



#### **Central Valley Regional Water Quality Control Board**

2 December 2014

WDID: 5A250102001

Ron Sherer, District Manager California Pines Community Services District HCR4 Box 43002 Alturas. CA 96101

# NOTICE OF APPLICABILITY (NOA), WATER QUALITY ORDER 2014-0153-DWQ-R5176, CALIFORNIA PINES COMMUNITY SERVICES DISTRICT, MODOC COUNTY

In February 2014 the California Pines Community Services District (hereafter "Discharger") responded with information pertaining to the Central Valley Regional Water Board (Central Valley Water Board) staff's request for updated information for the domestic wastewater treatment and disposal system at their facility in Modoc County.

Based on the information provided, the facility treats and disposes of less than 100,000 gallons of wastewater per day, and is therefore eligible for coverage under the general and specific conditions of State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). This letter serves as formal notice that the General Order is applicable to your facility and the wastewater discharge described below. You are hereby assigned General Order 2014-0153-DWQ-R5176 for your facility.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which describes mandatory discharge and monitoring requirements. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment system sections of the General Order and the attached *Monitoring and Reporting Program* (MRP). This MRP was developed after consideration of your waste characterization and site conditions described in the attached *Technical Memorandum*.

#### REGULATORY BACKGROUND

Waste Discharge Requirements (WDRs) 94-047 were adopted for this facility by the Central Valley Water Board on 25 February 1994. The existing MRP requires monthly reporting of wastewater flow, dissolved oxygen, and pond water depth.

### **DISCHARGE DESCRIPTION**

The California Pines Community Services District operates a wastewater collection and treatment facility located southwest of Alturas, near State Highway 299 in Section 10, Township 41 North, Range 11 East, MDB&M in Modoc County. The wastewater treatment system is comprised of a collection system with lift stations and five evaporation/percolation ponds. The location is shown in an attachment enclosed with this letter.

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

#### **FACILITY SPECIFIC REQUIREMENTS**

The Discharger will maintain exclusive control over the discharge, and shall comply with the terms and conditions of this NOA and the General Order 2014-0153-DWQ-R5176, with all attachments. Additionally the General Order states in Section B.1.L that the discharger shall comply with the setbacks as described in Table 3. This table summarizes different setback requirements for wastewater system equipment, activities, land application areas, and storage and/or treatment ponds from sensitive receptors and property lines where applicable. The Discharger shall comply with the following applicable setback requirements as summarized in the following table.

Site	Specific Appli	cable Setb	ack Requirements		
Equipment or Activity	Domestic Well	Flowing Stream	Ephemeral Stream Drainage	Property Line	Lake or Reservoir
Wastewater Storage and/or T	reatment Ponds	,			
Impoundment (undisinfected secondary recycled water)	150 feet a	NA	NA	50 feet	NA

Failure to comply with the requirements in the documents could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, MRPs, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyredding@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 364 Knollcrest Drive, Suite 205, Redding, CA 96002. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office: Program: Non-15, WDID: 5A250102001, Facility Name: CalPines CSD, Order: 2014-0153-DWQ-R5176

Please note that WDRs Order No. 94-047 is proposed to be rescinded at the 4/5 December 2014 meeting of the Central Valley Water Board. Upon rescission of your individual WDRs, coverage for your facility under the General Order shall become applicable subject to this Notice of Applicability.

If you have any questions regarding submitting an updated report of waste discharge, making changes to your permitted operations, compliance or enforcement please contact George Low at (530) 224-3208, George.Low@waterboards.ca.gov, or the footer address.

for Pamela C. Creedon

**Executive Officer** 

SJR: lm

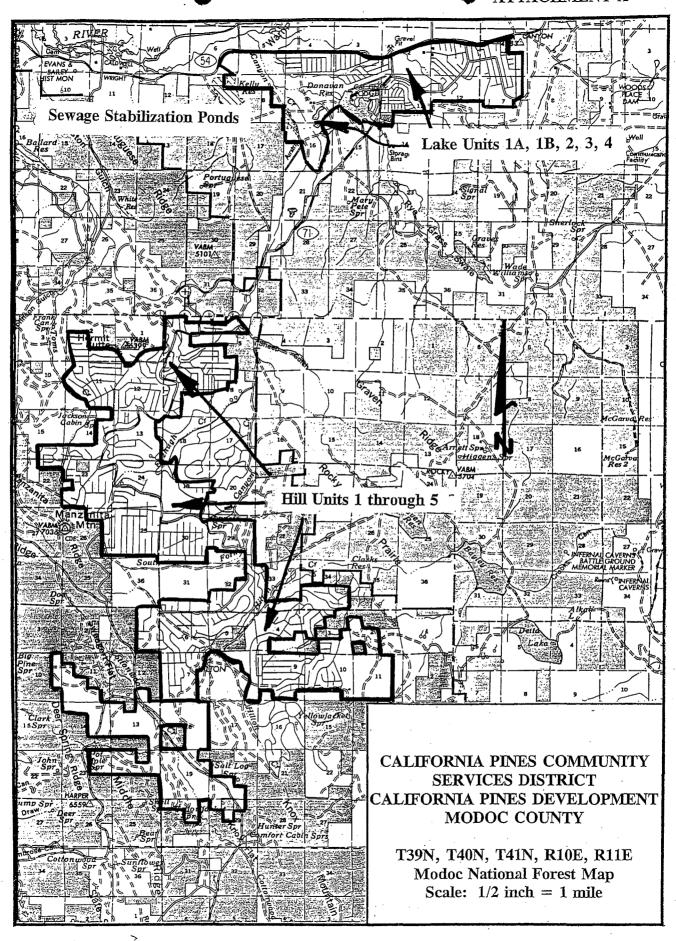
Attachment: California Pines Community Services District Facility Location Map

