



Los Angeles Regional Water Quality Control Board

December 7, 2018

Mr. Daniel S. Samorano Raytheon Systems Company 1151 East Hermans Road TU, Building 845 Tucson, Arizona 85706 Certified Mail Return Receipt Required Claim No. 7017 1450 0002 1559 1482

REVISED MONITORING AND REPORTING PROGRAM NO. CI-8947 – RAYTHEON SYSTEMS COMPANY, 8433 FALLBROOK AVENUE, CANOGA PARK, CALIFORNIA (FILE NO. 94-45, ORDER NO. R4-2014-0187, SERIES NO. 076, CI-8947, GLOBAL ID. WDR100000974)

Dear Mr. Samorano:

On September 19, 2016, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) enrolled you under general Waste Discharge Requirements (WDR Order No. R4-2014-0187) with a Monitoring and Reporting Program (MRP) No. CI-8947 for injection of sodium permanganate solution at Northwest Area and injection of emulsified vegetable oil, sodium lactate, and bioaugmentation culture near wells CM-4D and CM-8D to treat volatile organic compounds impacted groundwater.

On behalf of Raytheon Systems Company, Oneida Total Integrated Enterprises, LLC submitted the *Request for Modification of Monitoring and Reporting Program* (Request) dated November 9, 2018 to propose additional groundwater remediation at North-Central Barriers and former Tank T3 Area. The proposed injection was outlined in the *Corrective Action Plan Addendum No. 5: Work Plan for In Situ Chemical Oxidation and Enhanced In Situ Bioremediation* (Work Plan) dated December 2015 and approved by Regional Board Site Cleanup staff on April 26, 2016.

It is estimated that 22,990 gallons of amendment solution containing 1,595 gallons of emulsified vegetable oil, 495 gallons of sodium lactate, and 13 gallons (48 liters) of bioaugmentation culture (*Dehalococcoides sp.*) will be injected into 12 injection points at depths from approximately 34 to 55 feet below ground surface. The injection activities are expected to take approximately one month.

In addition, the Request proposes to discontinue monitoring at three locations:

- In Situ Chemical Oxidation at Northwest Area
- Enhanced In Situ Bioremediation at Former Building 269 Area (also known as CM-4D Area)
- Enhanced In Situ Bioremediation at CM-8D Area

Based on the review of the monitoring reports from the Fourth Quarter 2016 to the Third Quarter 2018, Regional Board staff determined that groundwater quality in the three above-mentioned areas have been stable from pre-injection through post-injection groundwater sampling events. Therefore, the monitoring of groundwater quality at three requested locations is no longer needed and is removed.

The revised MRP incorporates proposed injection and modification of Monitoring and Reporting Program. 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 WDR100000974. 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 for further details at: http://www.waterboards.ca.gov/losangeles/resources/Paperless/Paperless%20Office%20for%2 OGT%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,

Executive Officer

Enclosure: Revised Monitoring and Reporting Program No. CI-8947 dated December 7, 2018

cc: Ms. Kim Sawyer, Oneida Total Integrated Enterprises

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

REVISED MONITORING AND REPORTING PROGRAM NO. CI-8947 FOR FORMER RAYTHEON FACILITY 8433 FALLBROOK AVENUE, CANOGA PARK, CALIFORNIA

ENROLLMENT UNDER REGIONAL BOARD ORDER NO. R4-2014-0187 (SERIES NO. 076) FILE NO. 94-45

I. MONITORING AND REPORTING REQUIREMENTS

A. Raytheon Systems Company (hereinafter Discharger) shall implement this Monitoring and Reporting Program (MRP) on the effective date (December 7, 2018) under Regional Board Order No. R4-2014-0187. The next monitoring report under this program shall be received at the Regional Board by **January 30, 2019**. 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".

Raytheon Systems Company WDR Order No. R4-2014-0187 Revised Monitoring and Reporting Program No. CI-8947

II. DISCHARGE MONITORING PROGRAM

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

- 1. Location map showing injection points used for emulsified vegetable oil, sodium lactate, and bioaugmentation culture.
- 2. Written and tabular summary defining depth of injection points, quantity and concentration of emulsified vegetable oil, sodium lactate, and bioaugmentation culture injected at each injection point, and total amount of emulsified vegetable oil, sodium lactate, and bioaugmentation culture 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 CM-2D, M-1, MW-23, RW-11, RW-14, and RW-15 (Figure 1). The Discharger shall conduct a baseline sampling prior to the proposed injection, followed by specified schedules from all six 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
рН	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
Dissolved Gases (methane, ethane, and ethene)	μg/L	grab	Baseline and quarterly after injection
Dehalococcoides 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.

Raytheon Systems Company WDR Order No. R4-2014-0187 Revised Monitoring and Reporting Program No. CI-8947

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-8947 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 WDR100000974.

Ordered by:

Deborah J. Smith

Date: December 7, 2018

