



Central Valley Regional Water Quality Control Board

16 March 2023

Shannon Hansen, Public Works Director Mariposa County 4639 Ben Hur Road Mariposa, CA 95338 CERTIFIED MAIL 7022 2410 0000 2157 7190

NOTICE OF APPLICABILITY (NOA); STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; COUNTY OF MARIPOSA; COULTERVILLE WASTEWATER TREATMENT FACILITY; MARIPOSA COUNTY

On 28 August 2020, Provost & Pritchard submitted a Report of Waste Discharge (RWD), on behalf of Mariposa County (Discharger), seeking coverage under 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) for the Coulterville Wastewater Treatment Facility (Facility or WWTF). The Facility is currently regulated by Waste Discharge Requirements (WDRs) Order 5-00-193.

Based on the information provided, the system treats and disposes of less than 100,000 gallons per day (gpd) of domestic wastewater and is therefore eligible for coverage under the general and specific conditions of the General Order. This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described below. You are hereby assigned enrollee number 2014-0153-DWQ-R5388 for your system. Please note that coverage under General Order 2014-0153-DWQ will become effective after WDRs Order 5-00-193 has been rescinded (tentatively scheduled for the June 2023 Board Meeting).

You should familiarize yourself with the General Order and its attachments enclosed with this letter, which describe 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 systems sections of the General Order and the attached **Monitoring and Reporting Program (MRP) No. 2014-0153-DWQ-R5388**. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

MARK BRADFORD, CHAIR | PATRICK PULUPA, Esq., EXECUTIVE OFFICER

DESCRIPTION OF DISCHARGE

NOA 2014-0153-DWQ-R5388

The Facility is located in Mariposa County, approximately 1.1 miles southeast of Coulterville, CA. The Facility receives wastewater from the community of Coulterville, consisting of residential and commercial flows (a total of approximately 98 connections). The WWTF is an advanced primary system, which consists of a grinder and bar screen, one aeration cell, and a storage/settling pond. Treated wastewater is applied to a 7.23-acre land application area, which consists of a south spray field (zones 1 - 4) and a north spray field (zones 5 and 6). The point latitude and longitude for the pond system at the Facility is 37.695°, -120.1925°.

Sources of wastewater consist of residential and commercial users. No recreational vehicle (RV) waste is reportedly sent to the WWTF. Influent flows from the sewer are pumped to the Facility headworks that features a grinder and bar screen. Wastewater flows from the headworks to the influent pump station where wastewater is then pumped to the asphalt lined aeration cell. Aeration within the aeration cell is provided using a surface aerator. Wastewater then flows by gravity to the storage/settling pond, which has a storage volume of 15.8 acre-feet (5.15 million gallons) with two feet of freeboard and is lined with an impermeable geomembrane liner. Effluent is applied to the north and south spray fields utilizing a total of six sprinkler lines consisting of 45 total sprinkler heads which can be individually operated. The spray fields are separated by containment berms and a small natural drainage.

Monthly average flows from the Facility in 2022 was 7,000 gallons per day (gpd). The WWTF permitted flow limits per 5-00-193 are 25,000 gpd (monthly average dry weather flow) and 30,000 gpd (monthly average wet weather flow). For enrollment under the General Order, the Discharger requested to lower their flow limit to 20,000 gpd since their flows have consistently been well below 20,000 gpd.

FACILITY SPECIFIC REQUIREMENTS

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-R5388.

In accordance with Section B.1.a of the General Order, influent flow shall not exceed a **monthly average daily discharge of 20,000 gpd** (as described in the MRP).

The General Order states in Section D that the discharge shall not exceed the applicable effluent limitations as described in Table 4 of the General Order. Table 1 below summarizes the applicable BOD effluent limitation for the Facility's discharge to the land application area (e.g., spray fields). Compliance with this limitation shall be monitored at the Facility's discharge point to the land application rea.

