
Central Valley Regional Water Quality Control Board

27 February 2015

Ms. Marie Joachim
Nestlé USA, Inc.
800 North Brand Blvd.
Glendale, CA 91203

NOTICE OF APPLICABILITY, GENERAL ORDER NO. R5-2015-0012 - FORMER NESTLÉ USA, INCORPORATED FACILITY, 230 INDUSTRIAL AVENUE, RIPON, SAN JOAQUIN COUNTY

Nestlé USA, Inc. submitted a Notice of Intent and supplemental information on 3 and 28 March 2014 requesting coverage under General Order No. R5-2008-0149, General Waste Discharge Requirements for In-situ Groundwater Remediation at Sites with Volatile Organic Compounds, Nitrogen Compounds, Perchlorate, Pesticides, Semi-Volatile Compounds and/or Petroleum Compounds. Based on information in your submittal, it is our determination that this project does not meet the requirements of that general order. However, your project does meet the requirements of General Order No. RS-2015-0012, General Waste Discharge Requirements for In Situ Groundwater Remediation and Discharge of Treated Groundwater to Land. All of the requirements contained in the general order are applicable to your project. You are assigned Order No. R5-2015-0012-001.

Project Location:

The project is located at 230 Industrial Avenue in Ripon, California.
Assessor's Parcel No. 259-39-010
Latitude 37°44'18.43"N; Longitude 121°07'17.58"W

Project Description:

Nestlé USA, Inc. (Discharger) owned and operated a manufacturing plant (Site) in the City of Ripon, San Joaquin County, California (see Figures 1 through 3). Between 1948 and 1986, the Discharger manufactured caffeinated and decaffeinated instant coffee. From 1957 to 1970, the Discharger used trichloroethene (TCE) to extract caffeine during manufacture of decaffeinated coffee. During this period, wastewater from the manufacturing process was reportedly discharged to the City of Ripon's industrial sewer line. Wastewater containing TCE was discharged into the subsurface and reached groundwater at several locations, including the former facility at 230 Industrial Avenue.

The Discharger has been extracting and treating groundwater containing TCE and its degradation products with activated carbon since 1986. Currently, the Discharger is extracting and treating groundwater from the local water-bearing zone identified as the A-Hydrostratigraphic Zone or "A-Zone" (approximately 50 to 115 feet below ground surface) at the location of the former facility at 230 Industrial Avenue. The treated groundwater has been

discharged to the City of Ripon's industrial sewer system since 1986. The City of Ripon has limited disposal capacity in their wastewater ponds and the Discharger needs to increase their current pump & treat operations up to 260 gallons per minute (gpm) to capture the TCE plume in the A-Zone. To accommodate these increased flows, the Discharger is proposing to inject their treated groundwater at or near the former Nestlé USA, Inc. facility on Industrial Avenue.

Initially, groundwater will be extracted for treatment on-site by the existing granular activated carbon system and then injected into monitoring wells M-2A, M-3A, M-12A, EU-4, and/or EU-3 (see Figure 2). If these wells do not provide adequate disposal capacity, the Discharger may install new injection wells.

The Discharger is also proposing to install new extraction wells EU-5 and EU-6 to capture TCE near the toe of the plume in the Upper Aquifer. Extracted groundwater will be treated at the location of the new extraction wells and piped back to 230 Industrial Avenue for injection. When the new extraction wells are brought on-line, existing extraction wells (EI-1, EU-3, and EU-4) may be shutdown.

A recent sample of the Discharger's treated effluent contained total dissolved solids (TDS) at a concentration of 920 mg/L. This concentration exceeds the respective Federal and State Secondary Maximum Contaminant Levels (MCLs) of 500 and 450 mg/L. However, this TDS concentration falls within the range of local background concentrations (anthropogenic). Concentrations of TDS in A-Zone wells (M-7A and M-15A) designated for collecting background data for the proposed injection of treated groundwater range from 710 to 1,100 mg/L. The elevated TDS concentrations are part of a widespread plume in the southern portion of Ripon and are attributed to discharges to the City's unlined wastewater ponds and the former Simpson Paper Company (now Diamond Pet Food) ponds. The Discharger will be injecting treated groundwater in the A-zone. The discharge is expected to be of equal or better quality than currently exists in the A-zone. The treatment system will remove the volatile organic contaminants and return the water, including the salts already in the water, back to the aquifer from which it came. The treatment system does not add pollutants to the extracted groundwater.

