



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

February 22, 2017

Mr. Scott Kardell
Boys Town
355 McBreen Circle
Boys Town, Nebraska 68010

Certified Mail
Return Receipt Required
Claim No. 7016 1370 0001 2479 7896

REVISED MONITORING AND REPORTING PROGRAM NO. CI-10040 – BOYS TOWN FACILITY, 15116 SOUTH GIBSON AVENUE, COMPTON, CALIFORNIA (FILE NO. 14-023, ORDER NO. R4-2014-0187, SERIES NO. 034, CI-10040, GLOBAL ID. WDR 100016638)

Dear Mr. Kardell:

On July 23, 2015, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) enrolled you under General Waste Discharge Requirements (General WDRs Order No. R4-2014-0187) with a Monitoring and Reporting Program (MRP) No. CI-10040 for injection of emulsified vegetable oil and bioaugmentation culture for groundwater remediation of volatile organic compounds at the subject site.

On behalf of Boys Town (Discharger), AECOM submitted the *Addendum to the Remedial Action Plan* (Addendum), dated March 21, 2016 to propose additional injection materials. On April 18, 2016, Regional Board Site Cleanup staff approved the Addendum. The August 2016 groundwater monitoring results indicated that trichloroethylene and cis-1,2-dichloroethylene were detected at concentrations up to 14 micrograms per liter ($\mu\text{g/L}$) and 370 $\mu\text{g/L}$, respectively.

The Discharger submitted the WDR/MRP modification request on December 15, 2016. It is estimated that 10,000 gallons of 25% zero-valent iron slurry, 4,000 gallons of 10% pH buffer solution (sodium bicarbonate), 11 gallons (40 liters) of bioaugmentation culture (*Dehalococcoides sp.*), and 4,000 gallons of anaerobic chase water will be injected into 39 injection points at depths from approximately 30 to 60 feet below ground surface. The injection activities are expected to take one month.

The proposed discharge shall not cause the mineral constituents of the receiving groundwater at the compliance point, downgradient outside the application area, in excess of applicable limits (Central Basin of the Los Angeles Coastal Plain Groundwater Basin) given in Attachment B of General WDRs Order No. R4-2014-0187. The groundwater quality objectives are 700 milligrams per liter (mg/L) for total dissolved solids, 250 mg/L for sulfate, 150 mg/L for chloride, and 1.0 mg/L for boron.


The revised MRP, which incorporates injection of additional materials, is enclosed. The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the revised MRP, including groundwater monitoring data, discharge location data, and pdf monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100016638. Please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

For all parties who upload electronic documents to State Database GeoTracker, it is no longer necessary to email a copy of these documents to losangeles@waterboards.ca.gov or submit hard copies to our office. The Regional Board will no longer accept documents (submitted by either hard copy or email) already uploaded to GeoTracker. Please see Electronic Submittal to the Los Angeles Regional Board for GeoTracker Users dated December 12, 2011 at: <http://www.waterboards.ca.gov/losangeles/resources/Paperless/Paperless%20Office%20for%20GT%20Users.pdf>

To avoid paying future annual fees, please submit a written request for termination of your enrollment under the general WDR in a separate letter when the project is completed and the WDR is no longer needed. Be aware that the annual fee covers the fiscal year billing period beginning July 1 and ending June 30, the following year. You will pay the full annual fee if your request for termination is made after the beginning of the new fiscal year beginning July 1.

If you have any questions, please contact the Project Manager, Dr. Ann Chang at (213) 620-6122 (ann.chang@waterboards.ca.gov), or the Chief of Groundwater Permitting Unit, Dr. Eric Wu at (213) 576-6683 (eric.wu@waterboards.ca.gov).

Sincerely,


Samuel Unger, P.E.
Executive Officer

Enclosure: Revised Monitoring and Reporting Program No. CI-10040
dated February 22, 2017

cc: Mr. Assaf Rees, AECOM

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

REVISED MONITORING AND REPORTING PROGRAM NO. CI-10040
FOR
BOYS TOWN FACILITY
15116 SOUTH GIBSON AVENUE, COMPTON, CALIFORNIA

ENROLLMENT UNDER REGIONAL BOARD
ORDER NO. R4-2014-0187 (SERIES NO. 034)
FILE NO. 14-023

I. MONITORING AND REPORTING REQUIREMENTS

- A. Boys Town (hereinafter Discharger) shall implement this Monitoring and Reporting Program (MRP) on the effective date (February 22, 2017) under Regional Board Order No. R4-2014-0187. The next monitoring report under this program shall be received at the Regional Board by **April 30, 2017**. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

<u>Monitoring Period</u>	<u>Report Due</u>
January – March	April 30
April – June	July 30
July – September	October 30
October – December	January 30

- B. If there is no discharge or injection, during any reporting period, the report shall so state. By March 1 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 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.
- C. The Discharger shall comply with requirements contained in Section G of Order No. R4-2014-0187 "*Monitoring and Reporting Requirements*" in addition to the aforementioned requirements.

