



Central Valley Regional Water Quality Control Board

13 November 2019

Marty Duvall, Utilities Superintendent
Madera County
200 W 4th Street
Madera, California 93637

CERTIFIED MAIL
7018 1830 0001 2775 2552

NOTICE OF APPLICABILITY (NOA), STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5326, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS, MADERA COUNTY SERVICE AREA 14, CHUK-CHANSE WASTEWATER TREATMENT FACILITY, MADERA COUNTY

On 15 August 2019, Madera County (Discharger) submitted a Report of Waste Discharge (RWD) for County Service Area (CSA) 14, Chuk-Chanse wastewater treatment facility (WWTF). 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 completed and signed Form 200 and a technical report prepared by Mr. Ramon E. Mendez, a California registered engineer (RCE 83336). This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described below. After Waste Discharge Requirements (WDRs) Order 85-025 has been rescinded you are hereby assigned General Order **2014-0153-DWQ-R5326** for your system.

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-R5326**. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

DISCHARGE DESCRIPTION

Madera County owns and operates the CSA 14 WWTF that is regulated by WDRs Order 85-025. Order 85-025 and allows a discharge of up to 31,000 gallons per day (gpd) to unlined ponds.

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

1685 E Street, Fresno, CA 93706 | www.waterboards.ca.gov/centralvalley

The WWTF is near the intersection of Road 28 ½ and Avenue 19 ½ in Madera County (37°1'53.32"N, 120°2'10.03"W). The WWTF treats domestic wastewater generated from 31 housing units on the east of Road 28 ½ and an industrial park on the north of Avenue 19 ½. The WWTF is show in **Attachment A**, which is incorporated by reference and considered part of this Notice of Applicability (NOA).

According to the August 2019 RWD, the WWTF can treat a daily flow of 31,000 gpd and currently has estimated flows of 28,000 gpd. The WWTF consists of one lift station, and four unlined ponds. Wastewater from the lift station typically flows into Pond 1. After Pond 1, the wastewater flows to Ponds 2, 3, and 4. The wastewater treatment flow schematic is show in on **Attachment B**.

FACILITY SPECIFIC REQUIREMENTS

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-R5326.

In accordance with Section B.1 of the General Order, treated wastewater discharged to the ponds **shall not exceed a monthly average daily discharge of 31,000 gallons per day (gpd)**.

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	Property Line
Impoundment (undisinfected secondary wastewater)	150 ft	50 ft

The Discharger shall comply with the pond system requirements in Section B.5 of the General Order. Section B.5.a states that sufficient freeboard shall be maintained at all times in ponds to provide adequate storage capacity and prevent wastewater spills. Freeboard shall be measured vertically from the lowest elevation of the pond berm to the pond water surface. Section B.5.d states that objectionable odors shall not create nuisance conditions beyond the limits of the wastewater treatment facility. A dissolved oxygen concentration of less than 1.0 mg/L in the upper one foot of any wastewater pond shall be evidence of the potential to generate objectionable odors.

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 evaluate its discharge and the potential impacts of nitrogen to groundwater.

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 (**11 February 2020**):

- 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).

A copy of the Spill Prevention and Emergency Response Plan, the Sampling and Analysis Plan, and Sludge Management 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 **within 90 days** of the issuance of the NOA.

