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## Los Angeles Regional Water Quality Control Board

October 21, 2019

Mr. Eric Winquist  
1800 Rosecrans Partners, LLC  
2301 Rosecrans Avenue, Suite 1150  
El Segundo, California 90245

Certified Mail  
Return Receipt Required  
Claim No. 7018 2290 0001 8905 2930

**REVISED MONITORING AND REPORTING PROGRAM NO. CI-9584 – FORMER FAIRCHILD CONTROLS FACILITY, 1800 ROSECRANS AVENUE, MANHATTAN BEACH, CALIFORNIA (FILE NO. 15-085, ORDER NO. R4-2014-0187, SERIES NO. 040, CI-9584, GLOBAL ID. WDR100000332)**

Dear Mr. Winquist:

On November 4, 2015, the Los Angeles Regional Water Quality Control Board (Regional Board) enrolled 1800 Rosecrans Partners LLC (Discharger) under General Waste Discharge Requirements (WDR) for In-Situ Groundwater Remediation and Groundwater Re-injection, Order No. R4-2014-0187, with a Monitoring and Reporting Program (MRP) No. CI-9584 for injection of calcium carbonate, sodium bicarbonate, cheese whey, emulsified vegetable oil, and bioaugmentation culture for groundwater remediation of volatile organic compounds (VOCs) at Area A of the subject site.

The Discharger submitted the *Revised Modification to the Groundwater Recirculation Cell Workplan - Area A (Workplan)* dated February 15, 2019 to propose using methanol as an additional injection material and installing one additional injection well IWC-6 for the optimization of groundwater remediation activities. On March 18, 2019, Regional Board Site Cleanup staff approved the Revised Workplan.

It is estimated that 71,000 gallons (equivalent to 591,450 pounds) of methanol solution will be injected into five injection wells (IWC-3D, IWC-3S, IWC-6, PT-2D, and PT-2S) at depths from approximately 65 to 132 feet below ground surface.

The revised MRP, which incorporates the additional injection material and the additional injection well, 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

IRMA MUÑOZ, CHAIR | RENEE PURDY, EXECUTIVE OFFICER

ID WDR100000332. 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](mailto: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](mailto:ann.chang@waterboards.ca.gov)), or the Chief of Groundwater Permitting Unit, Dr. Eric Wu at (213) 576-6683 ([eric.wu@waterboards.ca.gov](mailto:eric.wu@waterboards.ca.gov)).

Sincerely,



Renee Purdy  
Executive Officer

Enclosure: Revised Monitoring and Reporting Program No. CI-9584 dated October 21, 2019

cc: Mr. Brett Bowyer, Bowyer Environmental Consulting, Inc.

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

**REVISED MONITORING AND REPORTING PROGRAM NO. CI-9584  
FOR  
FORMER FAIRCHILD CONTROLS FACILITY  
1800 ROSECRANS AVENUE, MANHATTAN BEACH, CALIFORNIA**

**ENROLLMENT UNDER REGIONAL WATER BOARD  
ORDER NO. R4-2014-0187 (SERIES NO. 040)  
FILE NO. 15-085**

**I. MONITORING AND REPORTING REQUIREMENTS**

- A. 1800 Rosecrans Partners, LLC (hereinafter Discharger) shall implement this Monitoring and Reporting Program (MRP) on the effective date (October 21, 2019) under Regional Water Board Order No. R4-2014-0187. The next monitoring report under this program shall be received at the Regional Water Board by **January 30, 2020**. Subsequent monitoring reports shall be received at the Regional Water 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 Water 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 Regional Water Board Order No. R4-2014-0187 “*Monitoring and Reporting Requirements*”.

**II. BIOAUGMENTATION CULTURE INJECTION AT AREA A**

**A. DISCHARGE MONITORING PROGRAM**

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

1. Location map showing injection points used for calcium carbonate, sodium bicarbonate, cheese whey, emulsified vegetable oil, methanol, and bioaugmentation culture.
2. Written and tabular summary defining depth of injection points, quantity of calcium carbonate, sodium bicarbonate, cheese whey, emulsified vegetable oil, methanol, and bioaugmentation culture injected at each injection point, and total amount of calcium carbonate, sodium bicarbonate, cheese whey, emulsified vegetable oil, methanol, and bioaugmentation culture 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 N-2, N-2D, OB-3S, OB-3D, OB-6S, OB-6D, OB-7S, OB-8S, OB-8D, OB-18S, OB-18D, and OB-29D (Figures 1, 2, and 3). The Discharger shall conduct a baseline sampling prior to the proposed injection, followed by specified schedules from all 12 monitoring wells for the following groundwater parameters:

<b>CONSTITUENT</b>	<b>UNITS</b>	<b>TYPE OF SAMPLE</b>	<b>MINIMUM FREQUENCY OF ANALYSIS</b>
Dissolved Oxygen	mg/L	grab	Baseline and quarterly after injection
Oxidation-Reduction Potential	millivolts	grab	Baseline and quarterly after injection

Former Fairchild Controls Facility  
WDR Order No. R4-2014-0187  
Revised Monitoring and Reporting Program No. CI-9584

<b>CONSTITUENT</b>	<b>UNITS</b>	<b>TYPE OF SAMPLE</b>	<b>MINIMUM FREQUENCY OF ANALYSIS</b>
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
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
Total Chromium and Hexavalent Chromium	µg/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.