Table 1 – Effluent Limitation

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Constituent	Units	Limit		
BOD ₅	mg/L	90 (monthly average)		

The General Order states in Section B.1.i 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 (spray field), and storage and/or treatment ponds from sensitive receptors and property lines where applicable. The Discharger shall comply with the applicable setback requirements, as summarized in the following table:

- 3 -

Table 2 – Setback Requirements

Equipment or Activity	Domestic Well	Ephemeral Stream Drainage	Property Line	Lake or Reservoir
Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System	150 ft	50 ft	5 ft	200 ft
Land Application Area (i.e., spray field)	150 ft	100 ft (see 1 below)	100 ft	200 ft
Impoundment (Undisinfected secondary wastewater)	150 ft	150 ft (see 2 below)	50 ft	200 ft

- The existing spray fields do not meet the 100-foot minimum setback for land application area from an ephemeral stream drainage established in Table 3 of the General Order. As discussed in the attached memorandum, based on site specific conditions, a reduced setback of 18 feet is acceptable for the existing spray fields provided the spray field berms are properly maintained and operated. Any future expansion will require a reevaluation of the setback distance.
- 2. The existing storage/settling pond does not meet the 150-foot minimum setback for impoundment of undisinfected secondary wastewater from an ephemeral stream drainage established in Table 3 of the General Order. As discussed in the attached memorandum, based on the site-specific conditions, a reduced setback of 100 feet is acceptable for the existing impoundment. Any future expansion will require a reevaluation of the setback distance.

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

- 1. Aerobic Treatment Unit requirements in Section B.3. of the General Order;
- Pond Systems requirements in Section B.5 of the General Order;
- 3. Land Application System and/or Recycled Water System requirements in Section B.7 of the General Order;
- 4. Sludge/Solids/Biosolids Disposal requirements in Section B. 8 of the General Order; and

5. Groundwater and Surface Water Limitations specified in Section C of the General Order

Section B.7.f of the General Order states if recycled water is applied, it shall comply with title 22 water recycling criteria, this General Order, the NOA, a Title 22 Engineering Report, and any Division of Drinking Water approval conditions. On 21 February 2023, County of Mariposa staff indicated via email that cattle are not allowed to graze on the spray field area. In the future, if the Discharger plans to implement reclamation activities, County of Mariposa staff shall contact Central Valley Water Board staff to revise this NOA. On 2 May 2022, the Discharger submitted a Title 22 Engineering Report for the WWTF's reclamation on the spray fields. Division of Drinking water staff are currently in the process of reviewing the Title 22 Engineering Report.

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.

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

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. The sludge management plan shall be submitted to the Central Valley Water Board by 14 June 2023.

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 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-R5388 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.

On 31 May 2018, the Central Valley Water Board adopted Basin Plan amendments incorporating new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative. Further details of these strategies are discussed in the enclosed memorandum. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of this NOA to ensure the goals of the Salt and Nitrate Control Programs are met.

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. Documents that are 50 MB 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: 215910,

Facility Name: Coulterville WWTF, **Order:** 2014-0153-DWQ-R5388

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 Omar Mostafa. Mr. Mostafa can be reached at (559) 445-5197 or omar.Mostafa@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 Cruz Romero. Cruz Romero can be reached at (559) 445-5036 or by email at Cruz.Romero@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 at Copies of the laws and regulations applicable to filing petitions (https://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

In order to conserve paper and reduce mailing costs, a paper copy of General Order WQO 2014-0153-DWQ has been sent only to the Discharger. Others are advised that the <u>General Order</u> is available on the State Water Board's website

(http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/w qo2014 0153 dwq.pdf).

Please note that WDRs Order 5-00-193 is proposed to be rescinded at the 22/23 June 2023 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 this matter, please contact Cruz Romero by phone at (559) 445-5036, or by email at cruz.romero@waterboards.ca.gov.

