

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
MONITORING AND REPORTING PROGRAM 88-106-02

FOR

FOREST SPRINGS, LLC.
FOREST SPRINGS MOBILE HOME PARK WWTF
NEVADA COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the wastewater treatment facility (WWTF) at the Forest Springs Mobile Home Park (MHP). 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 Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

Water Code section 13267 states, in part:

“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

Water Code section 13268 states, in part:

“(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

The Forest Springs MHP WWTF discharge is regulated by the Order 88-106, adopted on 24 June 1988, and is owned and operated by Forest Springs, LLC. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Resources Control Board, Environmental Laboratory Accreditation Program certified laboratory, or:

1. The user is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are maintained and available for at least three years.

INFLUENT FLOW MONITORING

Influent flow shall be monitored prior to discharge to the ponds and prior to entering the septic tank for the leachfield, as specified below.

Parameter	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Average Daily Influent Flow	mgd	Meter Observation	Daily	Quarterly

EFFLUENT MONITORING

Effluent samples shall be collected from Pond 4 and the septic system prior to disposal at the leachfield. A grab sample from Pond 4 will be considered to be representative of the effluent for the pond system. At a minimum, the Discharger shall monitor effluent as specified below.

Parameter	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
BOD ₅	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly
TKN	mg/L	Grab	Monthly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Monthly	Quarterly

POND MONITORING

The Discharger shall monitor each pond as specified below when wastewater is present in the ponds. Sampling and monitoring will be conducted from locations that will provide representative samples and observations of the ponds.

Parameter	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Freeboard ¹	0.1 feet	Staff Gage	Weekly	Quarterly
Levee Condition	--	Observation	Weekly	Quarterly
Seepage ²	--	Observation	Weekly	Quarterly
Odors	--	Observation	Weekly	Quarterly
Dissolved Oxygen ³	mg/L	Grab	Monthly	Quarterly

1. Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet.
2. Pond containment berms shall be observed for signs of seepage or surfacing water along the exterior toe. If surface water is found, then a wastewater sample shall be collected from the pond and tested for total coliform organisms and total dissolved solids.
3. Dissolved oxygen shall be monitored at each pond that contains at least one foot of standing water. The report shall state how much water was in the pond if dissolved oxygen was not monitored. Samples shall be collected opposite the pond inlet at a depth of one foot.

SEPTIC TANK MONITORING

All septic tanks shall be inspected and/or pumped at least as frequently as described below. Inspections of sludge and scum depth are not required if the tanks are pumped at least annually.

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

Septic tanks shall be pumped when any one of the following conditions exists:

1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment.
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches of the outlet device.

If a septic tank is pumped during the year, the pumping record shall be submitted with the annual report. At a minimum, the record shall include the date, nature of service, service company name, and service company license number.

LEACH FIELD AREA

Monitoring shall be sufficient to determine if wastewater is evenly applied, the disposal area is not saturated, burrowing animals are not present, plant roots have not compromised the disposal area, and odors are not present. Inspection of dosing pump controllers, automatic distribution valves, etc. is required to maintain optimum treatment in the leachfield area. Monitoring shall include, at a minimum, the following:

Parameter	Inspection Frequency	Reporting Frequency
Pump Controllers, Automatic Valves, etc. ¹	Monthly	Quarterly
Nuisance Odor Conditions	Monthly	Quarterly
Saturated Soil Conditions ²	Monthly	Quarterly
Plant Growth ³	Monthly	Quarterly
Vectors or Animal Burrowing ⁴	Monthly	Quarterly

1. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
2. Inspect a disposal area for saturated conditions.
3. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
4. Evidence of animals burrowing shall be immediately investigated, and burrowing animal populations controlled as necessary.

SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

GROUNDWATER MONITORING

Groundwater monitoring wells MW1 to MW4 shall be monitored according to the schedule below. Monitoring data and groundwater flow direction analysis shall be performed quarterly (four times per year) and shall be performed under the supervision of a California licensed civil engineer or geologist.

Parameter	Units ¹	Sample Type	Sampling Frequency	Reporting Frequency
Groundwater Elevation ¹	0.01 Feet	Calculated	Quarterly	Quarterly

Parameter	Units ¹	Sample Type	Sampling Frequency	Reporting Frequency
Depth to Groundwater ²	0.01 Feet	Calculated	Quarterly	Quarterly
Gradient	Feet/Feet	Calculated	Quarterly	Quarterly
Gradient Direction	Degrees	Calculated	Quarterly	Quarterly
pH	Std. Units	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly	Quarterly
TKN	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms	MPN/100 mL	Grab	Semiannually ³	Quarterly ³

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. Depth to groundwater shall be reported as feet below ground surface.
3. Samples for total coliform shall be collected during the first and third quarters.
 MPN/100 mL = most probable number per milliliter

REPORTING

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleysacramento@waterboards.ca.gov.