II. DISCHARGE MONITORING PROGRAM

The monitoring reports shall contain the following information regarding the injection activities:

1. Location map showing injection points used for zero-valent iron (ZVI) slurry, pH buffer solution, bioaugmentation culture, and anaerobic chase water.
2. Written and tabular summary defining date of injection, depth of injection points, quantity and concentration of ZVI slurry, pH buffer solution, bioaugmentation culture, and anaerobic chase water injected at each injection point, and total amount of ZVI sulrry, pH buffer solution, bioaugmentation culture, and anaerobic chase water injected at the Site.
3. Visual inspection at each injection point shall be conducted and recorded during the injection.

III. GROUNDWATER MONITORING PROGRAM

A groundwater monitoring program shall be implemented to evaluate impacts associated with the injection activity. Groundwater samples shall be collected from monitoring wells MW-4, MW-5s, MW-8s, MW-11s, and MW-13 (Figure 1). The Discharger shall conduct a baseline sampling prior to the proposed injection, followed by specified schedules from all five monitoring wells for the following groundwater parameters:

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Dissolved Oxygen	mg/L	grab	Baseline and quarterly after injection
Oxidation-Reduction Potential	millivolts	grab	Baseline and quarterly after injection
pH	pH units	grab	Baseline and quarterly after injection
Specific Conductivity	mS/cm	grab	Baseline and quarterly after injection
Temperature	°C	grab	Baseline and quarterly after injection
Turbidity	NTU	grab	Baseline and quarterly after injection

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total Organic Carbon	mg/L	grab	Baseline and quarterly after injection
Total Dissolved Solids	mg/L	grab	Baseline and quarterly after injection
Sulfate	mg/L	grab	Baseline and quarterly after injection
Chloride	mg/L	grab	Baseline and quarterly after injection
Boron	mg/L	grab	Baseline and quarterly after injection
Nitrate and Nitrite	mg/L	grab	Baseline and quarterly after injection
Volatile Organic Compounds	µg/L	grab	Baseline and quarterly after injection
Dissolved Gases (methane, ethane, and ethene)	µg/L	grab	Baseline and quarterly after injection
<i>Dehalococcoides</i> species	cells/mL	grab	Baseline and quarterly after injection

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

- a. Well identification, date and time of sampling;
- b. Sampler identification, and laboratory identification;
- c. 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 completed 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. PUBLIC DOCUMENTS

All records and reports submitted in compliance with Order No.R4-2014-0187 and Monitoring and Reporting Program No. CI-10040 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.

VII. ELECTRONIC SUBMITTAL OF INFORMATION

The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the MRP, including groundwater monitoring data in Electronic Deliverable Format, discharge location data, and searchable Portable Document Format of monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100016638.

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

Date: February 22, 2017



LEGEND:

- MW-11d GROUNDWATER MONITORING WELL
- MW-11s WDR MONITORING WELL
- MW-12 BIOAUGMENTATION WELL
- IP-16 INJECTION POINT
- PLANTER AREA
- HARDSCAPE AREA
- LANDSCAPE AREA
- MAIN BUILDING
- PROPERTY BOUNDARY

ABBREVIATIONS

- EVO emulsified vegetable oil
- d deep
- ZVI zero-valent iron
- s shallow
- WDR waste discharge requirements

NOTES:

1. GROUNDWATER MONITORING WELLS WERE SURVEYED BY AECOM ON FEBRUARY 28, 2013.
2. EVO INJECTION EVENT WAS PERFORMED BETWEEN JULY 21 AND JULY 25, 2014 AND POINTS WERE SURVEYED BY AECOM ON AUGUST 8, 2014.
3. BIOAUGMENTATION AND EVO INJECTION WAS PERFORMED BETWEEN OCTOBER 12 AND 14, 2015 AT WELLS MW-02s AND MW-12.

INJECTION LOCATIONS

15116 S. GIBSON AVE.		COMPTON, CALIFORNIA
Date: 12-16	BOYS TOWN	
Project No.		
60309302		
		Figure 1