CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

July 16, 2018

Mr. Brian Jacobs
AECOM
300 South Grand Avenue, Suite 200
Los Angeles, California 90071

Certified Mail
Return Receipt Required
Claim No. 7017 1450 0002 1559 0836

REVISED MONITORING AND REPORTING PROGRAM NO. CI-10357 – HITCO GARDENA FACILITY, 1600 WEST 135TH STREET, GARDENA, CALIFORNIA (FILE NO. 17-092, ORDER NO. R4-2014-0187, SERIES NO. 105, CI-10357, GLOBAL ID. WDR100039755)

Dear Mr. Jacobs:

On September 22, 2017, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) enrolled Gardena Holdings Inc. (hereinafter Discharger) under General Waste Discharge Requirements (WDR Order No. R4-2014-0187) with a Monitoring and Reporting Program (MRP) No. CI-10357. The existing coverage includes a pilot injection test to evaluate the effectiveness and implementability of an in situ anaerobic bioremediation (ISAB) recirculation treatment cell in target high-flux zones at the HITCO Gardena Facility.

On behalf of Gardena Holdings, Inc., AECOM Technical Services, Inc. submitted *Off-Site In Situ Chemical Oxidation Pilot Test Workplan* (ISCO PTWP) dated April 9, 2018 for testing the applicability and effectiveness of ISCO using permanganate at leading edge of the groundwater plume, located off-site and downgradient of the HITCO Gardena Facility. On April 17, 2018, Regional Board Site Cleanup Unit staff approved the ISCO PTWP.

It is estimated that 3,000 gallons of 6% sodium permanganate solution or 6,000 gallons of 3% potassium permanganate solution will be injected into three injection points at depths from approximately 20 to 55 feet below ground surface.

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 (West Coast Subbasin of the Coastal Plain of Los Angeles Groundwater Basin) given in Attachment B of General WDRs Order No. R4-2014-0187. The groundwater quality objectives are 800 milligrams per liter (mg/L) for total dissolved solids, 250 mg/L for sulfate, 250 mg/L for chloride, and 1.5 mg/L for boron.

The revised MRP, which incorporates the ISCO pilot test, 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 WDR100039755. 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,

Deborah J. Smith
Executive Officer

Enclosures: Revised Monitoring and Reporting Program No. CI-10357 dated July 16, 2018

cc: Mr. Assaf Rees, AECOM

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

REVISED MONITORING AND REPORTING PROGRAM NO. CI-10357
FOR
HITCO GARDENA FACILITY
1600 WEST 135TH STREET, GARDENA, CALIFORNIA

ENROLLMENT UNDER REGIONAL BOARD
ORDER NO. R4-2014-0187 (SERIES NO. 105)
FILE NO. 17-092

I. MONITORING AND REPORTING REQUIREMENTS

A. Gardena Holdings, Inc. (hereinafter Discharger) shall implement this Monitoring and Reporting Program (MRP) on the effective date (July 16, 2018) under Regional Board Order No. R4-2014-0187. The next monitoring report shall be received at the Regional Board by **October 30, 2018**. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

Monitoring Period	Report Due
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. IN SITU ANAEROBIC BIOREMEDIATION

A. DISCHARGE MONITORING PROGRAM

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

1. Location map showing injection points used for ethanol, sodium lactate, and sodium bicarbonate.

2. Written and tabular summary defining date of injection, depth of injection points, quantity and concentration of ethanol, sodium lactate, and sodium bicarbonate injected at each injection point, and total amount of ethanol, sodium lactate, and sodium bicarbonate injected at the Site.

3. Visual inspection at each injection point shall be conducted and recorded during the injection.

B. 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 DPEW-1, OW-01A, OW-01B, OW-01C, OW-02A, OW-02B, OW-02C, SMW-03A, SMW-03B, and SMW-03C (Figure 1). The Discharger shall conduct a baseline sampling prior to the proposed injection, followed by specified schedules from all 10 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

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.

III. IN SITU CHEMICAL OXIDATION

A. DISCHARGE MONITORING PROGRAM

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

1. Location map showing injection points used for permanganate.

2. Written and tabular summary defining date of injection, depth of injection points, quantity and concentration of permanganate injected at each injection point, and total amount of permanganate injected at the Site.

3. Visual inspection at each injection point shall be conducted and recorded during the injection.

B. 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 MH-14A, MH-14B, MH-14C, MH-15A, MH-15B, PRB-4A, and PRB-4B (Figure 2). The Discharger shall conduct a baseline sampling prior to the proposed injection, followed by specified schedules from all seven 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
Total Organic Carbon	mg/L	grab	Baseline and quarterly after injection

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
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
Manganese	mg/L	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 Regional Board Order No. R4-2014-0187 and Monitoring and Reporting Program No. CI-10357 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 WDR100039755.

