CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

3737 Main Street, Suite 500
Riverside, CA 92501-3348
(951) 782-4130
Regional Board Website (https://www.waterboards.ca.gov/santaana)

ORDER R8-2023-0040

ORDER INFORMATION

Status:	ADOPTED
Program:	Site Cleanup Program
Discharger(s):	Lockheed Martin Corporation
Facility:	Former Lockheed Martin Beaumont Site 2, Laborde Canyon
County:	Riverside County
Prior Order(s):	Order R8-2018-0074

CERTIFICATION

I, JAYNE JOY, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on June 9, 2023.

Jayne Joy
Digitally signed by Jayne Joy
Date: 2023.06.13 12:08:21 -07'00'
Water Boards

JAYNE JOY, P.E.
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA BASIN REGION

ORDER R8-2023-0040

AMENDMENT TO WASTE DISCHARGE REQUIREMENTS ORDER R8-2018-0074
FOR
FULL SCALE BIOBARRIER REPLENISHMENT
AT FORMER LOCKHEED MARTIN BEAUMONT SITE 2, LABORDE CANYON
BEAUMONT, RIVERSIDE COUNTY

FINDINGS

The Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) hereby finds as follows:

1. The Department of Toxic Substances Control is overseeing the cleanup and abatement of pollutants at the former Lockheed Martin Beaumont Site 2, Laborde Canyon property located at 96501 Jackrabbit Trail in the City of Beaumont, California (Site). Portions of the Site were used for rocket motor testing, assembly, or propellant burning between 1958 to the late 1980s. Investigations conducted at the Site have identified perchlorate as the pollutant in soil and groundwater beneath and downgradient of the Site.

2. Cleanups at polluted sites such as the Site may be accomplished in whole or in part via the addition (discharge) of chemicals and other reactive materials (amendments) to soil and groundwater (in-situ), to promote remediation. A person or entity applying or proposing to discharge such amendments to soil or groundwater to promote remediation within a specified treatment zone must file a report of waste discharge (ROWD) pursuant to Water Code section 13260 and obtain waste discharge requirements (WDRs) for the discharge from the Santa Ana Water Board.

3. On May 14, 2018, the Santa Ana Water Board adopted Order R8-2018-0074, *Waste Discharge Requirements for Pilot Scale Biobarrier, the Former Lockheed Martin Beaumont Site 2, Laborde Canyon-96501 Jack Rabbit Trail, Beaumont, California* (Order).

4. The Order is issued to Lockheed Martin Corporation (Discharger) and regulates the specified discharge for in-situ bioremediation of perchlorate and potentially volatile organic compounds (VOCs) in groundwater at the Site. The Santa Ana Water Board determined that issuance of individual WDRs was more appropriate than enrollment under Order R8-2018-0092, *General Waste Discharge Requirements for In-situ Groundwater Remediation at Sites Within the Santa Ana Region* (General Order), given that the extent of the plume is beyond the treatment area and Compliance Points per the definition of the General Order must be outside of the plume

boundary.

5. The Order has an accompanying Site-specific groundwater monitoring and reporting program, Monitoring and Reporting Program R8-2018-0074, that complies with requirements prescribed in the Order and is subject to change by the Executive Officer. The Site-specific monitoring and reporting program takes into account the seasonal fluctuations in groundwater level, hydrogeology, and the movement of the injected amendment and groundwater through the biobarrier.

6. On February 13, 2023, the Discharger requested to modify the Order to allow additional emulsified vegetable oil (EVO) replenishment of the biobarrier at the Site to maintain optimal conditions for perchlorate biodegradation. The Santa Ana Water Board agrees that the injection of additional EVO at the Site is necessary to complete in-situ remediation work at the Site.

7. The Santa Ana Water Board also finds that a reduction in frequency of VOCs monitoring due to the lack of detection outside the treatment zone is warranted. It is further appropriate to reduce the frequency of submittal of monitoring reports from quarterly to semi-annual.

8. Adoption of this amendment does not change the California Environmental Quality Act (CEQA) findings in the Order. The increased volume of the amendment discharged is only in the amount necessary to conduct in-situ remediation to address the concentrations of perchlorate and potentially VOCs in groundwater beneath the treatment zone at the Site. This change does not have the potential to cause a significant adverse impact on the environment.

9. The Santa Ana Water Board has notified interested agencies and persons of its intent to adopt this amendment and has provided them with an opportunity to submit written comments. There are no known tribal and/or disadvantaged communities in the vicinity of the Site.

