

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2009-0825  
FOR  
SACRAMENTO MUNICIPAL UTILITY DISTRICT  
RANCHO SECO NUCLEAR GENERATING STATION  
WASTEWATER TREATMENT FACILITY  
SACRAMENTO COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the package plant, artificial wetlands, ponds, spray field, and sludge 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.

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 WDRs cited herein, the reports are necessary to ensure that Sacramento Municipal Utility District complies with the WDRs. Pursuant to Section 13267 of the California Water Code, the Discharger shall implement this MRP and shall 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 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 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.

### PACKAGE PLANT EFFLUENT MONITORING

Samples of effluent shall be taken at or prior to the point of discharge from the package treatment plant to the artificial wetlands pond. At a minimum, effluent monitoring shall consist of the following:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Effluent Flow	gpd	Meter	Weekly	Monthly
BOD <sub>5</sub>	mg/L	Grab	Monthly	Monthly
Total Nitrogen	mg/L	Grab	Monthly	Monthly
Electrical Conductivity	umhos/cm	Grab	Monthly	Monthly

<sup>1</sup> At a minimum, the total flow shall be measured weekly to calculate the average daily flow for the week.

### ARTIFICIAL WETLANDS AND POND MONITORING

The Discharger shall monitor all ponds at the WWTF, including the artificial wetlands, in accordance with the following. Samples shall be collected from designated 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	Staff Gauge Observation	Weekly	Monthly
Dissolved Oxygen <sup>1</sup>	mg/L	Grab	Weekly	Monthly

<sup>1</sup> Samples shall be collected opposite each pond inlet at a depth of one foot between 0700 and 0900 hours.

### SPRAY FIELD MONITORING

Inspections of the spray fields shall be performed weekly when it is in use. The ground in the spray field shall be assessed to determine the presence of saturation or effluent on the ground surface. The inspection report shall document the dates of discharge to the spray field. Evidence of erosion, field saturation, ponding, accumulation of solids, soil clogging, presence of nuisance such as odors, vectors or insects, and other relevant field conditions shall be observed and recorded. The notations shall also document any corrective actions taken with respect to observations made. A copy of the entries made in the log during each month and any analytical data shall be submitted along with monthly monitoring reports.

### PACKAGE TREATMENT PLANT INSPECTIONS

The Discharger shall inspect the package treatment plant at least weekly 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 inspections, dates of inspection, problems identified, repairs recommended, repairs completed, and dates of completion. At a minimum, the inspection shall include the following elements:

<u>Item</u>	<u>Inspection Frequency</u>	<u>Reporting Frequency</u>
Wet well pumping station, pump, and switching system	Weekly	Monthly
Effluent sump pump and switching system	Weekly	Monthly
Package plant blowers, pumps, switches	Weekly	Monthly
Flow metering system function	Weekly	Monthly
Visible piping systems and control valves	Weekly	Monthly

### SLUDGE DISPOSAL MONITORING

The Discharger shall keep records regarding sludge generated by the package treatment plant, including any analytical test results; the quantity of sludge removed from the plant and removed from the site 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 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., effluent, pond, 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.

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.

### A. Monthly Monitoring Reports

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

1. Results of the following:
  - a. Wastewater treatment system effluent monitoring;
  - b. Artificial wetlands and pond monitoring;
  - c. Spray field monitoring; and
  - d. Package treatment plant inspections.
2. A comparison of monitoring data to the discharge specifications, disclosure of any violations of the WDRs, and an explanation of any violation of those requirements. Data shall be presented in tabular format.
3. Copies of current calibration logs for all field test instruments.
4. If requested by staff, copies of laboratory analytical report(s).

### B. Annual Report

An Annual Report shall be prepared as the twelfth monthly monitoring report. The Annual Report shall include all monitoring data required in the monthly, and shall be submitted to the Regional Water Board by **1 February** each year. In addition to the data normally presented in a monthly monitoring report, the Annual Report shall include the following:

1. Tabular and graphical summaries of all data collected during the year.

2. An evaluation of the performance of the WWTF, including discussion of capacity issues, nuisance conditions, system problems, and a forecast of the flows anticipated in the next year.
3. 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.
4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
5. The name and contact information for the certified wastewater operator responsible for operation, maintenance, and system 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 and shall be signed by the Discharger or the Discharger's authorized agent:

