CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

(TENTATIVE) MONITORING AND REPORTING PROGRAM R5-2024-XXXX FOR VULCAN MATERIALS COMPANY, CALMAT CO AUSTIN QUARRY MADERA COUNTY

This Monitoring and Reporting Program (MRP), which is separately issued pursuant to California Water Code section 13267, subdivision (b)(1), establishes monitoring and reporting requirements related to the waste discharges regulated under Waste Discharge Requirements Order R5-2024-XXXX (WDRs Order). Each of the Findings set forth in the WDRs Order, including those pertaining to the need for submission of reports, are hereby incorporated as part of this MRP.

Vulcan Materials Company and Calmat Co. (hereafter Dischargers) own and operate Austin Quarry (Facility), which is subject to the WDRs Order R5-2024-XXXX. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopts, or the Executive Officer issues a revised MRP.

A glossary of terms used in this MRP is included on the last page.

This MRP may be revised by the Executive Officer, in accordance with their delegated authority under Water Code section 13223.

I. GENERAL MONITORING REQUIREMENTS

A. FLOW MONITORING

Hydraulic flow rates shall be measured at the monitoring points specified in this MRP. All flow monitoring systems shall be appropriate for the conveyance system (i.e., open channel flow or pressure pipeline) and liquid type. The measurements shall be based on flow meter readings. The method of measurement must be specified. Unless otherwise specified, each flow meter shall be equipped with a flow totalizer to allow reporting of cumulative volume as well as instantaneous flow rate. Flow meters shall be calibrated at the frequency recommended by the manufacturer; typically, at least once per year and records of calibration shall be maintained for review upon request.

B. MONITORING AND SAMPLING LOCATIONS

Samples and measurements shall be obtained at the monitoring points specified in this MRP. Central Valley Water Board staff shall approve any proposed changes to sampling locations prior to implementation of the change.

Madera County

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this Order:

Monitoring Location Monitoring Location Description Location where a representative sample of the SP-002 discharge to Settling Pond Two can be collected. Location where a representative sample of the supply water can be collected prior to being used in the wash SW-001 process. Location where representative effluent flow from the clarifier may be measured prior to discharging into the EFF-001 settling ponds. Location where a representative sample of water extracted from the current mining phase may be MIN-001 collected prior to entering the freshwater storage tank for use in the wash process. SOLIDS Solids monitoring

Table 1 - Monitoring Locations

C. SAMPLING AND SAMPLE ANALYSIS

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. Except as specified otherwise in this MRP, grab samples will be considered representative of water, wastewater, soil, solids/sludges and groundwater. The time, date, and location of each sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to measure pH, temperature, electrical conductivity [EC], dissolved oxygen [DO], wind speed, and precipitation) may be used provided that:

- 1. The operator is trained in proper use and maintenance of the instruments;
- 2. The instruments are field calibrated at the frequency recommended by the manufacturer;
- 3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
- 4. Field calibration reports are submitted as described in the "Reporting Requirements" section of this MRP.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following (as applicable to the medium to be analyzed):

 Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA);

- Test Methods for Evaluating Solid Waste (EPA);
- Methods for Chemical Analysis of Water and Wastes (EPA);
- Methods for Determination of Inorganic Substances in Environmental Samples (EPA);
- Standard Methods for the Examination of Water and Wastewater (APHA/AWWA/WEF); and
- Soil, Plant and Water Reference Methods for Western Region (WREP 125).

Approved editions shall be those that have been most recently approved for use by the United States Environmental Protection Agency (EPA) or the State Water Resources Control Board (State Water Board), Division of Drinking Water's Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

II. SPECIFIC MONITORING REQUIREMENTS

A. SETTLING POND MONITORING (SP-002)

The Discharger shall monitor the discharge to the settling ponds at Monitoring Location SP-002. Freeboard shall be measured vertically from the water surface to the lowest elevation of pond edge or berm (or spillway/overflow pipe invert) and shall be measured to the nearest 0.1 feet. Monitoring shall include, at a minimum, the parameters and constituents specified in Table 2 below.

