

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 7597
FOR
AMERICAN REMEDIAL TECHNOLOGIES, INC.
JORGENSEN STEEL FACILITY, LYNWOOD

(File No. 95-029)

American Remedial Technologies, Inc. (Discharger) shall implement this Monitoring and Reporting Program on the effective date of this Order.

I. MONITORING

A. VADOSE ZONE MONITORING

The Discharger shall install a vadose zone monitoring system. The vadose zone monitoring system shall consist of a network of organic vapor analyzers for leak detection, installed below each treatment unit and storage area. The system shall be tested monthly for the presence of organic vapors, and results included in the quarterly reports.

B. MONITORING OF CONTAMINATED SOILS

1. After the Executive Officer's approval of a waste load-checking program, results of that checking program shall be reported in each monitoring report. In the event that hazardous wastes or other unacceptable materials are detected, the type, source, and final disposition of those wastes shall also be reported.
2. The total quantity of petroleum hydrocarbon-contaminated soil accepted from a source shall be defined as a 'lot'. For every lot of soil, composite samples shall be collected and tested as described below, before the soil is accepted at the facility. Discrete samples shall be analyzed at the following rates:

Volume in Cubic Yards (cy)

< 500
500 - 1,000
1,001- 10,000
> 10,000

Testing Frequency

1 sample per 100 cy
1 sample per 200 cy
1 sample per 500 cy
1 sample per 1000 cy

3. The Discharger shall maintain a log of each incoming load of petroleum hydrocarbon-contaminated soil and report to the Regional Board, on a quarterly basis, the following:

<u>Parameter</u>	<u>Units</u>
Quantity Accepted	cubic yards (cy)
Source(s)	---
Major pollutant(s)* and ranges	mg/Kg

*Major pollutants include unleaded gasoline, leaded gasoline, lead, diesel, jet fuel, kerosene, lubricating oil, hydraulic oil, grease, crude oil, and other petroleum process waste streams.

4. Documentation of the non-hazardous nature of each lot of contaminated soil shall be included in quarterly reports to the Regional Board. Hazardous characteristics shall be determined by criteria contained in Title 22, California Code of Regulations, Division 4.5, Chapter 11, Article 3 to include toxicity, ignitability, reactivity, and corrosivity.
5. The Discharger may propose an alternative sampling plan for monitoring contaminated soil, for the Executive Officer's approval, provided the plan ensures that the soil sampling and analyses are representative of the lot. The following analyses must be performed for each lot of petroleum hydrocarbon-contaminated soil:

<u>Parameter</u>	<u>Units</u>
Total recoverable petroleum hydrocarbons ¹ (TRPH)	mg/Kg
Total petroleum hydrocarbons ² (TPH)	
as gasoline	mg/Kg
as diesel	mg/Kg
Aromatic volatile organics ³ including:	
Benzene	mg/Kg
Toluene	mg/Kg
Xylene(s)	mg/Kg
Ethylbenzene	mg/Kg
Other constituents potentially present in the soil ⁴	mg/Kg

- Representative composite samples prepared by:
TRPH EPA Method 418.1
- Representative composite samples prepared by:
TPH as gasoline EPA Method 5030/8015M
TPH as diesel EPA Method 3550/8015M
and analyzed by GC/FID. Analytical detection limits shall be as close to 1.0 mg/Kg as practicable.
- Representative grab samples shall be analyzed by EPA Method 8020. EPA Toxicity Characteristic Leaching Procedure (TCLP) should be conducted for benzene as necessary. Analytical detection limits shall be as close to EPA Method Detection Limits as practicable.
- Includes fuel additives or other known or suspected contaminants. Appropriate EPA analytical methods shall be used.

6. All verification sampling requires 72 hours written and verbal notice to the Board, in order for staff to participate in the sampling.

C. MONITORING OF TREATED SOILS

1. A representative sample of treated soil shall be analyzed at the following rates:

<u>Volume in Cubic Yards (cy)</u>	<u>Testing Frequency</u>
< 500	1 sample per 100 cy
500 - 1,000	1 sample per 200 cy
1,001-10,000	1 sample per 500 cy
> 10,000	1 sample per 1000 cy

2. The Discharger shall monitor each lot of treated soil prior to storage, reuse and/or disposal off-site and shall report to the Regional Board, on a quarterly basis, the following:

<u>Parameter</u>	<u>Units</u>
Quantity	cubic yards
Destination	---
Total recoverable petroleum hydrocarbons ¹ (TRPH)	mg/Kg
Total petroleum hydrocarbons ² (TPH)	
as gasoline	mg/Kg
as diesel	mg/Kg
Aromatic volatile organics ³ including:	
Benzene	mg/Kg
Toluene	mg/Kg
Xylene(s)	mg/Kg
Ethylbenzene	mg/Kg
Other constituents potentially present in the soil ⁴	mg/Kg

