

MONTAGUE WATER CONSERVATION DISTRICT
GROUNDWATER DISCHARGE TO SHASTA RIVER
ORDER NO. R1-2009-0045 (LOW THREAT PERMIT)

**MONITORING AND REPORTING PROGRAM (MRP) NO. R1-2014-0048 FOR
THE MONTAGUE WATER CONSERVATION DISTRICT
GROUNDWATER DISCHARGE TO THE SHASTA RIVER
WDID NO. 1A14072RSIS**

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

The Low Threat General Permit (Order No. R1-2009-0045) includes a standard monitoring and reporting program and allows the Regional Water Board Executive Officer to modify the monitoring and reporting program for a specific discharger in order to adapt the monitoring requirements to the project. This MRP was developed as a modification of the MRP in Order No. R1-2009-0045. The MRP revisions recognize that the Montague Water Conservation District Groundwater Discharge to the Shasta River is a high quality groundwater. Deviations from the standard MRP in Order No. R1-2009-0045 have been identified in the public notice placed on the Regional Water Board's website for this Project.

I. GENERAL MONITORING PROVISIONS

- A.** Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health, in accordance with Water Code section 13176, and must include quality assurance/quality control data with their reports.
- B.** If the Discharger monitors any pollutant more frequently than required by this MRP, using test procedures approved by 40 CFR Part 136 or as specified in this MRP, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's self-monitoring reports.
- C.** Samples and measurements taken as required by this MRP 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 the approval of the Regional Water Board Executive Officer.
- D.** Monitoring results, including noncompliance, shall be reported at intervals and in the manner specified in this MRP.
- E.** 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. 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.

- F. Wastewater Monitoring Provision. Composite samples may be taken by a proportional sampling device approved by the Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed one hour.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point	Monitoring Location	Monitoring Location Description
001	EFF-001	Location for monitoring groundwater being discharged.
Receiving Water	RSW-002	Receiving water downstream of the point of discharge, at a location that provides a representative sample of the water quality after mixing of the discharge and receiving water.

III. INFLUENT MONITORING REQUIREMENTS

This section of the standardized MRP is not applicable to discharges of low threat wastewaters.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Groundwater Discharge – Monitoring Locations EFF-001

1. The Discharger shall monitor the discharge at Monitoring Location EFF-001 for the constituents identified in Table E-2 and record the monitoring results.

Table E-2. Effluent Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow ¹	GPD ²	Weir ³	Continuous	Standard Methods
<ol style="list-style-type: none"> 1. The Discharger shall monitor the flow rate and calculate the average daily flow rate of the discharge during the entire period of the discharge. The flow rate, duration, and total volume of the discharge shall be monitored and reported. 2. Gallons per day 3. Weir located on the Cross Canal 				

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

The General Permit does not require whole effluent toxicity testing.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

This section is not applicable to this discharge.

VII. RECLAMATION MONITORING REQUIREMENTS

This section is not applicable to this discharge.

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Receiving Water – Monitoring Location RSW-001

1. The Discharger shall monitor receiving water at Monitoring Location RSW-001 for the constituents identified in Table E-3 and record the monitoring results.

Table E-3. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Method
Temperature	°C or °F	Continuous temperature monitoring device	Continuous during all periods of groundwater discharge ^{1,2}	Standard Methods
pH	standard units	Continuous monitoring device	Continuous during first week of discharge ^{1,3}	Standard Methods
Dissolved Oxygen	mg/L	Continuous monitoring device		Standard Methods
Specific Conductance @25°C	µmhos/cm	Continuous monitoring device		Standard Methods
Turbidity	NTU	Continuous monitoring device		Standard Methods
Visual Observations ⁴	---	Visual	Monthly	---
<ol style="list-style-type: none"> 1. For the purpose of this project continuous monitoring means that measurements shall be taken every 15 minutes, at a minimum. Measurements may be taken more frequently. 2. All temperature data collected after the first week of discharge may be submitted at the end of the discharge season, if temperature monitoring device requires continuous deployment. 3. Based on the objectives of the MWCD Groundwater Discharge Project, water quality is expected to benefit from the groundwater discharge. Monitoring during the first week of discharge is intended to provide data to identify diurnal trends. If the monitoring data identifies any concerns, the Regional Water Board Executive Officer may require the monitoring to continue for a longer period of time. 				