**Technical Memorandum** 

Monitoring and Reporting Program

General Order No. 2014-0153-DWQ -R5176

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# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5176

#### FOR

# CALIFORNIA PINES COMMUNITY SERVICES DISTRICT MODOC COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. 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 (Regional Water Board) Executive Officer.

The State Water Resources Control Board (State Water Board) and Regional Water Boards are transitioning to the paperless office system. In some regions, Dischargers will be directed to submit reports (both technical and monitoring reports) to the State Water Board's GeoTracker database over the Internet in portable document format (pdf). In addition, analytical data shall be uploaded to the GeoTracker database under a site-specific global identification number. Information on the GeoTracker database is provided on the Internet at:

<a href="http://www.waterboards.ca.gov/ust/electronic\_submittal/index.shtml">http://www.waterboards.ca.gov/ust/electronic\_submittal/index.shtml</a>

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 Discharger owns and operates the wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ. The reports are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to Water Code section 13267, 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 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 Regional 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 Board California 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.

#### POND SYSTEM MONITORING

#### **Influent Monitoring**

Influent samples shall be taken from a location that provides representative samples of the wastewater and flow rate. At a minimum, influent monitoring shall consist of the following:

Constituent	<u>Units</u>	Sample Type	Sample <u>Frequency</u>	Reporting Frequency
Flow Rate <sup>a</sup>	gpd	Meter	Continuous	Quarterly
gpd denotes gallons per da	•	neasured monthly to ca	alculate the average of	faily flow for the month

## Wastewater Pond Monitoring

All wastewater and treated wastewater storage ponds (lined and unlined) shall be monitored as specified below:

Constituent	<u>Units</u>	Sample Type	Sample <u>Frequency</u>	Reporting <u>Frequency</u>
Dissolved Oxygen	mg/L	Grab	Monthly	Quarterly
Freeboard	0.1 feet	Measurement	Monthly	Quarterly
Odors		Observation	Monthly	Quarterly
Berm condition		Observation	Monthly	Quarterly
mg/L denotes milligrams per	liter.			

#### 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.

#### REPORTING

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 General Order and NOA 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.

During the life of this General Order, the State Water Board or Regional Water Board may require the Discharger to electronically submit monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) program Internet web site or alternative database. Electronic submittal procedures will be provided when directed to begin electronic submittals. Until directed to electronically submit monitoring reports, the Discharger shall submit hard copy monitoring reports.

# A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Regional Water Board on the **first day of the second month after the quarter ends** (e.g. the January-March Quarterly Report is due by May 1st). 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 all required monitoring.

- 2. A comparison of monitoring data to the discharge specifications, applicable effluent limits, disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. (Data shall be presented in tabular format.)
- 3. If requested by staff, copies of laboratory analytical report(s) and chain of custody form(s).

# **B. Annual Report**

Annual Reports shall be submitted to the Regional Water Board by **March 1st 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 facility, including discussion of capacity issues, nuisance conditions, system problems, and a forecast of the flows anticipated in the next year. A flow rate evaluation as described in the General Order (Provision E.2.c) shall also be submitted.
- 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 NOA and/or General Order.
- 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 wastewater operator responsible for operation, maintenance, and system monitoring.

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 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 MRP.

