

## Attachment E – Monitoring and Reporting Program – Table of Contents

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## ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify monitoring and reporting requirements. CWC Sections 13267 and 13383 also authorize the Regional Boards to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements to implement the federal and State regulations.

### I. GENERAL MONITORING PROVISIONS

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and approval of the Regional Board.
  
- B. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 10$  percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references.
  - 1. *A Guide to Methods and Standards for the Measurement of Water Flow*, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421).
  - 2. *Water Measurement Manual*, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027).
  - 3. *Flow Measurement in Open Channels and Closed Conduits*, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST).
  - 4. *NPDES Compliance Sampling Manual*, U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225).
  
- C. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services.
  
- D. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
  
- E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.

**II. MONITORING LOCATIONS**

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements of this Order:

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
002	M-002	Pond C at the discharge point to Soquel Creek; 37° 03' 30" N latitude, 121° 55' 15" W longitude.
Receiving Water	R-001U	In Soquel Creek, upstream of Discharge Point 002 where a representative sample for determination of background water quality can be taken.
Receiving Water	R-001D	In Soquel Creek, downstream of Discharge Point 002 where a representative sample for determination of impacts to receiving water quality due to discharges from Discharge Point 002 can be taken.

**III. INFLUENT MONITORING REQUIREMENTS**

This section is not applicable, as this Order does not require influent monitoring.

**IV. EFFLUENT MONITORING REQUIREMENTS**

**A. Monitoring Location: M-002**

- Discharges of process wastewater through Discharge Point 002 shall be monitored only when effluent is being discharged to Soquel Creek. If no discharge occurs within the sampling interval specified below, samples shall be collected at the first discharge event following the specified interval and at the specified sampling frequency thereafter. The Discharger shall monitor effluent discharged to the Soquel Creek at Monitoring Location M-002 as follows.

Constituent	Units	Sample Type	Minimum Sampling Frequency
Flow	mgd	calculated	daily
Total Suspended Solids	mg/L	grab	weekly <sup>1</sup>
Settleable Solids	mL/L/hr	grab	weekly <sup>1</sup>
Turbidity	NTUs	grab	weekly <sup>1</sup>
pH	pH units	grab	weekly <sup>1</sup>
Temperature	° F	grab	weekly <sup>1</sup>
Acute Toxicity	pass / fail	grab	biannually <sup>1,2</sup>
Aluminum	µg/L	grab	biannually <sup>1,2</sup>
Arsenic	µg/L	grab	biannually <sup>1,2</sup>
Barium	µg/L	grab	biannually <sup>1,2</sup>
Cadmium	µg/L	grab	biannually <sup>1,2</sup>
Chromium (6)	µg/L	grab	biannually <sup>1,2</sup>
Copper	µg/L	grab	biannually <sup>1,2</sup>
Lead	µg/L	grab	biannually <sup>1,2</sup>
Mercury	µg/L	grab	biannually <sup>1,2</sup>
Nickel	µg/L	grab	biannually <sup>1,2</sup>
Selenium	µg/L	grab	biannually <sup>1,2</sup>
Silver	µg/L	grab	biannually <sup>1,2</sup>
Zinc	µg/L	grab	biannually <sup>1,2</sup>

<sup>1</sup> Weekly and biannual samples shall be collected during the first day of a discharge event.

<sup>2</sup> Biannual samples shall be collected from Discharge Point 002 during the first discharge event following adoption of the Order and then at 2-year intervals thereafter.

**V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS**

Acute toxicity testing shall be performed using U.S. EPA Method 2001.0 (fathead minnow) in accordance with procedures described by *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, U.S. EPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition.

The presence of acute toxicity is identified by significantly reduced survival, as determined by a t-test, of test organisms in 100 percent effluent compared to a control sample.

When toxicity monitoring finds acute toxicity in the effluent above the limitation established by Order No. R3-2005-0057, the Discharger shall immediately resample the effluent, if the discharge is continuing, and retest for acute toxicity. Results of the initial failed test and any toxicity monitoring results subsequent to the failed test shall be reported as soon as reasonable to the Executive Officer (EO). The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements, or to implement other measures.

**VI. LAND DISCHARGE MONITORING REQUIREMENTS**

This section is not applicable because this Order does not apply to discharges to land.

**VII. RECLAMATION MONITORING REQUIREMENTS**

This section is not applicable because this Order does not apply to wastewater reclamation.

**VIII. RECEIVING WATER MONITORING REQUIREMENTS**

**A. Monitoring Locations: R-001U and R-001D**

The Discharger shall monitor Soquel Creek at Monitoring Locations R-001U and R-001D as follows. Samples at Monitoring Locations R-001U and R-001D shall be collected as close to simultaneously as reasonable and shall be analyzed in accordance with the following schedule.