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
 ECM Mailroom
 11020 Sun Center Drive, Suite 200
 Rancho Cordova, California 95670

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any correspondence used to transmit documents to this office:

Facility Name: Forest Springs Mobile Home Park WWTF, Nevada County
 Program: Non-15 Compliance
 Order: 88-106-02
 CIWQS Place ID: 224893

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernible. The data shall be summarized to clearly illustrate compliance with the WDRs as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in

the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

Monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated. For a Discharger conducting any of its own analyses, reports must be signed and certified by the chief of the laboratory.

A. Quarterly Monitoring Reports

Daily, weekly, and monthly monitoring data shall be reported in the quarterly reports. Quarterly reports shall be submitted to the Regional Water Board on the **first day of the second month following the quarter** (e.g., the January-March Quarterly Report is due by **1 May**). The reports shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the quarterly reports shall include:

1. Results of Flow Monitoring in tabular format for each month during the reported quarter, including calculated values for the total flow and average daily flow for each month and total annual flow to date.
2. Results of wastewater influent and effluent monitoring, pond monitoring, and leachfield monitoring in tabular format for each month during the reported quarter.
3. Summary data tables of historical and current groundwater analytical results.
4. Copies of laboratory analytical data.
5. Results of all required quarterly monitoring. Data shall be organized by the associated monitoring sections (e.g., Flow Monitoring, Effluent Monitoring, etc.) and presented in tabular format.
6. A disclosure of any violations and an explanation of corrective actions.
7. A status update describing the continued improvements, repairs, and/or upgrades made to the leachfield system and a schedule for upcoming repairs and investigation activities.

B. Annual Report

Annual Reports shall be submitted to the Regional Water Board by **1 February following the monitoring year**. The Annual Report shall include the following:

1. Tabular and graphical summaries of all monitoring data collected during the year.
2. An evaluation of the performance of the wastewater treatment system, including discussion of capacity issues, nuisance conditions, system problems, and a forecast of the flows anticipated in the next year.
3. A statement of whether septic tanks were pumped during the year and a copy of pumping records. The report shall also contain a tabulated summary of historical pumping dates, nature of service, and service company names and license number.
4. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the WDRs.

5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
6. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.
7. A groundwater monitoring report prepared by a California licensed professional. The report shall contain an analysis of groundwater data collected during the year. The analysis shall include a description of the sample events, copies of the field logs, purge method and volumes, groundwater elevations and trends, a groundwater elevation map for each sample event, summary tables showing results for parameters measured, comparison of groundwater quality parameters, chain-of-custody forms, calibration logs for field equipment used, and an evaluation of any impacts the wastewater discharge is having on groundwater quality. In addition, the report shall include an evaluation of the nitrate as nitrogen groundwater concentration trends in relation to the repairs conducted on the leachfield system to determine if improvements to the leachfield are improving groundwater quality in the downgradient monitoring wells.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

I, Patrick Pulupa, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of a Monitoring and Reporting Program issued by the California Regional Water Quality Control Board, Central Valley Region on 25 September 2019.

Original signed by Robert Busby for
PATRICK PULUPA, Executive Officer

GLOSSARY

BOD₅ = Five-day biochemical oxygen demand

DO = Dissolved oxygen

EC = Electrical conductivity at 25° C

TKN = Total Kjeldahl nitrogen

Continuous = The specified parameter shall be measured by a meter continuously.

24-hr Composite = Samples shall be a flow-proportioned composite consisting of at least eight aliquots over a 24-hour period.

Daily = Every day except weekends or holidays.

Weekly = Once per week.

Monthly = Once per calendar month.

Quarterly = Once per calendar quarter.

Semiannually = Once every six calendar months (i.e., two times per year) during non-consecutive quarters.

Annually = Once per year.

mg/L = Milligrams per liter

µg/L = Micrograms per liter

µmhos/cm = Micromhos per centimeter

gpd = Gallons per day

mgd = Million gallons per day

MPN/100 mL = Most probable number [of organisms] per 100 milliliters



Central Valley Regional Water Quality Control Board

25 September 2019

Robb Tucker
Forest Springs, LLC.
10084 Forest Springs Road
Grass Valley, CA 95949

CERTIFIED MAIL
7010 3090 0000 5044 7046

WATER CODE 13267 ORDER FOR TECHNICAL AND MONITORING REPORTS, FOREST SPRINGS, LLC, FOREST SPRINGS MOBILE HOME PARK WWTF, NEVADA COUNTY

