

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NOS. CI-7598
FOR
THERMAL REMEDIATION SOLUTIONS**

(File No. 94-080)

A. MONITORING GENERAL

1. The reporting responsibilities of Thermal Remediation Solutions (TRS) are specified in the California Water Code (CWC). The principal purposes of this self-monitoring report are:
 - a. To document compliance with waste discharge requirements adopted by the Regional Board.
 - b. To facilitate self-policing by TRS to prevent and abate any pollution arising from the discharge.
2. Thermal Remediation Solutions (TRS) shall implement this Monitoring and Reporting Program (M&RP) on the effective date of this Order.

B. SITE MONITORING AND MONITORING REPORTS

1. Waste Evaluation Monitoring
 - a. TRS shall maintain a log of the waste evaluation program procedures described in Section C of Order No. R4-2004.0056. Waste characterization reports submitted to TRS by the generators of petroleum hydrocarbon contaminated soil (PHCS) shall be retained by TRS for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by this Regional Board. Such records shall show the following for each sample:

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

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

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- b. The total quantity of PHCSs accepted from a source shall be defined as a “Lot”. For every Lot of soil, samples shall be collected and tested to confirm materials acceptance criteria as described in Provision C.4 of Order No. R4-2004-0056.
- c. Analyses completed for hazardous characteristics by the generator or TRS shall be determined by criteria contained in Title 22 of the California Code of Regulations, division 45, chapter 11, article 3 to include toxicity, ignitability, reactivity, and corrosivity.
- d. TRS may propose an alternative sampling plan for monitoring incoming contaminated soil, for approval by the Regional Board Executive Officer (Executive Officer), provided the plan ensures that the soil sampling and analyses are representative of a Lot.
- e. The following analyses shall be performed at part of waste evaluation procedures for PHCSs soil accepted at TRS’s facility:

<u>Parameter</u>	<u>Units</u>
Total 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

¹Representative composite sample by:
TRPH USEPA Method 8015M

²Representative composite sample by:
TPH as gasoline USEPA Method 5030/8015M
TPH as diesel USEPA Method 5030/8015M
and analyzed by GC/FID. Analytical detection limits shall be as close to 1.0 mg/Kg as practicable.

³Representative grab samples shall be analyzed by USEPA Method 8020. USEPA TCLP or California WET extraction procedure should be conducted as necessary. Analytical detection limits shall be as close to USEPA Method Detection Limits as practicable.

⁴Includes fuel additives or other known or suspected contaminants. Appropriate USEPA analytical methods shall be used.

2. Monitoring of Treated Soils

- a. One soil sample shall be taken from each 250 cy quantity of treated materials. A certified laboratory shall composite, prepare, and analyze the soil samples. No more than four soil samples shall be composited by the laboratory.
- b. The following analyses shall be performed at part of monitoring of treated PHCSs at TRS's facility:

<u>Parameter</u>	<u>Units</u>
Total 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

¹Representative composite sample by:
TRPH USEPA Method 8015M

²Representative composite sample by:
TPH as gasoline USEPA Method 5030/8015M
TPH as diesel USEPA Method 5030/8015M
and analyzed by GC/FID. Analytical detection limits shall be as close to 1.0 mg/Kg as practicable.

³Representative grab samples shall be analyzed by USEPA Method 8020. USEPA TCLP or California WET extraction procedure should be conducted as necessary. Analytical detection limits shall be as close to USEPA Method Detection Limits as practicable.

⁴Includes fuel additives or other known or suspected contaminants. Appropriate USEPA analytical methods shall be used.

- 3. Sampling of amended soils shall be conducted in a random manner and testing must be at a frequency of a minimum of 5% of the total of amended soils and those monitoring parameters included in this Order or any other parameters deemed appropriate by the Regional Board Executive Officer.
- 4. All analytical samples obtained for this M&RP shall be grab samples.

5. All chemical analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services (DHS), or approved by the Executive Officer. Laboratory analyses must follow methods approved by the United States Environmental Protection Agency (USEPA), and the laboratory must meet USEPA quality assurance/quality control criteria.

Reporting

6. Quarterly Reports

- a. 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

- b. Quarterly monitoring reports shall contain the following:
- i. The results of monthly vadose zone monitoring;
 - ii. A certification statement that all PHCSs received by TRS complied with waste acceptance criteria contained in Order No. R4-2004-0056 during the quarter;
 - iii. A summary of results from the waste-load-checking program. 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.
 - iv. The quantity and concentration of all PHCSs stored, treated, reused, or disposed of, including reuse/disposal location;
 - v. Testing results completed by TRS for all incoming and treated soils;
 - vi. Relevant information for amended soils, including the following:
 - list all amendments used,
 - tabulate the quantities of amendments used,
 - identify all soil lots amended,
 - report the location(s) where the amended soils were reuse; and

- vii. A statement signed by a responsible official representing TRS stating that the treatment and reuse/disposal was completed in accordance with the requirements and provisions of Order No. R4-2004-0056. All other signed statements required by Order No. R4-2004-0056 shall also be included.

7. General Provisions for Reporting

- a. The technical reports submitted to the Regional Board shall be prepared under the direct supervision of a California-Registered Civil Engineer or a California-Certified Engineering Geologist.
- b. Each monitoring report must affirm in writing that all analyses were conducted at a laboratory certified for such analyses in accordance with section 13176 of the California Water Code, and in accordance with current USEPA guideline procedures, title 40 of the Code of Federal Regulations (CFR) part 261, or as specified in this M&RP.
- c. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall be located at the front of the report and shall clearly list all non-compliance with discharge requirements
- d. For any analyses performed for which no procedures are specified in the USEPA guidelines or in this M&RP, the constituent or parameter analyzed and the method or procedure used must be specified in the report.
- e. TRS may submit additional data to the Regional Board not required by this M&RP in order to simplify reporting to other regulatory agencies.
- f. Where the units for a parameter are listed, as µg/L (parts per billion), suitable analytical techniques shall be used to achieve this precision. All detection limits must be below the current drinking water Maximum Contaminant Level (MCL) as recommended by the DHS, Sanitary Engineering Branch, or the minimum limit of detection specified in USEPA methods, or Appendix A, 40 CFR part 136, if the MCL is not achievable.
- g. 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).

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- h. If the TRS performs analyses for any parameter more frequently than required by this M&RP using approved analytical methods, the results of those analyses shall be included in the corresponding monitoring report.
- i. Submit monitoring reports to:

California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013
ATTN: Information Technology Unit

Ordered by

Dennis A. Dickerson
Executive Officer

Date