Ordered by:

PAMELA C. CREEDON, Executive Officer

<u> Deenko 2, 2014</u> (Date)

# CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD GENERAL ORDER 2014-0153-DWQ MONITORING AND REPORTING PROGRAM

Month/Year: _	
WDID: 5	California Pines CSD 5A250102001 Collection system, lift station, evaporation/percolation ponds quency: Monthly
	Flow (gpd) :
	Dissolved Oxygen:
Pond Freebo	ard Greater Than 2 ft (Y/N)?:
*Pond Condition	ons:
*Cite condition do	
Comments:	ption of any objectionable odors, burrowing animal activity, erosion, weeds, and algae.
in this document a for obtaining the i	nalty of law that I have personally examined and am familiar with the information submitted and all attachments and that, based on my inquiry of those individuals immediately responsible information, I believe that the information is true, accurate, and complete. I am aware that it penalties for submitting false information, including the possibility of fine and imprisonment."
Signed	Date
Scan to PDF fi	le and email to: centralvalleyredding@waterboards.ca.gov





## **Central Valley Regional Water Quality Control Board**

#### TECHNICAL MEMORANDUM

TO: Bryan Smith, PE

FROM:

George Low, PG

Supervising Water Resource

Senior Engineering Geologist

**Control Engineer** 

Clint Snyder, PG

Assistance Executive Officer

DATE: 2 December 2014

SIGNATURE:

SUBJECT: REVIEW OF NITRATE AND SETBACK COMDITIONS FOR CALIFORNIA PINES COMMUNITY SERVICES DISTRICT, MODOC COUNTY

Staff has reviewed the case file and a 15 November 2013 Inspection Report for California Pines Community Services District. The Report assesses the general condition of the wastewater evaporation/percolation ponds, and an inspection of all lift station and manholes was also completed during the site visit. The Discharger has kept adequate maintenance documentation and all treatment and collection infrastructure appears in good order. The first wastewater treatment pond is aerated and dissolved oxygen levels are monitored. The flow then proceeds to four more evaporation/percolation ponds. The original permitted operational process of releasing final effluent for pasture flood irrigation is no longer performed and the infrastructure to do this has been made inoperable.

The wastewater system has intermittently been in violation of their WDR Order No. 94-047 because the WDR set a dry weather wastewater flow limit at 5,000 gpd, with reporting of additional build-out construction required. In the 20 years since the WDR was approved, average dry weather flows of 20,000 gallons are not uncommon; therefore, at the request of this agency the CalPines CSD had a water balance and facility treatment capacity estimate prepared by a registered civil engineer. The maximum flow estimated for the existing design of the treatment plant is 48,000 gallons per day, and I concur with this estimate given the renovated pond berms that increased storage capacity and storm drain separations that reduced inflow to the system.

## **Potential Threats to Water Quality**

The wastewater treatment system is located west of the main community development of CalPines, greater than 200 feet from the development property line and fence. The closest potable water well is greater than 1,200 feet from the wastewater ponds, and the closest well has a static water depth of 30 feet from the top of the well casing. Depth to

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

groundwater directly under the ponds is unknown, but 30 feet appears to be a valid assumption. The ponds are designed as evaporation/percolation disposal; however, an engineering report submitted to the agency in 1985 by James Arden, PE describes the ponds as built from "clayey soil" with a permeability estimate of "...6 ft/year for lagoon bottoms and berm materials". This percolation rate (6 x 10^-6 cm/s) is well within the range of wastewater treatment ponds and is nearing permeability design requirements of strictly evaporative ponds. Completion of the Nitrate Checklist in Attachment 1 of Order 2014-0153-DWQ indicates the following flow and rationale:

A1 Exceed 20,000 gpd? Yes.

Wastewater flow generally less than 35,000 gpd.

A2 Shallow Groundwater? No.

The percolation rate compared to Table 5 is very low and the ponds are primarily designed and used as evaporation ponds. Estimated water depth below the ponds is 30 feet.

A3 Excessive Perc Rate/Frac, Env.? No.

The pond area is primarily Buntingville clay loam (Web Soil Survey), and the pond berms and bottoms have an estimated percolation rate of 6 x 10^-6 cm/s.

A4 Exceed domestic wastewater strength? No.

The last wastewater test performed other than monthly sampling was in 2011. These results indicate the CalPines wastewater is within expected standards of domestic wastewater (pH 6.5; TSS 41 mg/L; SC 141mS; O&G 4.9 mg/L).

A5 Nitrogen removal may be required? No.

No domestic well is in the vicinity, the percolation rate is very low, the wastewater is typical of domestic waste suitable for regulation under the General Order 2014-0153-DWQ.

Conclusion: No nitrogen removal is required.

#### **Monitoring Requirements**

To protect water quality, a monitoring program similar to the existing Order should be instituted. General Order requirements would be sufficient monitor physical condition of the system (Freeboard, Odor, Rodent control, etc.). Effluent Limitation described in Table 4 are not applicable because 1) the BOD and TSS limits are only applicable to land application or subsurface disposal, and 2) Nitrate Limits are not required due to environmental and design conditions. Staff recommends the CalPines wastewater system be monitored for Freeboard, Dissolved Oxygen, and Flow to ensure the limits of the General Order are met.

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