Forest Springs Mobile Home Park (MHP) Wastewater Treatment Facility (WWTF) in Nevada County is regulated under Waste Discharge Requirements (WDRs) Order 88-106, which was adopted on 24 June 1998. The WDRs are outdated and require revision. In February 2015, Forest Springs, LLC. (the Discharger) submitted a Report of Waste Discharge (RWD) requesting enrollment under the State Water Resources Control Board General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems, Order WQ 2014-0153-DWQ (Small Domestic General Order). Information included in the RWD showed that groundwater downgradient of the leachfield contained nitrate as nitrogen concentrations greater than concentrations protective of beneficial use (10 mg/L; Primary Maximum Contaminant Level). Based on the RWD, it is unclear if the pollution could be mitigated by improving the septic system and leachfield.

On 27 March 2019, the Central Valley Water Board required the Discharger to submit additional Technical and Monitoring Reports pursuant to Water Code 13267, which authorizes the Central Valley Water Board to require the submittal of technical and monitoring reports in the course of investigating existing or proposed discharges of waste to waters of the State. The Discharger was issued Monitoring and Reporting Program (MRP) 88-106-01 and was required to submit quarterly status reports detailing the repairs and/or upgrades made to the septic system to determine if discharges from the facility were degrading groundwater with respect to nitrate as nitrogen. Quarterly reports were also required to include a schedule for planned repairs and investigation activities.

After discussions with the Discharger's representative, Central Valley Water Board staff determined that influent sampling for the septic system required in MRP 88-106-01 was not necessary. Enclosed is Revised Monitoring and Reporting Program (MRP) 88-106-

KARL E. LONGLEY SCD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

02 for the Forest Springs MHP WWTF. The revision to the MRP removes the influent wastewater monitoring requirements for the septic system. The Discharger is still required to submit quarterly status reports documenting repairs and investigation activities conducted on the septic and leachfield system.

On 19 December 2017, the Forest Springs MHP was issued a Notice of Violation which required the Discharger to submit a Groundwater Monitoring and Characterization Workplan. The workplan, dated 28 February 2018, proposed to collect surface water samples upstream and downstream of a creek located downslope from the leachfield to determine if nitrate as nitrogen was impacting surface water. Concentrations of nitrate as nitrate in upsteam and downstream samples have been less than 1.40 mg/L. Based on the concentrations and concentration trends, it does not appear that nitrate as nitrogen has degraded surface water. Therefore, surface water sampling is longer required at this time.

Required Actions

IT IS HEREBY ORDERED that, pursuant to California Water Code section 13267, Forest Springs, LLC is required to determine if groundwater pollution can be mitigated by improving the leachfield system. The following reports are required to be submitted to the Central Valley Water Board for review and approval.

1. Beginning with the First Quarter 2020, the Discharger shall implement MRP 88-106-02 (attached) and shall monitor the wastewater and groundwater as described in the MRP. The first quarterly monitoring report is due by 1 May 2020 and quarterly and annual monitoring shall continue to be submitted until the MRP is rescinded.
2. The Discharger shall submit quarterly status reports to Central Valley Water Board detailing the repairs and/or upgrades made to the septic system, as required in the attached MRP. The reports shall also include a schedule for upcoming repairs and investigation activities. The annual reports shall include an evaluation of the nitrate as nitrogen groundwater concentration trends in relation to the repairs conducted on the leachfield system to determine if improvements to the leachfield are improving groundwater quality in the downgradient monitoring wells.

The above technical reports are required pursuant to Water Code section 13267. Failure to submit the reports, or submittal of incomplete reports, subjects the Discharger to a maximum liability of \$1,000 per day per late report.

DOCUMENT SUBMITTALS

All monitoring reports and other correspondences should be converted to searchable Portable Document Format (PDF) and submitted electronically. Documents less than 50 MB should be emailed to:

centralvalleysacramento@waterboards.ca.gov. To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or any documentation submitted to the mailing address for this office:

Facility Name: Forest Springs Mobile Home Park WWTF, Nevada County
Program: Non-15 Compliance
Order: 88-106-02
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Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to:

**Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670**

If you have any questions concerning permitting, please contact Dina Calanchini in our Waste Discharge to Land Permitting Unit at (916) 464-4740 or at dcalanchini@waterboards.ca.gov. If you have any questions concerning compliance with the monitoring requirements under Water Code 13267, please contact Guy Childs at (916) 464-4648 or at gchilds@waterboards.ca.gov.

Original signed by Robert Busby for
Patrick Pulupa
Executive Officer

Attachment: Monitoring and Reporting Program 88-106-02
cc w/attachment: Dale O'Bryan, Cranmer Engineering, Inc., Grass Valley
cc w/o attachment: Nevada County Environmental Health Department, Nevada City