



Central Valley Regional Water Quality Control Board

3 July 2020

Craig Barnes, Supervisor Sierra Unified School District Foothill Elementary School 29147 Auberry Road Prather, California 93651 CERTIFIED MAIL 7019 2970 0001 5206 3633

NOTICE OF APPLICABILITY (NOA), STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; SIERRA UNIFIED SCHOOL DISTRICT; FOOTHILL ELEMENTARY SCHOOL WASTEWATER TREATMENT SYSTEM; FRESNO COUNTY

On 6 March 2020, AM Consulting Engineers, Inc., on behalf of Sierra Unified School District (Discharger), submitted a Report of Waste Discharge (RWD) for Foothill Elementary School Wastewater Treatment Facility (Facility or WWTF). The Discharger is requesting coverage under the State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ, *General Water Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). The Report of Waste Discharge (RWD) included a completed and signed Form 200 and a technical report prepared by Alfonso Manrique, a California registered civil engineer with AM Consulting Engineers, Inc. (RCE 63673).

Based on the information provided and a review of available information, the Facility treats and disposes of less than 100,000 gallons of domestic wastewater per day and is eligible for coverage under the General Order. This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described. You are hereby assigned enrollee number **2014-0153-DWQ-R5337** for your system. After Waste Discharge Requirements (WDRs) Order 94-107, has been rescinded, coverage under General Order 2014-0153-DWQ will become effective.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which describes mandatory discharge and monitoring requirements. Sampling, monitoring and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate

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

treatment system sections of the General Order and the attached Monitoring and Reporting Program (MRP) No. **2014-0153-DWQ-R5337**. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

DISCHARGE DESCRIPTION

Sierra Unified School District owns and operates Foothill Elementary School and the associated WWTF. The Facility is located west of Thunderbird Road about 0.9 miles northwest of Prather in Fresno County (Section 24, Township 10 South, Range 22 East, Mount Diablo Base and Meridian). The Facility currently provides treatment of wastewater generated for about 600 students and 80 staff.

The Facility consists of headworks, a lined facultative pond, a chlorine contact chamber, and two lined evaporation/storage ponds. The headworks is equipped with both an inline grinder (comminutor) and a bypass, which has a manually cleaned bar screen. Following the headworks, screened sewage flows into a facultative wastewater treatment pond. Upon treatment, effluent is then pumped through a chlorine contact chamber (not in use) and disposed of into two designated evaporation ponds that are lined (Overflow Basin and Evaporation Pond). The Facility was initially designed and permitted to treat an average design flow rate of 31,500 gallons per day (gpd) in order to be able to treat wastewater from the school and a proposed residential development of approximately 2,000 homes. However, the residential development was never constructed. The March 2020 RWD justifies a decrease in flow rate limit as represented in the design water balance calculations, which indicate that the Facility can adequately dispose of up to 15,000 gpd.

FACILITY SPECIFIC REQUIREMENTS AND EFFLUENT LIMITATIONS

The Discharger shall maintain exclusive control over the discharge and shall comply with the terms and conditions of this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5337.

In accordance with section B.1 of the General Order, the monthly average daily discharge to the evaporation ponds shall not exceed 15,000 gpd. In accordance with the requirements of the General Order, this NOA does not specify a nitrogen effluent limitation since the Facility flowrate is less than 20,000 gpd.

The General Order states in Section B.1 that the Discharger shall comply with the setbacks as described in Table 3 of the General Order. This table summarizes the different set setback requirements for wastewater treatment system equipment, activities, land application areas and storage and/or treatment ponds from sensitive receptors and property lines where applicable. The Discharger shall comply with the applicable requirements, as summarized in the following table.

Table 1: Site Specific Applicable Setback Requirements

Equipment or Activity	Domestic Well	Flowing Stream	Ephemeral Stream Drainage	Property Line	Lake or Reservoir
Impoundment (undisinfected secondary recycled water)	150 ft.	150 ft	150 ft.	50 ft	200 ft
Septic Tank, Treatment System, and Collection System	150 ft.	50 ft	50 ft.	5 ft	200 ft

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

- 1. Pond Systems requirements specified in Section B.5 of the General Order;
- 2. Sludge/Solids/Biosolids Disposal requirements specified in Section B.8 of the General Order; and
- Groundwater and Surface Water Limitations specified in Section C.1 of the General Order.

