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## Central Valley Regional Water Quality Control Board

21 October 2020

Marty Duvall, Utilities Superintendent  
Madera County  
200 W 4<sup>th</sup> Street  
Madera, California 93637

**CERTIFIED MAIL**  
**7019 2970 0001 5206 4203**

**NOTICE OF APPLICABILITY (NOA); STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5348; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; MADERA COUNTY MAINTENANCE DISTRICT NO. 37; LA VINA WASTEWATER TREATMENT FACILITY; MADERA COUNTY**

On 4 August 2020, Madera County (Discharger), submitted a Report of Waste Discharge (RWD) for the La Vina Wastewater Treatment Facility (WWTF) in Madera County. The Discharger is requesting coverage under the 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). The RWD included a technical report prepared by Mr. Ramon Mendez, a California registered civil engineer (RCE 83336). A Form 200 signed by Mr. Marty Duvall, Utilities Superintendent with Madera County and submitted with the RWD. Based on the information provided, the discharge from your WWTF is eligible for coverage under the General Order.

This letter serves a 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-R5348**. After Waste Discharge Requirements (WDRs) Order 95-157 have been rescinded, coverage under General Order 2014-0153-DWQ will become effective.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 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 system sections of the General Order and the attached **Monitoring and Reporting Program (MRP) No. 2014-0153-DWQ-R5348**. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

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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)

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### DISCHARGE DESCRIPTION

The WWTF is currently regulated by WDRs Order 95-157, which allows a monthly average daily discharge flow of 86,000 gallons per day (gpd) to seepage pits. The WWTF services the La Vina subdivision that consists of approximately 52 acres with 101 sewer connections serving 175 residential units and a convenience store. The WWTF is about 5.5 miles southwest of the City of Madera in Madera County (sections 21, Township 12 South, Range 17 East, Mount Diablo Base and Meridian [MDB&M]) (36° 52' 47.52" N, 120° 7' 7.84" W). A site map is shown on **Attachment A**, which is incorporated by reference and considered part of this Notice of Applicability (NOA).

The WWTF consists of 12 septic tanks operated in parallel, each with a capacity of 7,500 gallons, and 87 seepage pits. Wastewater gravity flows to the WWTF where it is pumped into septic tanks by a lift station. Wastewater then gravity flows through the septic tanks into the seepage pits. The seepage pits are 4.5 feet in diameter and are approximately 30 to 35 feet deep. Sludge from the septic tanks is removed periodically and disposed at the City of Madera WWTF. The WWTF flow schematic is show on **Attachment B** of the NOA.

### FACILITY SPECIFIC REQUIREMENTS AND EFFLUENT LIMITATIONS

The Discharger will 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-R5348.

In accordance with Section B.1 of the General Order, treated wastewater discharged from the septic tanks **shall not exceed a monthly average daily flow of 86,000 gallons per day (gpd) to the seepage pits.**

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

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

Equipment or Activity	Domestic Well	Ephemeral Stream Drainage	Property Line
Septic Tank, Aerobic Treatment Unit, Treatment System, and Collection System	150 ft	50 ft	5 ft
Seepage Pit	150 ft	50 ft	8 ft

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

1. Septic Systems requirements specified in Section B.2 of the General Order;

2. Subsurface Disposal Systems requirements specified in Section B.6 of the General Order;
3. Sludge/Solids/Biosolids Disposal requirements specified in Section B.8 of the General Order; and
4. Groundwater and Surface Water Limitations specified in Section C.1 of the General Order.

The proposed discharge has a flow rate that exceeds 20,000 gpd and a nitrogen evaluation was conducted as described in Attachment 1 of the General Order to determine if nitrogen effluent limits are required. The attached memorandum includes a nitrogen effluent limit evaluation. Based on the evaluation, nitrogen limits are not necessary at this time. The Discharger is required to conduct effluent nitrogen monitoring to characterize the Facility's discharge. In addition, the Discharger will receive a Notice To Comply for the Nitrogen Control Program in the next few years.

Provision E.1 of the General Order requires discharges enrolled under the General Order to prepare and implement the following reports within **90 days** of the issuance of the NOA (**19 January 2021**):

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

A copy of the Spill Prevention and Emergency Response Plan and the Sampling and Analysis Plan shall be maintained at the WWTF and shall be presented to the Regional Water Board staff upon request.

Failure to comply with the requirements in this NOA, General Order **2014-0153-DWQ-R5348**, with all attachments, and MRP No. **2014-0153-DWQ-R5348** 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.

