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## Central Valley Regional Water Quality Control Board

9 December 2020

Mike Healy, Director  
Mariposa County Public Works Dept.  
4639 Ben Hur Road  
Mariposa, California 95338

**CERTIFIED MAIL**  
**7018 1830 0001 0014 8921**

**NOTICE OF APPLICABILITY (NOA), STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; MARIPOSA COUNTY PUBLIC WORKS DEPARTMENT; MARIPOSA PINES WASTEWATER TREATMENT SYSTEM; MARIPOSA COUNTY**

On 16 July 2020, Provost & Pritchard Consulting Group, on behalf of Mariposa County Public Works Department (Discharger), submitted a Report of Waste Discharge (RWD) for Mariposa Pines Wastewater Treatment Facility (Facility or WWTF). The Discharger is requesting coverage under the State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ, *General Water Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). The Report of Waste Discharge (RWD) included a completed and signed Form 200 and a technical report prepared by Maija S. Madec, a California registered civil engineer with Provost & Pritchard Consulting Group (RCE 79709).

Based on the information provided and a review of available information, the Facility treats and disposes of less than 100,000 gallons of domestic wastewater per day and is eligible for coverage under the General Order. This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described. You are hereby assigned enrollee number **2014-0153-DWQ-R5350** for your system. After Waste Discharge Requirements (WDRs) Order 97-134, has been rescinded, coverage under General Order 2014-0153-DWQ will become effective.

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

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

1685 E Street, Fresno, CA 93706 | [www.waterboards.ca.gov/centralvalley](http://www.waterboards.ca.gov/centralvalley)

treatment system sections of the General Order and the attached Monitoring and Reporting Program (MRP) No. **2014-0153-DWQ-R5350**. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

### **DISCHARGE DESCRIPTION**

Mariposa County owns and operates Mariposa Pines WWTF. The Facility is located 15 miles north east of Mariposa in Mariposa County (Section 15, Township 4 South, Range 19 East, Mount Diablo Base and Meridian). The WWTP treats domestic wastewater from 23 homes in the Mariposa Pines subdivision. The WWTF consists of an influent pump station, aeration pond, sediment pond, and a leachfield system.

### **FACILITY SPECIFIC REQUIREMENTS AND EFFLUENT LIMITATIONS**

The Discharger shall maintain exclusive control over the discharge and shall comply with the terms and conditions of this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5350.

In accordance with Section B.1 of the General Order, **the monthly average influent flow to the Facility shall not exceed 5,000 gallons per day (gpd) and the monthly average discharge to the leach field shall not exceed 4,400 gpd.** Furthermore, in accordance with Section D of the General Order, the discharge of treated wastewater to the leach field shall not exceed a **biochemical oxygen demand (BOD) monthly average concentration of 90 mg/L.**

The General Order states in Section B.1 that the Discharger shall comply with the setbacks as described in Table 3 of the General Order. This table summarizes the different set setback requirements for wastewater treatment 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 applicable requirements, as summarized in the following table.

**Table 1: Site Specific Applicable Setback Requirements**

<b>Equipment or Activity</b>	<b>Domestic Well</b>	<b>Flowing Stream</b>	<b>Ephemeral Stream Drainage</b>	<b>Property Line</b>	<b>Lake or Reservoir</b>
Septic Tank, Treatment System, and Collection System	150 ft.	50 ft	50 ft.	5 ft	200 ft
Impoundment (undisinfected secondary )	150 ft.	150 ft	150 ft.	50 ft	200 ft
Leachfield	100 ft	100 ft	50 ft	5 ft	200 ft

The Discharger shall comply with all applicable sections in the General Order, including:

1. Pond Systems requirements (Section B.5);
2. Subsurface Disposal System requirements (Section B.6);
3. Sludge/Solids/Biosolids Disposal requirements (Section B.8); and
4. Groundwater and Surface Water Limitations (Section C.1).

Provision E.1 of the General Order requires dischargers enrolled under the General Order to prepare and implement the following reports within **90 days** of the issuance of the NOA (**9 March 2021**):

- Spill Prevention and Emergency Response Plan (Provision E.1.a).
- Sampling and Analysis Plan (Provision E.1.b).
- Sludge Management Plan (Provision E.1.c).