Original Signed by Clay L. Rodgers for: Patrick Pulupa Executive Officer

(see next page for Attachments, Enclosures, and cc's)

Attachments:

- Attachment A Vicinity Map
- Attachment B Site Map
- Attachment C –Process Flow Diagram

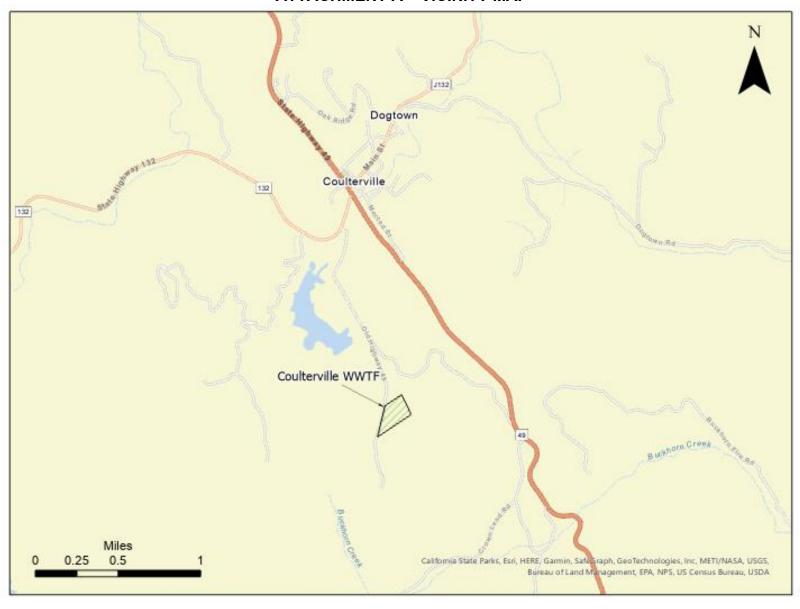
Enclosures:

- Monitoring and Reporting Program 2014-0153-DWQ-R5388
- Staff Review Memorandum for Mariposa County Coulterville WWTF
- State Water Resources Control Board Order WQ 2014-0153-DWQ (Discharger only)

CC:

- Christopher Moskal, State Water Resources Control Board, OCC, Sacramento (via email)
- Laurel Warddrip, State Water Resources Control Board, DWQ, Sacramento (via email)
- Tricia Wathen, State Water Resources Control Board, Division of Drinking Water (via email)
- RB5S-cvsalts@waterboards.ca.gov
- Omar Mostafa, Central Valley Water Board, Fresno (via email)
- Matt Hespenheide, County Engineer, Mariposa County Public Works (via email)
- Debbie Webster, CVCWA (via email)

ATTACHMENT A - VICINITY MAP



ATTACHMENT B - SITE MAP



ATTACHMENT C - PROCESS FLOW DIAGRAM **Gravity Flow** Influent Pump Grinder and Aeration Storage/Settling Bar Screen Cell Pond **Containment Berms** Pump Six Sprinkler Lines North South **Spray Field** Spray Field **Gravity Flow** Collection Sump

Return Sump with Pump

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5388 FOR

MARIPOSA COUNTY COULTERVILLE 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. Mariposa County (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 Coulterville Wastewater Treatment System (Facility or WWTF) that is subject to Notice of Applicability (NOA) 2014-0153-DWQ-R5388. The NOA enrolls the WWTF under State Water Resources Control Board Order WQ 2014-0153-DWQ, *General Waste Discharge Requirements for*

reports described herein.

Small Domestic Wastewater Treatment Systems (General Order) upon the rescission of the WDRs Order 5-00-193. The reports required in this MRP 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

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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.

POND SYSTEM MONITORING

A. Influent Monitoring

Influent samples shall be taken from a location that provides representative samples of the wastewater prior to any treatment or return flows. At a minimum, influent monitoring shall include the monitoring specified in Table 1 below.

Table 1 – Influent Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow	gpd	Meter	Continuous (see 1 and 2 below)	Quarterly
BOD ₅	mg/L	Grab	Monthly	Quarterly

1. For continuous analyzers, the Discharger shall document routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation.