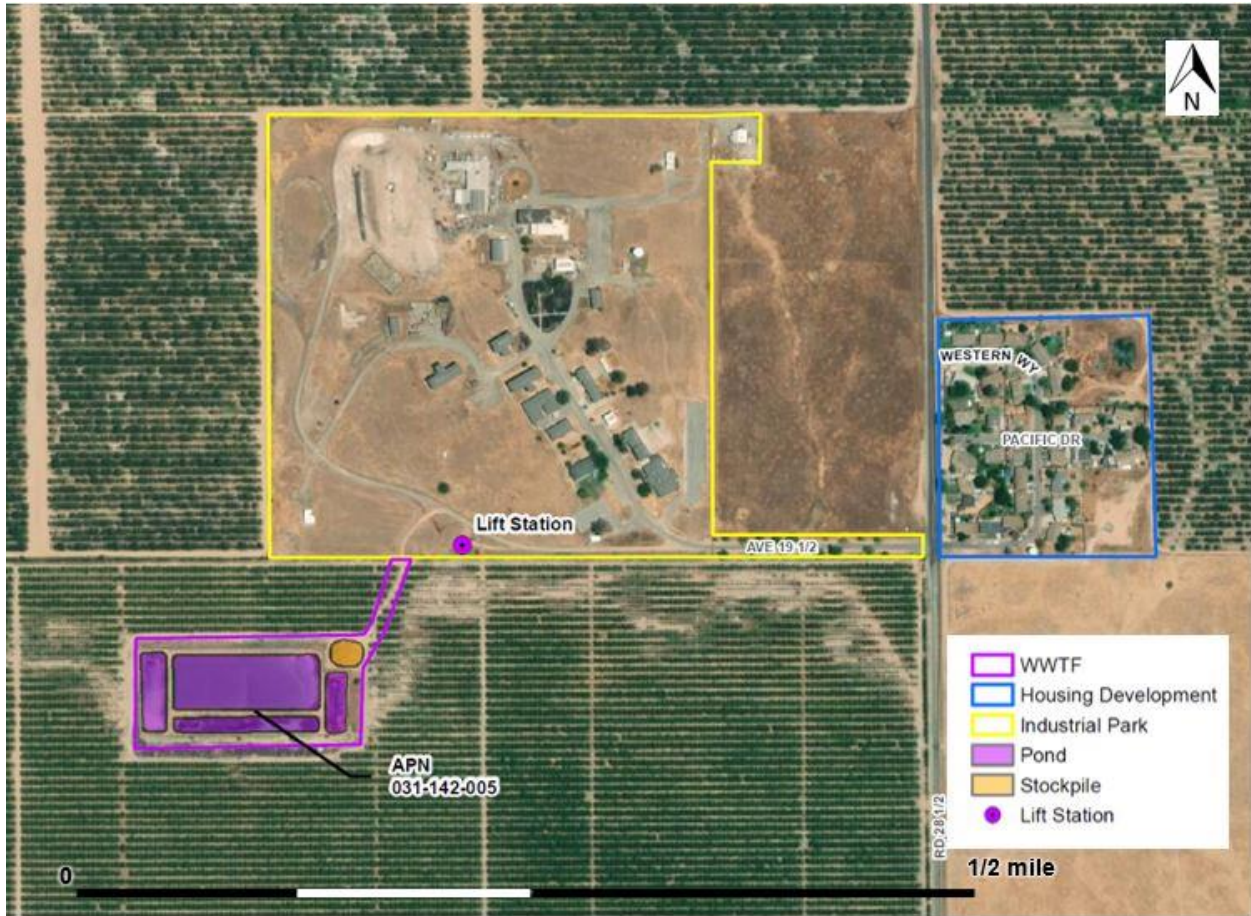
Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5326 could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. 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 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.