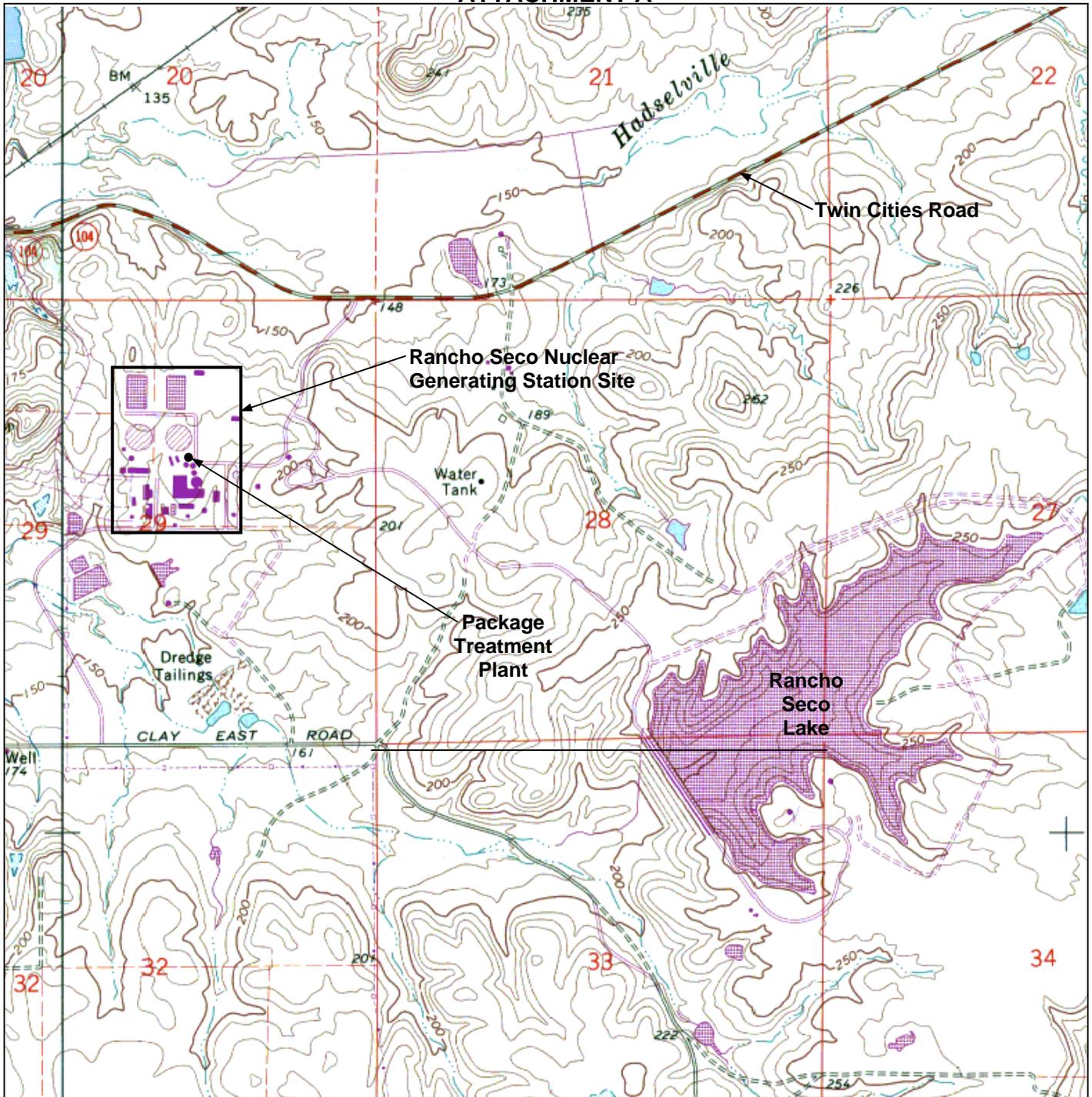
*"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, 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 monitoring program as of the date of this Order.

