

Los Angeles Regional Water Quality Control Board

August 5, 2016

Mr. Steve Sacco
Robertshaw Controls Company
70 Mechanic Street, C41-32
Foxboro, MA 02035

REVISED MONITORING AND REPORTING PROGRAM NO. CI-9687 – ROBERTSHAW CONTROLS COMPANY, 3000 EAST IMPERIAL HIGHWAY, LYNWOOD, CALIFORNIA (FILE NO. 10-068, ORDER NO. R4-2011-0150, CI-9687, GLOBAL ID WDR100001833)

Dear Mr. Sacco:

The Robertshaw Controls Company (hereinafter Discharger) facility is located at 3000 East Imperial Highway in Lynwood, California (Site). The Discharger began environmental investigations at the Site in November 2010. In March 2011, the Discharger proposed to remediate groundwater by Enhanced In Situ Bioremediation (EISB). The proposal was approved by the Department of Toxic Substances Control (DTSC) on June 22, 2011.

On September 1, 2011, the Los Angeles Regional Water Quality Control Board (Regional Board) adopted Order No. R4-2011-0150 for the injection of emulsified vegetable oil (EVO), bioaugmentation culture (KB-1™), and emulsified zero valent iron (ZVI). Upon adoption of the Waste Discharge Requirements (WDRs), the Discharger was required to implement Monitoring and Reporting Program (MRP) No. CI-9687.

Groundwater monitoring results from November 2011 to May 2016 indicated that trichloroethene (TCE) concentrations were reduced from 60,000 micrograms per liter (µg/L) to 50 µg/L, and cis-1,2-dichloroethene (cis-1,2-DCE) concentrations were reduced from 30,000 µg/L to non-detected in downgradient monitoring well MW-21B. The results indicated a decreasing trend in volatile organic compounds (VOCs) in groundwater. As a result, on November 30, 2015, the Regional Board reduced the monitoring frequency of groundwater from quarterly to semi-annual with DTSC concurrence.

On January 12, 2016, the Discharger submitted a letter to the Regional Board indicating that groundwater monitoring wells MW-19A, MW-19B, MW-20A, and MW-20B were destroyed with DTSC approval due to the implementation of electrical resistance heating (ERH) in the vicinity of these wells. As a result, the Discharger requested adding wells MW-1, MW-2, and MW-8, to the monitoring network to replace the destroyed wells.

Based on the review of the groundwater data, the EISB has been controlled within the treatment area and has proven its effectiveness. Therefore, Monitoring and Reporting Program (MRP) No. CI-9687 is modified as follows:


1. The due dates for the semi-annual are changed to January 30 and July 30 to be consistent with DTSC's due dates.
2. Groundwater wells MW-19A, MW-19B, MW-20A, and MW-20B were eliminated from the monitoring network.
3. Groundwater wells MW-1, MW-2, and MW-8, were added to the monitoring network.

The Discharger shall comply with the Electronic Submittal of information (ESI) requirements by submitting all reports required under the MRP, including groundwater monitoring data, discharge location data, and pdf monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100001833.

Please see Electronic Submittal for GeoTracker Users, dated December 12, 2011 at:
<http://www.waterboards.ca.gov/losangeles/resources/Paperless/Paperless%20Office%20for%20OGT%20Users.pdf>

If you have any additional questions, please contact the Project Manager, Mr. David Koo, at (213) 620-6155 (David.Koo@waterboards.ca.gov) or the Groundwater Permitting Unit Chief, Dr. Eric Wu, at (213) 576-6683 (Eric.Wu@waterboards.ca.gov).

Sincerely,


Samuel Unger, P.E.
Executive Officer

Enclosure: Monitoring and Reporting Program No. CI-9687 revised on date July 25, 2016

cc: Mr. Jose Diaz, Department of Toxic Substances Control
Mr. Donald Chae, 3000 East Imperial LLC
Mr. Roger Haley, City Manager, City of Lynwood
Mr. G. Daniel Ojeda, Director of Public Works, City of Lynwood
Mr. Chi Diep, California Department of Public Health, Drinking Water Program
Mr. Mark Pesterella, County of Los Angeles, Department of Public Works
Mr. Christopher Gale, Geosyntec consultants

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

**REVISED 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)**

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 Los Angeles Regional Water Quality Control Board (Regional Board) Order No. R4-2011-0150.