2. At a minimum, the total flow shall be measured weekly to calculate the average daily flow.

B. Effluent Monitoring

Samples of effluent shall be taken at an area that represents the effluent quality distributed to the north and south spray fields. At a minimum, effluent monitoring shall include the monitoring specified in Table 2 below.

Table 2 – Effluent Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
рH	SU	Grab	Monthly	Quarterly
BOD ₅	mg/L	Grab	Monthly	Quarterly
TSS	mg/L	Grab	Monthly	Quarterly
EC	µmhos/cm	Grab	Monthly	Quarterly
Total Nitrogen (as N)	mg/L	Grab	Quarterly	Quarterly

C. Pond Monitoring

The storage/settling pond shall be monitored as specified in Table 3 below.

Table 3 - Wastewater Pond Monitoring

Parameter	Units	Sample Type	Sample Frequency	Reporting Frequency
Dissolved Oxygen (DO) (see 1 below)	mg/L	Grab	Monthly	Quarterly
Freeboard	0.1 feet	Measurement	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, when there is sufficient water in the pond(s). If there is insufficient water in the pond(s) no sample shall be collected and the reason provided in the quarterly monitoring report. 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.

LAND APPLICATION MONITORING

The Discharger shall monitor spray fields (also referred to as LAAs) when wastewater and/or supplemental irrigation water is applied. If wastewater/supplemental irrigation water is not applied during a reporting period, the monitoring report shall so state. LAA monitoring shall include the following:

Table 4 – LAA Monitoring

Parameter	Units	Jnits Sample Type		Reporting Frequency
Supplemental Irrigation	gpd	Meter (see 1 below)	Monthly	Quarterly
Wastewater Flow	gpd	Meter (see 1 below)	Monthly	Quarterly
Local Rainfall	Inches	Weather Station (see 2 below)	Monthly	Quarterly
Acreage Applied	Acres	Calculated (see 3 below)	Monthly	Quarterly
Soil Erosion Evidence	gal/acre/mo	Calculated	Monthly	Quarterly
Containment Berm Condition		Observation	Monthly	Quarterly
Soil Saturation/Ponding		Observation	Monthly	Quarterly
Nuisance Odors/Vectors		Observation	Monthly	Quarterly
Discharge Off-Site		Observation	Monthly	Quarterly
Bypass Gate		Observation (see 4 below)	Monthly	Quarterly

- 1. Meter requires meter reading, a pump run time meter, or other approved method.
- 2. Weather station may be site-specific station or nearby governmental weather reporting station.
- 3. Acreage applied denotes the acreage to which wastewater is applied.
- 4. Bypass gate must be checked prior to each wastewater application event.

SLUDGE/BIOSOLIDS 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 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.

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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. Documents that are 50MB 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: 215910,

Facility Name: Coulterville WWTF, **Order:** 2014-0153-DWQ-R5388

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 the 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. 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 1**st **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, 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.

C. State Water Board Volumetric Annual Reporting

Per State Water Resources Control Board's Water Quality Control Policy (https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/), amended in December 2018, dischargers of treated wastewater and recycled water are required to report annually monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. The Discharger shall submit an annual report to the State Water Board by April 30 of each calendar year furnished with the information detailed below. The Discharger must submit this annual report containing monthly data in electronic format via the State Water Board's Internet GeoTracker system (https://geotracker.waterboards.ca.gov/). Required data shall be submitted to the GeoTracker database under a site-specific global identification number. Any data will be made publicly accessible as machine readable datasets. The Discharger must report all applicable items listed below:

- 1. **Influent.** Monthly volume of wastewater collected and treated by the wastewater treatment plant.
- 2. **Production.** Monthly volume of wastewater treated, specifying level of treatment.
- 3. **Discharge.** Monthly volume of treated wastewater discharged to land, where beneficial use is not taking place, including evaporation or percolation ponds, overland flow, or spray irrigation disposal, excluding pasture of fields with harvested grounds.
- 4. **Reuse.** Monthly volume of recycled water distributed.
- 5. **Reuse Categories.** Annual volume of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, title 22 in each of the use categories listed below:
 - a. Agricultural irrigation: pasture or crop irrigation.
 - b. Landscape irrigation: irrigation of parks, greenbelts, and playgrounds; school yards; athletic fields; cemeteries; residential

- landscaping, common areas; commercial landscaping; industrial landscaping; and freeway, highway, and street landscaping.
- c. Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.