The General Order requires that the Sludge Management Plan be submitted to the Central Valley Water Board within **90 days of the issuance of the NOA**. A copy of the Spill Prevention and Emergency Response Plan and the Sampling and Analysis Plan shall be maintained at the treatment facility and shall be presented to the Regional Water Board staff upon request.

As stated in Section E.2.w., in the event any change in control or ownership of the Facility or wastewater disposal areas, the Discharger must notify the succeeding owner or operator of the existence of this General Order by letter, a copy of which shall be immediately forwarded to the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) Executive Officer.

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. **2014-0153-DWQ-R5350** 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 Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting (i.e., Salt and Nitrate Control Programs) as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (**CV-SALTS**) initiative. These Basin Plan amendments became effective on 17 January 2020. Further details of the Salt and Nitrate Control Programs are discussed in the enclosed memorandum. For more information regarding the Salt and Nitrate Control Program, you are encouraged to go to the [CV-SALTS Info Webpage](https://www.cvsalinity.org/public-info) (<https://www.cvsalinity.org/public-info>).

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.

All regulatory documents, 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: [centralvalleyfresno@waterboards.ca.gov](mailto:centralvalleyfresno@waterboards.ca.gov). Documents that are 50MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. 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,  
**Place ID:** 239543,  
**Facility Name:** Mariposa Pines WWTF,  
**Order:** 2014-0153-DWQ-R5350

All documents, including responses to inspections and written notifications, submitted to comply with this NOA shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Russell Walls. Mr. Walls can be reached at (559) 488-4392 or [Russell.Walls@waterboards.ca.gov](mailto:Russell.Walls@waterboards.ca.gov). Questions regarding the permitting aspects of the NOA, and notification for termination of coverage under the Small Domestic General Order, shall be directed, via the paperless office system, to the WDR Permitting Unit, attention Jeffrey Pyle. Mr. Pyle can be reached at (559) 445-5145 or [Jeffrey.Pyle@waterboards.ca.gov](mailto:Jeffrey.Pyle@waterboards.ca.gov).

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. [Copies of the law and regulations applicable to filing petitions](#) may be found on the internet or will be provided upon request.

([http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)).

In order to conserve paper and reduce mailing costs, a paper copy of the General Order has been sent only to the Discharger. Others are advised that the [General Order](#) is available on the State Water Board's website:

([http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2014/wqo2014\\_0153\\_dwq.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf)).

WDRs Order 97-134 is proposed to be rescinded at the February 2021 meeting of the Central Valley Water Board. Upon rescission of your individual WDRs, coverage for your Facility under the General Order shall become applicable under this Notice of Applicability.

If you have any questions regarding this matter, please contact Alex Mushegan by phone at (559) 488-4397 or by email at [Alexander.Mushegan@waterboards.ca.gov](mailto:Alexander.Mushegan@waterboards.ca.gov).

