

**MONITORING AND REPORTING PROGRAM NO. R1-2011-0007
WDID NO. 1B10078RSON**

FOR

**Sonoma County Junior College District
Shone Farm Reservoir and Frost Protection System
Forestville, California**

Sonoma County

California Water Code section 13267 authorizes the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This monitoring and reporting program (MRP) establishes monitoring and reporting requirements, which implement the state regulations. Any person failing to furnish technical or monitoring reports or falsifying any information therein is guilty of a misdemeanor, and may be subject to civil liability. (Water Code section 13268)

I. GENERAL MONITORING PROVISIONS

- A. If the Discharger monitors any parameter more frequently than required by this Order, using test procedures approved by 40 CFR Part 136 or as specified in this Order, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the monthly and annual discharger monitoring reports.
- B. Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health (CDPH) in accordance with the provisions of Water Code section 13176, and must include quality assurance / quality control data with their analytical reports.

II. RECYCLED WATER RESERVOIR CONSTRUCTION MONITORING

The Discharger shall perform construction site monitoring before and after storm events and every 24 hours during storm events to comply with maintenance and monitoring requirements for the construction best management practices, in accordance with the specific requirements of the statewide construction stormwater permit.

III. RECYCLED WATER STORAGE RESERVOIR MONITORING

The Shone Farm recycled water reservoir shall only be used for the storage of disinfected, tertiary effluent from the Windsor Wastewater Treatment Facility. The Discharger shall ~~collect samples from one or more permanent monitoring locations~~

that will provide representative samples, monitor flow and rainfall in accordance with the following:

Parameter	Units	Type of Sample	Minimum Sampling Frequency
Flow from Windsor WWTF to reservoir	MGD	Meter	Continuous
Flow from reservoir to reclamation system	MGD	Meter	Continuous
Rainfall	inches	Measurement	Daily
Freeboard ¹	feet	Measurement	Weekly
Dissolved Oxygen ²	mg/L	Grab	Weekly
Odors	---	Observation	Daily

IV. SHONE FARM FROST PROTECTION MONITORING

The Discharger shall conduct pre-season and regular in-season inspections and testing of the Frost Protection System. During periods that the Frost Protection System is in use, the Discharger shall visually monitor for runoff and ensure that the frost protection system is operating in accordance with the approved Operations and Maintenance Manual. The Discharger shall verify that the frost protection system and runoff controls (e.g., berms, collection channels) are functioning properly.

V. GROUNDWATER MONITORING

Prior to construction of the groundwater monitoring wells, the Discharger shall submit plans and specifications to the Regional Water Board for review and approval.

Groundwater monitoring shall begin upon completion of monitoring well installation and development and shall consist of at least one groundwater sampling event prior to use of the reservoir for recycled water storage. The groundwater monitoring wells shall be sampled and analyzed in accordance with the following:

Parameter	Units	Type of Sample	Minimum Sampling Frequency
Depth to groundwater ³	feet	Measurement	Semi-Annually
Groundwater elevation ⁴	feet	Calculation	Semi-Annually
Gradient	feet/feet	Calculation	Semi-Annually

¹ Freeboard shall be measured vertically from the water surface to the lowest possible point of overflow (e.g., spillway or overflow pipe invert) and shall be measured to the nearest 0.10 feet.

² Samples shall be collected at a depth of one foot between prior to 9:00 a.m.

³ Depth to groundwater and groundwater elevation shall be measured to the nearest 0.01 feet

⁴ Groundwater elevations shall be determined based on depth-to-water measurements using a surveyed measuring point elevation on the well and a surveyed reference elevation.

Parameter	Units	Type of Sample	Minimum Sampling Frequency
Gradient Direction	degrees	Calculation	Semi-Annually
Total Dissolved Solids	mg/L	Grab	Semi-annually
Nitrate	mg/L	Grab	Semi-annually
Total Coliform	MPN/100 mL	Grab	Semi-annually
pH	pH units	Grab	Semi-annually

VI. REPORTING

A. Reservoir Construction Reports

1. The Discharger shall submit final plans and specifications to the Regional Water Board Executive Officer at least ~~90~~60 days in advance of initiating construction of the recycled water storage reservoir.
2. Upon completion of the recycled storage reservoir construction, the Discharger shall submit as-built plans and specifications and all geotechnical test results associated with the test fill, results from compaction testing of the clay liner, and the topographic survey that verifies liner thickness.

B. Frost Protection Infrastructure and Run-off Control Reports

1. The Discharger shall submit plans and specifications for vineyard frost protection infrastructure and run-off control measures for each vineyard block before using frost protection in the block. The plans and specifications shall identify drainage swales that are down-gradient of the vineyards that could be impacted by runoff from the vineyards and design features to prevent frost protection runoff from entering the drainage swales.

C. Groundwater Monitoring Well Reports

1. The Discharger shall submit plans and specifications for construction of the groundwater monitoring wells to the Regional Water Board Executive Officer prior to construction of the wells.
2. The Discharger shall submit well logs to the Regional Water Board Executive Officer upon completion of well construction.

D. General Reporting Requirements

1. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through V. During the first year of reservoir operation, ~~the~~ Discharger shall submit monthly~~quarterly~~ SMRs

including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs shall be submitted annually thereafter, unless otherwise required by the Regional Water Board Executive Officer. 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.

