

California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2014-0063

FOR

FARMHOUSE INN
ON-SITE WASTEWATER TREATMENT SYSTEM
7871 River Road
Forestville, California

Sonoma County
WDID No. 1B07094RSON

California Water Code sections 13267 authorize the Regional Water Quality Control Board (Regional Water Board) to require submittal of technical and monitoring reports for projects and facilities that may impact water quality. This monitoring and reporting program establishes monitoring and reporting requirements, which implement the state regulations. Any person failing to furnish technical or monitoring reports or falsifying any information therein is guilty of a misdemeanor, and may be subject to civil liability. (Water Code section 13268)

The purpose of this monitoring program is to ensure the Farmhouse Inn's compliance with State Water Resources Control Board Order No. 97-10-DWQ, *General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems* (Order 97-10-DWQ).

FLOW MEASUREMENT

The Permittee shall measure, at least weekly, the volume of effluent sent to the disposal fields through flow measurement or calculation. The average daily flow shall be calculated by dividing the flow volume in the calendar month by the number of days in the month. The average daily flow for each calendar month in the monitoring period shall be reported in the quarterly monitoring report.

INFLUENT

The treatment system's performance shall be monitored quarterly for the constituents listed in Table 1. Influent samples shall be obtained from the wastewater entering the Recirculation-Blend tank located in the south treatment area, immediately before the AdvanTex Treatment Pods (Monitoring Location INF-1). Influent samples shall be collected at least once each quarter, concurrent with effluent samples. Influent results shall be reported in the quarterly monitoring report and include sampling date, time and name of sampler.

Table 1

Constituent	Location	Units	Type of Sample
Biochemical Oxygen Demand	INF-1	mg/L	Grab
Total Suspended Solids	INF-1	mg/L	Grab
Nitrate	INF-1	mg/L	Grab
Total Kjeldahl Nitrogen	INF-1	mg/L	Grab
Grease and Oil	INF-1	mg/L	Grab

EFFLUENT

The Permittee shall monitor the effluent exiting the treatment system quarterly. Effluent samples shall be collected at least once each quarter, concurrent with influent samples. Samples shall be collected at a location following the AdvanTex pretreatment unit and prior to disposal to the drip irrigation field (Monitoring Location EFF-1). Influent results shall be reported in the quarterly monitoring report and include sampling date, time and name of sampler.

Table 2

Constituent	Location	Units	Type of Sample
Biochemical Oxygen Demand	EFF-1	mg/L	Grab
Total Suspended Solids	EFF-1	mg/L	Grab
Nitrate	EFF-1	mg/L	Grab
Ammonia	EFF-1	mg/L	Grab
Total Dissolved Solids	EFF-1	mg/L	Grab

SYSTEM MAINTENANCE

1. An Orenco systems service provider shall be retained for the operating life of the system. In the event that the service provider is changed, the Permittee shall notify the Regional Water Board within thirty days of the transfer. Each quarterly report shall certify that a service provider has been contracted during the monitoring period and shall include the name of such provider.
2. The Permittee shall maintain on-site an emergency response plan describing alarm notifications, on-call staff, and emergency notification procedures including responsibilities of the service provider and the Farmhouse Inn.
3. The Permittee shall maintain on-site a site-specific operations and maintenance manual for the wastewater treatment and disposal system. The Permittee shall implement the maintenance activities as required by the site-specific operations and maintenance manual. Operation and maintenance activities occurring during the monitoring period, including system adjustments, cleaning and repairs, shall be reported in the quarterly monitoring report.
4. The Permittee shall conduct visual inspections of all septic tanks, pre-treatment equipment, cleanouts, and pump stations, no less than quarterly. Inspection results for each monitoring period shall be reported in the quarterly monitoring report.

5. Disposal fields receiving effluent shall be inspected no less than monthly. Any odors, evidence of surfacing effluent, or other signs of malfunction or improper operation shall be reported in the quarterly monitoring report.
6. Shallow observation wells located within the disposal fields that have received effluent during the reporting period shall be inspected no less than quarterly. Depth of water shall be measured and reported in the quarterly monitoring report.

GROUND WATER MONITORING

The purpose of ground water monitoring is to determine compliance with water quality objectives for groundwater in the vicinity of the disposal field. The ground water monitoring program shall be as follows:

1. **Monitoring Locations**
The four deep ground water monitoring wells shall be screened to capture both summer and winter water tables, conditional upon the underlying stratigraphy. The deep wells are in addition to the shallow monitoring wells required by the Sonoma County PRMD.
2. **Ground Water Gradient**
Ground water elevations shall be used to determine the ground water gradient. Gradient calculations shall be submitted and direction shown in degrees and shall be plotted on scaled map showing local and disposal system features. The gradients shall be compared to the location of the monitoring wells and the well locations evaluated to determine if they are in a suitable location.
3. **Monitoring Schedule**
At least one groundwater sample shall be collected quarterly from each deep monitoring well. The groundwater samples shall be analyzed for the constituents listed in Table 3.

Table 3

Constituent	Units	Type of Sample	Frequency
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly
Nitrate	mg/L	Grab	Quarterly
Total and Fecal Coliform Bacteria	MPN/ 100 ml	Grab	Quarterly
Ground Water Elevation	Feet	Measurement	Quarterly

SEPTIC TANK & GREASE INTERCEPTOR MONITORING

Septic tanks, sumps and the grease interceptor tank shall be inspected and pumped as described below. An inspection is not required during the year a tank is pumped. Documentation of inspection and pumping shall be included in the 4th Quarter monitoring report.

Parameter	Units	Type of Minimum Measurement	Inspection Frequency
Sludge depth and scum thickness in each compartment of each tank	Inches	Staff Gauge	Annually
Distance between bottom of scum or grease cap layer and top of outlet device	Inches	Staff Gauge	Annually
Distance between top of each sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually

Tanks shall be pumped when any one of the following conditions exists or may occur before the next inspection:

- a. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment; or,
- b. The scum layer is within three inches of the outlet device; or,
- c. The sludge layer is within eight inches of the outlet device.

REPORTING

The Permittee shall submit self-monitoring reports quarterly. The reports shall be submitted by the first day of the second month following the end of the quarter, as follows:

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

All quarterly monitoring reports shall include, a Letter of Transmittal. The letter should include the following information:

- 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.

Each quarterly monitoring report shall present all data for a calendar year in a tabular fashion and evaluate long term and seasonal performance. The 4th quarter monitoring report shall include an evaluation of the previous year's data, system performance in

relation to design capacity, system maintenance, and a review of noncompliance, effluent limitation exceedances and system alterations.

All monitoring reports should be submitted to the Regional Water Board via e-mail to NorthCoast@waterboards.ca.gov or on disk (CD or DVD) in a Portable Document Format (PDF) file in lieu of paper-sourced documents. The guidelines for electronic submittal of documents can be found on the Regional Water Board website at <http://www.waterboards.ca.gov/northcoast>.

All reports required by this monitoring and reporting program or other information requested by the Regional Water Board, or the State Water Resources Control Board shall be signed by the Permittee's principal executive officer or a duly authorized representative of that person. Any person signing a document under this requirement shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Original digitally signed by

Ordered by: _____

Matthias St. John
Executive Officer

December 30, 2014

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