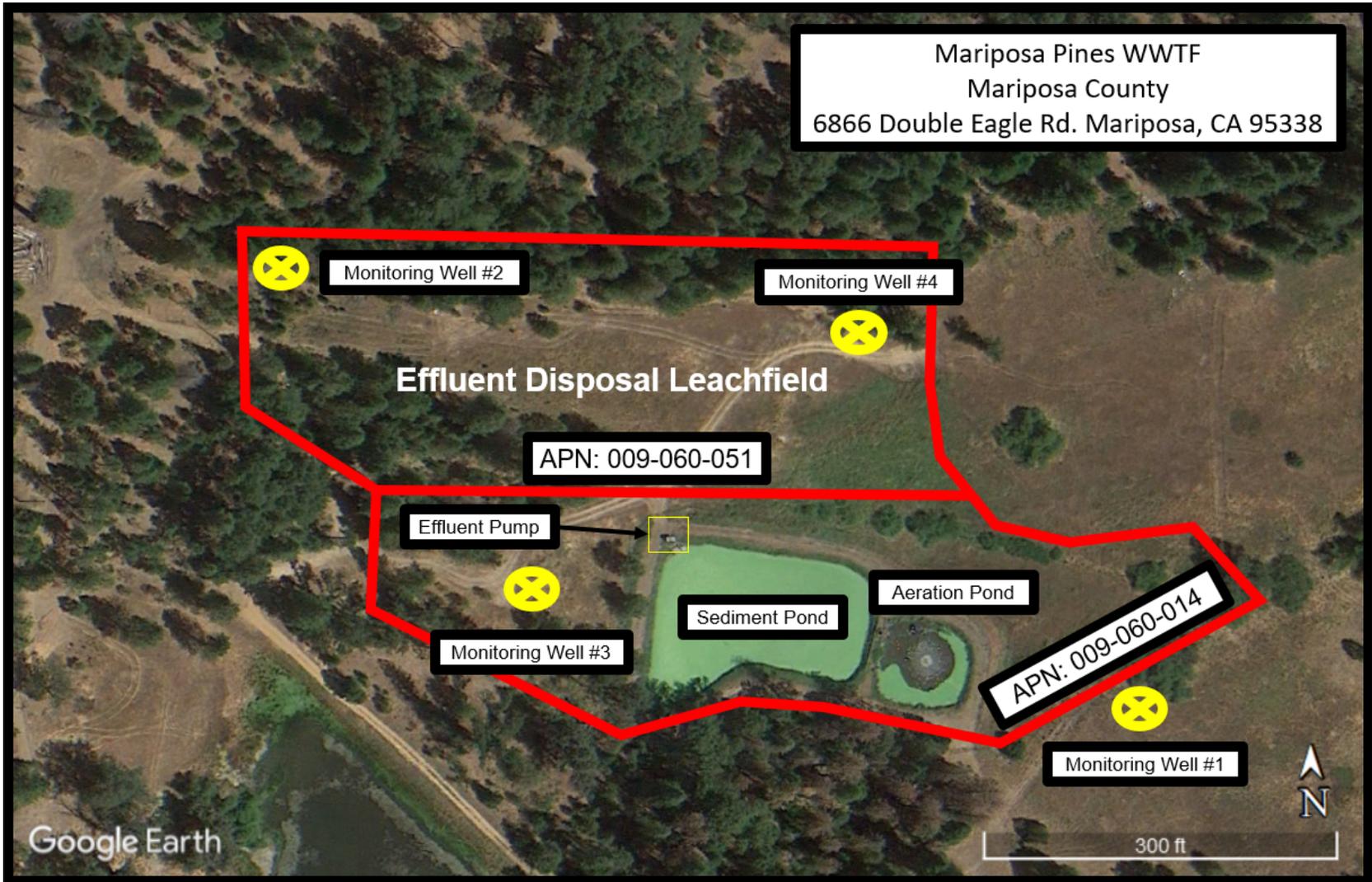
*Original Signed by Clay L. Rodgers for:*