4. Visual observations shall include the appearance of the discharge including color, turbidity, floating or suspended matter or debris, appearance of the receiving water at the point of discharge (e.g., occurrence of erosion and scouring, turbidity, solids deposition, unusual growth, etc.) and observation about the receiving water, such as the presence of aquatic life.

2. In conducting the receiving water monitoring, a log shall be kept of the receiving water conditions throughout the reach bounded by EFF-001 and RSW-001. Attention shall be given to the presence or absence of:

- a. Erosion or scouring caused or exacerbated by the discharge;
- b. Nuisance conditions such as algae, fungi, slimes, or objectionable growths, mosquitoes, flooding, etc) caused or exacerbated by the discharge
- b. Floating or suspended matter;
- c. Bottom deposits;
- d. Aquatic life; and
- e. Visible films, sheens, or coatings.

Notes on receiving water conditions shall be summarized in monitoring reports submitted to the Regional Water Board.

IX. OTHER MONITORING REQUIREMENTS

This section is not applicable as there are no additional monitoring requirements to add.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. The Discharger shall report to the Regional Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.

B. Self Monitoring Reports (SMRs)

1. Effective June 2, 2014, all regulatory documents, data, correspondence, or other materials should be submitted to the Regional Water Board via e-mail to NorthCoast@waterboards.ca.gov or on disk (CD or DVD) in a Portable Document Format (PDF) file in lieu of paper-sourced documents. The guidelines for

electronic submittal of documents can be found on the Regional Water Board website at <http://www.waterboards.ca.gov/northcoast>.

2. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>).
3. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
4. The first monitoring report of each discharge season shall be submitted after a full month of discharge has occurred, and shall be submitted on the first day of the second month following the end of the first full discharge month.

The second monitoring report of each discharge season shall be submitted after the groundwater discharge has ceased for the discharge season, and shall be submitted on the first day of the second month following the end of the discharge season. This report shall include all monitoring data and visual observations recorded since the first full month of discharge.

5. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if

such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
6. The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The SMR shall contain documentation to demonstrate that field sampling staff have been properly trained and that all field equipment used for water quality monitoring was properly calibrated.
 - c. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:
 - (1) Facility name;
 - (2) WDID number;
 - (3) Applicable period of monitoring and reporting;
 - (4) Any variations from the Notice of Intent;
 - (5) If the discharge resulted in observable changes or impacts in the receiving water, including, but not limited to, discoloration or turbidity and an explanation of upstream and downstream conditions identified in the receiving water monitoring required by section VIII.A of this Monitoring and Reporting Program;

- (6) Identification and explanation of any violations of the General Permit (include a description of the requirement that was violated and a description of the violation);
 - (7) Explanation of corrective actions taken or planned to comply with the General Permit,
 - (8) The proposed time schedule for any corrective actions planned; and
 - (9) Identification and explanation of any complaints caused by the discharge.
- d. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), as noted in X.B.1. above.

C. Discharge Monitoring Reports (DMRs)

Discharge Monitoring Reports are not required under this Order.

D. Other Reporting Requirements

1. Notice of Start Up. The Discharger shall notify the appropriate Regional Water Board staff person by telephone or email at least three (3) days before initiating an authorized discharge, unless a shorter notification period is authorized by the Regional Water Board Executive Officer.
2. Notice of Termination. Using the Notice of Termination (NOT) form provided as Attachment G to this General Permit, within 30 days following permanent termination of an authorized discharge, dischargers shall provide notice that the authorized discharge has been completed.

Ordered by:

Original Signed By

Matthias St. John
Executive Officer