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- d. Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.
- e. Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered.
- f. Geothermal energy production: augmentation of geothermal fields.
- g. Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments.
- h. Groundwater recharge: the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system. Includes surface or subsurface application, except for seawater intrusion barrier use.
- i. Reservoir water augmentation: the planned placement of recycled water into a raw surface water reservoir used as a source of domestic drinking water supply for a public water system, as defined in section 116275 of the Health and Safety Code, or into a constructed system conveying water to such a reservoir (Water Code § 13561).
- j. Raw water augmentation: the planned placement of recycled water into a system of pipelines or aqueducts that deliver raw water to a drinking water treatment plant that provides water to a public water system as defined in section 116275 of the Health and Safety Code (Water Code § 13561).
- k. Other potable uses: both indirect and direct potable reuse other than for groundwater recharge, seawater intrusion barrier, reservoir water augmentation, or raw water augmentation.

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 implement the above monitoring program on the first day of the month following rescission of WDRs Order 5-00-193.

Ordered by:

Ordered by: Original Signed by Clay L. Rodgers for:

PATRICK PULUPA, Executive Officer

3/16/2023

(Date)

Coulterville WWTF

MRP 2014-0153-DWQ-R5388

GLOSSARY

BOD₅ Five-day biochemical oxygen demand

CaCO₃ 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 Samples shall be a flow-proportioned composite consisting

of at least eight aliquots 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

gal/acre/mo Gallons per acre per month

mgd Million gallons per day

MPN/100 mL Most probable number [of organisms] per 100 milliliters

NA Denotes not applicable

NTU Nephelometric Turbidity Units

UV Ultraviolet mJ/cm² Millijoules/cm² SU Standard pH units





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

Cruz Romero

Water Resource Control Engineer

DATE: 16 March 2023

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

On 28 August 2020, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) for the Coulterville Wastewater Treatment Facility (Facility or WWTF). The Facility is owned and operated by Mariposa County (Discharger). The RWD was stamped by Maija Madec (RCE 79709) with Provost and Pritchard. The RWD requested coverage under State Water Resources Control Board's WQ Order 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order) for the Facility. The RWD also includes a Nitrogen Limit Evaluation. In addition, a Title 22 Engineering Report was submitted on 2 May 2022.

BACKGROUND INFORMATION

The Facility is located in Mariposa County (37.6954°, -120.19251°), near State Highway 49, approximately 1.1 miles southeast of Coulterville (as shown in Attachment A of the Notice of Applicability [NOA]). The Facility is currently permitted under Waste Discharge Requirements (WDRs) Order 5-00-193, which specifies a monthly average flow limit of 25,000 gpd from 1 June to 30 September and 30,000 gpd from 1 October to 31 May. For enrollment under the General Order, the Discharger requested to lower their flow limit to 20,000 gpd since the WWTF flows have been significantly less than 20,000 gpd. The WWTF was previously (prior to Order 5-00-193) regulated by WDRs Order 85-256.

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

DESCRIPTION OF DISCHARGE

The WWTF provides advanced primary treatment and features a grinder and bar screen, an aeration cell, and a lined storage/settling pond. Treated effluent is reclaimed on a 7.23-acre land application area, which consists of two spray fields (north and south) with a total of six sprinkler lines. Attachment C of the Notice of Applicability shows a process flow diagram for the Facility.