Patrick Pulupa  
Executive Officer

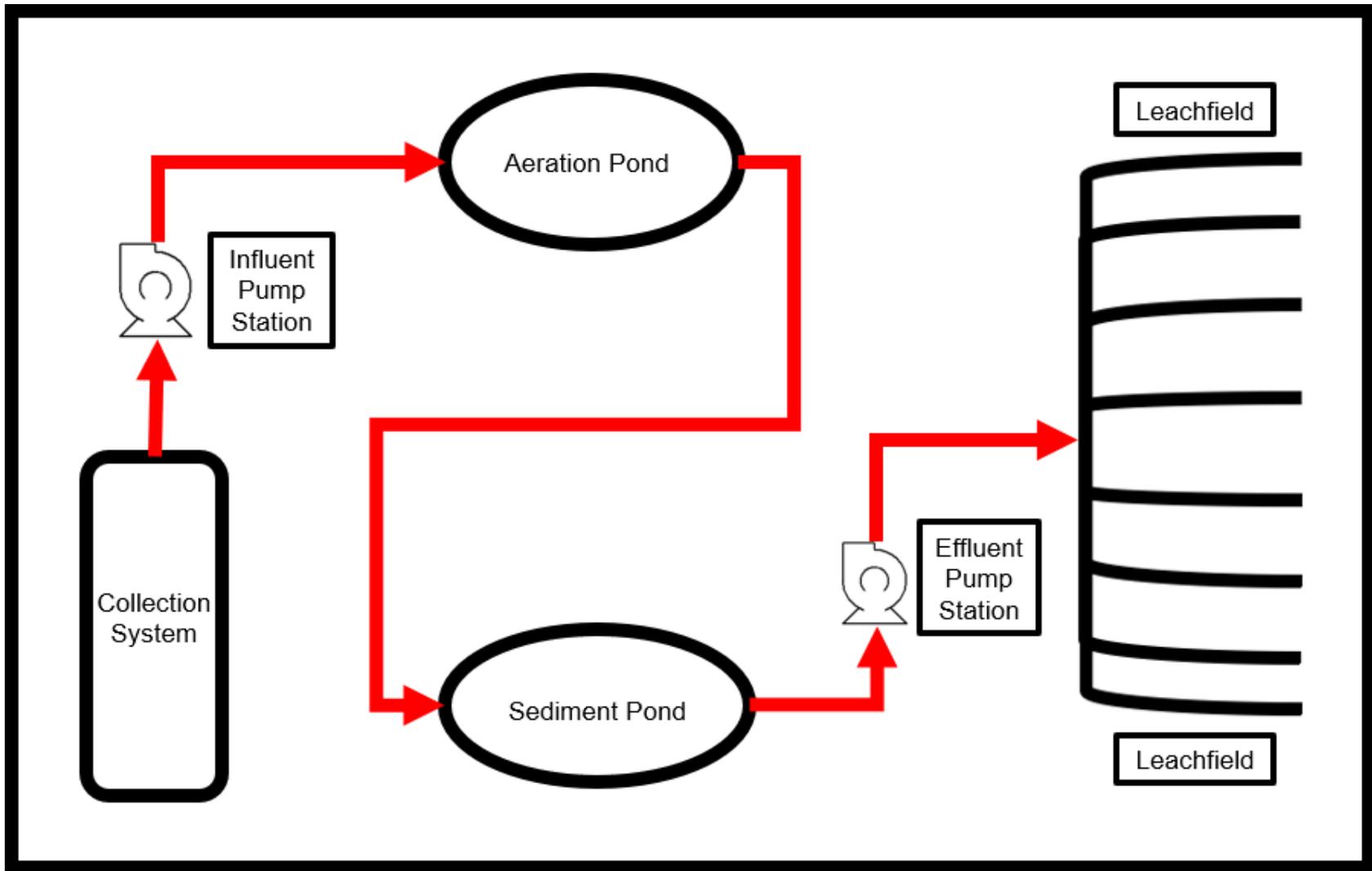
Attachments:      • Attachment A – Site Map  
                          • Attachment B – Flow Schematic

Enclosures:       • Monitoring and Reporting Program 2014-0153-DWQ-R5350  
                          • Review Memorandum of Mariposa County, Mariposa Pines  
                          Wastewater Treatment Facility  
                          • State Water Resources Control Board WQ 2014-0153-DWQ  
                          (Discharger Only)

cc:                 ○ David Lancaster, State Water Resources Control Board, OCC,  
                          Sacramento (via email)  
                          ○ Laurel Warddrip, State Water Resources Control Board, DWQ,  
                          Sacramento (via email)  
                          ○ Russell Walls, Senior Engineer, Central Valley Water Board, Compliance  
                          and Enforcement Unit, Fresno (via email)  
                          ○ Adam Forbes, State Water Resources Control Board, Division of  
                          Drinking Water, Fresno (via email)  
                          ○ Darryl Nielsen, Senior Plant Operator, Mariposa County Public Works  
                          Dept., Mariposa (via email)  
                          ○ Maija S. Medec, Provost and Prichard Consulting Group. (via email)



**ATTACHMENT A – SITE MAP**  
**NOTICE OF APPLICABILITY 2014-0153-DWQ-R5350**



ATTACHMENT B – FLOW SCHEMATIC  
NOTICE OF APPLICABILITY 2014-0153-DWQ-R5350

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

**MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5350  
FOR  
MARIPOSA COUNTY PUBLIC WORKS DEPARTMENT  
MARIPOSA PINES WASTEWATER TREATMENT FACILITY  
MARIPOSA 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 Mariposa County Public Works Department (District or 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.

