borings and sample collection method. 4. Casing type, diameter, screen interval, and pack and slot sizing technique. 5. Depth and type of seal. 6. Development method and criteria for determining adequate development. 7. Plans for disposal of cuttings and development water. 8. Surveying plans for wells (requirements include surveying to established benchmark to 0.01 foot). C. Groundwater sampling plans Water level measurement procedure.

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- 2. Well purging procedures and disposal protocol.
- 3. Sample collection and analysis procedures.
- 4. Quality assurance plan.
- 5. Chain-of-custody procedures.
- V. Prepare a Site Safety Plan