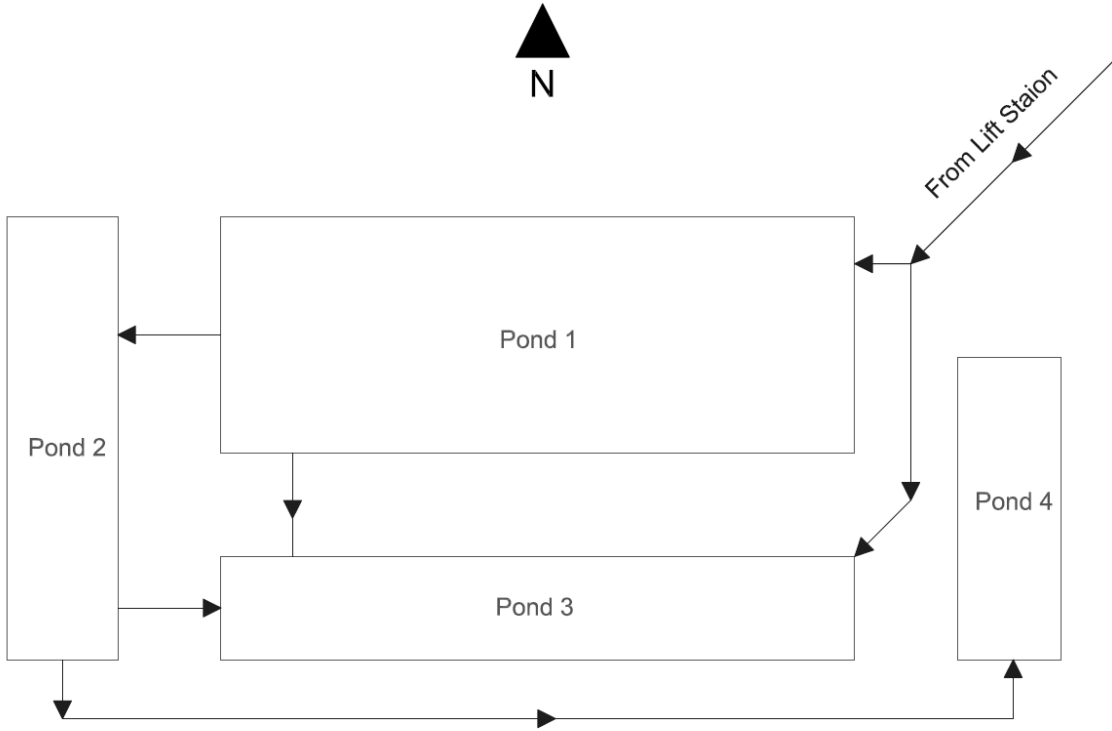
The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

The Central Valley Water Board 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. These programs, once effective, could change how the Central Valley Water Board permits discharges of salt and nitrate.

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. 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:



ATTACHMENT A – SITE MAP
 NOTICE OF APPLICABILITY 2014-0153-DWQ-R5326
 FOR
 MADERA COUNTY
 COUNTY SERVICE AREA 14
 CHUK-CHANSE WASTEWATER TREATMENT FACILITY
 MADERA COUNTY



ATTACHMENT B – FLOW SCHEMATIC
NOTICE OF APPLICABILITY 2014-0153-DWQ-R5326
FOR
MADERA COUNTY
COUNTY SERVICE AREA 14
CHUK-CHANSE WASTEWATER TREATMENT FACILITY
MADERA COUNTY

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

**MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5326
FOR
MADERA COUNTY
COUNTY SERVICE AREA 14
CHUK-CHANSE 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 (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 County Service Area (CSA) 14 Chuk-Chanse wastewater treatment facility (WWTF) that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5326. 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 samples shall be taken from a location that provides representative samples of the wastewater and flow rate. At a minimum, influent monitoring shall include the monitoring specified in Table 1 below. Influent flow rate shall be metered at the lift station prior to Pond 1.

Table 1 – Influent Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Influent Flow Rate	Gallons per day (gpd)	Metered (see 1. below)	Continuous	Quarterly
EC	µmhos/cm	Grab	Quarterly	Quarterly
pH	pH units	Grab	Quarterly	Quarterly

1. Flow rate may be metered or estimated based on potable water supply meter reading or other approved method. Flow rates may be measured as influent or effluent flow.

All wastewater and treated wastewater storage ponds (lined and unlined) shall be monitored as specified in Table 2 below (unless specified otherwise). Monitoring shall be conducted for all parameters listed in Table 2 for each pond that contained wastewater during the month/quarter. Pond samples shall be collected opposite the pond inlet at a depth of one foot.

Table 2 – Wastewater Pond Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
BOD ₅	mg/L	Grab	Monthly (see 1. below)	Quarterly
EC	µmhos/cm	Grab	Monthly	Quarterly
DO (see 2. below)	mg/L	Grab	Monthly	Quarterly
Total Nitrogen (as N)	mg/L	Grab	Quarterly (see 3. below)	Quarterly
Freeboard	0.1 feet	Measurement	Monthly	Quarterly
Odors	---	Observation	Monthly	Quarterly
Berm Condition	---	Observation	Monthly	Quarterly

1. BOD₅ monitoring shall occur at least once per month for 12 months in each pond containing wastewater during that month. After 12 month of monitoring, the Discharger shall, at a minimum sample the last pond containing wastewater quarterly.
2. DO shall be measured between 8:00 a.m. and 10:00 a.m.
3. Total nitrogen shall be measured at the last pond containing wastewater.