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 Mariposa Pines Wastewater Treatment Facility (WWTF or Facility) near Jerseydale in Mariposa County that is subject to Notice of Applicability (NOA) 2014-0153-DWQ-R5350 enrolling the Facility under State Water

Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ, *General Water Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order) (upon rescission of WDRs Order 97-134). 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 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 (ELAP) 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.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

## **POND SYSTEM MONITORING**

### Influent Monitoring

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

**Table 1: Influent Monitoring**

<b>Constituent</b>	<b>Units</b>	<b>Sample Type</b>	<b>Sample Frequency</b>	<b>Reporting Frequency</b>
Flow Rate	gpd	Metered (see 1. below)	Continuous	Quarterly

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
EC	µmhos/cm	Grab	Monthly	Quarterly
BOD <sub>5</sub>	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Annually	Annually

1. Flows can be metered or estimated based on pump run time or other approved method. The method of measurement should be reported.

#### Effluent Monitoring

Effluent samples shall be taken from a location that provides representative samples of the treated wastewater discharged from the Sediment Pond to the leach field. Effluent monitoring is only required when wastewater is discharged to the leach field. At a minimum, effluent monitoring shall consist of the following:

**Table 2: Effluent Monitoring**

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
pH	pH units	Grab	Monthly	Quarterly
EC	µmhos/cm	Grab	Monthly	Quarterly
BOD <sub>5</sub>	mg/L	Grab	Monthly	Quarterly
Total Nitrogen (as N)	mg/L	Grab	Annually	Annually

#### Wastewater Pond Monitoring

All wastewater treatment and disposal ponds (lined and unlined) shall be monitored as specified below:

**Table 3: Wastewater Pond Monitoring**

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Dissolved Oxygen (see 1 below)	mg/L	Grab	Monthly	Quarterly
Freeboard	feet	Observation	Monthly	Quarterly
Odors	--	Observation	Monthly	Quarterly
Berm Condition	--	Observation	Monthly	Quarterly

1. DO shall be measured between 8:00 am and 10:00 am and shall be taken opposite the pond inlet at a depth of approximately one foot. Should the DO be below 1.0 mg/L during a monthly sampling event, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected ponds until the problem has been resolved.

#### **SUBSURFACE DISPOSAL AREA MONITORING**

In general, monitoring shall be sufficient to determine if wastewater is evenly applied, the disposal area is not saturated, burrowing animals and/or deep-rooted plants are not

present, and odors are not present. Inspection of dosing pump controllers, automatic distribution valves, etc. is required to maintain optimum treatment in the disposal area (and any sand or media filter if present). Monitoring of the leach field system shall, at a minimum, include the monitoring specified in Table 4 below. Monitoring in Table 4 is only required during quarters when discharge of wastewater to the leach field system occurs.

**Table 4: Subsurface Disposal Area Monitoring**

<b>Constituent</b>	<b>Inspection Frequency</b>	<b>Reporting Frequency</b>
Pump Controllers, Automatic Valves, etc. (see 1 below)	Quarterly	Quarterly
Nuisance Odor Condition	Quarterly	Quarterly
Saturated Soil Conditions (see 2 below)	Quarterly	Quarterly
Plant Growth (see 3 below)	Quarterly	Quarterly
Vectors or Animal Burrowing (see 4 below)	Quarterly	Quarterly

1. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
2. Inspect disposal area for saturated conditions
3. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed 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 names 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**

Consistent with the Business and Professions Code, groundwater monitoring reports, well construction workplans, etc. shall be prepared under the supervision of a California licensed civil engineer or geologist. Prior to construction of any groundwater monitoring wells, the Discharger shall submit plans and specification to the Regional Water Board for review and approval. Once installed, all monitoring wells designated as part of the monitoring network shall be sampled and analyzed according to the schedule below. Analysis of the data and groundwater flow directions shall be performed at least annually and shall be performed under the supervision of a California licensed professional (as described above).

Groundwater monitoring shall be conducted at Monitoring Wells MW-1, MW-2, MW-3, MW-4, and any other future wells added to the groundwater monitoring network. Prior to sampling, groundwater elevations shall be measured, and the wells shall be purged of at least three well volumes and until pH and electrical conductivity have stabilized. No-purge, low-flow, or other sampling techniques are acceptable if they are described in an approved Sampling and Analysis Plan. Depth to groundwater shall be measured to the nearest 0.01 feet. Groundwater elevations shall be calculated. Samples shall be collected using approved USEPA methods. Groundwater monitoring shall include, at a minimum, the following:

**Table 5: Groundwater Monitoring**

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Groundwater Elevation (See 1 below)	0.01 Feet	Calculated	Monthly	Quarterly
Depth to Groundwater	0.01 Feet	Measurement	Monthly	Quarterly
Gradient	Feet/Feet	Calculated	Monthly	Annually
Gradient Direction	Degrees	Calculated	Monthly	Annually
Groundwater Separation	0.01 Feet	Calculated	Monthly	Quarterly
EC	µmhos/cm	Grab	Quarterly	Quarterly
Nitrate (as Nitrogen)	mg/L	Grab	Annually	Annually
Total Coliform Organisms (See 2 below)	MPN/100 mL	Grab	Monthly (See 3 below)	Quarterly

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. Using a minimum of 15 tubes or three dilutions.
3. If a total coliform result is detected above 2.2 MPN/100 mL in a monitoring well during a regular monthly groundwater monitoring test, the Discharger shall conduct weekly total coliform groundwater monitoring for the well until the result is at or less than 2.2 MPN/100 mL (at which point the Discharger can recommence regularly monthly monitoring for total coliform).

**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 discernable. 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.

All regulatory documents, 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 50 MB should be emailed to:

[centralvalleyfresno@waterboards.ca.gov](mailto:centralvalleyfresno@waterboards.ca.gov). Documents that are 50 MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 1685 E Street, Fresno, CA 93706. 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,  
**Place ID:** 239543,  
**Facility Name:** Mariposa Pines WWTF,  
**Order:** 2014-0153-DWQ-R5350

#### **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 1<sup>st</sup>). 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 requirements (including the flow limitation), 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. An evaluation of the total coliform groundwater samples collected during the quarter.
4. Copies of all 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 system, including discussion of the capacity issues nuisances' 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.
3. A discussion of compliance and the corrective actions 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.

6. A groundwater monitoring report prepared by a California licensed professional. This report may be prepared separately from the rest of the Annual Report. 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 volume, groundwater elevation and trend, a groundwater elevation map for each sample event, summary tables showing results for parameters measured, comparison of groundwater quality parameters to standards in the NOA, chain-of-custody forms, calibration logs for field equipment used, and a general evaluation of any impacts the wastewater discharge is having on groundwater quality. Specifically, the groundwater monitoring report should provide an analysis of total coliform samples collected during the year and, if appropriate, propose actions to mitigate the Facility's impact on underlying groundwater.

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."*

The Discharger shall begin implementing this monitoring program in the first month following the date WDRs Order 97-134 is rescinded.

Ordered by:

*Original Signed by Clay L. Rodgers for:*  
PATRICK PALUPA, Executive Officer

*12/9/2020*  
(Date)

## **GLOSSARY**

BOD <sub>5</sub>	Five-day biochemical oxygen demand
CaCO <sub>3</sub>	Calcium carbonate
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
TDS	Total dissolved solids
TKN	Total Kjeldahl nitrogen
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-hr Composite eight aliquots	Samples shall be a flow-proportioned composite consisting of at least over a 24-hour period.
Daily	Every day except weekends or holidays.
Twice Weekly	Twice per week on non-consecutive days.
Weekly	Once per week.
Twice Monthly	Twice per month during non-consecutive weeks.
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
mg/kg	Milligrams per kilogram
mL/L	Milliliters [of solids] 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
NA	Denotes not applicable



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## Central Valley Regional Water Quality Control Board

**TO:** Scott J. Hatton  
Supervising Water Resource Control Engineer

**FROM:** Alexander S. Mushegan  
Senior Water Resource Control Engineer  
RCE 84208

Ernesto P. Garcia  
Scientific Aid

**DATE:** 9 December 2020



**APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; MARIPOSA COUNTY PUBLIC WORKS DEPARTMENT; MARIPOSA PINES WASTEWATER TREATMENT FACILITY; MARIPOSA COUNTY**

On 16 July 2020, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) consisting of a Form 200 and technical report for Mariposa County Public Works Department's Mariposa Pines Wastewater Treatment Facility (Facility or WWTF). The technical report was prepared and signed by Maija S. Medec (RCE 79709) with Provost & Prichard Consulting Group. This memorandum provides a summary of the applicability of this discharge for coverage under the State Water Resources Control Board's WQ Order 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order).