As stated in Section E.2.w of the General Order, in the event any change in control or ownership of the WWTF 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.

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 Program are met.

All monitoring reports and other 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:** 201077,  
**Facility Name:** La Vina WWTF,  
**Order:** 2014-0153-DWQ-R5348

All document, including responses to inspection and written notification, submitted to comply with this General Order 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 General Order and notification for termination of coverage under the General Order, shall be directed, via the paperless office system, to the WDR Permitting Unit, attention to Denise Soria. Ms. Soria can be reached at (559) 444-2488 or by email at [denise.soria@waterboards.ca.gov](mailto:denise.soria@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, section 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 NOA 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 ([https://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/](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 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 at: ([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 95-157 are proposed to be rescinded at the **10/11 December 2020 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 Denise Soria by phone at (559) 444-2488, by email at [denise.soria@waterboards.ca.gov](mailto:denise.soria@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-R5348  
                      ○ 21 October 2020 Regional Water Board Staff Memorandum  
                      ○ State Water Resources Control Board Order WQ 2014-0153-DWQ  
                          (Discharger Only)

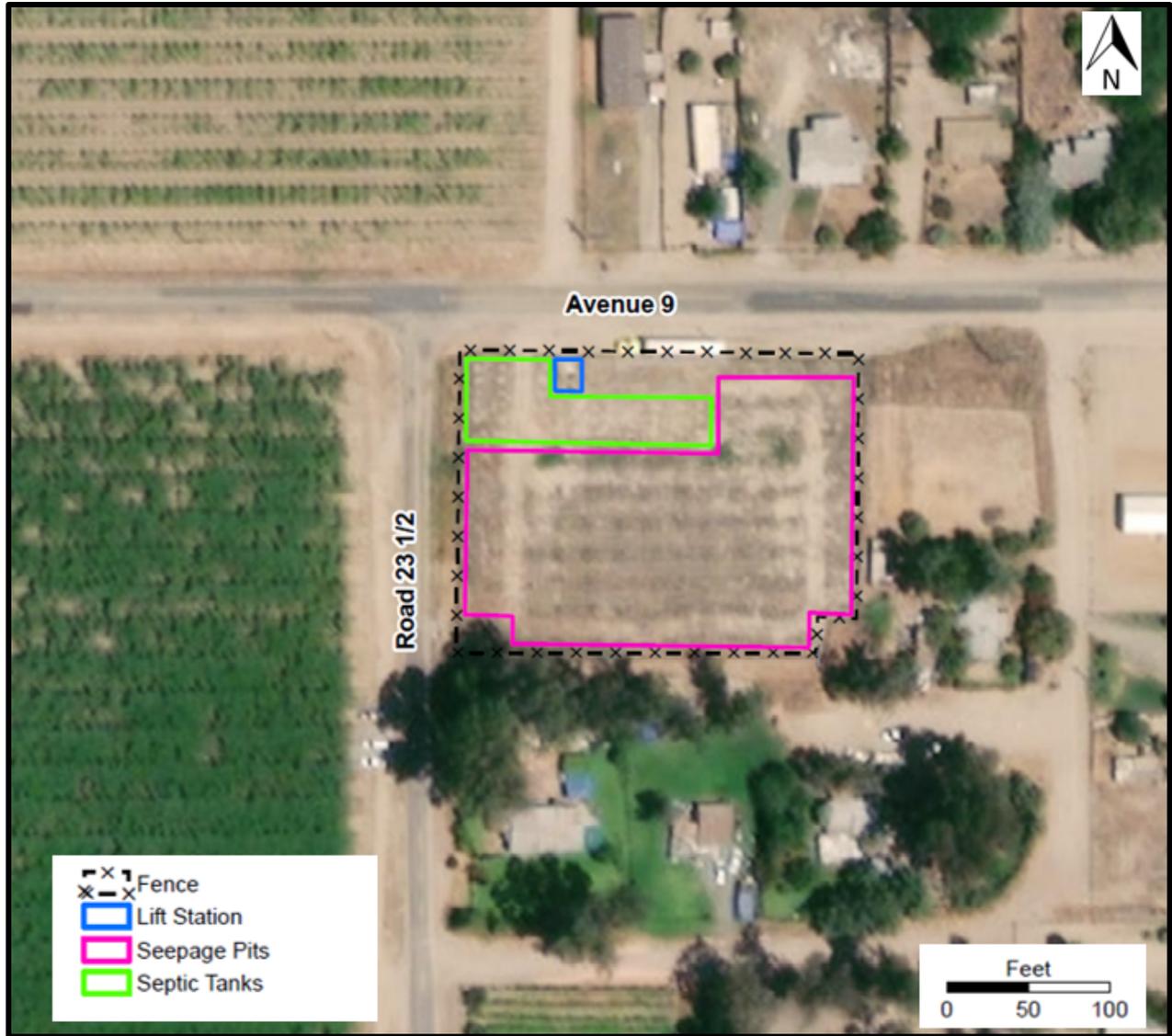
cc:               • David Lancaster, State Water Resources Control Board, OCC,  
                          Sacramento (via email)

