# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD NORTH COAST REGION

ORDER NO. R1-2009-0090 WDID. No. 1A03126RDN

#### MONITORING AND REPORTING PROGRAM

FOR

# SMITH RIVER RANCHERIA WASTEWATER TREATMENT FACILITY

**Del Norte County** 

#### FLOW MEASUREMENT

Wastewater flow to the leachfields shall be recorded daily. The total daily flow to the leachfields shall be reported on the quarterly monitoring report. All flow measurement devices shall be tested annually and their accuracy certified. Certification shall be submitted with the annual monitoring report.

#### **VISUAL MONITORING**

The Permittee shall conduct surface inspections of all septic tanks, pretreatment units, filters, force mains and leachfields no less than monthly to record any odors, evidence of surface runoff, or other signs of malfunction or improper operation.

#### **EFFLUENT MONITORING**

The purpose of effluent monitoring is to determine treatment system efficiency and suitability for subsurface disposal. The sampling location for effluent samples shall be a point after completion of treatment and prior to discharge to the leachfield trenches. The effluent monitoring shall be as follows:

**Table 1. Effluent Monitoring** 

Constituent	Units	Type of Sample	Sample Frequency	Reporting Frequency
BOD (20°C, 5-day)	mg/L	Grab	Monthly	Quarterly
Suspended Solids	mg/L	Grab	Monthly	Quarterly
Settleable Solids	mL/L	Grab	Monthly	Quarterly
Hydrogen Ion	pH Units	Grab	Monthly	Quarterly
Nitrate-Nitrogen	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly

#### **GROUNDWATER MONITORING**

The purpose of groundwater monitoring is to determine compliance with water quality objectives for groundwater in the vicinity of the leachfields. The groundwater monitoring program shall consist of the following:

## 1. Monitoring Well Construction

Monitoring wells shall be constructed to yield representative samples year-round from the uppermost layer of the uppermost aquifer and to comply with applicable well standards. The Discharger shall submit a report detailing relevant subsurface stratigraphy and lithology, a diagram of the well showing total drilled depth, well installation depth, construction details including screened interval, surveyed top of casing elevation, and a location map for all installed wells, surveyed to the nearest 0.1 foot.

### 2. Monitoring Locations

Groundwater monitoring wells shall be located to allow evaluation of the groundwater quality upgradient and downgradient of the leachfields. Additional monitoring wells shall be added to the monitoring network as needed. Samples shall be collected from all installed wells for the constituents specified in Table 2.

# 3. Monitoring Schedule

Groundwater samples shall be collected from monitoring wells on a quarterly basis. Prior to sampling, the groundwater elevations shall be measured to the nearest 0.01 feet and the wells shall be purged of at least three well volumes until temperature, pH and electrical conductivity have stabilized. Samples shall be collected using standard EPA methods. Groundwater samples shall be collected and analyzed for the following constituents:

Table 2. Groundwater Monitoring Parameters

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Constituent	Units	Type of Sample	Frequency
Depth to groundwater	0.01 feet	Measurement	Quarterly
Groundwater Elevation	0.01 feet	calculation	Quarterly
Gradient	Feet/feet	calculation	Quarterly
Gradient Direction	degrees	calculation	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly
Nitrate-Nitrogen	mg/L	Grab	Quarterly

#### **QUARTERLY MONITORING REPORT**

For each quarter, a self-monitoring report shall be submitted to the Regional Water Board in accordance with the following:

1. The report shall be submitted by the first day of the second month following the end of the quarter, as follows:

**Table 3 Monitoring Report Due Dates** 

Reporting Period	Monitoring Period	Report Due Date
1 <sup>st</sup> Quarter	January 1 – March 31	May 1 <sup>st</sup>
2 <sup>nd</sup> Quarter	April 1 – June 30	August 1st
3 <sup>rd</sup> Quarter	July 1 – September 30	November 1 <sup>st</sup>
4 <sup>th</sup> Quarter	October 1 – December 31	February 1 <sup>st</sup>

- 2. Letter of Transmittal: Each report shall be submitted with a letter of transmittal. This letter shall include the following:
  - a. Identification of facility: Name, Address, Order number, and WDID number;
  - b. Date of report and monitoring period;
  - c. Identification of all violations of permit conditions found during the monitoring period;
  - d. Details of the violations: parameters, magnitude, test results, frequency, and dates;
  - e. The cause of the violation;
  - f. Discussion of corrective actions taken or planned to resolve violations and prevent recurrence, and dates or time schedule of action implementation;
  - g. Other relevant information including, but not limited to, incidents of wastewater treatment and collection system equipment failure, results of visual observations, and reports of wastewater spills or surfacing effluent;
  - h. Authorized signature and certification statement.
- 3. Results of Analyses and Observations
  - a. Tabulations of all required analyses, including parameter, sample date and time, sample station, and test result;
  - b. Written summary of results of all visual monitoring conducted during the monitoring period that indicate non-compliance with provisions of waste discharge requirements;
  - c. If the permittee monitors any pollutant at the point of compliance or conducts visual inspection more frequently than required by this Permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and report of the data submitted in the discharger monitoring report.

- 4. Compliance Evaluation Summary: Each report shall include a compliance evaluation summary. The summary shall illustrate clearly the facility's compliance with all waste discharge requirements, as required.
- 5. Report Submittal: Copies of each monitoring report shall be mailed to:

North Coast Regional Water Quality Control Board 5550 Skylane Boulevard, Suite A Santa Rosa, CA 95403

### ANNUAL REPORT

The Permittee shall submit an annual report to the Regional Water Board for each calendar year. The report shall be submitted so that it is received by the Regional Water Board by March 1st of the following year. The report shall include, at a minimum, the following:

- 1. Tabular and, where appropriate, graphical summaries of the monitoring data and solids disposal records from the previous year; and
- 2. A comprehensive discussion of the facility's compliance with waste discharge requirements, and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the Permit.

Ordered by:		
	Catherine Kuhlman	
	Executive Officer	
	December 10, 2009	

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