### **BACKGROUND INFORMATION**

Mariposa County Public Works Department (hereafter Discharger) owns and operates the Mariposa Pines WWTF, which provides for collection, treatment, and disposal of domestic wastewater from 23 homes within the Mariposa Pines subdivision near Jerseydale in Mariposa County (37° 35' 06.01" N, 119° 51' 22.74" W). The Facility is currently regulated by Waste Discharge Requirements (WDRs) Order 97-134, which authorizes a discharge of up to 5,000 gallons per day (gpd) as a monthly average. The potable water system for the subdivision is provided by groundwater wells operated by

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

1685 E Street, Fresno, CA 93706 | [www.waterboards.ca.gov/centralvalley](http://www.waterboards.ca.gov/centralvalley)

Mariposa Pines Mutual Water Company. Wastewater flows to the Facility are currently estimated based on domestic water use. According to the July 2020 RWD, average flows are estimated at about 4,200 gpd.

### **DESCRIPTION OF DISCHARGE**

According to the 2020 RWD, the Facility consists of a treatment portion (APN 009-060-014) and a disposal portion (APN 009-060-051) located on neighboring parcels. The treatment portion consists of an influent pump station, an aerated treatment pond, and a sediment pond. There is a groundwater monitoring network consisting of four (4) monitoring wells, which span over both parcels, to monitor groundwater quality. The sewage from Mariposa Pines collects in a sewer collection system before entering the influent pump station (located on Hites Road). The influent pump station has two pumps, each with a pumping capacity of 100 gallons per minute (gpm), which pump wastewater to the aeration pond. Wastewater is treated by a surface aerator within the aeration pond. Wastewater flows from the aeration pond to the sediment pond for further break down of organic matter and settling of solids.

The aeration pond has a surface area of 5,000 square feet, a total operational depth of 8 feet, and a treatment volume of 300,000 gallons. Its design average daily treatment capacity is 5,000 gallons per day with a hydraulic retention time of 60 days. The sediment pond has a surface area of 20,000 square feet, a total operational depth of 5 feet, a total volume of 750,000 gallons, and a design average daily treatment capacity of 5,000 gallons per day. While the Facility features no solids handling, the sludge in the sediment pond is measured monthly to the nearest 0.1 feet as required by WDRs Order 97-134. Sludge in both the aeration pond and sediment pond have been observed to degrade over time. According to the 2020 RWD, sludge has not been removed from the Facility since it was constructed in 1970. According to the August 2020 self-monitoring report, latest sludge depth for the sediment pond is 1.5 feet.

The effluent pump station, located at the sediment pond, transports treated wastewater over to the leach field when needed. The leach field is utilized when the freeboard in the storage pond reaches three feet. The leach field has a design disposal capacity of 4,400 gallons per day and total trench length of 4,000 linear feet. The trench network consists of two banks of 100-foot long trenches, each containing 20 trenches. Trenches have a depth of four to five feet, a width of three feet, and are spaced six feet apart on-center.

The sediment pond typically provides sufficient disposal via evaporation and percolation such that the leach field is utilized as a secondary option for effluent disposal. Since the beginning of 2018, the leach field was reportedly only used from February 2019 to July 2019 and from January 2020 to June 2020.

The General Order states facilities discharging under 100,000 gpd are eligible for coverage. Furthermore, since the Facility will have flows below 20,000 gpd, no nitrogen evaluation is necessary per the General Order.

**POTENTIAL THREAT TO WATER QUALITY**

Limited water quality monitoring is required by Monitoring and Reporting (MRP) 97-134 for the Facility. However, typical domestic wastewater strength is assumed for the Facility’s discharge considering that the development consists of just 23 homes, and WDRs Order 97-134 prohibits the discharge of recreational vehicle holding tanks to the Facility. Table 1 below displays the typical domestic wastewater strength with values for untreated and secondary treated effluent from Table 1 of the General Order (*Summary of Domestic Wastewater Characteristics*).

