

W E S T

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March 9, 1997

Mr. Jack Schultz  
Pacific Galvanizing  
715 46th Avenue  
Oakland, California 94601

Post-It® Fax Note	7871	Date	12/12/97	# of pages	6
To	MADHULLA LOGAN	From	JACK SCHULTZ		
Co./Dept.	ALAMEDA COUNTY	Co.	PACIFIC GALVANIZING		
Phone #		Phone #	261-7331		
Fax #		Fax #	261-7526		

Subject: Proposal to Conduct Site Closure Characterization  
715 46th Avenue, Oakland, California

Dear Mr. Schultz:

In response to the Alameda County Health Care Services (ACHCS) letter dated June 25, 1996, World Environmental Services & Technology (WEST) has prepared the following proposal to characterize the Pacific Galvanizing facility located at 715 46th Avenue in Oakland, California (the "Site"). This letter presents a summary of proposed work activities to conduct investigations at the Site where metals were previously detected in soil samples. Investigation results will be used to identify appropriate site closure procedures. The objective of the proposed investigation is to assess the vertical extent of metals in soil and the possible presence and potential impacts to ground water in the area where metals were previously detected in soil at the facility. This data will be utilized to develop the a risk management plan, as required by the ACHCS.

## 1.0 BACKGROUND

Soil samples were reportedly collected at the Site on March 15, 1996 at depths of ranging from one to four feet below ground surface (bgs). Results of metals analysis on the composited samples indicate that concentrations of lead (up to 1,900 mg/kg) and zinc (up to 45,000 mg/kg) were present above their respective State of California Total Threshold Limit Concentrations (TTLCs). The TTLC is the concentration limit established by the State of California for characterization of waste materials as hazardous.

The TTLC does not establish cleanup levels. Cleanup levels are determined, primarily, on site specific risk based analyses. Risk based analyses focus on the identification of possible receptors and the potential exposure to the identified chemicals. Therefore, prior to the ACHCS approval of the proposal to install an asphalt cap over the affected soils at the Site, the ACHCS requested characterization activities including an assessment of the the vertical extent of soil contamination and potential impacts to ground water at the Site. The results of this characterization are to be forwarded to the ACHCS, and a detailed risk management plan prepared. The following scope of work describes the tasks required to perform the additional site characterization task.

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## **2.0 SCOPE OF WORK**

The Scope of Work for the soil and ground-water investigations has been organized into specific tasks as follows:

- Task 1: Preparation of Work Plan
- Task 2: Permitting and Utility Clearance
- Task 3: Soil and Ground-Water Grab Sampling
- Task 4: Report Preparation

A detailed description of each task follows.

### **Task 1: Preparation of Work Plan**

WEST will prepare a Work Plan for submittal to the ACHCS for review and approval. The Work Plan will summarize the proposed scope of work including, sample locations, sampling procedures, and analytical methods. The investigations will be initiated after receipt of approval of the work plan by ACHCS.

### **Task 2: Permitting and Utility Clearance**

Based on discussions with the ACHCS, nine sampling locations are proposed at the Site. Prior to drilling, a subsurface drilling permit will be obtained from the Alameda County Zone 7 Water Agency. Underground Services Alert (USA) will be notified and the boring locations will be cleared for underground utilities using a private underground utility locating subcontractor.

As required by the Occupational Health and Safety Administration (OSHA) 29 CFR 1910.120, Hazardous Waste Operations and Emergency Responses, a site Health and Safety Plan (HSP) will be prepared for use while conducting proposed field sampling activities. The HSP will be read and approved by the Project Manager, a Quality Assurance Reviewer, and the On-site Safety Officers of all subcontractors working at the Site.

### **Task 3: Soil and Ground-Water Grab Sampling**

To assess the extent of metals in Site soil, samples will be collected from approximately nine shallow soil borings at the Site. The soil borings are located to collect deeper soil samples from the area where previous sampling indicated metals were detected at the Site (Figure 1). Ground-water grab samples will be collected from three of the soil borings (Figure 1) to obtain qualitative ground-water quality data to assess potential impacts to ground water.

The sampling locations shown in Figure 1 are contingent upon access limitations (i.e., site features, utilities) and final locations may be moved to the closest accessible location. The proposed borings will be drilled to a depth of approximately 3 to 5 feet below grade. Soil samples

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will be collected from each boring based on field screening, observations, and pH measurements. The samples will be submitted to a California certified laboratory for lead and zinc analyses using EPA Method 6010/7000 series.

