



PACIFIC RIM ENVIRONMENTAL

Post Office Box 192972
San Francisco, CA U.S.A. 94119
Phone: 415-255-0860 Fax: 415-431-0334

Site Closure Report

Prepared for:

**Mr. Richard Croop
436 14th Street, Suite 305
Oakland, California 94612**

Prepared By:

**Pacific Rim Environmental
P.O. Box 192972
San Francisco, California**

Project Location:

**2901 Glasscock Avenue
Oakland, California**

A handwritten signature in black ink, appearing to read "Don W. James", is written over a horizontal line. The signature is stylized and cursive.

**Don W. James
Project Manager
Pacific Rim Environmental**

January 21, 1994

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1.0 Introduction

Pacific Rim Environmental (Pacific Rim) has been contracted to prepare a closure report for metal shaving contaminated soil removed from 2901 Glasscock Avenue in Oakland California. This report documents the excavation, removal, sampling and analytical results for soil samples collected from excavations. Also included in the report are the invoices and manifests for the disposal of the stockpiled soil.

2.0 Scope of Services

Pacific Rim performed or witnessed the following services pursuant to the contract dated June 7, 1993 and subsequent directions of Mr. Richard C. Croop and partners:

- Prepared the shoreline with silt fencing, just below the low tide line, to prevent shavings from migrating into the estuary.
- Prepared the warehouse for excavated soil.
- Provided equipment and labor to excavate and move metal shavings contaminated soil from the area above the bank to the warehouse.
- Collected and submitted, for laboratory analysis, soil samples taken from the excavation area and from background areas determined by a Regional Water Quality Control Board representative.
- Removed and disposed of stockpiled soil.
- Wrote and submitted closure report.

3.0 Background

The subject property is comprised of a small strip of undeveloped land and a large warehouse. The property sits upon the Oakland estuary in Oakland, California.

Subsurface Environmental Corp. (SE) was contracted to excavate and remove metal shavings and slag material from the site and to take soil samples from the excavated area .

On December 30, 1992, SE installed a silt fence along the shoreline just below sea level to prevent debris from falling into the estuary. They then used an excavator to remove shapper waste from the banks to inside the warehouse where it was stockpiled.

On January 12, 1993, SE took two soil samples from the banks where metal shavings and slag material had been removed. The samples were taken at a depth of approximately eleven feet below the top of the building foundation and delivered under chain of custody to Trace Analysis Laboratory, Inc. for analysis. The samples were analyzed for seventeen priority pollutant metals at the request of the California Regional Water Quality Control Board (CRWQCB). The analyses indicated that metals concentrations were above background levels and Pacific Rim was retained to investigate this issue. (See Appendix A for results).

4.0 Field Activities

4.1 Excavation and Sampling

The Glasscock Avenue Partners instructed Pacific Rim to resume excavation activities on estuary embankment. This activity was performed in hopes of removing shapper contaminated soils from the excavation to eliminate the need for future investigation or remediation. Under the supervision of the CRWQCB, Pacific Rim excavated the site only at low tide for two days.

On June 24, 1993, Pacific Rim contracted with Innovative and Creative Environmental Solutions (ICES) to take lateral and vertical soil samples of the excavated site at the shoreline. ICES used S-1 and S-5 as off-site samples to compare to S-2, S-3, and S-4, under the guidance of the CRWQCB. Five undisturbed soil samples were collected from the excavation and background location and stored in brass sleeves, sealed with Teflon liners and end caps. The five

samples were then labeled and placed on ice at 4 degrees Celsius and transported according to the United States Environmental Protection Agency (USEPA) protocol to a State of California Department of Health Services (DOHS) certified laboratory. Sample identification and chain-of-custody procedures were utilized for the sample possession from the time of collection to the laboratory. All sampling equipment was washed with a non-phosphate cleanser, pre-rinsed with tap water and finally rinsed with de-ionized water prior to sampling. (Analytical reports and chain-of-custody reports are presented in Appendix B).

4.2 Stockpiled Soils

The CRWQCB requested that all stockpiled soil be removed from the site before closure would be granted. On 12/01/93, approximately 288 cubic yards of stockpiled soils were manifested and hauled away by subcontractor. (The manifest and disposal documents are presented in Appendix C).

5.0 Discussion

Two background samples and three excavation samples were taken on June 24, 1993. The results of these samples indicate the metal readings in the excavated area to be lower than the readings in the background area and also below action levels. Pursuant to discussions with the CRWQCB representative, no further action is anticipated or recommended at this time.

6.0 Conclusion

This report has been prepared for the exclusive use of the owners of 2901 Glasscock Avenue. The findings and conclusions rendered in this report are opinions based on laboratory testing of soil samples collected during this project. This report does not reflect subsurface variations which may exist between sampling points. These variations cannot be anticipated nor can they be entirely accounted for even with exhaustive additional testing.

All work has been performed in accordance with generally accepted practices in geotechnical\environmental engineering, engineering geology and hydrology. No other warranty, either expressed or implied, is made.

If you have any questions regarding this report or the information contained herein, please contact this office at your convenience.