                      • Laurel Warddrip, Senior Scientist, State Water Resources Control  
                          Board, Division of Water Quality, Sacramento (via email)

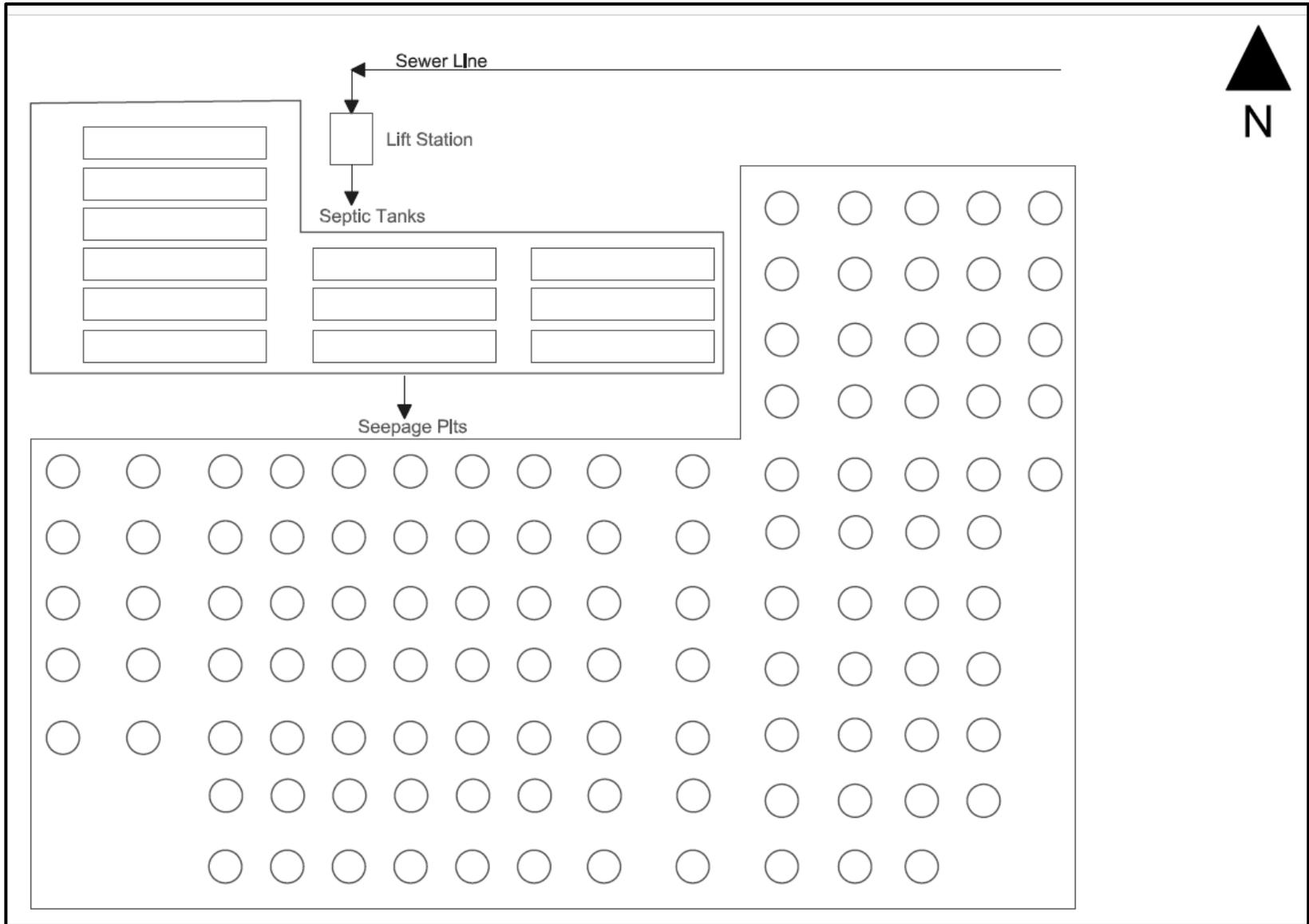
                      • Russell Walls, Senior Engineer, Central Valley Water Board,  
                          Fresno (via email)