The Discharger may need to implement an in-situ treatment technology appropriate for remediating their TCE plume in the A-zone. Also, the Discharger may need to implement groundwater extraction and treatment or in situ treatment in the aquifer zones that underlie the A-zone. These contingencies would be implemented to shorten the time necessary to restore water quality. Before the Discharger implements these remedial contingencies, this Notice of Applicability will be reopened and revised to address these actions.

As part of this Order, groundwater monitoring will be performed in accordance with the attached Monitoring and Reporting Program (MRP) to confirm injection of the treated groundwater is not adversely impacting groundwater quality in the A-zone. The requirements in the attached MRP augment the existing MRP No. R5-2014-0815, which administers Nestlé's site-wide groundwater monitoring program. The Discharger will prepare reports as required under existing MRP No. R5-2014-0815 that will include the results of any required monitoring under this NOA.

The tentative Notice of Applicability was issued for 30-day public review on 20 January 2015. No comments were received.

General Information:

1. The project will be operated in accordance with the requirements contained in the General Order No. R5-2015-0012, and in accordance with the information submitted in the Notice of Intent and specified in this Notice of Applicability.
2. The required annual fee (as specified in the annual billing you will receive from the State Water Resources Control Board) shall be submitted until this Notice of Applicability is rescinded.
3. Injection of materials into the A-zone other than groundwater treated with activated carbon is prohibited. Before the Discharger implements in-situ treatment or injects treated groundwater beneath the A-zone, this Notice of Applicability will be reopened and revised to address these actions.
4. Failure to abide by the conditions of the General Order could result in an- enforcement action as authorized by provisions of the California Water Code.
5. Nestlé USA Inc. shall comply with the attached Monitoring and Reporting Program, Order No. R5-2015-0012-001, and any revisions thereto as ordered by the Executive Officer.

If you have any questions regarding this matter, please call Marcus Pierce at (916) 464-4733 or contact him at Marcus.Pierce@waterboards.ca.gov.

ORIGINAL SIGNED BY ANDREW ALTEVOGT FOR

PAMELA C. CREEDON
Executive Officer

Attachments

c: Kevin Sheridan, San Joaquin Council of Governments
Della Kramer, Regional Water Quality Control Board, Rancho Cordova

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2015-0012-001
FOR

NESTLÉ USA, INC.
FORMER RIPON FACILITY AT 230 INDUSTRIAL AVENUE
GROUNDWATER REMEDIATION PROJECT
SAN JOAQUIN COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the injection of treated groundwater into the A-Hydrostratigraphic Zone or “A-Zone” beneath the Site. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. Currently, the Discharger’s comprehensive well monitoring program is administered under MRP No. R5-2014-0815 issued in April 2014. This MRP augments MRP No. R5-2014-0815 and includes requirements specific to injection of treated groundwater.

All samples should be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each sample shall be recorded on the sample chain of custody form.

GROUNDWATER TREATMENT MONITORING

The effluent of each groundwater treatment system shall be monitored in accordance with the frequency found in Table 1 using the analytical methods provided in Table 3, below.

Table 1: Groundwater Treatment System Monitoring

Sample Location¹	Target Parameters	Minimum Sampling Frequency
Influent	Volatile Organic Compounds	Quarterly
Mid-Point	Volatile Organic Compounds ²	Monthly
Effluent	Volatile Organic Compounds ²	Quarterly
Effluent	pH, Temperature, Specific electrical conductance, and Total dissolved solids	Twice per month

¹ Includes existing 230 Industrial Avenue Treatment System and any future system(s) installed to treat the A-zone plume.

