

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2009- __

FOR
SYSCO FOOD SERVICES OF SACRAMENTO, INC.
WASTEWATER TREATMENT FACILITY
SUTTER COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the wastewater treatment facility (WWTF) influent, effluent, wastewater treatment and storage ponds, percolation/evaporation (P/E) ponds, groundwater, and biosolids disposal. 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 Water Board staff shall approve specific sampling locations prior to any sampling activities. 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 sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to test dissolved oxygen, pH, and electrical conductivity) may be used provided that:

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 submitted as described in the "Reporting" section of this MRP.

INFLUENT MONITORING

The Discharger shall monitor influent wastewater in accordance with the following. Samples shall be representative of the influent to the septic tank (the sample may be collected from the sewage lift station). Grab samples are considered representative of the influent. Influent monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow	gpd	Flow Meter	Daily	Monthly
BOD	mg/L	Grab	Monthly	Monthly
Total Suspended Solids	mg/L	Grab	Monthly	Monthly
Electrical Conductivity	umhos/cm	Grab	Monthly	Monthly

BOD denotes biochemical oxygen demand.

EFFLUENT MONITORING

The Discharger shall monitor effluent wastewater in accordance with the following. Samples shall be representative of the effluent discharged to the percolation/evaporation ponds. Grab samples are considered representative. Effluent monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
BOD	mg/L	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Electrical Conductivity	umhos/cm	Grab	Monthly	Monthly
Total Suspended Solids	mg/L	Grab	Monthly	Monthly
Sodium	mg/L	Grab	Monthly	Monthly
Chloride	mg/L	Grab	Monthly	Monthly
pH	Std.	Grab	Monthly	Monthly
Total Nitrogen (as N)	mg/L	Grab	Monthly	Monthly
TPH - Oil & Grease	mg/L	Grab	Monthly	Monthly
TPH - Diesel	mg/L	Grab	Monthly	Monthly
TPH - Gasoline	mg/L	Grab	Monthly	Monthly
BTEX	mg/L	Grab	Monthly	Monthly

Simple and flow weighted averages of TDS, EC, and Total Nitrogen must be reported as described in MRP Section A.2 and C.3.

BOD denotes Biochemical Oxygen Demand. TPH denotes Total Petroleum Hydrocarbons. BTEX denotes benzene, toluene, ethyl benzene, and xylenes. TSS shall be determined using a Whatman glass fiber filter with a nominal pore size of about 1.58 um, or equivalent. Total Nitrogen is the sum of all forms of nitrogen. Silica gel cleanup may be used in the TPH analyses.

POND MONITORING

The Discharger shall monitor all ponds at the wastewater system in accordance with the following. Samples shall be collected from permanent monitoring locations that will provide samples representative of the wastewater in each pond. Freeboard shall be measured vertically from the water surface to the lowest elevation of the pond berm, and shall be measured to the nearest 0.10 feet. Pond monitoring shall include, at a minimum, the following:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Freeboard	0.1 feet	Measurement	Weekly	Monthly
Pond berm condition ¹	--	Observation	Weekly	Monthly
Burrowing Animals ²	--	Observation	Weekly	Monthly
Dissolved Oxygen ³	mg/L	Grab	Monthly	Monthly

1. Pond berm condition shall include observations of all the wastewater treatment and percolation/evaporation ponds as well as the stormwater pond sidewalls.

2. The presence or absence of burrowing animals or animal burrows shall be noted.

3. Samples shall be collected opposite each pond inlet at a depth of one foot between 0700 and 0900 hours.

GROUNDWATER MONITORING

Effective immediately, the Discharger shall establish a quarterly sampling schedule for groundwater monitoring, with samples obtained approximately every three months.

These monitoring requirements apply to all the existing monitoring wells, as well as those constructed after issuance of this MRP. The Discharge may propose changes to the monitoring well network in the Groundwater Monitoring Well Workplan, required by the WDRs.