                      • Adam Forbes, State Water Resources Control Board, Division of  
                          Drinking Water, Fresno (via email)

                      • Ramon Mendez, Madera County Public Works, Madera (via email)



**ATTACHMENT A – SITE MAP**  
NOTICE OF APPLICABILITY 2014-0153-DWQ-R5348



**ATTACHMENT B – FLOW SCHEMATIC**  
 NOTICE OF APPLICABILITY 2014-0153-DWQ-R5348

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

**MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5348  
FOR  
MADERA COUNTY MAINTENANCE DISTRICT NO. 37  
LA VINA WASTEWATER TREATMENT FACILITY  
MADERA 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. Madera County Maintenance District No. 37 (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 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 La Vina Wastewater Treatment Facility (WWTF) that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5348. This NOA enrolls the WWTF under State Water Resources

Control Board Order WQ 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Treatment Systems* (General Order) upon the rescission of WDRs Order 95-157. 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 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.

## **TREATMENT UNIT MONITORING**

### **Septic Tank Monitoring**

Septic tank effluent samples shall be taken from a location that represents the effluent from the septic tank to the seepage pits. At a minimum, effluent monitoring shall include the following:

**Table 1 – Septic Tank Effluent Monitoring Requirements**

<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>	<b>Reporting Frequency</b>
Flow	gpd	Estimated (see 1 below)	Continuous	Quarterly

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
EC	mg/L	Grab	Monthly	Quarterly
Total Nitrogen (as N)	mg/L	Grab	Monthly	Quarterly

1 Flows can be metered or estimated based on pump run time or other approved method. The method of measurement shall be reported in the self-monitoring report.

All septic tanks shall be inspected and/or pumped at least as frequently as described in Table 2 below. Inspections of sludge and scum depth are not required if the tanks are pumped at least annually.

**Table 2 – Septic Tank Monitoring Requirements**

Parameter	Units	Measurement Type	Inspection/Reporting Frequency
Sludge depth and scum thickness in each compartment of each tank	Feet	Staff Gauge	Annually
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Annually
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually
Effluent filter condition	N/A (See 1. Below)	N/A (See 1. Below)	Annually

1. N/A denotes not applicable

Septic tanks shall be pumped when any of the following conditions exists:

1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment.
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches of the outlet device.

If a septic tank is pumped during the year the pumping report shall be submitted with the annual report. All pumping reports shall be submitted with the next regularly scheduled monitoring report. At a minimum, the record shall include the date, nature of service, service company name, and service company license number.

### **SUBSURFACE DISPOSAL AREA MONITORING**

In general, subsurface disposal 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 disposal area. Monitoring of the seepage pit area shall at a minimum, include the monitoring specified in Table 3.

**Table 3 – Subsurface Disposal Area Monitoring Requirements**

<b>Parameter</b>	<b>Sampling 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
Seepage Pit Condition (see 5. Below)	Quarterly	Quarterly

1. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
2. Inspect the disposal area for saturated conditions.
3. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
4. Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.
5. Seepage pits shall be inspected to ensure they are allowing wastewater to infiltrate as designed. Visual inspection of the water level in the seepage pit is adequate.

### **SOLIDS DISPOSAL MONITORING**

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the WWTF. 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.

### **GROUNDWATER MONITORING**

Groundwater depth and elevation readings shall be taken at domestic wells La Vina #1 and La Vina #2 to ensure groundwater does not approach 40 feet below ground surface (bgs). If groundwater is detected within 60 feet of the ground surface, the Discharger shall contact Central Valley Water Board staff to discuss installation of a groundwater monitoring well network at the WWTF.

**Table 4 – Groundwater Monitoring Requirements**

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Groundwater Elevation (See 1. Below)	0.01 feet	Calculated	Weekly	Annually
Depth to Groundwater	0.01 feet	Measurement	Weekly	Annually

1. Groundwater elevation shall be based on depth to water using a surveyed measuring point elevation on the well and a surveyed reference elevation.

