

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2002-0168

FOR  
AMADOR WATER AGENCY  
WILDWOOD ESTATES COMMUNITY LEACHFIELD SYSTEM  
AMADOR COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring domestic wastewater, treated effluent, leachfields, and groundwater. 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.

All samples should 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 test 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. 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.

**SEPTIC TANK MONITORING**

The Amador Water Agency shall monitor the septic tanks and report this information in the annual reports. Septic tanks shall be inspected annually and pumped as described below.

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum Inspection</u>	<u>Reporting Frequency</u>
Sludge depth and scum thickness in the first compartment of each septic tank	Feet	Staff Gauge	Annually	Annually
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum Inspection</u>	<u>Reporting Frequency</u>
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually

The Discharger shall retain records of each inspection, by street address, noting the date, measured readings and calculations, and calculated projection of whether the limits of Discharge Specification B.8 will be exceeded before the next reading. The Discharger will also record when cleaning is required, the date of notice to the homeowner, the condition of the tank, and the date that cleaning or repair occurred and by whom. Copies of the Liquid Waste Hauler manifests shall be retained for review as with any other record concerning documentation of compliance with the Order.

### EFFLUENT MONITORING

The Amador Water Agency shall conduct effluent monitoring of the wastewater entering the leachfield. Wastewater samples shall be collected from the leachfield dosage siphon. Effluent monitoring shall include, at a minimum, the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow <sup>1</sup>	gpd	Dose Counter	Monthly	Monthly
Total Dissolved Solids	mg/l	Grab	Quarterly	Quarterly
Nitrates as Nitrogen	mg/l	Grab	Quarterly	Quarterly
Total Kjeldahl Nitrogen	mg/l	Grab	Quarterly	Quarterly
Standard Minerals <sup>2</sup>	mg/l	Grab	Annually	Annually

<sup>1</sup> Flow monitoring to begin effective 1 October 2002. Dose counter readings shall be converted to a monthly average flow, in gpd.

<sup>2</sup> Standard Minerals shall include, at a minimum, the following elements and compounds: Barium, Boron, Calcium, Iron, Magnesium, Manganese, Sodium, Potassium, Chloride, Sulfate, Total Alkalinity (including alkalinity series), and Hardness.

### LEACHFIELD MONITORING

The Amador Water Agency shall conduct a visual inspection of the leachfields on a monthly basis. Results shall be recorded and submitted with the monthly monitoring report. Evidence of surfacing wastewater, erosion, field saturation, runoff, or the presence of nuisance conditions shall be noted in the report. If surfacing water is found, then a sample shall be collected and tested for total coliform organisms and total dissolved solids. In addition to the visual inspections, monitoring of the leachfields shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Application Rate <sup>1</sup>	gal/acre•day	Calculated	Monthly	Monthly

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Leachline Riser Inspection <sup>2</sup>	Inches	Measurement	Semi-annual <sup>3</sup>	Semi-annual <sup>4</sup>

<sup>1</sup> The application rate for each leachfield

<sup>2</sup> The Amador Water Agency shall measure the depth of any ponded wastewater in each inspection riser. The Discharger shall provide the depth of each disposal trench and the corresponding depth of soil remaining between the ponded wastewater and the surface.

<sup>3</sup> Semi-annual monitoring shall be conducted during the months of March and October.

<sup>4</sup> Semi-annual reporting shall be included with the monthly report for which the data was collected.

### GROUNDWATER MONITORING

Beginning with the third quarter 2003, the Amador Water Agency shall conduct the following groundwater monitoring program. Prior to construction of any groundwater monitoring wells, the Discharger shall submit plans and specifications to the Board for review and approval. Once installed, all new wells shall be added to the MRP, and shall be sampled and analyzed according to the schedule below.

Prior to sampling, groundwater elevations shall be measured and the wells shall be purged at least three well volumes until pH and electrical conductivity have stabilized. Depth to groundwater shall be measured to the nearest 0.01 feet. Water table elevations shall be calculated. Samples shall be collected using approved EPA methods. Groundwater monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling and Reporting Frequency<sup>3</sup></u>
Groundwater Elevation <sup>1</sup>	0.01 Feet	Measurement	Quarterly
Depth to Groundwater	0.01 Feet	Calculated	Quarterly
PH	S.U.	Grab	Quarterly
Total Dissolved Solids	mg/l	Grab	Quarterly
Nitrates as Nitrogen	mg/l	Grab	Quarterly
Total Kjeldahl nitrogen	mg/l	Grab	Quarterly
Total Coliform Organisms <sup>2</sup>	MPN/100 ml	Grab	Quarterly

<sup>1</sup> Groundwater elevation shall be based on depth-to-water using a surveyed measuring point elevation on the well and a surveyed reference elevation.

<sup>2</sup> Using a minimum of 15 tubes or three dilutions

<sup>3</sup> Groundwater monitoring begins with the third quarter 2003.

### REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, 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.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a Registered Engineer or Geologist and signed by the registered professional.

### **A. Monthly Monitoring Reports**

Monthly reports shall be submitted to the Regional Board on the **1<sup>st</sup> 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 effluent and leachfield 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. Quarterly Report**

The Discharger shall establish a quarterly sampling schedule for effluent monitoring such that samples are obtained approximately every three months. Beginning with the second quarter 2003, the Discharger shall establish a quarterly sampling schedule for groundwater monitoring. Quarterly monitoring reports shall be submitted to the Board by the **1<sup>st</sup> day of the second month after the quarter** (i.e. the January-March quarterly reports is due by May 1<sup>st</sup>) each year. The Quarterly Report shall include the following:

1. Results of effluent and groundwater monitoring. The results of regular monthly monitoring reports for March, June, September and December may be incorporated into their corresponding quarterly monitoring report;
2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
3. Calculation of groundwater elevations and discussion of seasonal trends if any;

4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);
5. A comparison of the monitoring data to the groundwater limitations and an explanation of any violation of those requirements;
6. Summary data tables of historical and current water table elevations and analytical results;
7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum; and
8. Copies of laboratory analytical report(s) for groundwater monitoring.

### **C. Annual Report**

An Annual Report shall be prepared as the December monthly monitoring report. The Annual Report will include all monitoring data required in the monthly schedule. The 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 quarterly monitoring report for the last quarter of the year;
2. If requested by staff, tabular and graphical summaries of all data collected during the year;
3. Results of the effluent annual monitoring;
4. A description of any activity to control vegetation in the leachfield area;
5. The results of the inspection, and if necessary, the maintenance activities performed on the stormwater diversion ditch;
6. Annual summary of the septic tank inspections for the year, including the number of tanks on which notifications for cleaning were issued, and from compilation of Liquid Waste Hauler Manifests, the volumes of sludge removed from the WWTF and ultimate sludge disposal site(s);
7. A statement of when the O&M Manual was last reviewed for adequacy, and a description of any changes made during the year;
8. A description of the annual evaluation of effluent distribution and adjustments made, if any;
9. A summary of maintenance and repairs activities which were performed on the effluent collection system;

10. A statement regarding whether the dose counter was calibrated during the year;
11. Attached documents as verification of each operator's certification when requested by staff;
12. Attached documentation describing user education actions; and
13. A discussion of any 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.

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 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: \_\_\_\_\_  
THOMAS R. PINKOS, Acting Executive Officer

\_\_\_\_\_  
6 September 2002

(Date)