² Discharger shall report all VOC detections in effluent to Regional Board staff within 24 hours of receipt of lab results. Discharger shall immediately shutdown the treatment plant if VOCs are detected in effluent samples at concentrations equal to or above Federal or State Maximum Contaminant Levels (MCLs). Detections of VOCs at or above effluent limitations in the mid-point sample shall trigger a carbon change-out within thirty (30) days.

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GROUNDWATER MONITORING

As shown on Figure 2, there are five existing wells (M-2A, M-12A, M-3A, EU-4, and EU-3) and two proposed new injection wells (IU-1 and IU-2) that may be used for injection of treated groundwater by the Discharger. The two designated groundwater monitoring wells (M-7A and M-15A) that will be used to develop a representative background value for total dissolved solids (TDS) and assess compliance with water quality objectives are shown on Figure 3.

Sampling of the designated monitoring wells shall be conducted in accordance with the frequency listed in Table 2, using the analytical methods listed in Table 3 and performing the field sampling found in Table 4, below.

Table 2: Well Sampling

Target Parameters	Sampling Frequency	Well Number
Total Dissolved Solids	Quarterly for first year and semi-annual thereafter	M-7A and M-15A

Table 3: Analytical Methods

Parameters	EPA Analytical Methods ^{1,2}	Maximum Practical Quantitation Limit
Volatile Organic Compounds (VOCs)	EPA 8021 or 8260B	0.5 µg/L
Total dissolved solids (TDS)	SM2540C	50 mg/L
pH, Temperature, and Conductivity	Calibrated Field Meter	±0.1 unit

¹ Discharger must analyze and report full suite of VOCs. All estimated concentrations must be reported.

² EPA Methods yielding equivalent or lower method quantitation limits may also be used.

FIELD SAMPLING

In addition to the above sampling and analysis, field sampling and analysis shall be conducted each time a designated monitoring well is sampled. The sampling and analysis of field parameters shall be as specified in Table 4.

Table 4: Field Sampling Requirements

Parameters	Units	Type of Sample
Groundwater elevation	Feet	Measurement
Specific electrical conductance	µmhos/cm	Grab
pH	pH Units (to 0.1 units)	Grab
Temperature	°C	Grab
Volume purged	Gallons	Measurement

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Field test instruments (such as those used to test pH) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitored event;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are appended to the required quarterly and annual monitoring reports.

DISCHARGE MONITORING

The Discharger shall monitor daily the discharge of treated groundwater that is injected into the A-Zone according to the requirements specified in Table 5.

Table 5: Discharge Monitoring Requirements

Parameters	Units	Method of Measurement
Injected volume	Gallons	Totalizer

REPORTING

When reporting the data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with this Order. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall also be reported to the Central Valley Water Board.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional or their subordinate and signed by the registered professional.

The Discharger shall submit quarterly electronic data reports, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30. The quarterly reports shall be submitted electronically over the internet to the Geotracker database system by **15 February, 15 May, 15 August, and 15 November** until such time as the Executive Officer determines that the reports are no longer necessary.

Electronic copies of quarterly reports shall be submitted to the Central Valley Water Board office by **15 May** (1st Quarter), **15 August** (2nd Quarter), and **15 November** (3rd Quarter) until such time as the Executive Officer determines that the reports are no longer necessary. The 4th Quarter data shall be included in the Annual Report, which shall be submitted by **31 March** of each year. In addition to information specified in MRP No. R5-2014-0815, each report shall include tabulation of and assessment of TDS data collected

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from the designated monitoring wells.

A letter transmitting the monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section 8.3.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

Ordered by:

ORIGINAL SIGNED BY ANDREW ALTEVOGT FOR

PAMELA C. CREEDON, Executive Officer

3/2/2015

(Date)

2/26/15 MLP

FIGURES ARE AVAILABLE UPON REQUEST