**Table 1 – Estimated Effluent Quality**

<b>Constituent</b>	<b>Typical Domestic Wastewater Strength (Untreated)</b>	<b>Equivalent to Secondary Treatment Effluent (% Removal)</b>
Biochemical Oxygen Demand	200-290 mg/L	65%
Total Suspended Solids	200-290 mg/L	--
Total Nitrogen	35-100 mg/L	43 - 80%

According to WDRs Order 97-134, soils beneath the leach field area consist of residual soils over decomposed granitic rock. These soils consist of sandy silt with 20 percent clays and generally exceed 10 feet in depth. Average annual precipitation is approximately 30 inches with average annual evaporation around 45 inches. The average percolation rate is 74 minutes per inch as indicated by onsite percolation tests in the leach field area. Both the ponds and leach field are not within an area subject to flooding. WDRs Order No. 97-134 indicates that surface water drains to the Snyder Creek, which is approximately 0.25 miles east of the Facility.

**SOIL AND GROUNDWATER**

The Facility has a groundwater monitoring well network consisting of four monitoring wells. The groundwater monitoring wells locations are depicted in Attachment A of the NOA. Groundwater flow appears to be to the northeast. According to the 2020 RWD, groundwater monitoring wells MW-2 and MW-3 are upgradient wells. Groundwater monitoring well MW-1 is downgradient of the ponds, and Monitoring Well #4 is downgradient of the leach field.

The depth to groundwater is sampled on a monthly basis from 1 May to 30 November and also sampled from 1 December to 30 April on a weekly basis. Separation (which is the minimum distance between first encountered groundwater and leachfield trench bottoms or stabilization pond) is measured on a weekly basis. A summary of the 2019 total coliform data (January to September) for the groundwater monitoring wells are listed in Table 2 below. According to the 2020 RWD, total coliform organism samples are collected monthly when groundwater is less than 10 feet below ground surface (bgs) and weekly in wells with total coliform detections equal or greater than 2.2 MPN/100 mL as required by MRP 97-134.

**Table 2 - Total Coliform Groundwater Data (January 2019 to September 2019)**

<b>Monitoring Well</b>	<b>MW-1</b> (Downgradient of ponds)	<b>MW-2</b> (Upgradient of leach field)	<b>MW-3</b> (Upgradient of ponds)	<b>MW-4</b> (Downgradient of leach field)
# of Detections/ # of Samples	14/25	2/21	17/25	18/25
Ave. Concentration of Detections (MPN/100 mL)	10	100	530	430

According to the 2020 RWD, it appears there are minor impacts to groundwater quality from the ponds when groundwater level is shallow since elevated concentrations for total coliform were observed predominately from January through March in 2019 (excluding monitoring well #4). However, the reported data also shows upgradient groundwater total coliform groundwater detections (MW-3), which is likely at least partially attributed to the very shallow groundwater during the winter months (e.g., less than 0.5 feet). The monitoring well with the most frequent total coliform detections (MW-4) is downgradient of the leach field, which as previously stated, is only used as a secondary means of disposal when needed.

**MONITORING REQUIREMENTS**

Monitoring requirements included in the following sections from Attachment C of the General Order are appropriate for this discharge:

- Pond System Monitoring;
- Solids Disposal Monitoring;
- Subsurface Disposal Area Monitoring; and
- Groundwater Monitoring

**SALT AND NITRATE CONTROL PROGRAMS**

As part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative, the Central Valley Water Board adopted Basin Plan amendments (Resolution R5-2018-0034) incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting. On 16 October 2019, the State Water Resources Control Board adopted Resolution No. 2019-0057 approving the Central Valley Water Board Basin Plan amendments and also directed the Central Valley Water Board to make targeted revisions to the Basin Plan amendments within one year from the approval of the Basin Plan amendments by the Office of Administrative Law. The Office of Administrative Law approved the Basin Plan amendments on 15 January 2020.

Pursuant to the Basin Plan amendments, dischargers will receive a Notice to Comply with instructions and obligations for the Salt Control Program within one year of the effective date of the amendments. Upon receipt of the Notice to Comply, the District

will have no more than six months to inform the Central Valley Water Board of their choice between Path A (Conservative Option for Salt Permitting) or Path B (Alternative Option for Salt Permitting).

For the Nitrate Control Program, the WWTF falls outside a prioritized groundwater basin. The closest prioritized basin is Groundwater Basin 5-022.04 (San Joaquin Valley - Merced). Implementation within a non-prioritized basin/sub-basin will occur as directed by the Central Valley Water Board Executive Officer. More information related to the Salt and Nitrate Control Programs can be at the [CV-SALTS Website](https://www.cvsalinity.org/public-info) (<https://www.cvsalinity.org/public-info>).