Coulterville is in a remote area and receives wastewater from residential and commercial sources. There are a total of 98 connections to the sewer collection system. Wastewater is pumped from the influent pump station to the asphalt-lined aeration cell, that has an approximate storage volume of 45,000 gallons with two feet of freeboard. The aeration cell has one surface aerator. The wastewater gravity flows from the aeration cell to the lined storage/settling pond. The storage/settling pond is 18 feet deep and has a storage volume of 15.8 acre-feet with two feet of freeboard. At full capacity, the pond has a surface area of 1.17 acres. The storage/settling pond is lined with an impermeable geomembrane liner. Solids are not regularly removed from the Facility. Sludge from the treatment process collects on the ponds' bottom. According to the RWD, sludge has not been removed from the pond in at least 13 years.

The fenced 7.23-acre spray field is a naturally terraced and pastured hillside with slopes that vary from mild to steep. There are a total of six spray field lines. The north spray field has two sprinkler lines, while the south spray field has a total of four sprinkler lines. In total, there are 45 permanently stationed sprinkler heads that can be individually turned on and off. Each of the spray fields are surrounded by a 16- to 18-inch berm and separated by a natural drainage. Runoff is collected by the north spray fields containment berm and drained to a collection sump. Collected runoff in the sump then flows via gravity through a pipe into the return sump on the south spray field.

Both the collection and return sumps have bypass gates that can be opened to allow precipitation runoff to escape. The spray fields are designed and originally intended for use during dry weather months only, with the sump bypass gates closed, collected runoff in the return sump is pumped back to the Pond.

TITLE 22 ENGINEERING REPORT

According to the Title 22 Engineering Report, the County is the producer, distributor, and user for recycled water at the Coulterville WWTF. The recycled water produced at the Facility meets the definition of "undisinfected secondary recycled water" defined by Section 60301.900 of the Title 22 requirements. The Discharger currently disposes of the recycled water using the north and south spray fields. Previously, beef cattle were allowed to graze the spray field areas; however, according to discussions with the Discharger, cattle are currently not allowed to graze the spray fields. If the Discharger plans to implement recycled water uses in the future, County of Mariposa staff needs to contact the Central Valley Water Board to revise this NOA.

POTENTIAL THREAT TO WATER QUALITY

The Discharger measures the Facility's influent flow using a flow meter located at the sewage lift station (37.70999° N, 120.19610° W). Flow meter readings are recorded daily. Monthly average flows from January 2020 through December 2022 are summarized in Table 1 below. For this date range, the average wastewater flow was 0.007 million gallons per day (mgd) and ranged from 0.006 mgd to 0.011 mgd. As previously mentioned, WDRs Order 5-00-193 specifies a monthly average dry-weather (June to September) flow limit of 0.025 mgd and a wet-weather (October to May) flow limit of 0.030 mgd.

Table 1 – Monthly Average Wastewater Flows (2020-2022)

Table 1 - Worthly Average Wastewater 1 lows (2020-2022)					
Month	2020 (MGD)	2021 (MGD)	2022 (MGD)		
Jan	0.007	0.008	0.007		
Feb	0.008	0.006	0.007		
Mar	0.009	0.006	0.008		
Apr	0.009	0.006	0.006		
May	0.008	0.006	0.007		
Jun	0.009	0.007	0.007		
Jul	0.009	0.007	0.007		
Aug	0.007	0.007	0.007		
Sep	0.007	0.006	0.007		
Oct	0.008	0.006	0.006		
Nov	0.008	0.008	0.007		
Dec	0.007	0.009	0.011		

Monthly average effluent 5-day biochemical oxygen demand (BOD₅) for the same date range is summarized in Table 2 below. Generally, these results comply with the effluent limitation specified in the General Order for pond systems when discharging to a land application area (monthly average limit of 90 mg/L BOD₅). However, for February 2022, the monthly average BOD₅ concentration was 102.8 mg/L. Central Valley Water Board staff inquired about the high BOD₅ effluent concentration; however, County staff were unsure what the cause was.