Ordered by: \_\_\_\_\_ original signed by \_\_\_\_\_  
PAMELA C. CREEDON, Executive Officer

\_\_\_\_\_  
16 June 2009  
Date

**ATTACHMENT A**



Drawing Reference:  
USGS 7.5 min. quad  
map, Herald, CA

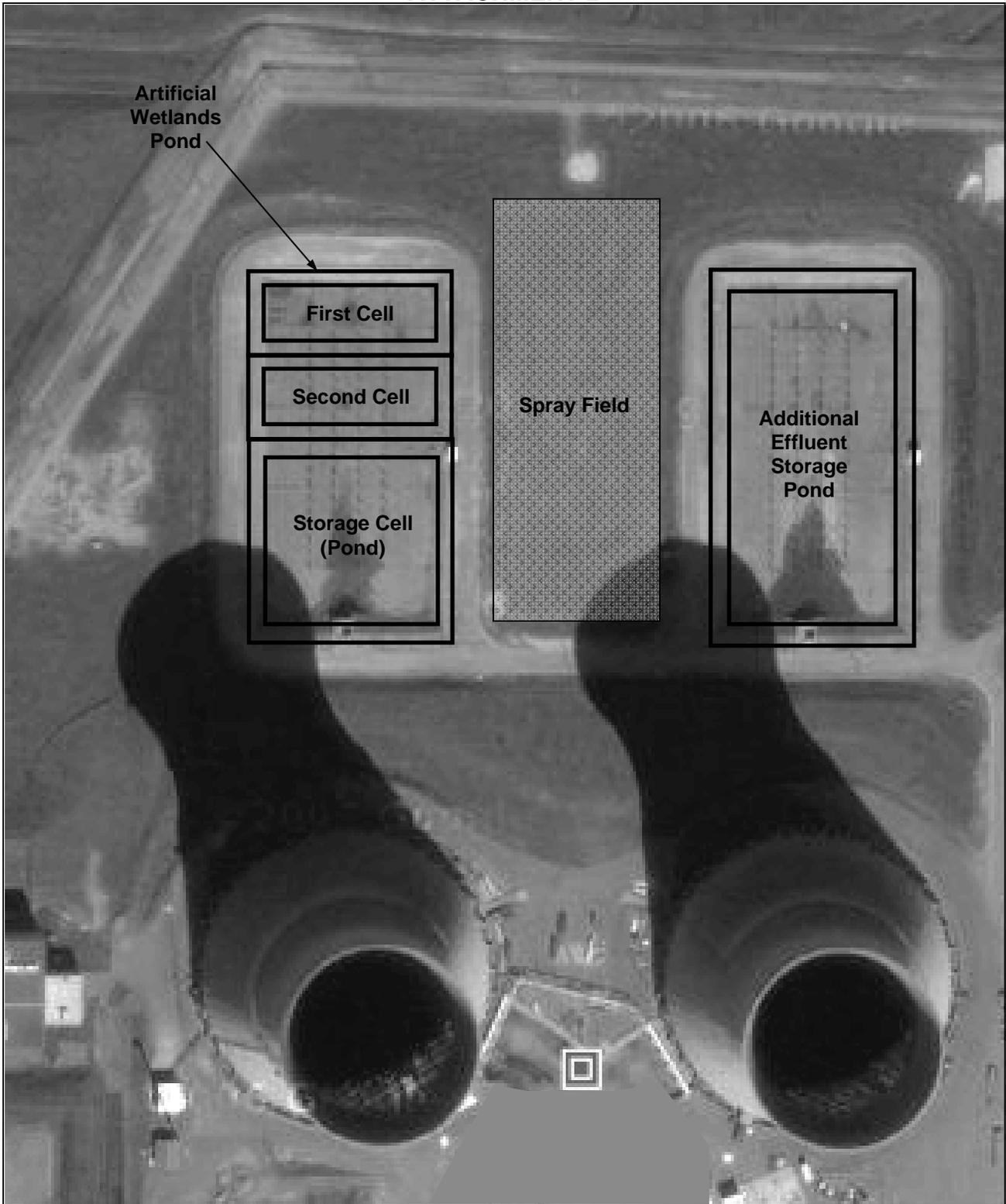
**SITE LOCATION MAP**  
SACRAMENTO MUNICIPAL UTILITY DISTRICT  
RANCHO SECO NUCLEAR GENERATING STATION  
WASTEWATER TREATMENT FACILITY  
SACRAMENTO COUNTY

ORDER NO. 97-10-DWQ-R5019



Approx. Scale:  
1" = 1/3 mile

**ATTACHMENT B**



Drawing Reference:  
Google Maps

**SITE PLAN**

SACRAMENTO MUNICIPAL UTILITY DISTRICT  
RANCHO SECO NUCLEAR GENERATING  
STATION WASTEWATER TREATMENT FACILITY  
SACRAMENTO COUNTY

ORDER NO. 97-10-DWQ-R5019



Approx. Scale:  
1" = 150'