Prior to well purging, groundwater elevations shall be measured. 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. The monitoring wells shall be purged of at least three well volumes or until temperature, pH, and electrical conductivity have stabilized. Samples shall be collected and analyzed 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 Frequency</u>	<u>Reporting Frequency</u>
Depth to Groundwater	0.01 feet	Measurement	Quarterly	Quarterly
Groundwater Elevation	0.01 feet	Calculated	Quarterly	Quarterly
Gradient	feet/feet	Calculated	Quarterly	Quarterly
Gradient Direction	Degrees	Calculated	Quarterly	Quarterly
pH	pH units	Grab	Quarterly	Quarterly
Electrical Conductivity	umhos/cm	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms ¹	MPN/100 ml	Grab	Quarterly	Quarterly
Standard Minerals ²	mg/L	Grab	Annually	Annually

1. Using a minimum of 15 tubes or three dilutions.

2. Standard Minerals shall include, at a minimum, the following elements/compounds: boron, bromide, calcium, chloride, fluoride, magnesium, phosphate, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness as CaCO₃.

BIOSOLIDS MONITORING

The Discharger shall keep records regarding biosolids generated by the treatment processes, including any analytical test results; the quantity of biosolids removed for disposal; the quantity of biosolids removed from the ponds and disposed. Records shall be stored onsite and available for review during inspections.

If biosolids are transported off-site for disposal, then the Discharger shall include records identifying the hauling company, the amount of biosolids transported, the date removed from the facility, the disposal facility name and address, and copies of 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., influent, effluent, 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 to the Regional Water Board.

A. Monthly Monitoring Reports

Monthly Monitoring Reports shall be submitted to the Regional Water Board by the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). Each report shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the monthly monitoring reports shall include:

1. Influent monitoring, effluent monitoring, and pond monitoring.
2. A comparison of monitoring data to the discharge specifications and effluent limitations, disclosure of any violations of the WDRs, and an explanation of any violation of those requirements. Data shall be presented in tabular format. Average concentrations of effluent shall be calculated for TDS, EC, and total nitrogen. The calculations shall include the following:
 - a. On a month to month basis beginning each year in January the simple arithmetic average value shall be calculated. (The sum of all the concentration data shall be divided by the number of months data was collected). If for any reason, more than one data point is available for any month, that data shall be averaged before use in the running average calculation. No data shall be excluded from the calculation without a written explanation from the analytical laboratory.
3. Copies of current calibration logs for all field test instruments.
4. Copies of laboratory analytical report(s).
5. A summary pond condition inspection report that includes dates of inspection, problems identified, repairs recommended, repairs completed, and dates of completion.

B. Quarterly Monitoring Reports

The Discharger shall submit quarterly monitoring reports to the Regional Water Board by the **1st day of the second month after the quarter** (i.e. the January-March quarter is due by May 1st) each year.

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 Professional Engineer or Geologist and signed by the registered professional.

The Quarterly Monitoring Report shall include the following:

1. Results of groundwater monitoring.
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 WDRs, 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, 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.
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 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.
8. Copies of laboratory analytical report(s) for groundwater monitoring.

C. Annual Report

An Annual Report shall be prepared as the fourth quarter monitoring report. The Annual Report shall include all monitoring data required in the monthly/quarterly schedule. The Annual Report shall be submitted to the Regional Water 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 quarterly monitoring report for the last quarter of the year.
2. Analytical results for all water supply and other annual monitoring.
3. Calculation of the flow weighted average for TDS, EC, and total nitrogen for the calendar year using the following formulas. The data shall be presented in a table for review.

Flow Wt. Average = the sum of monthly contributions from each month

$$\text{Monthly Contribution} = (\text{Concentration}_{mo})(\text{Flow}_{mo})/(\text{Flow}_{yr})$$

4. If requested by staff, tabular and graphical summaries of all data collected during the year.
5. An evaluation of the performance of the WWTF, including discussion of capacity issues, infiltration and inflow (I/I) rates, nuisance conditions, and a forecast of the flows anticipated in the next year.
6. A statement that addresses the dual media filtration status and how many times the filters were replaced during the calendar year.
7. 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.
8. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
9. A summary of information on the disposal of biosolids as described in the "Biosolids Monitoring" section.
10. A summary of the type and quantity of detergents used at the truck wash facility. The description shall include a Material Safety Data Sheet (or an Internet address where it is provided), a statement on the biodegradation of the detergent, and an estimate of the amount of detergent used (can be from purchasing records).

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 penalty of perjury statement by the Discharger, or the Discharger's authorized agents, as described in the Standard Provisions General Reporting Requirements Section B.3.

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

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

Date