SLUDGE/BIOSOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily 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.

The Central Valley Water Board has gone to a Paperless Office System. 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. 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: 214483,
Facility Name: County Service Area 14,
Order: 2014-0153-DWQ-R5326

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 discharge specifications, applicable effluent limits, disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. (Data shall be presented in tabular format).
3. Copies of laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

Annual Reports shall be submitted to the Regional Water Board by **March 1st following the monitoring year**. The Annual Report shall include the following:

1. Tabular and graphical summaries of all monitoring data collected during the year.
2. An evaluation of the performance of the wastewater treatment 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.
3. Copies of laboratory analytical report(s) and chain of custody form(s).
4. 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.

5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
6. 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/) (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 Annual 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 rescission of WDRs Order 85-025.

Ordered by:

Original Signed by Scott Hatton for:
PATRICK PALUPA, Executive Officer

11/13/2019

GLOSSARY

BOD5	Five-day biochemical oxygen demand
CaCO ₃	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

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: 13 November 2019

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 SERVICE AREA 14; CHUK-CHANSE WASTEWATER TREATMENT FACILITY, MADERA COUNTY

BACKGROUND INFORMATION

Waste Discharge Requirements (WDRs) Order 85-025 regulates the discharge of treated domestic wastewater from the Madera Unified School District, Chuk Chanse Training Center wastewater treatment facility (WWTF) for a flow of up to 31,000 gallons per day (gpd) to four unlined ponds. On 6 December 1983, Madera County Board of Supervisors adopted Resolution 83-578 for the formation of Madera County Service Area 14 (Chuk-Chanse). WDRs Order 85-025 needs to be updated to ensure the discharge is consistent with Central Valley Water Board plans and policies.

On 15 August 2019, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) applying for coverage under 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 and a technical report prepared by Mr. Ramon E. Mendez, a California registered engineer (RCE 83336).

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 located on Assessor Parcel Number (APN) 031-142-005 of section 29, Township 10 South, Range 18 East, Mount Diablo Base and Meridian (MDB&M) in Madera County (see **Attachment A** of the Notice of Applicability [NOA]). The WWTF services about 31 housing units and an industrial park. However, according to the RWD, the industrial park does not provide significant flow due to “inactivity”.

The WWTF consists of a lift station, and four unlined ponds (total storage capacity of 15.91 acre-feet). According to the August 2019 RWD, flows at the WWTF are estimated based on the lift station pump run time. Wastewater from the lift station typically flows into Pond 1. After Pond 1, the wastewater flows to Ponds 2 and 3. The WWTF flow schematic is show on **Attachment B** of the NOA.

The WWTF has a design flow of 31,000 gpd. Sludge accumulated at the bottom of the ponds is removed and stockpiled on-site near the WWTF prior to being hauled off-site. The last time sludge was removed from the ponds and hauled off-site was about 15 to 20 years ago. According to the Discharger, sludge will be hauled off-site to the Fairmead Municipal Solid Waste Landfill currently regulated under WDRs Order R5-2015-0052.

Monthly average flows at the WWTF range from 24,000 gpd to 82,000 gpd according to Self-Monitoring Reports (SMRs) from January 2017 through July 2019. According to County staff, these flows were incorrectly calculated based on new pump performance conditions. Due to the age of the pump, the calculations resulted in overestimating flows coming into the WWTF. To address the issue, the Discharger began incorporating a correction factor in late August 2019 to consider current pump performance conditions due to wear. Monthly flows at the WWTF are tabulated in Table 1. The General Order states that WWTFs discharging under 100,000 gpd are eligible for coverage.