-
1. Representative composite samples prepared by:
 TRPH EPA Method 418.1
2. Representative composite samples prepared by:
 TPH as gasoline EPA Method 5030/8015M
 TPH as diesel EPA Method 3550/8015M
 and analyzed by GC/FID. Analytical detection limits shall be as close to 1.0 mg/Kg as practicable.
3. Representative grab samples shall be analyzed by EPA Method 8020. EPA Toxicity Characteristic Leaching Procedure (TCLP) should be conducted for benzene as necessary. Analytical detection limits shall be as close to EPA Method Detection Limits as practicable.
4. Includes fuel additives or other known or suspected contaminants. Appropriate EPA analytical methods shall be used.

D. GENERAL PROVISIONS FOR SAMPLING ANALYSIS

1. All analytical samples obtained for this Program shall be grab samples.
2. All chemical and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services, or approved by the Executive Officer. Laboratory analysis must follow methods approved by the United States Environmental Protection Agency, and the laboratory must meet EPA Quality Assurance/Quality Control criteria.

II. REPORTING

A. QUARTERLY REPORTS

1. Monitoring reports shall be submitted to the Regional Board on a quarterly basis, by the fifteenth day following the end of the quarter, as shown in the following schedule;

<u>Reporting Period</u>	<u>Report Due Date</u>
January - March	April 15
April - June	July 15
July - September	October 15
October - December	January 15

2. Quarterly monitoring reports shall contain the following:
 - a. the source of all petroleum hydrocarbon-contaminated soil received by the Discharger during the quarter;
 - b. the quantity and concentration of all petroleum hydrocarbon-contaminated soil stored, treated, reused, or disposed of, along with the relevant laboratory documentation;
 - c. the results of monthly vadose zone monitoring;
 - d. a statement signed by a responsible official representing the Discharger stating that the treatment was completed in accordance with the requirements and provisions of Order 95-131. All other signed statements required by Order No. 95-131 shall also be included.

B. ANNUAL REPORTS

Annual summary reports shall be submitted by April 15 of each year. Tabular and graphical summaries of data obtained during the previous four quarterly monitoring periods must be included. The first annual summary report (due March 1, 1997), shall include an evaluation of the effectiveness of the enhanced bioremediation and thermal treatment systems.

C. GENERAL PROVISIONS FOR REPORTING

1. The technical reports submitted to the Regional Board shall be prepared under the direct supervision of a California-Registered Geologist or Civil Engineer, or a California-Certified Engineering Geologist.
2. Each monitoring report must affirm in writing that all analyses were conducted at a laboratory certified for such analyses in accordance with §13176 of the California Water Code, and in accordance with current EPA guideline procedures, 40 CFR Part 261, or as specified in this Monitoring Program.
3. For any analyses performed for which no procedures are specified in the EPA guidelines or in this Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.
4. The Discharger may submit additional data to the Board not required by this Program in order to simplify reporting to other regulatory agencies.
5. Where the units for a parameter are listed, as µg/L (ppb), suitable analytical techniques shall be used to achieve this precision. All detection limits must be below the current Drinking Water Maximum Contaminant Levels (MCL) as recommended by the California Department of Health Services, Sanitary Engineering Branch, or the minimum limit of detection specified in EPA Methods, or Appendix A, 40 CFR 136, if the (MCL) is not achievable.
6. Analytical data reported as "less than" shall be reported as less than a numeric value or below the limit of detection for that particular analytical method (the limit of detection shall also be noted).
7. If the Discharger performs analyses for any parameter more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the monitoring report.
8. In the event that hazardous, designated or other unacceptable wastes are detected at the site, the type, source, quantity and disposition of those wastes shall also be

American Remedial Technologies, Inc.
Jorgensen Steel Facility, Lynwood
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Order No. 95-131

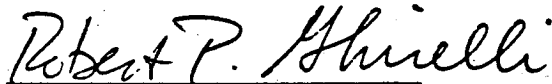
reported. If no unacceptable wastes are detected during the monitoring period, the report shall so state.

The monitoring reports required by this program shall be submitted to:

California Regional Water Quality Control Board,
Los Angeles Region
101 Centre Plaza Drive
Monterey Park, CA 91754-2156
ATTN: Technical Support Unit

These records and reports are public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Board, Los Angeles Region. Records or reports which might disclose trade secrets, etc., may be excluded from this provision as provided in §13267(b) of the California Water Code, if requested.

Ordered by:



ROBERT P. GHIRELLI, D.Env.
Executive Officer

September 18, 1995

DAO