I. REPORTING REQUIREMENTS

- A. The Robertshaw Controls Company (hereinafter Discharger) shall implement this revised MRP under Regional Board Order No. R4-2011-0150. The first monitoring report under this revised program is due by July 30, 2016. Subsequent monitoring reports shall be received by the Regional Board according to the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January – June	July 30
July – December	January 30

- B. If there is no discharge or injection during any reporting period, the report shall so state.
- C. By January 31st of each year, beginning January 31, 2016, 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 calendar year. In addition, the Discharger shall discuss 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.
- D. Laboratory analyses – all chemical, bacteriological, and/or toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board, Division of Drinking Water (SWRCB-DDW) Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certifications shall be provided each time a new analysis is used and/or renewal is obtained from ELAP and/or NELAP.

- E. The method limits (MLs) employed for analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control (QA/QC) procedures.
- F. 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. Proper chain of custody procedures must be followed and a copy of the chain of custody documentation shall be submitted with the report.
- G. Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the SWRCB-DDW ELAP, 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.
- H. For every item where the requirements are not met, the Discharger shall submit a statement of the cause(s), and actions undertaken or proposed which will bring the discharge into full compliance with waste discharge requirements at the earliest possible time, including a timetable for implementation of those actions.
- I. The Discharger shall maintain all sampling and analytical results, including strip charts, 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.
- J. 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.
- K. 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 (WDRs). This section shall be located at the front of the report and shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.

- L. The Discharger should not implement any changes to the Monitoring and Reporting Program prior to receiving Executive Officer's written approval.

II. GROUNDWATER MONITORING PROGRAM

The Discharger shall sample from monitoring wells MW-1, MW-2, MW-3, MW-5, MW-8, MW-15, MW-21A, and MW-21B, to provide water quality information. Groundwater from the wells noted above shall be monitored in accordance with Table 1 below:

TABLE 1 – GROUNDWATER MONITORING CONSTITUENTS

<u>CONSTITUENT</u>	<u>UNITS</u> ¹	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY OF ANALYSIS</u>
Water Temperature ²	°C	Low-flow sample	Semi-Annually
Specific Conductance ²	µS/cm	Low-flow sample	Semi-Annually
Dissolved Oxygen ²	mg/L	Low-flow sample	Semi-Annually
pH ²	pH units	Low-flow sample	Semi-Annually
Oxidation-Reduction Potential ²	mV	Low-flow sample	Semi-Annually
Dissolved Hydrogen Gases	mg/L	Low-flow sample	Semi-Annually
Volatile Organic Compounds (EPA Method 8260B)	µg/L	Low-flow sample	Semi-Annually
Chloride (EPA Method 300)	mg/L	Low-flow sample	Semi-Annually
Nitrate (EPA Method 300)	mg/L	Low-flow sample	Semi-Annually
Sulfate (EPA Method 300)	mg/L	Low-flow sample	Semi-Annually
Total Organic Carbon (EPA Method 415.1)	mg/L	Low-flow sample	Semi-Annually
Total Dissolved Solids (EPA Method 160.1 or SM 2540C)	mg/L	Low-flow sample	Semi-Annually
Boron (EPA Method 6010B)	mg/L	Low-flow sample	Semi-Annually

¹ mg/L: milligrams per liter; µg/L: micrograms per liter; µS/cm: microsiemens per centimeter; mV: millivolts; °C: degree Celsius.

² Field instrument can be used to test for this constituent.

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 FREQUENCIES

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 dropped by the Executive Officer if the Discharger makes a request and the request is backed 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 imprisonment.

Executed on the _____ day of _____ at _____.

_____(Signature)

_____(Title)"

VI. ELECTRONIC SUBMITTAL OF INFORMATION (ESI) TO GEOTRACKER

The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the MRP, including groundwater monitoring data, discharge location data, correspondence, and pdf monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100001833.

Robertshaw Controls Company
3000 East Imperial Highway
Revised Monitoring & Reporting Program No. CI-9687

Order No. R4-2011-0150

All records and reports submitted in compliance with this Order are public documents and will be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region, upon request by interested parties. Only proprietary information, and only at the request of the Discharger, will be treated as confidential.

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

Date: August 5, 2016