~~Ground-water grab samples will be collected from three borings drilled to depths between 5- and 10-foot bgs. Samples will be collected from the borings using a 3/4-inch stainless steel bailer lowered into the borehole. The ground-water samples will be submitted to a California state-certified laboratory for filtration and analysis for lead and zinc using EPA Method 200 series. In the event that a ground-water grab sample cannot be collected from the boring due to the presence of low permeability sediments, a soil sample will be collected from slightly below the soil/ground-water interface and sent to the laboratory for analysis for lead and zinc using EPA Method 6010/7000 series.~~

The borings will be drilled using hand auger equipment. Soil samples will be collected continuously from the borehole for lithologic description. Soil samples will be collected by driving clean, 1-3/4 inch diameter sampler lined with clean stainless steel or brass tubes into undisturbed soil. The sample selected for chemical analysis will be sealed by installing plastic caps over the ends of the sample tube and then placed in a chilled cooler for transport to the analytical laboratory. The sampling equipment will be decontaminated prior to reuse at each sampling location. The samples for laboratory analysis will be collected in appropriate sample containers, labeled and then placed in an ice-chilled cooler for transport to the laboratory. After collecting the sample, the borehole will be sealed with a bentonite-grout mix and the ground surface restored using replacement materials (i.e., asphalt or cement patch).

Sampling activities described in this Proposal are based on Level D protection equipment for workers performing the sampling activities. In the event that Site conditions (i.e., high contaminant levels in soil or air) require a higher level of worker protection equipment, the Client will be notified and additional equipment fees may be necessary to perform the sampling work.

Waste soil generated during sampling will be securely stored on-site in labeled 55-gallon drums. WEST will assist the Client to properly dispose of sampling waste soil. Costs to dispose of this waste soil may vary depending upon the quantity generated, the laboratory analytical results for Site soil and applicable regulations. Though it cannot be accurately estimated at this time, costs for transport and disposal of the drilling and sampling waste are estimated to range between approximately \$150 to \$300. Since the drilling and waste costs cannot be estimated at this time, those costs are not included in the enclosed proposal cost estimate.

#### **Task 4: Report Preparation**

Geologic and chemical data collected from the soil and ground-water investigation activities will be evaluated, summarized, and a report prepared. The report will include the following:

- Detailed descriptions of the methodologies used to collect and analyze the data.

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- Descriptions of the Site and site soils, including appropriately scaled base maps showing all boring locations and boring logs illustrating soils observed in the field.
- Presentation and interpretation of soil and ground-water analytical results and laboratory data certificates, including an assessment of the presence and vertical extent of metals.
- A copy of the actual laboratory results of the soil and ground water samples collected from the Site
- A schedule and estimated budget for preparation of the risk management plan.

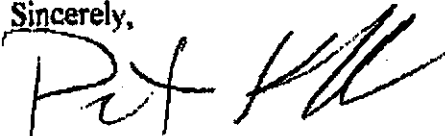
### 3.0 SCHEDULE AND ESTIMATED COSTS

Upon receiving approval of this Proposal, it is estimated that the total time to complete the tasks of the proposed Scope of Work is 4 to 6 weeks. Tasks 1 and 2 will be completed within about 2 to 4 weeks of receiving Client approval. Task 3 will be completed within about 2 weeks of receiving ACHCS approval of the work plan, assuming a normal two-week laboratory turnaround time for sample analysis. A technical report of the results of the investigations (Task 4) can be prepared within two weeks of WEST's receipt of laboratory data.

Work will be conducted on a time-and-material basis in accordance with our current Schedule of Charges. WEST has estimated the time requirements and associated costs for this proposed Scope of Work based upon a level of effort deemed appropriate for the described activities. A detailed cost breakdown for each Task, including project labor rates and subcontractor costs is provided in attached Table. The estimated total project budget will not be exceeded without prior authorization from the Client. Any anticipated modifications to this estimate would be discussed with the Client as they become evident.

If the scope of work described above meets with your approval, please sign and return one copy of the approval and acceptance page. We appreciate the opportunity to provide you our services. Please feel free to call me at 510-549-0116 if you have any questions.

Sincerely,



Peter M. Krasnoff, P.E.  
Principal

**APPROVAL AND ACCEPTANCE**

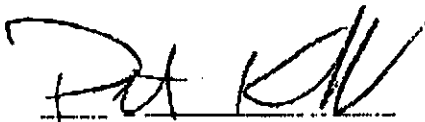
Approval and acceptance of this Work Order are acknowledged by the signatures of the duly authorized representatives of Pacific Galvanizing and WEST.