Table 2 – Effluent BOD₅ **Data (2020-2022)**

Month	2020 (mg/L)	2021 (mg/L)	2022 (mg/L)
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Jan	61.3	56.8	57.4
Feb	68.8	54.8	102.8
Mar	50.8	44.0	81.8
Apr	28.0	64.8	51.0
May	48.0	64.0	69.0

Month	2020 (mg/L)	2021 (mg/L)	2022 (mg/L)
Jun	59.6	51.8	63.4
Jul	37.5	36.3	63.8
Aug	68.3	50.4	43.0
Sep	50.3	33.3	60.7
Oct	41.3	67.5	27.4
Nov	46.6	55.3	49.5
Dec	77.0	55.5	27.5

Monthly average effluent total suspended solids (TSS) measurements since the beginning of 2020 are summarized in Table 3 below. The average concentrations for TSS were 53 mg/L in 2020, 73 mg/L in 2021, and 65 mg/L in 2022.

Table 3 – Effluent TSS Data (2020-2022)

	2020	2021	2022
Month	(mg/L)	(mg/L)	(mg/L)
Jan	48.5	143.3	45.8
Feb	66.8	42.8	102.0
Mar	35.4	56.8	85.8
Apr	32.5	52.0	78.8
May	42.3	93.0	99.0
Jun	58.6	55.2	66.4
Jul	39.3	48.0	92.8
Aug	89.8	66.0	55.0
Sep	53.3	56.5	52.8
Oct	41.5	97.3	33.6
Nov	63.6	81.4	34.5
Dec	59.3	78.3	35.3

Finding 22 of WDRs Order 5-00-193 describes the soil at the spray field as shallow and highly permeable. The Information Sheet for WDRs Order 5-00-193 mentions that the United States Natural Resource Conservation Service (NRCS) classifies the soil at the spray fields as white rock rocky loam with permeability ranging from 0.6 to 2.0 inches per hour (36 - 120 minutes per inch [MPI]) and that the underlying geologic formations consist of fractured slate and schist.

According to the Discharger, the minimum distance between the edge of the containment berms to the ephemeral stream drainage bifurcating the north and south spray fields is 18 feet, which is less than the 100 feet setback distance included in *Table 3: Summary of Wastewater System Setbacks* of the General Order. In addition, the storage/settling pond is approximately 100 feet from the ephemeral stream drainage, which is less than 150 feet setback distance included in Table 3 of the

General Order. While neither distance meets the minimum setback requirements included in the General Order, the above-mentioned setback distances are not referenced to a requirement and, according to the General Order, based on professional judgment and may be revised by the Regional Water Board Executive Officer based on site-specific conditions. Furthermore, the General Order states that for existing sites not able to comply with the setbacks provided in Table 3, the existing site may be permitted under the General Order if nuisance conditions do not result from the noncompliance. The existing spray fields include containment berms that if properly maintained and operated should prevent effluent runoff from occurring, and the storage/settling pond is lined. Furthermore, Central Valley Water Board permitting staff are unaware of any recent reported spills/runoff or nuisance conditions being reported at the site.

The Discharger provided source water quality data between October 2019 and October 2021 in the submitted self-monitoring reports (shown in Table 4 below). Coulterville has one active supply well. According to the well log, the active supply well was drilled to a total depth of 365 feet and has an eight-inch diameter steel casing from 0 to 55 feet.

Table 4 - Groundwater Quality (Source Water Well) Data

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Constituent	10/7/2019	10/5/2020	10/4/2021		
Chloride (mg/L)	40	59	37		
Nitrate as N (mg/L)	2.7	4.1	3.7		
Sulfate (mg/L)	36	44	38		
TDS (mg/L)	430	410	410		
Iron (mg/L)	<0.1	<0.1	<0.1		
Bicarbonate Alkalinity (mg/L)	320	290	300		
Manganese (mg/L)	<0.005	< 0.005	<0.005		
Calcium (mg/L)	55	53	54		
Potassium (mg/L)	1.7	1.5	1.7		

