

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

REVISED MONITORING AND REPORTING PROGRAM  
R5-2014-0026 REVISION NO. 1

FOR

SOUTH SAN JOAQUIN IRRIGATION DISTRICT  
NICK C. DEGROOT WATER TREATMENT PLANT  
STANISLAUS COUNTY

This Monitoring and Reporting Program (MRP) incorporates requirements for wastewater discharge monitoring at the San Joaquin Irrigation District's (SSJID's) Nick C. DeGroot Water Treatment Plant (WTP). This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

All wastewater samples shall be representative of the volume and nature of the discharge. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. A revised flow schematic is included with this MRP as Attachment 1 and supersedes Attachment C of WDRs R5-2014-0026.

Field test instruments (such as pH, EC, and dissolved oxygen) may be used provided that:

1. The operator is trained in the proper use of the instrument;
2. The instruments are field calibrated prior to each use;
3. 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" section of this MRP.

**FLOW MONITORING**

Flow rates to the percolation/evaporation ponds shall be monitored as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Overflow from sludge drying beds	Gallons	Meter Reading	Daily	Quarterly
Emergency overflow from recycle pump station <sup>1</sup>	Gallons	Meter Reading	Daily	Quarterly
Emergency overflow from stabilization basins <sup>1</sup>	Gallons	Meter Reading	Daily	Quarterly

<sup>1</sup> Reporting required during emergency overflow conditions greater than 100 gallons.

### WASTEWATER MONITORING

Ultrafiltration cleaning wastewater discharged to the percolation/evaporation ponds shall be monitored as described below. Grab samples representative of the discharge shall be collected from the concrete lined drying beds prior to discharge to the percolation ponds as shown in Attachment 1 of this MRP. If 100 gallons or more of emergency overflow is discharged to the percolation/evaporation ponds from the recycle pump station or stabilization basins, grab samples shall be collected from the overflow source. Wastewater monitoring shall include, at a minimum, the following:

Constituent	Units	Type of Sample <sup>1</sup>	Sampling Frequency <sup>2</sup>	Reporting Frequency
Dissolved Manganese	µg/L	Grab	Quarterly	Quarterly
Dissolved Aluminum	µg/L	Grab	Quarterly	Quarterly
Dissolved Iron	µg/L	Grab	Quarterly	Quarterly
Sodium	mg/L	Grab	Quarterly	Quarterly
Chloride	mg/L	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly

<sup>1</sup> All samples shall be filtered prior to preservation.

<sup>2</sup> Sampling shall be conducted during ultrafiltration cleaning events for each ultrafiltration train.

### WASTEWATER TRIGGER CONCENTRATIONS

The following wastewater trigger concentrations are intended only to serve as a means of assessing whether the discharge might potentially cause a violation of one or more of the groundwater limitations of the WDRs at some later date.

Parameter	Trigger Concentration (mg/L) <sup>1</sup>
Dissolved Manganese	0.5
Dissolved Aluminum	2.0

<sup>1</sup> Trigger concentrations are subject to review and revision based on the submittal of four quarterly monitoring reports after adoption of the WDRs.

If the annual evaluation of wastewater quality performed pursuant to this MRP shows that the annual average of one or both of the trigger concentrations has been exceeded during the calendar year, the Discharger shall submit one or both of the following technical reports (as applicable) by **1 May of the following calendar year** (e.g., if one or more trigger concentrations are exceeded for calendar year 2016, the appropriate report is due by 1 May 2017):

- a. A technical evaluation of the reason[s] that the concentration has not decreased to the trigger concentration for each constituent and a technical demonstration that continuing the discharge without additional treatment or control will not result in exceedance of the applicable groundwater limitation.
- b. An Action Plan that presents a systematic technical evaluation of each component of the facility's wastewater disposal system to determine what additional treatment or control is

necessary and feasible for each waste constituent that exceeds a trigger concentration. The plan shall evaluate each component of the wastewater treatment, storage, and disposal system (as applicable); describe the applicability and feasibility of available treatment and/or control technologies; provide preliminary capital and operation/maintenance cost estimates for each; designate the preferred option[s] for implementation; and specify a proposed implementation schedule to reduce wastewater concentrations to the trigger concentrations. The schedule for full implementation shall not exceed one year, and the Discharger shall immediately implement the proposed improvements.

### REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., wastewater monitoring, 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 Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

#### A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Central Valley Water Board by the 1st day of the second month following the end of the reporting period (e.g. the January monthly report is due by 1 March). The Quarterly Report submittal schedule is shown in the table below.

Quarter	Monitoring Period	Quarterly Report Due Date
First	January - March	1 May
Second	April - June	1 August
Third	July – September	1 November
Fourth (Annual Monitoring Report)	October - December	1 February

The Quarterly Report shall include the following:

1. Tabulated daily flows for all wastewater and emergency bypass flows from the stabilization basins, drying beds, and the plant recycle pump station discharged to the percolation/evaporation ponds.
2. Calculation of total quarterly wastewater flows and cumulative wastewater flows for the calendar year to date.
3. Tabulated wastewater monitoring data for each sample taken during the quarter.
4. Disclosure of any violations of the WDRs, and an explanation of any violation of those requirements.
5. If requested by staff, copies of laboratory analytical report(s).

**B. Annual Monitoring Reports**

An Annual Monitoring Report shall be submitted to the Central Valley Water Board by **1 February** each year. The Annual Monitoring Report shall include the following:

1. Calculation of the annual average wastewater monitoring results for all monitored wastewater constituents and comparison of the average dissolved manganese and aluminum results to the trigger concentrations.
2. A detailed description of any operational changes, new water treatment systems that might affect the character of the wastewater, and changes to the ultrafiltration equipment cleaning process.
3. If requested by staff, tabular and graphical summaries of all data collected during the year with data arranged to confirm compliance with the WDRs.
4. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
6. If any wastewater trigger concentrations were exceeded, include acknowledgment that the appropriate technical report will be submitted in accordance with this MRP.
7. Whether any expansion of the water treatment plant's capacity is planned or anticipated in the next calendar year.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions 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, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate and complete.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by: Andrew Althoff For  
PAMELA C. CREEDON, Executive Officer  
4/25/16  
(Date)