

ATTACHMENT C

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2014-0817  
FOR  
GURU NANAK SOCIETY OF YUBA CITY  
GURU NANAK SIKH TEMPLE  
SUTTER COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the influent, effluent, filtration system inspection, septic tank inspection and monitoring, subsurface dispersal area, groundwater, and septic tank and sludge disposal. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this revised MRP unless and until another revised MRP is issued by the Executive Officer.

Section 13267 of the California Water Code 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.”*

Section 13268 of the California Water Code 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 and 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 Discharger owns and operates the facility that is subject to the Notice of Applicability (NOA) of Water Quality Order No. 97-10-DWQ. The reports are necessary to ensure that the Discharger complies with the NOA and water quality objectives (WQO). Pursuant to Section 13267 of the California Water Code, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

### **MONITORING WELL INSTALLATION AND REPORTING**

On 14 April 2014, the Discharger provided a *Monitoring Well Installation Workplan and Groundwater Sampling and Analysis Plan* for the installation of three shallow-interval groundwater monitoring wells around the proposed leachfield area. The workplan addressed the items listed in Section 1 of Attachment E which is attached hereto and is made part of this Order by reference.

The monitoring wells will be drilled, installed, and sampled to provide groundwater monitoring data up- and downgradient of the planned leachfield areas. Well sealing and grouting specifications must effectively seal the shallow groundwater interval from deeper water-bearing zones and follow Sutter County Environmental Health Division permitting requirements. All groundwater monitoring wells shall be designed to yield samples representative of the upper-most portion of the first saturated groundwater interval. The *Sampling and Analysis Plan* that described sampling techniques designed to ensure that representative samples of sufficient volume will be obtained and analyzed for all monitoring wells, as required by Paragraph G, Section 1 of Attachment E.

**By 31 December 2014**, the Discharger shall submit a *Groundwater Monitoring Well Installation Report* that describes the installation and development of groundwater monitoring wells as required by this MRP. The *Groundwater Monitoring Well Installation Report* shall be consistent with the Section 2 of Attachment E and include copies of well installation permits issued by the Sutter County Environmental Health Division.

### **SAMPLING REQUIREMENTS**

All samples shall 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, dissolved oxygen, and electrical conductivity) 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 for the presence of sludge in the second compartment of each septic tank. If sludge is encountered, then the septic tank shall be inspected as described in the table below. In addition, the first compartment of each tank shall be monitored as described below once every three years, even if no sludge is encountered in the second compartment.

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum Inspection</u>	<u>Reporting Frequency</u>
Septic tank valves, pumps, filters, and switching system <sup>1</sup>	N/A	Observation	Weekly	Quarterly
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

<sup>1</sup>: The Discharger shall visually inspect the tanks for signs of damages, leakage, or deterioration

The Discharger shall retain records of each inspection, tank location, noting the date and measured readings and calculations. The Discharger shall also record when cleaning is required, the condition of the tank(s), 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.

### FILTRATION SYSTEM INSPECTION

The Discharger shall inspect the wastewater filtration system at least monthly and test, adjust, repair, or replace system components as needed to ensure continuous optimal function. The facility inspection and repair information shall include the name of the person conducting the inspection, date of inspection, problems identified, repairs recommended, repairs completed, and dates of completion. At a minimum, the inspection shall include the following elements:

<u>System Component</u>	<u>Inspection Frequency</u>	<u>Reporting Frequency</u>
Filter system valves, pumps, switches	Monthly	Quarterly
Effluent pumps and switching system	Monthly	Quarterly
Flow metering system function	Monthly	Quarterly
Visible piping systems and control valves	Monthly	Quarterly

### EFFLUENT MONITORING

The Discharger shall monitor effluent flow to each leachfield as follows:

<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 Observation	Weekly	Quarterly
Flow to each leachfield section	gpd	Calculated <sup>1</sup>	Weekly	Quarterly

<sup>1</sup>. Per dose counter.

### LEACHFIELD MONITORING

The Discharger shall conduct a visual inspection of the leachfield **biweekly**, and the results shall be included in the quarterly 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, the Discharger shall report in writing within 48 hours of discovery, specifying the nature and extent of the problem, and the actions that have been or will be taken to correct the problem and prevent public contact and discharge outside of the leachfield area. 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	Quarterly
Leachline Riser Inspection <sup>2</sup>	Inches	Measurement	Monthly	Quarterly
Acreage Applied <sup>3</sup>	Acres	Calculated	Monthly	Quarterly

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

<sup>2</sup>. 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 the active lateral(s). In addition, the Discharger shall record when lateral distribution lines are switched.