Table 1. Wastewater Flows (gpd)

Month	2017	2018	2019
January	87,000	32,000	43,000
February	74,000	30,000	82,000
March	51,000	41,000	59,000
April	38,000	27,000	24,000
May	37,000	27,000	33,000
June	36,000	32,000	37,000
July	30,000	34,000	39,000
August	41,000	40,000	30,774
September	39,000	28,000	18,100
October	32,000	31,000	---

Month	2017	2018	2019
November	26,000	37,000	---
December	---	31,000	---

POTENTIAL THREAT TO WATER QUALITY

The WWTF does not have a groundwater monitoring well network. Groundwater in the area flows in northwest direction and is found at approximately 350 feet below ground surface (bgs) according to the Groundwater Information Center Interactive Map Application published by the Department of Water Resources, Fall 2018 Depth.

Historical groundwater data from wells within a 2-mile radius from the WWTF are shown in Table 2. Groundwater data was obtained from the California Department of Water Resources Water Data Library portal (Well 1: 10S18E32B080M; Well 2: 10S18E20M002M; and Well 3: 10S18E20M080M) and the United States Geological Survey National Water Information System: Mapper (Well 4: 10S18E20Q001M).

Table 2. Groundwater Quality from Nearby Wells

Parameter	Units	Well 1 (8/10/1960)	Well 2 (5/28/1965)	Well 3 (8/10/1960)	Well 4 (6/5/1987)
Total Alkalinity	mg/L	67	68	56	85
Boron (Dissolved)	mg/L	---	<0.1	---	0.03
Calcium (Dissolved)	mg/L	---	17	---	18
Chloride (Dissolved)	mg/L	20	15	25	23
Electrical Conductivity	umhos/cm	220	220	295	252
Fluoride (Dissolved)	mg/L	---	0.1	---	0.2
Total Hardness	mg/L	---	66	90	70.8
Magnesium (Dissolved)	mg/L	---	6	---	6.2
Nitrate (Dissolved)	mg/L	---	24	---	11.1
Potassium (Dissolved)	mg/L	---	2.4	---	2.2
Sodium (Dissolved)	mg/L	13	19	20	22
Sulfate (Dissolved)	mg/L	---	3	---	4.9
pH	pH Units	8	7.2	7.8	7.4

The groundwater data above demonstrates that underlying groundwater is of poor quality with nitrogen ranging from 11.1 to 24 mg/L. For EC, underlying groundwater appears to be of good quality.

NITROGEN LIMIT EVALUATION

Attachment 1 of the General Order includes five site-specific considerations that shall be considered when evaluating a discharge and the need for nitrogen control. 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.

The predominant soil type in the vicinity of the WWTF is Cometa Sandy Loam, according to the Web Soil Survey published by the United States Department of Agriculture, Natural Resources Conservation Service. The RWD states that the percolation rate for sandy loam soils is approximately, 0.36 inches per day. As previously mentioned, groundwater depth in the vicinity of the WWTF is approximately 350 ft bgs.

Influent and effluent monitoring for nitrogen was not required by Monitoring and Reporting Program 85-025. According to the RWD, wastewater quality at the WWTF does not exceed typical domestic wastewater strength. The NOA will include a more robust monitoring schedule that requires nitrogen monitoring to better characterize the wastewater. In addition, flows at the WWTF will reportedly not be increasing from the currently permitted flow of 31,000 gpd.

The August 2019 RWD did not provide a summary of the groundwater quality for nitrogen. Based on historical data groundwater in the area is of poor quality with respect to nitrogen. The Discharger does not propose to reclaim any of its treated wastewater. All treated wastewater is discharged to evaporation/percolation ponds.

Based on 1) percolation rate and depth to groundwater, 2) strength of influent domestic wastewater quality which is not expected to exceed typical domestic wastewater strength, 3) nitrogen monitoring to evaluate the discharge and its potential impacts to groundwater, and 4) no future plans to increase growth in the within the CSA, the discharge is not expected to impact underlying groundwater. 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
- Solids Disposal Monitoring

SALT AND NITRATE CONTROL PROGRAMS

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. On 16 October 2019, the State Water Resources Control Board adopted a resolution 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. These programs, once effective, could change how the Central Valley permits discharges of salt and nitrate.