Table 2 - Settling Pond Monitoring

Constituent/Parameter	Units	Sample Type	Monitoring Frequency
Freeboard	Feet (±0.1)	Measurement	Monthly
Berm Condition	NA	Observation	Monthly
Electrical Conductivity	µmhos/cm	Grab	Monthly
pH	s.u.	Grab	Monthly
Total Dissolved Solids	mg/L	Grab	Quarterly
Nitrate as N (see 1 below)	mg/L	Grab	Monthly
Total Nitrogen (see 1 below)	mg/L	Grab/Calculation	Monthly

Constituent/Parameter	Units	Sample Type	Monitoring Frequency
Total Kjeldahl Nitrogen (see 1 below)	mg/L	Grab	Monthly
General Minerals (see 1, 2 below)	mg/L	Grab	Annually
Coagulant/Flocculants	pounds	Measurement	Quarterly

- 1. Filter samples with 0.45 micrometer (µm) filter at the time of sample collection, or prior to preservation and lab digestion.
- 2. List of analytes for general mineral analysis is included in the Glossary.

B. SUPPLY WATER MONITORING (SW-001)

Samples shall be representative of the supply water added to the aggregate wash system. If the supply water is from more than one source, the results shall be presented as a flow-weighted average of all sources. At a minimum, the supply water shall be monitored as specified in Table 3 below.

Constituent/Parameter	Units	Sample Type	Monitoring Frequency
Flow	gallons	Metered (see 1 below)	Continuous
Electrical Conductivity	µmhos/cm	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Nitrate as N (see 4 below)	mg/L	Grab	Quarterly
Total Kjeldahl Nitrogen (see 4 below)	mg/L	Grab	Quarterly
Total Nitrogen (see 4 below)	mg/L	Grab/Calculation	Quarterly
General Minerals (see 2, 4 below)	mg/L	Grab	Once/3 years (see 3 below)

Table 3 - Supply Water Monitoring

- 1. May be based on flow meter reading or pump run time estimate. The method of measurement must be specified.
- 2. List of analytes for general mineral analysis is included in the Glossary.
- 3. Samples for general minerals analysis shall be collected once every three years starting 2025.

Vulcan Materials Company, Calmat Co Austin Quarry

Madera County

4. Filter Samples with 0.45 micrometer (μm) filter at the time of sample collection, or prior to preservation and lab digestion.

C. CLARIFIER EFFLUENT MONITORING (EFF - 001)

The Discharger shall monitor the discharge from the clarifier before it discharges to the settling ponds. Monitoring shall include, at a minimum, the parameters and constituents specified below by Table 4 below.

Table 4 - Clarifier Monitoring

Constituent/Parameter	Units	Sample Type	Monitoring Frequency
Flow	gpd	Metered (see 1 below)	Continuous

^{1.} May be based on flow meter reading or pump run time estimate. The method of measurement must be specified.

D. MINING PIT WATER MONITORING (MIN - 001)

The Discharger shall monitor the water sourced from the mining pit operations before blending with source water in the freshwater storage tank. Monitoring shall include, at minimum, the parameter and constituents specified by Table 5 below.

Table 5 - Mining Pit Water Monitoring

Constituent/Parameter	Units	Sample Type	Monitoring Frequency
Flow	gpd	Metered (see 1 below)	Continuous
Nitrate as N (see 2 below)	mg/L	Grab	Monthly
Total Kjeldahl Nitrogen (see 2 below)	mg/L	Grab	Monthly
Total Nitrogen (see 2 below)	mg/L	Grab/Calculation	Monthly

- 1. May be based on flow meter reading or pump run time estimate. The method of measurement must be specified.
- 2. Filter samples with 0.45 micrometer (µm) filter at the time of sample collection, or prior to preservation and lab digestion.

E. SOLIDS MONITORING

The Discharger shall maintain detailed records for disposal and/or recycling of residual solids removed from the Facility. The record should include information on quantity, storage, method of disposal (i.e., soil amendment, on-site use, etc.)

MRP R5-2024-XXXX Vulcan Materials Company, Calmat Co Austin Quarry Madera County

and receipts (if applicable). A summary of the information shall be included in the Annual Report.

III. REPORTING REQUIREMENTS

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board Region 5 – Fresno Office 1685 "E" St. Fresno, California 93706

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or transmittal sheet:

Program: Non-15 Place ID: 866404

Facility: Vulcan Materials Company - Austin Quarry

Order: MRP R5-2024-XXXX

County: Madera

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of this MRP and the WDRs Order during the reporting period and actions taken or planned for correcting each violation. If the Discharger has previously submitted a report describing corrective actions taken and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent certifying under penalty of perjury that the report is true, accurate and complete to the best of the signer's knowledge.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, groundwater, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next scheduled monitoring report.

