

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

MONITORING AND REPORTING PROGRAM NO. CI-9687
FOR
ROBERTSHAW CONTROLS COMPANY
3000 EAST IMPERIAL HIGHWAY
(ENHANCED IN SITU BIOREMEDIATION AND IN SITU CHEMICAL REDUCTION FOR
GROUNDWATER CLEANUP)
(FILE NO. 10-068)

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This Monitoring and Reporting Program (MRP) presents the monitoring and reporting requirements associated with only the Enhanced In-Situ Bioremediation (EISB) and In-Situ Chemical Reduction (ISCR) pilot study activities to be performed to treat groundwater impacts associated with the property located at 3000 East Imperial Highway, Lynwood, California in accordance with Regional Board Order No. R4-2011-XXXX.

I. REPORTING REQUIREMENTS

- A. The Robertshaw Controls Company (hereinafter Discharger) shall implement this monitoring program on the effective date (September 1, 2011) of Regional Board Order No. R4-2011-XXXX. The first quarterly monitoring report under this Program, for October – December 2011, shall be received at the Regional Board by January 15, 2012. Subsequent monitoring reports shall be received by the Regional Board on a quarterly basis by dates in the following schedule:

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

- B. If there is no discharge or injection during any reporting period, the report shall so state. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.
- C. By March 1st of each year, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous semi-annual monitoring period. In addition, the Discharger shall explain the compliance record and the corrective actions taken, or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements (WDRs).

September 1, 2011

- D. Laboratory analyses – all chemical and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal certification is obtained from ELAP.
 - E. Groundwater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136. All QA/QC samples must be run on the same dates when samples were actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff.
 - F. Each monitoring report must affirm in writing that “All chemical analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health, and in accordance with current United States Environmental Protection Agency (USEPA) guideline procedures or as specified in this Monitoring Program.” Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.
 - G. 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 WDRs. This section shall be located at the front of the report and shall clearly list all non-compliance with WDRs, as well as all excursions of effluent limitations.
 - H. The Discharger shall maintain all sampling and analytical results: date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
 - I. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.
- II. ENHANCED IN SITU BIOREMEDIATION (EISB) AND IN SITU CHEMICAL REDUCTION (ISCR) INJECTION REPORTING REQUIREMENTS

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The Discharger is required to submit a report within 60 days following the end of injections,

which shall include baseline laboratory data, as wells as the EISB and ISCR injection data and shall include the following information regarding injection activities:

1. Location map showing injection points;
2. Depths of Injection points; and
3. Total amount of electron donor, microbial culture (KB-1™), and ZVI and dates injected.

III. GROUNDWATER MONITORING PROGRAM

The Discharger shall sample from monitoring wells MW-3, MW-4, MW-5, MW-15, MW-19A, MW-19B, MW-20A, MW-20B, MW-21A, MW-21B, to provide baseline water quality information prior to the electron donor, KB-1™, and ZVI injections. Groundwater from the wells noted above shall be monitored for the duration of the remediation in accordance with the following monitoring program:

Constituent	Units	Sampling Frequency
Volatile Organic Compounds	Micrograms per liter (µg/L)	Baseline, Bi-Monthly for 6 Months, Quarterly for 6 Months, Semi-Annually for 1 year
pH	pH Units	Baseline, Bi-Monthly for 6 Months, Quarterly for 6 Months, Semi-Annually for 1 year
Dissolved Oxygen	Milligrams per liter (mg/L)	Baseline, Bi-Monthly for 6 Months, Quarterly for 6 Months, Semi-Annually for 1 year
Oxidation Reduction Potential	Millivolts (mV)	Baseline, Bi-Monthly for 6 Months, Quarterly for 6 Months, Semi-Annually for 1 year
Specific Conductance	microSiemens per centimeter (µS/cm)	Baseline, Bi-Monthly for 6 Months, Quarterly for 6 Months, Semi-Annually for 1 year
Temperature	Degrees Celsius (°C)	Baseline, Bi-Monthly for 6 Months, Quarterly for 6 Months, Semi-Annually for 1 year

In addition to the above monitoring parameters, the Discharger shall monitor monitoring wells MW-3, MW-5, MW-19A, MW-19B, MW-20A, MW-20B, MW-21A, and MW-21B, which are within the proposed treatment area, for the following:

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Constituent	Units	Sampling Frequency
Dissolved Hydrogen Gases	Milligrams per liter (mg/L)	Baseline, Semi-Annually for 2 years
Total Organic Carbon	Milligrams per liter (mg/L)	Baseline, Semi-Annually for 2 years
Anions (chloride, sulfate, nitrate, nitrite)	Milligrams per liter (mg/L)	Baseline, Semi-Annually for 2 years
Total Dissolved Solids (TDS)	Milligrams per liter (mg/L)	Baseline, Semi-Annually for 2 years
Boron	Milligrams per liter (mg/L)	Baseline, Semi-Annually for 2 years
Volatile Fatty Acids	Micrograms per liter (µg/L)	Semi-Annually for 2 years
<i>Dehalococcoides</i> or Vinyl Chloride Reductase	Presence/Absence	Semi-Annually for 1 year Annually for 1 year

All groundwater monitoring reports must include, at a minimum, the following:

- a. Well identification, date and time of sampling;
- b. Sampler identification, and laboratory identification;
- c. Semi-annual observation of groundwater levels, recorded to 0.01 feet mean sea level and groundwater flow direction.

IV. MONITORING FREQUENCY

Specifications in this monitoring program are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted to a less frequent basis or parameters and locations removed by the Executive Officer if the Discharger makes a request and the request is supported by statistical trends of monitoring data submitted.

V. CERTIFICATION STATEMENT

Each report shall contain the following declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and

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imprisonment.

Executed on the _____ day of _____ at _____.

(Signature)

(Title)"

VI. PUBLIC DOCUMENTS

These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

VII. ELECTRONIC SUBMITTAL OF INFORMATION (ESI) TO GEOTRACKER

The Discharger shall submit all reports required under this MRP, including groundwater monitoring data and discharge location data (latitude and longitude), to the State Water Resources Control Board GeoTracker database, in addition to submitting hard copies to the Regional Board office, Information Technology Unit. Once the Discharger demonstrates mastery of electronic submittal of reports to GeoTracker for the Site, it may request that the Regional Board waive the requirement of submitting hard copies of reports.

Ordered by: _____
Samuel Unger, P.E.
Executive Officer

Date: September 1, 2011

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