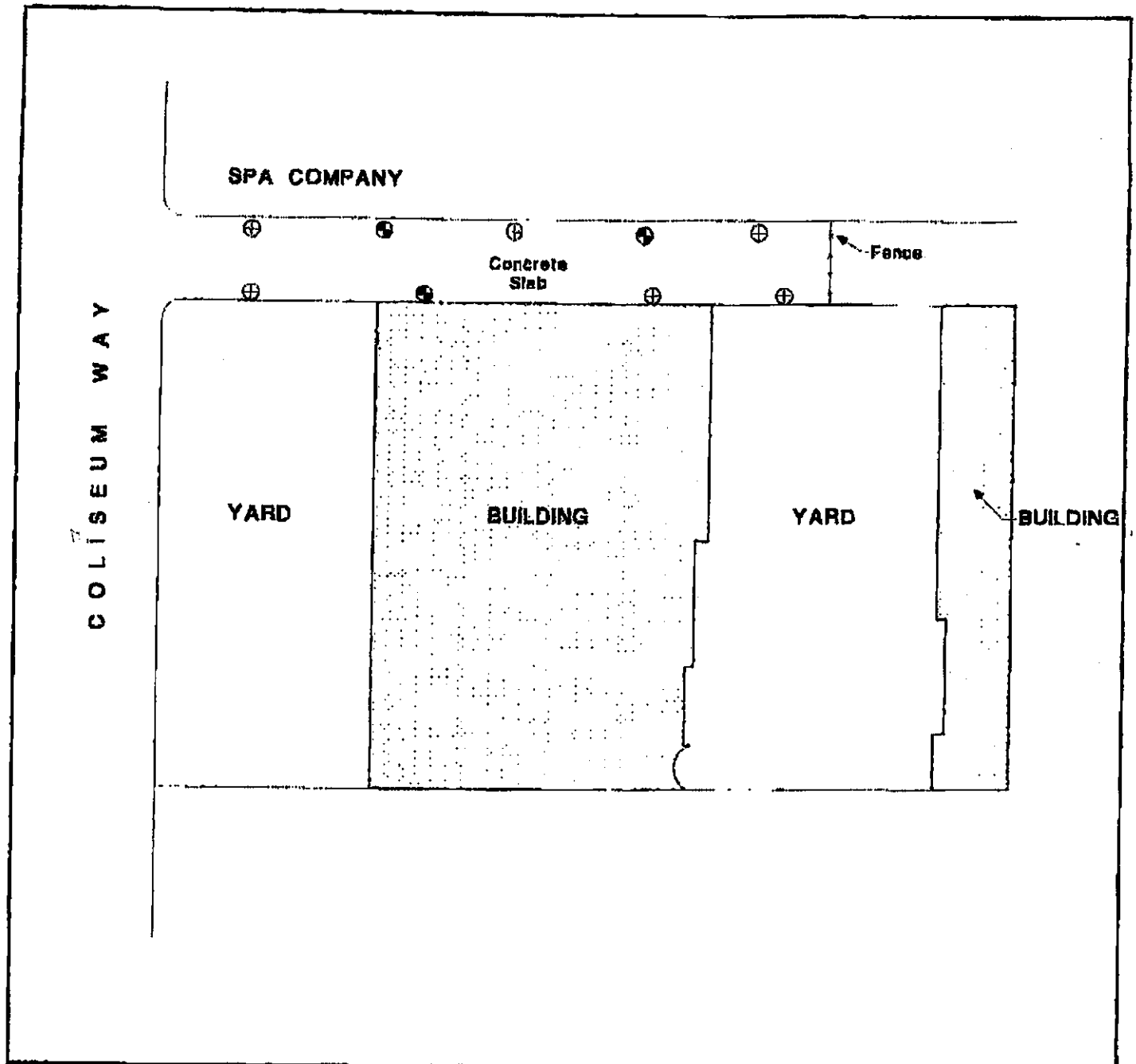
**PACIFIC GALVANIZING**

\_\_\_\_\_  
Signature Title Date

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(Please print or type name)

**WORLD ENVIRONMENTAL SERVICES & TECHNOLOGY**

  
Signature Principal Title Date  
3/8/97



**EXPLANATION**

- ⊕ Proposed Soil Sampling Location
- ⊙ Proposed Soil and Ground-Water Grab Sampling Location



**Figure 1: Site Map Showing Proposed Sampling Locations**

WEST