

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO.

FOR
CEDAR RIDGE VIEW, LLC.
CEDAR RIDGE VIEW MOBILE HOME PARK
WASTEWATER TREATMENT AND DISPOSAL SYSTEM
AMADOR COUNTY

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

This MRP is effective upon the date of signature; however, monitoring of septic tanks, effluent, and leachfields need only be conducted once the discharge of wastewater into the treatment and disposal system commences. In the meantime, the Discharger shall submit monthly status reports and groundwater monitoring reports as described in the “Reporting” section of this MRP.

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 field calibrated prior to each monitoring event;
3. 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 this MRP.

SEPTIC TANK MONITORING

The Discharger shall monitor the septic tanks and report this information in the annual reports. Septic tanks shall be inspected annually as described below. In addition, the Discharger shall visually inspect the tanks for signs of damage, leaks, or deterioration.

<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

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 lot number, noting the date and measured readings and calculations. 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

Wastewater effluent shall be monitored prior to discharge to the leachfield. Samples shall be collected from the lift station. Flow shall be monitored at both the lift station and the dosing siphon. Grab samples are considered adequately composited to represent the wastewater. 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>
Total Flow to the leachfields	gpd	Meter	Weekly	Monthly
Flow Discharged from Lift Station To Leachfield	gpd	Meter	Daily	Monthly
Flow Discharged from Dosing Siphon To Leachfield	gpd	Meter	Daily	Monthly
pH	Std. units	Grab	Monthly	Monthly
BOD ₅	mg/l	Grab	Monthly	Monthly
Total Dissolved Solids	mg/l	Grab	Monthly	Monthly
Nitrates as Nitrogen	mg/l	Grab	Monthly	Monthly
Total Kjeldahl Nitrogen	mg/l	Grab	Monthly	Monthly
Standard Minerals ²	mg/l	Grab	Annually	Annually

¹ Standard Minerals shall include, at a minimum, the following elements and compounds: Boron, Calcium, Iron, Magnesium, Manganese, Sodium, Potassium, Chloride, Sulfate, Total Alkalinity (including alkalinity series), and Hardness.

LEACHFIELD AREA MONITORING

The Discharger shall conduct a visual inspection of the leachfield on a **weekly basis**. Results shall be recorded and submitted with the monthly monitoring report. Photocopies of entries into an operator's log are acceptable. 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 ¹	gal/acre•day	Calculated	Monthly	Monthly
Leachline Riser Inspection ²	Inches	Measurement	Monthly	Monthly

¹ The application rate for each leachfield

² The Discharger shall measure and record the distance from the surface of the liquid in the observation port to the surface of the ground in each active lateral(s).

GROUNDWATER MONITORING

Beginning with the first quarter 2006, the Discharger 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 and used to determine groundwater gradient and direction of flow. 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 Frequency⁴</u>
Groundwater Elevation ¹	0.01 Feet	Measurement	Quarterly
Depth to Groundwater	0.01 Feet	Calculated	Quarterly
Gradient	Feet/Feet	Calculated	Quarterly
Gradient Direction	Degrees	Calculated	Quarterly
Total Coliform Organisms ²	MPN/100ml	Grab	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
Standard Minerals ³	mg/l	Grab	Annually

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

² Using a minimum of 15 tubes or three dilutions

³ Standard Minerals shall include, at a minimum, the following elements and compounds: Boron, Calcium, Iron, Magnesium, Manganese, Sodium, Potassium, Chloride, Sulfate, Total Alkalinity (including alkalinity series), and Hardness.

⁴ The existing monitoring well shall be sampled beginning with the First Quarter 2006. The additional required wells shall be added to the sampling program upon installation.

WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Water supply monitoring shall include at least the following for each water source used during the previous year. As an alternative to annual water supply monitoring, the Discharger may submit results of the most current DHS water supply monitoring data.

<u>Constituents</u>	<u>Units</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Total Dissolved Solids	mg/L	Annually	Annually
Standard Minerals ¹	mg/L	Annually	Annually

¹ Standard Minerals shall include, at a minimum, the following elements/compounds boron, calcium, iron, magnesium, manganese, sodium, potassium, chloride, sulfate, total alkalinity (including alkalinity series), and hardness.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, leachfield, 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 **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. If the WWTF is not yet operational, then a status report shall be submitted stating that it is not yet operational and providing a timeline for anticipated start-up of the WWTF.
2. Once the WWTF is operational, then the report shall include the following:
 - a. Results of effluent and leachfield area monitoring;
 - b. 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;

- c. If requested by staff, copies of laboratory analytical report(s); A calibration log verifying calibration of all hand held monitoring instruments and devices used to comply with the prescribed monitoring program; and
- d. Date(s) on which the monitoring instruments were calibrated.

B. Quarterly Report

Submittal of quarterly monitoring reports to the Regional Board shall begin starting the first quarter of 2006. The Discharger shall establish a quarterly sampling schedule for groundwater such that samples are obtained approximately every three months. Quarterly monitoring reports shall be submitted to the Board by the **1st day of the second month after the quarter** (i.e. the January-March quarterly report is due by May 1st) each year. The Quarterly Report shall include the following:

1. Results of 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 monthly and quarterly monitoring report for the last month and quarter of the year, respectively;
2. If requested by staff, tabular and graphical summaries of all data collected during the year;
3. Results of the annual effluent and groundwater monitoring;
4. Results of the water supply monitoring;
5. Results of the septic tank monitoring, including the number of tanks for which notifications for cleaning were issued, and from compilation of Liquid Waste Hauler Manifests, the volumes of waste removed;
6. A description of any activity to control vegetation in the leachfield area;
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 flow meter was calibrated during the year; A statement on how many new septic tanks were connected to the leachfield disposal system during the year.
11. Attached documentation describing user education actions; and
12. 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.

MONITORING AND REPORTING PROGRAM NO.
CEDAR RIDGE VIEW MHP.
WASTEWATER TREATMENT AND DISPOSAL SYSTEM
AMADOR COUNTY

-7-

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

THOMAS R. PINKOS, Executive Officer

(Date)

JSK: 9/20/05