### **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 shall 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 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:** 201077,  
**Facility Name:** La Vina WWTF,  
**Order:** 2014-0153-DWQ-R5348

#### **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 the minimum, the quarterly reports shall include:

1. Results of all required monitoring.
2. For each month of the quarter, a calculation of the average total nitrogen concentration (effluent).

3. 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).
4. 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. A groundwater monitoring report summarizing the groundwater data collected from the source water wells (La Vina #1 and #2). When groundwater is detected at 60 ft bgs, the Discharger shall discuss with Water Board staff about installing groundwater monitoring wells.
3. An evaluation of the performance of the WWTF, 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.
4. Copies of laboratory analytical report(s) and chain of custody form(s).
5. 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.
6. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
7. 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 Recycled Water Policy](https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/) ([https://www.waterboards.ca.gov/water\\_issues/programs/water\\_recycling\\_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. For calendar year 2019, data shall be reported for the months January through December. The Discharger must submit this annual report containing monthly data in electronic format via the State Water Board's Internet [GeoTracker system](http://geotracker.waterboards.ca.gov/) (<http://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.
  - 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, excluding the State Water Board Volumetric Report, 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 the above monitoring program upon the first day of the month following the rescission of WDRs Order 95-157.

Ordered by:

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

10/21/2020  
(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	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
MPN/100 mL	Most probable number [of organisms] per 100 milliliter

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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

Denise Soria  
Water Resource Control Engineer



**DATE:** 21 October 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; MADERA COUNTY MAINTENANCE DISTRICT NO. 37; LA VINA WASTEWATER TREATMENT FACILITY, MADERA COUNTY**

**BACKGROUND INFORMATION**

Waste Discharge Requirements (WDRs) Order 95-157 regulates the discharge of treated domestic wastewater from the Madera County Maintenance District No. 37 (Discharger or County) La Vina Wastewater Treatment Facility (WWTF) for a flow of up to 86,000 gallons per day (gpd) to seepage pits. WDRs Order 95-157 needs to be updated to ensure the discharge is consistent with Central Valley Water Board plans and policies.

On 4 August 2020, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) from the Discharger applying for coverage under the State Water Resources Control Board's Water Quality Order 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). The RWD includes a Form 200 signed by Mr. Marty Duvall, Utilities Superintendent with Madera County, and a technical report signed and stamped by Mr. Ramon E. Mendez, a California registered civil engineer (RCE 83336) with Madera County.

This memorandum provides a summary of Central Valley Water Board staff's review of the RWD and the applicability of the discharge to be covered under the General Order.

### DESCRIPTION OF DISCHARGE

The WWTF is about 5.5 miles southwest of the City of Madera in Madera County (sections 21, Township 12 South, Range 17 East, Mount Diablo Base and Meridian [MDB&M]) (36° 52' 47.52" N, 120° 7' 7.84" W). A site map is shown on **Attachment A** of the Notice of Applicability (NOA). The WWTF services the La Vina subdivision that consists of approximately 52 acres with 101 sewer connections serving 175 residential units and commercial units (convenience store).

The WWTF has a design peak treatment capacity of 86,000 gpd. The General Order states that domestic wastewater treatment systems discharging under 100,000 gpd are eligible for coverage. The WWTF consists of twelve 7,500-gallon septic tanks, operated in parallel, and 87 seepage pits. Wastewater gravity flows to the WWTF where it is pumped into the septic tanks by a lift station. Wastewater then gravity flows through the septic tanks and into the seepage pits. The seepage pits are 4.5 feet in diameter and approximately 30 to 35 feet deep. Sludge from the septic tanks is removed periodically and disposed at the City of Madera WWTF. The WWTF flow schematic is show on **Attachment B** of the NOA.

Waste Discharge Requirements 95-157 includes the following conditions and effluent limits:

- a) A monthly average daily discharge flow not to exceed 86,000 gpd.
- b) The maximum specific electrical conductivity of the discharge shall not exceed 700 umhos/cm.

According to the RWD, the monthly average flows generated at the WWTF range from 41,273 to 87,550 gpd. Table 1 below shows the monthly average flow at the WWTF. According to the Discharger, elevated flow readings in 2018 were due to issues with the pump. The pump has since been replaced.