### **III. FERROUS SULFATE INJECTION AT AREA B**

#### **A. DISCHARGE MONITORING PROGRAM**

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

1. Location map showing injection points used for ferrous sulfate, sodium hydroxide, calcium carbonate, sodium bicarbonate, cheese whey, emulsified vegetable oil, sodium dithionite, and methanol.
2. Written and tabular summary defining depth of injection points, quantity of ferrous sulfate, sodium hydroxide, calcium carbonate, sodium bicarbonate, cheese whey, emulsified vegetable oil, sodium dithionite, and methanol injected at each injection point, and total amount of ferrous sulfate, sodium hydroxide, calcium carbonate, sodium bicarbonate, cheese whey, emulsified vegetable oil, sodium dithionite, and methanol 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 OB-30D, OB-30LG, OB-32D, OB-32LG, and OB-35D, (Figures 1 and 4). 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:

Former Fairchild Controls Facility  
WDR Order No. R4-2014-0187  
Revised Monitoring and Reporting Program No. CI-9584

<b>CONSTITUENT</b>	<b>UNITS</b>	<b>TYPE OF SAMPLE</b>	<b>MINIMUM FREQUENCY OF ANALYSIS</b>
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
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
Total Chromium and Hexavalent Chromium	µg/L	grab	Baseline and quarterly after injection
Volatile Organic Compounds	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.

**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 Water Board Order No. R4-2014-0187 and Monitoring and Reporting Program No. CI-9584 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 WDR100000332.

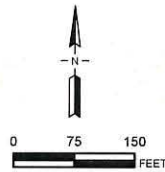
Ordered by:   
Renee Purdy  
Executive Officer

Date: October 21, 2019



**EXPLANATION**

- WDR GROUNDWATER MONITORING WELL
- WDR INJECTION WELL
- GROUNDWATER PUMPING/RECIRCULATION WELL




 BEC  
 17011 Beach Boulevard, Suite 900  
 Huntington Beach, CA 92647  
 Tel. (877) 232-4620  
 Fax (714) 494-1912

**WDR WELL LOCATIONS**  
 FORMER FAIRCHILD CONTROLS FACILITY  
 1800 Rosecrans Avenue, Manhattan Beach, California

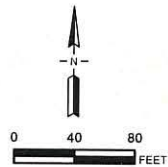
Project No. 09004008	Figure 1
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**EXPLANATION**

- ⊕ WDR GROUNDWATER MONITORING WELL
- ⊕ WDR INJECTION WELL
- ⊕ GROUNDWATER PUMPING/RECIRCULATION WELL




**BEC**  
 17011 Beach Boulevard, Suite 900  
 Huntington Beach, CA 92647  
 Tel. (877) 232-4620  
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**AREA A1 WELL LOCATIONS AND  
 PROPOSED INJECTION WELL IWC-6**  
 FORMER FAIRCHILD CONTROLS FACILITY  
 1800 Rosecrans Avenue, Manhattan Beach, California

Project No.  
 09004008

Figure  
 2





**EXPLANATION**

- ⊕ WDR GROUNDWATER MONITORING WELL
- ⊕ WDR INJECTION WELL
- ⊕ GROUNDWATER PUMPING/RECIRCULATION WELL




 BEC  
 17011 Beach Boulevard, Suite 900  
 Huntington Beach, CA 92647  
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**AREA A2 WELL LOCATIONS**  
 FORMER FAIRCHILD CONTROLS FACILITY  
 1800 Rosecrans Avenue, Manhattan Beach, California

Project No. 09004008	Figure 3
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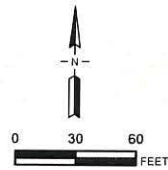




Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**EXPLANATION**

- ⊕ WDR GROUNDWATER MONITORING WELL
- ⊕ WDR INJECTION WELL
- ⊕ GROUNDWATER PUMPING/RECIRCULATION WELL




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**AREA B WELL LOCATIONS**  
 FORMER FAIRCHILD CONTROLS FACILITY  
 1800 Rosecrans Avenue, Manhattan Beach, California

Project No. 09004008	Figure 4
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