<sup>3</sup>. Land application areas shall be identified and a map shall be included identifying all land application areas.

The inspection report shall document the dates of discharge to each dispersal area and include any findings of surfacing effluent. Records of inspection shall be stored onsite and available for review during inspections.

### GROUNDWATER MONITORING

The proposed groundwater monitoring wells identified in the groundwater monitoring well network in the NOA, as well as any wells installed thereafter, shall be sampled and analyzed according to the schedule below. Prior to sampling, the groundwater elevations shall be measured and the wells shall be purged at least three well volumes until temperature, pH, and electrical conductivity have stabilized. Depth to groundwater shall be measured to the

nearest 0.01 feet. Samples shall be collected using standard 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</u>
Depth to Groundwater	0.01 feet	Measurement	Annual <sup>2</sup>
Groundwater Elevation <sup>1</sup>	0.01 feet	Calculated	Annual <sup>2</sup>
Gradient	feet/feet	Calculated	Annual <sup>2</sup>
Gradient Direction	Degrees	Calculated	Annual <sup>2</sup>
Total Dissolved Solids	mg/L	Grab	Annual <sup>2</sup>
Electric Conductivity	µmhos/cm	Grab	Annual <sup>2</sup>
Total Nitrogen	mg/L	Grab	Annual <sup>2</sup>
Nitrate as Nitrogen	mg/L	Grab	Annual <sup>2</sup>
pH	pH units	Grab	Annual <sup>2</sup>
Chloride	mg/L	Grab	Annual <sup>2</sup>
Total Coliform Organisms	MPN/100 mL	Grab	Annual <sup>2</sup>

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

<sup>2</sup> Annual samples shall be obtained during the third quarter between the months of July and September.

### **SEPTIC AND SLUDGE DISPOSAL MONITORING**

The Discharger shall keep records regarding sludge generated at the treatment plant, septage removed from the primary septic tanks, the quantity of sludge removed for disposal, and steps taken to prevent nuisance conditions. Records shall be stored onsite and available for review during inspections, and shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the facility, the disposal facility name and address, and all analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

### **REPORTING**

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, sludge, etc.), constituents, 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 to the Central Valley Water Board.

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 and stamped by the registered professional.

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.

#### **A. Quarterly Monitoring Report**

Quarterly monitoring reports shall be submitted to the Central Valley Water Board by the **1st day of the second month after the quarter** (i.e. the January-March quarter is due by May 1<sup>st</sup>). The reports shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the quarterly monitoring reports shall include:

1. Results of influent monitoring, effluent monitoring, filtration system inspection, septic tank inspection and monitoring, and subsurface dispersal area monitoring;
2. For each event where total influent flows exceed 15,000 gpd, documentation certifying that access to facility restrooms was restricted and that portable restroom facilities and temporary wastewater storage was made available on-site and used for the duration of the daily event.
3. A comparison of monitoring data to the discharge specifications, disclosure of any violations of the General Order, and an explanation of any violation of those requirements. Data shall be presented in tabular format;
4. Copies of periodic calibration logs for all field test instruments;
5. If requested by staff, copies of laboratory analytical report(s);
6. Any septic tank pumping activity;

#### **B. Annual Report**

The annual report shall be submitted to the Central Valley Water Board by **1 February** each year. The annual report shall include the following:

1. The results of annual groundwater monitoring;
2. The results from annual monitoring of the septic tanks;
3. Tabular and graphical summaries of all data collected during the year;
4. An evaluation of the performance of the leachfields, including discussion of capacity, effluent distribution, leachfield erosion, and a forecast of the flows anticipated in the next year;
7. Tabular and graphical summaries of all data collected during the year.
8. 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.

9. An evaluation of the groundwater quality beneath the subsurface dispersal areas.
10. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
11. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
12. The name and contact information for the certified wastewater operator responsible for operation, maintenance, and system monitoring.
13. A summary of information on the disposal of septic and sludge monitoring.
14. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program;
15. Results of the annual groundwater monitoring including the following:
  - a. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be detailed to verify compliance with the NOA and General Order, 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;
  - b. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
  - c. 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);
  - d. Summary data tables of historical and current water table elevations and analytical results;
  - e. 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
  - f. Copies of laboratory analytical report(s) for groundwater monitoring.

A letter transmitting the self-monitoring reports shall accompany each report. The 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 the following penalty

of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.2.d:

*"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 the 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."*

The Discharger shall implement the above revised monitoring program on the first day of the month following adoption of this Order.

Ordered by: Original signed by Andrew Altevogt for:  
PAMELA C. CREEDON  
Executive Officer

14 May 2014

(Date)

SAA: 05/14/2014