10. The Santa Ana Water Board in a public meeting held on June 9, 2023 heard and considered all comments pertaining to this amendment.

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267, that Order R8-2018-0074 is amended as follows:

1. Finding 7 is revised to authorize the injection of up to 1,500 gallons of EOS Pro®. The proposed scope of work shall remain similar to the previously adopted Order.

2. Waste Discharge Limitation and Specification B.11 is revised as follows: “The volume of amendment discharged and the injection parameters (e.g., pressure, flow rate, etc.) shall only be in the amount necessary to conduct in-situ remediation to

address the concentrations of perchlorate and potentially VOCs in groundwater beneath the treatment zone at the Site. The Executive Officer may approve the discharge of a higher volume of the amendment identified in Finding 7 (with the same injection parameters) upon a technical demonstration that additional injection is necessary to complete the in-situ remediation."

3. Monitoring and Reporting Program R8-2018-0074 is revised to decrease the number of wells sampled for VOCs due to the lack of detection outside the treatment zone. Monitoring wells PMW-7A/B, PMW-8A/B, and PMW-4A/B will be sampled for VOCs to monitor for temporary potential formation of biodegradation byproducts following EVO replenishments. Accordingly, Table 2 of Monitoring and Reporting Program R8-2018-0074 is revised as indicated below:

This section intentionally left blank.

Table 2 - Monitoring Parameters and Frequency[1,3]

Sample Parameters	Parameter Type	Unit	Method of Analysis	Sample Locations	Baseline	Quarterly Events
Field Parameters[2]	General Groundwater Parameters	-[2]	Field Measurement	PMW-1A/B, PMW-2A/B, PMW-3A/B, PMW-4A/B, PMW-5A/B, PMW-6A/B, PMW-7A/B, PMW-8A/B	X	X
Perchlorate	Contaminant of Concern	µg/L	EPA Method 331		X	X
Total Organic Carbon	Electron Donor/Carbon Substrate	mg/L	SM 5310D		X	X
Total Dissolved Solids	Stabilization Reaction Monitoring Parameter	mg/L	SM 2540C		X	X
Volatile Organic Compounds (VOCs)	Contaminants of Concern	µg/L	EPA Method 8260B	PMW-4A/B, PMW-7A/B, PMW-8A/B[3]	X	X
Nitrate as nitrogen and Sulfate	Competing Electron Acceptors	mg/L	EPA Method 300.0	PMW-5A/B, PMW-7A/B, PMW-8A/B[3]	X	X
Fe, Mn, Se, As	Total and Dissolved Metals	mg/L	EPA Method 200.8		X	X

Notes:

Abbreviations: µg/L = micrograms per liter, mg/L = milligrams per liter, mS/cm = millisiemens per centimeter, mV = millivolts, °C = degrees Celsius.

1. Monitoring parameters and frequency are subject to modification by the Executive Officer. Minimum of eight quarterly events are required.
2. Field parameters include pH (standard unit), oxidation-reduction potential (mV), dissolved oxygen (mg/L), specific electrical conductance (mS/cm), and temperature (°F).
3. In the event that wells PMW-4A/B, PMW-7A/B, or PMW-8A/B are dry, check the groundwater elevations at other wells in the monitoring well network (PMW-1A/B, PMW-2A/B, PMW-3A/B, PMW-5A/B, and PMW-6A/B) and collect samples for laboratory analysis from at least one well pair upgradient and one well pair downgradient of the biobarrier if water is present in the monitoring wells.

4. Section D of Monitoring and Reporting Program R8-2018-0074 is revised to allow submission of monitoring reports on a semi-annual basis to the Santa Ana Water Board in accordance with the following schedule:

Monitoring Period	***Report Due***
January – June	August 1
July – December	February 1

ENFORCEMENT

The Santa Ana Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code sections 13300 and 13308, or referral to the California Attorney General for recovery of judicial civil liability. Failure to comply with this Order may result in the assessment of administrative civil liability of up to $10,000 per violation, per day, depending on the violation.

ADMINISTRATIVE REVIEW

Any person aggrieved by this Santa Ana Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. To be timely, the petition must be received by the State Water Board by 5:00 pm on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday or state holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the State Water Board website (http://www.waterboards.ca.gov/public_notices/petitions/water_quality). Copies will also be provided upon request.