

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

REVISED MONITORING AND REPORTING PROGRAM R5-2005-0097 **(REV1)**

FOR
AMADOR WATER AGENCY
MACE MEADOW GOLF AND COUNTRY CLUB, INC.
BUCKHORN WATER TREATMENT PLANT AND REUSE SITE
AMADOR COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the water treatment plant, backwash water (wastewater), wastewater storage ponds, and wastewater reuse areas. 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. Regional Board staff shall approve specific sample station locations prior to implementation of sampling activities. Amador Water Agency and Mace Meadow Golf and Country Club, Inc. are jointly responsible for implementing this MRP, and shall submit joint monitoring reports.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. The instruments are serviced and/or calibrated per the manufacturer's recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of the MRP.

WASTEWATER MONITORING

Wastewater samples shall be collected before discharge to wastewater storage ponds and shall be representative of the volume and nature of the discharge. Wastewater monitoring shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow ¹	mgd	Continuous	Daily	Monthly
Total Coliform Organisms ²	MPN/100 mL ³	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Sodium	mg/L	Grab	Monthly	Monthly
Chloride	mg/L	Grab	Monthly	Monthly
Nitrate as Nitrogen	mg/L	Grab	Monthly	Monthly
pH	Standard	Grab	Monthly	Monthly
Dissolved Metals ^{5,6}	ug/L	Grab	Annually	Annually
Standard Minerals ⁴	mg/L	Grab	Annually	Annually

¹ Wastewater flows discharged into the storage ponds shall be monitored

² Using a minimum of 10 tubes or two dilutions.

³ Most probable number per 100 ml.

- ⁴ Standard Minerals shall include, at a minimum, the following elements/compounds: boron, calcium, iron, magnesium, potassium, sulfate, total alkalinity (including alkalinity series), and hardness.
- ⁵ At a minimum, the following metals shall be included in: aluminum, antimony, arsenic, total chromium, hexavalent chromium, copper, iron, lead, manganese, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.
- ⁶ Samples shall be filtered through a 0.45micron filter prior to preservation.

STORAGE POND MONITORING

Each storage pond shall be sampled for the parameters specified below. In addition, the monthly monitoring report shall provide a statement as to whether surface water runoff was diverted into the storage pond(s), and if so, the timeframe and volume of diversion.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
<u>Total Aluminum</u>	<u>mg/L</u>	<u>Grab</u>	<u>Weekly</u>	<u>Monthly</u>
<u>Dissolved Aluminum</u>	<u>mg/L</u>	<u>Grab</u>	<u>Weekly</u>	<u>Monthly</u>
Dissolved Oxygen ¹	mg/L	Grab	Weekly	Monthly
pH	pH units	Grab	Weekly	Monthly
Freeboard ²	0.1 feet	Observation	Weekly	Monthly
Berm Seepage ^{3,4}	NA	Observation	Weekly	Monthly
Odors ⁴	--	Observation	Weekly	Monthly

- 1 Samples shall be collected at a depth of one foot from each pond in use, opposite the inlet. ~~Samples shall be collected between 0700 and 0900 hours.~~
- 2 If the reservoir is empty on the scheduled monitoring date, the Discharger may report the freeboard monitoring result as "dry".
- 3 Pond containment levees shall be observed for signs of seepage or surfacing water along the exterior toe of the levees and dam. If surfacing water is found, then a sample shall be collected and tested for pH and total dissolved solids.
- 4 Inspection field logs are acceptable as the monthly monitoring report.

GOLF COURSE MONITORING

Monitoring of the wastewater reuse site (golf course) shall be conducted **daily** when irrigating with wastewater and the results shall be included in the monthly monitoring report. Evidence of erosion, saturation, irrigation runoff, or the presence of nuisance conditions shall be noted in the report. Wastewater monitoring results shall be used in calculations to ascertain loading rates at the application area. Monitoring of the golf course shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow ¹	mgd	Continuous	Daily	Monthly
Rainfall	Inches	Observation	Daily	Monthly
Application Rate ²	gal/acre/day	Calculated	Daily	Monthly
Total Dissolved Solids Loading Rate ²	lbs/ac/month	Calculated	Monthly	Monthly

¹ Flow measurement shall be provided for effluent being supplied to the golf course.

² For each land application area.

The entire irrigated area shall be inspected at least **weekly** during or immediately following an irrigation event to identify any equipment malfunction or other circumstances that might allow irrigation runoff to leave the irrigation area and/or create ponding conditions that violate the Waste Discharge Requirements. A daily log of these inspections shall be kept at the facility and made available for review upon request.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., wastewater, storage pond, reuse areas, 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 to the Regional Board.

A. Monthly Monitoring Reports

Daily, weekly, and monthly monitoring data shall be reported in monthly monitoring reports. Monthly reports shall be submitted to the Regional Board on the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

1. Results of wastewater, storage pond, and golf course monitoring;
2. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format;
3. If requested by staff, copies of laboratory analytical report(s); and
4. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.

B. Annual Report

An Annual Report shall be submitted to the Regional Board by **1 February** each year. In addition to the data normally presented, the Annual Report shall include the following:

1. The contents of the regular monthly monitoring report for the last sampling event of the year;
2. Total annual wastewater flows into the wastewater storage ponds;

3. If requested by staff, tabular and graphical summaries of all data collected during the year;
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 waste discharge requirements;
5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program;
6. A statement regarding whether the flow meter was calibrated during the year; and
7. A statement regarding the anticipated wastewater flows for the next year.

A letter transmitting the self-monitoring reports shall accompany each report. Such a 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 the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

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

Ordered by:

PAMELA C. CREEDON, Executive Officer

(Date)