Ordered by: for Deborah J. Smith
Executive Officer

Date: July 16, 2018

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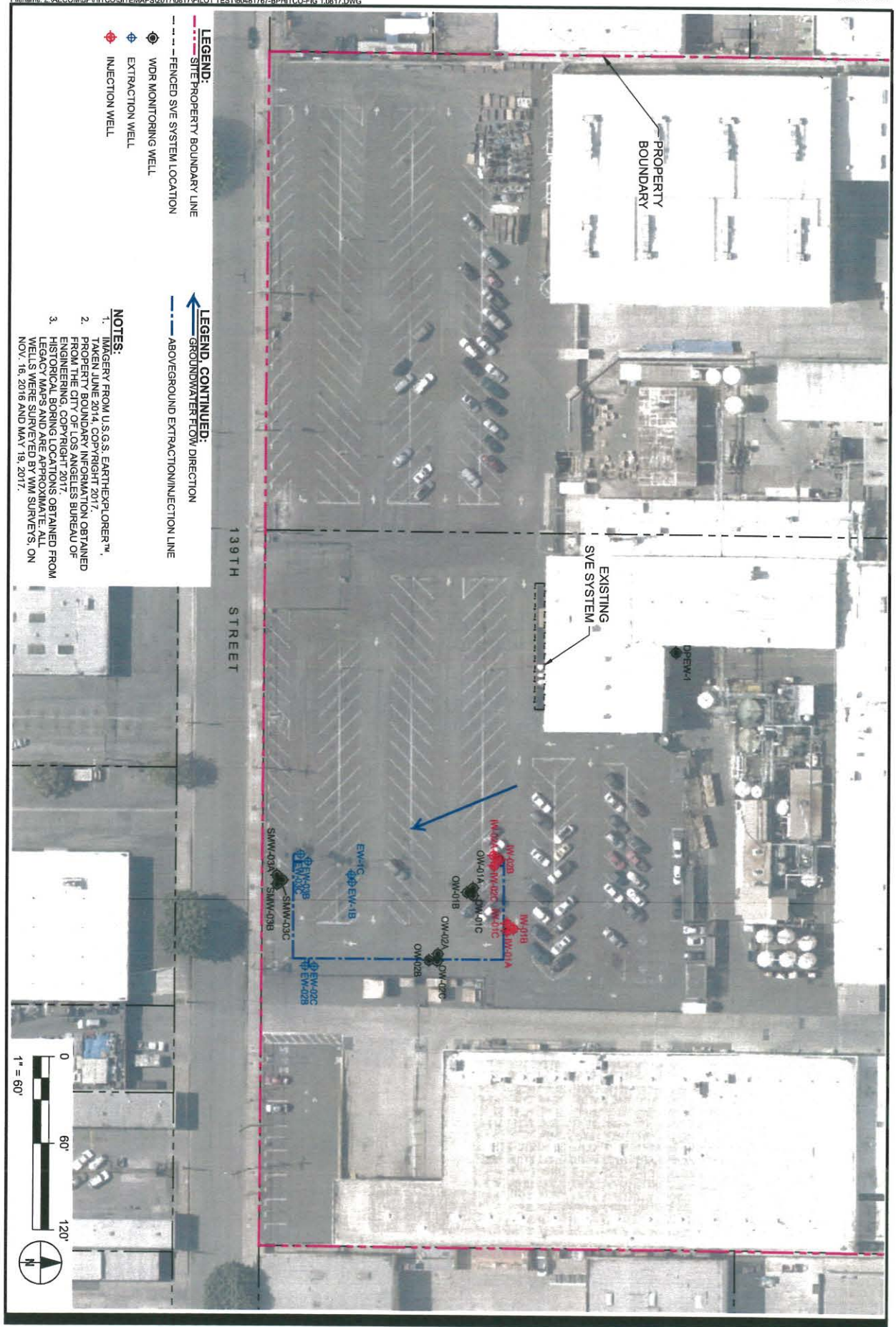

HITCO Gardena Facility
1600 W 135th Street, Gardena, CA

RECIRCULATION PILOT TEST LAYOUT

AECOM

Project No.: 60481767 Date: August 2017

Figure: 1

EXPLANATION

- EXISTING MONITORING WELL LOCATION
- INJECTION POINT
- APPROXIMATE GROUNDWATER FLOW DIRECTION

ABBREVIATIONS

µg/L MICROGRAMS PER LITER

N

0 50 100 200 Feet

1 " = 200 '

ISCO Pilot Test Monitoring Grid

Date 06-2018	HITCO Gardena	Figure
Project No. 60481767	AECOM	2

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