Laboratory analysis reports shall be included in the monitoring reports. In addition, all laboratory reports must be retained for a minimum of three years in accordance with Standard Provision C.3. of the SPRRs. For a Discharger conducting any of its

MRP R5-2024-XXXX Vulcan Materials Company, Calmat Co Austin Quarry Madera County

own analyses, reports must also be signed and certified by the chief of the laboratory.

Monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

All monitoring reports that involve planning, investigation, evaluation or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

A. QUARTERLY MONITORING REPORTS

Quarterly Monitoring Reports shall be prepared and submitted to the Central Valley Water Board by the **1**st **day of the second month after the quarter** (i.e., the 1st quarter [January-March] quarterly report is due 1st May). Each Quarterly Monitoring Report shall include the following:

- 1. Results of the **Settling Pond Monitoring** as specified in Section II.A.
- 2. Results of the **Supply Water Monitoring** as specified in Section II.B, including:
 - a. Calculation of monthly average flow for each month of the guarter.
- Results of the Clarifier Effluent Monitoring as specified in Section II.C, including:
 - a. Calculation of maximum daily and monthly average flow for each month of the quarter.
- 4. Results of the **Mining Pit Dewatering Monitoring** as specified in Section II.D., including:
 - a. Calculation of monthly average flow for each month of the quarter.
- 5. Copies of all laboratory analytical reports.
- 6. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.

B. FOURTH QUARTER/ANNUAL MONITORING REPORT

In addition to the above information, the fourth quarter monitoring report, due 1st **February of each year**, shall include the following:

- Total influent and effluent flow, average monthly flows for each month of the year, and the average dry weather flow compared to the flow limitations of the WDRs.
- Tabular and graphical summaries of all data collected during the year.
- 3. A summary of the handling and disposal of solids removed from the Facility during the calendar year as specified in Section II.E.
- 4. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed, to bring the discharge into full compliance with the WDRs Order.
- 5. A discussion of any data gaps and potential deficiencies or redundancies in the monitoring system or reporting program.
- 6. Statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, include identification of who performed the calibrations (SPRRs C.4).
- 7. Names, title, and contact information for person to contact regarding the Facility for emergency and routine situations.
- 8. A summary of the activities and progress on the Nitrogen Source Evaluation Plan and Minimization Plan that occurred during the reporting period.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$1,000 per violation, per day, depending on the violation, pursuant to Water Code, section 13268. The Central Valley Water Board reserves the right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this MRP, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet

MRP R5-2024-XXXX Vulcan Materials Company, Calmat Co Austin Quarry Madera County 9

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided on request.

The Discharger shall begin implementation of the above monitoring program on **1 November 2024**. Beginning 1 November 2024, MRP R5-2020-0813 is terminated and replace by this MRP.

I, PATRICK PULUPA, Executive Officer, hereby certify that the following is a full, true and correct copy of the Monitoring and Reporting Program issued by the California Regional Water Quality Control Board, Central Valley Region, on XX October 2024.

PATRICK PULUPA, Executive Officer

IV. GLOSSARY

EC Electrical conductivity at 25° C

TDS Total dissolved solids

SPRR Standard Provision and Reporting Requirements

Continuous The specified parameter shall be measured by a meter continuously.

ELAP Environmental Laboratory Accreditation Program

EPA Environmental Protection Agency

Daily Every day

Monthly Once per calendar month

Quarterly Once per calendar quarter (e.g., January – March)

Annually Once per calendar year

mg/L Milligrams per liter

MRP Monitoring Reporting Program
MCL Minimum Constituent Level
PQL Practical Limitation Limit

μg/L Micrograms per liter

µmhos/cm Micromhos per centimeter

gpd Gallons per day

General Minerals Analysis shall include; alkalinity (as CaCO₃) bicarbonate(asCaCO₃),

boron, calcium, carbonate (as CaCO₃), chloride, iron,

magnesium, manganese, nitrate as N, phosphate, potassium, sodium, sulfate, and verification that the analysis is complete (i.e.,

cation/anion balance)

RWD Report of Waste Discharge

RL Reporting Limit

WDR Waste Discharge Requirements
WRR Waste Recycling Requirements