Constituent	Units	Sample Type	Minimum Sampling Frequency
Dissolved Oxygen	mg/L	field measurement	monthly <sup>1</sup>
Visual Observations	-	field observation	monthly <sup>1</sup>
Turbidity	NTUs	grab	monthly <sup>1</sup>
TSS	mg/L	grab	monthly <sup>1</sup>
Settleable Solids	mL/L	grab	monthly <sup>1</sup>
Hardness	mg/L CaCO <sub>3</sub>	grab	annual <sup>1,2</sup>
Metals <sup>3</sup>	µg/L	grab	Once during the life of the permit

<sup>1</sup> This monitoring schedule assumes that storm water discharges will occur only during the California rainy season. Monthly and annual samples, therefore, shall be collected only during the rainy season (October through April). The Discharger shall make reasonable efforts to collect monthly receiving waters samples during periods of discharge of process water and/or storm water from the facility.

<sup>2</sup> Hardness shall be monitored at R-001D, only.

<sup>3</sup> Metals are those with numeric effluent limitations (aluminum, arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc). Metals shall be monitored at Monitoring Location R-001U, only, one time during the term of Order No. R3-2005-0057. Metals

concentrations in receiving water will be used to compare background conditions with metals concentrations in discharges from Discharge Point 002. Because this monitoring schedule assumes that discharges from Discharge point 002 will occur only during the California rainy season, receiving water samples for metals analysis shall be collected between October and April.

## IX. REPORTING REQUIREMENTS

### A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions, Attachment D, related to monitoring, reporting, and recordkeeping.

### B. Self Monitoring Reports

1. At any time during the term of this permit, the Discharger, after notification by the State or Regional Board, may be required to electronically submit self-monitoring reports. Until such time as electronic submission of self-monitoring reports is required, the Discharger shall submit self-monitoring reports in accordance with the requirements described further below.
2. The Discharger shall submit quarterly Self Monitoring Reports, which include the results of all required monitoring and results of all additional monitoring conducted using U.S. EPA approved test methods or methods specified in this Order. Quarterly reports shall be due on May 1, August 1, November 1, and February 1 following each calendar quarter. The Discharger shall also submit an Annual Report by February 1 of each year containing both tabular and graphical summaries of the monitoring data generated during the previous year. The Annual Report can be combined with the fourth quarter report, which is due at the same time.

Monitoring periods for all required monitoring shall adhere to the following schedule:

Monitoring Period	Quarterly SMR Submittal Date
January 1 – March 31	May 1
April 1 – June 30	August 1
July 1 – September 30	November 1
October 1 – December 31	February 1

3. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the laboratory current Method Detection Limit (MDL) as determined by the procedure in 40 CFR Part 136.
4. The Discharger shall arrange all reported data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
5. The Discharger shall attach a cover letter to its Self Monitoring Report. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.
6. Self Monitoring Reports must be submitted to the Regional Board, signed and certified as required by the standard provisions (Attachment D), to the address listed below:

California Regional Water Quality Control Board  
Central Coast Region  
895 Aerovista Place, Suite 10  
San Luis Obispo, CA 93401

7. Duplicate copies of the monitoring reports, signed and certified as required by the standard provisions (Attachment D) must be submitted to the address listed below:

State Water Resources Control Board  
Discharge Monitoring Report Processing Center  
Post Office Box 671  
Sacramento, CA 95812

8. If no discharge occurs during the quarterly monitoring period, a statement to that effect may be sent in lieu of the Quarterly SMR.
9. In accordance with Provision VI. C. 6 of Order No. R3-2005-0057, the Discharger shall certify by October 1 of each year that necessary measures have been taken and pollution control equipment and systems are in proper condition to comply with the terms of the Order during the impending rainy season.
10. Quarterly Self-Monitoring Reports shall include:
- All data required by this MRP for the corresponding monitoring period, including appropriate calculations to verify compliance with effluent limitations.
  - A discussion of any incident of non-compliance and corrective actions taken.
11. All monitoring shall be conducted according to test procedures established at 40 CFR 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, constituents not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations.
12. Monitoring requirements of this MRP will be continuously evaluated, and this MRP may be revised at any time during the permit term, as necessary, following collection and review of monitoring data.

### **C. Discharge Monitoring Reports**

Not applicable to the Olive Springs Quarry.

### **D. Other Reports**

The Discharger shall submit storm water Annual Reports by July 1 of each year to the Regional Board in accordance Provision VI. C. 3 of Order No. R3-2005-0057