Monitoring and Reporting Program (MRP) 5-00-193 requires the Discharger to monitor the unnamed tributary (creek) of Maxwell Creek, at upstream station one (S1) and downstream station two (S2) of the creek segment adjacent to the WWTF's southern boundary. Central Valley Water Board staff reviewed data from 2018 through 2021. The surface creek monitoring data generally shows minimal increases in chloride or nitrate/ammonia/total kjeldahl nitrogen (TKN) results when comparing upstream concentrations to downstream concentrations. Based on the data summarized in **Table 5** below, it does not appear that the WWTF's discharge significantly impacts the creek; therefore, the new MRP does not need to require continued surface water monitoring of the creek.

Staff Memorandum

Table 5 - Creek Monitoring Samples Data

Station (Sample Date)	Nitrate-N (mg/L)	Ammonia-N (mg/L)	TKN (mg/L)	Chloride (mg/L)	Total Coliform (MPN)	Fecal Coliform (MPN)
S1 (04/16/2018)	<0.45	<1.0	<0.50	4.5	540	17
S2 (04/16/2018)	<0.45	<1.0	<0.50	6.6	920	49
S1 (02/20/2019)	0.87	<1.0	0.87	3.5	350	23
S2 (02/20/2019	1.3	1.3	0.98	5.0	1600	49
S1 (04/01/2019)	<0.45	<1.0	<0.50	4.2	220	33
S2 (04/01/2019)	<0.45	<1.0	<0.50	5.8	170	49
S1 (01/06/2020)	0.47	<1.0	<0.50	6.9	94	6.8
S2 (01/06/2020)	1.6	<1.0	0.52	13.0	<1600	540
S1 (04/06/2020)	0.74	<1.0	<0.50	2.0	1600	240
S2 (04/06/2020)	1.1	<1.0	0.53	3.4	1600	240
S1 (01/28/2021)	1.2	<1.0	0.66	0.66	920 HT (see 1 below)	6.8
S2 (01/28/2021)	6.3	<1.0	1.6	1.6	<1600 HT	15.0
S1 (02/17/2021)					130	<2
S2 (02/17/2021)					920	33

^{1.} HT denotes that the sample was taken outside of the EPA's recommended holding times, as such an additional sample was taken on 17 February 2021.

NITROGEN LIMIT EVALUATION

Attachment 1 of the General Order includes five site-specific considerations (Step A) that shall be considered when evaluating a discharge and the need for nitrogen effluent limits. These five site-specific considerations include: flow, groundwater depth, percolation rate, wastewater strength, and if nitrogen is of concern in the area. Based on 1) proposed flow of 20,000 gpd, 2) discharge volume is small, 3) effluent is discharged to a lined pond prior to land application, and 4) surface creek monitoring data, the discharge is not expected to significantly impact underlying groundwater with regards to nitrate. Therefore, nitrogen limits are not necessary at this time.

MONITORING REQUIREMENTS

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

- Pond System Monitoring
- Land Application Monitoring
- Solids Disposal

SALT AND NITRATE CONTROL PROGRAMS

Participation and Optimization Study (P&O Study).

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 (Resolution R5-2018-0034). The Basin Plan amendments became effective on 17 January 2020 and were revised by the Central Valley Water Board in 2020 with Resolution R5-2020-0057 (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/re solutions/r5-2020-0057_res.pdf). Pursuant to the Basin Plan amendments, the Discharger was sent a Notice to Comply on 5 January 2021 (CV SALTS ID: 1934) with instructions and obligations for the Salt Control Program within one year of the effective date of the amendments. The Discharger submitted a Notice of Intent on 14 April 2021 and selected Option 2 (Alternative Option for Salt Permitting) and is participating in the

For the Nitrate Control Program, the Facility and disposal areas are not within a prioritized basin. Implementation within a unprioritized basin/sub-basins will occur at the direction of the Executive Officer.

<u>More information on the Salt and Nitrate Control Program</u> may be found on the internet (https:///cvsalinity.or/public-info).