**Table 1 – Monthly Average Wastewater Flows (in gallons per day)**

Month	2017	2018	2019
January	59,000	62,400	75,111
February	68,500	70,111	68,500
March	69,000	77,000	41,273
April	71,367	76,000	42,875
May	71,355	69,097	42,091
June	72,500	69,100	41,333
July	78,268	74,091	43,125
August	75,387	81,778	46,750
September	74,690	80,667	41,778
October	74,233	87,550	44,714
November	72,000	83,556	48,500
December	63,111	72,667	44,000

Influent and effluent monitoring for electrical conductivity (EC) was not required by MRP 95-157. However, in 2012 the Discharger collected effluent samples at the WWTF to characterize EC in the wastewater. The 2012 EC data are shown in Table 2.

**Table 2 - 2012 Effluent EC Data**

<b>Month</b>	<b>EC (µmhos/cm)</b>
January	694
February	764
March	689
April	546
May	679
June	635
July	705
August	610
September	---
October	---
November	---
December	641

#### **POTENTIAL THREAT TO WATER QUALITY**

WDRs 95-157 requires the Discharger to submit a work plan to establish a groundwater network of piezometers in the seepage pit area if groundwater is detected within 40 feet of the ground surface, alternatively, the Discharger is required to submit a work plan for monitoring groundwater levels using existing Department of Water Resources groundwater monitoring well(s) when groundwater is detected within 60 feet of the ground surface. According to Madera County staff, the WWTF does not have a piezometer network in the seepage pit area.

According to the *Lines of Equal Elevation of Groundwater* map published by the Department of Water Resources, Spring 2011, groundwater elevation in the area ranges from 130 to 140 feet. Based on a ground elevation of approximately 230, according to the Madera Quadrangle Topographic Map from the US. Geological Survey (2018), the calculated depth to groundwater ranges from 90 to 100 feet below ground surface and flows in the northwest direction.

The Discharger proposes to monitor two domestic wells (La Vina #1 and La Vina #2) to ensure groundwater depths do not approach 40 feet below ground surface (bgs). The two domestic wells were constructed in 1984. La Vina #1 is located near the intersection of Avenue 9 and Road 23 ½. La Vina #2 is located near the intersection of Avenue 9 and Road 24. According to the drilling reports, the wells were constructed at a total depth of 420 ft bgs (La Vina #1) and 400 ft bgs (La Vina #2). The wells have 72 feet (La Vina #1) and 96 feet (La Vina #2) of screen with a 0.06-inch slot size and a filter pack of gravel from 300 to 420 feet bgs (La Vina #1) and 290 to 400 feet bgs (La Vina #2).

Cottonwood Creek is located about 3.5 miles to the north of the WWTF and the San Joaquin River is located about 4.5 miles to the south of the WWTF.

### **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. The proposed flow is greater than 20,000 gpd and, therefore, a nitrogen effluent limit evaluation is required for the WWTF.

Influent and effluent monitoring for nitrogen, was not required by Monitoring and Reporting Program 95-157. According to the RWD, there are no significant contributions of nitrogen from other sources like recreational vehicles, institutions, and factories. It is anticipated that wastewater quality at the WWTF will not exceed typical domestic wastewater strength.

The new MRP should include a more robust monitoring schedule that requires nitrogen monitoring to better characterize the wastewater. In addition, flows at the WWTF will not be increasing from the currently permitted flows of 86,000 gpd. Given current depth to groundwater and limiting site conditions discussed above it is appropriate to carry over the existing groundwater monitoring requirements from Order 95-157. Furthermore, as discussed below, the Discharger will receive a Notice to Comply for the new Nitrate Control Program in the next few years. 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:

- Septic Tank Monitoring;
- Subsurface Disposal Area Monitoring; and
- Solids Disposal 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 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 (OAL Matter No. 2019-1203-03).

Pursuant to the Basin Plan amendments, discharges will receive a Notice to Comply with instruction and obligations for the Salt Control Program within one year of the effective date of the amendments (17 January 2020). The Salt Notice to Comply letters should be issued in the next couple of months. Upon receipt of the Notice to Comply, the Discharger will have no more than six months to submit their Notice of Intent informing the Central Valley Water Board of their choice between Option 1 (Conservative Salinity Permitting Approach) or Option 2 (Alternative Salinity Permitting Approach).

For the Nitrate Control Program, the WWTF falls within Groundwater Basin 5-022.06 (San Joaquin Valley – Madera) a Priority 2 basin/sub-basin. A Notice to Comply for the Nitrate Control Program will be issued within two to four years after the effective date of the amendments.

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