2. All monitoring results reported shall be supported by the inclusion of the complete analytical report from the laboratory that conducted the analyses.
3. 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 permit requirements.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:
 - i. Facility name and address;
 - ii. WDID number;
 - iii. Applicable period of monitoring and reporting;
 - iv. Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation);
 - v. Corrective actions taken or planned; and
 - vi. The proposed time schedule for corrective actions.
 - c. SMRs must be submitted to the Regional Water Board, signed and certified as specified in the Certification section of this MRP, to the address listed below:

**Regional Water Quality Control Board
North Coast Region
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403**

E. Monthly Monitoring Report

The Discharger shall submit Monthly Self-Monitoring Reports (SMR) to the Regional Water Board. Each monthly SMR shall be submitted by the first day of the second month following the monitoring period (e.g., January report is due by March 1). Data shall be presented in tabular format.

Each monthly SMR shall include the results of the recycled water storage reservoir monitoring and the frost protection monitoring and an explanation of any violation of those requirements. Frost Protection System reporting shall include dates and brief descriptions of inspections, testings and use. The reports shall identify any runoff that is not captured by run-off controls and corrective measures taken.

F. Annual Monitoring Report

The Discharger shall submit an Annual Report to the Regional Water Board for each calendar year. The report shall be submitted by March 1st of the following year. The report shall, at a minimum, include the following:

1. Both tabular and, where appropriate, graphical summaries of the monitoring data and disposal records from the previous year. If the Discharger monitors any pollutant more frequently than required by this Order, using test procedures approved under title 40, section 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and report of the data submitted SMR.
2. Groundwater monitoring results.
3. A comprehensive discussion of ~~the facility's compliance (or lack thereof) with all effluent limitations and other WDRs, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Order annual operations and any deviations from planned or expected conditions.~~
4. The names, ~~certificate grades,~~ and general responsibilities of all persons employed at the Facility.
5. The names and telephone numbers of persons to contact regarding the wastewater treatment facility for emergency and routine situations.
6. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.
7. A statement certifying whether the current operation and management manual, and contingency plan, reflect the ~~wastewater treatment facility~~ recycled water storage reservoir and frost protection system as currently constructed and operated, and the dates when these documents were last reviewed and last revised for adequacy.

G. Spills and Overflows Notification

1. All spills, ~~and~~ unauthorized discharges, ~~and sanitary sewer overflows (SSOs)~~ equal to or in excess of 1,000 gallons or any size spill ~~or SSO~~ that results in a discharge to a drainage channel or a surface water:

a. As soon as possible, but not later than **two (2) hours** after becoming aware of the discharge, the Discharger shall notify the State Office of Emergency Services (OES), the local health officer or directors of environmental health with jurisdiction over affected water bodies or land areas, and the Regional Water Board.⁵

Information to be provided verbally to the Regional Water Board includes:

- i. Name and contact information of caller;
- ii. Date, time and location of spill occurrence;
- iii. Estimates of spill volume, rate of flow, and spill duration;
- iv. Surface water bodies impacted, if any;
- v. Cause of spill;
- vi. Cleanup actions taken or repairs made; and
- vii. Responding agencies.

b. As soon as possible, but not later than **twenty-four (24) hours** after becoming aware of a discharge, the Discharger shall submit to the Regional Water Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over affected water bodies or land areas have been notified of the discharge. For the purpose of this requirement, "certification" means an OES certification number and, for the local health department, name of local health staff, department name, phone number and date and time contacted.

c. Within **five (5) business days**, the Discharger shall submit a written report to the Regional Water Board office. The report must include all available details related to the cause of the spill and corrective action taken or planned to be taken, as well as copies of reports submitted to other agencies.

- i. Information provided in the verbal notification;
- ii. Other agencies notified by telephone;
- iii. Detailed description of cleanup actions and repairs taken; and
- iv. Description of actions that will be taken to minimize or prevent future spills.

⁵ The contact number for spill reporting for the Office of Emergency Services is (800) 852-7550. The contact number of the Regional Water Board during normal business hours is (707) 576-2220. After normal business hours, spill reporting to OES will satisfy the 2 hour notification requirement for the Regional Water Board.

- d. In the cover letter of the monthly monitoring report, the Discharger shall include a brief written summary of the event and any additional details related to the cause or resolution of the event, including, but not limited to results of any water quality monitoring conducted.
2. All spills, ~~and~~ unauthorized discharges, ~~and sanitary sewer overflows (SSOs)~~ less than 1,000 gallons that do not reach a drainage channel or a surface water:
 - a. As soon as possible, but not later than **twenty-four (24) hours** after becoming aware of the discharge, the Discharger shall notify the Regional Water Board and provide the applicable information in requirement 1.a of this section.
 - b. In the cover letter of the monthly monitoring report, the Discharger shall include a written description of the spill event.

VII. CERTIFICATION

All reports required by this Monitoring and Reporting program or other information requested by the Regional Water Board, or the State Water Resources Control Board shall be signed by the principal executive officer or a duly authorized representative of that person. Any person signing a document under this requirement shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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 fine and imprisonment for knowing violations."

Ordered by: _____

Catherine Kuhlman
Executive Officer

January 27, 2011