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 (**1 October 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).

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

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

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5337 could result in an

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

The Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting (i.e., Salt and Nitrate Control Programs) as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (**CV-SALTS**) initiative. These Basin Plan amendments became effective on 17 January 2020. Further details of the Salt and Nitrate Control Programs are discussed in the enclosed memorandum. For more information regarding the Salt and Nitrate Control Program, you are encouraged to go to the CV-SALTS Info Webpage (https://www.cvsalinity.org/public-info).

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

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. 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: 224827,

Facility Name: Foothill Elementary School WWTF,

Order: 2014-0153-DWQ-R5337

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 <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).

All documents, including responses to inspections and written notifications, submitted to comply with this NOA shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Russell Walls. Mr. Walls can be reached at (559) 488-4392 or Russel.Walls@waterboards.ca.gov. Questions regarding the permitting aspects of the NOA, and notification for termination of coverage under the

Small Domestic General Order, shall be directed, via the paperless office system, to the WDR Permitting Unit, attention Katie Carpenter. Ms. Carpenter can be reached at (559) 445-5551 or Katie.Carpenter@waterboards.ca.gov.

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

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-R5337
- Review Memorandum of Sierra Unified School District, Foothill Elementary School Wastewater Treatment Facility
- State Water Resources Control Board WQ 2014-0153-DWQ (Discharger Only)

CC:

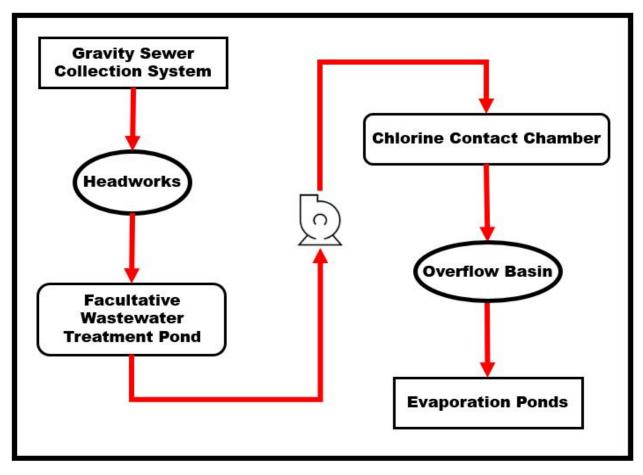
- David Lancaster, State Water Resources Control Board, OCC, Sacramento (via email)
- Laurel Warddrip, State Water Resources Control Board, Division of Water Quality, Sacramento (via email)
- Russel Walls, Senior Engineer, Central Valley Water Board, Compliance and Enforcement Unit, Fresno (via email)
- Jose Robledo, State Water Resources Control Board, Division of Drinking Water, Fresno (via email)
- Fresno County Environmental Health, 1221 Fulton Street, 3rd Floor, P.O. Box 11867, Fresno, CA 93775
- o Alfonso Manrique, AM Consulting Engineers Inc. (via email)
- o Brandon Cauble, AM Consulting Engineers Inc. (via email)



ATTACHMENT A - SITE MAP

NOTICE OF APPLICABILITY 2014-0153-DWQ-R5337 FOR

SIERRA UNIFIED SCHOOL DISTRICT FOOTHILL ELEMENTARY SCHOOL WASTEWATER TREATMENT SYSTEM FRESNO COUNTY



ATTACHMENT B - FLOW SCHEMATIC

NOTICE OF APPLICABILITY 2014-0153-DWQ-R5337 FOR

SIERRA UNIFIED SCHOOL DISTRICT FOOTHILL ELEMENTARY SCHOOL WASTEWATER TREATMENT SYSTEM FRESNO COUNTY

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5337 FOR

SIERRA UNIFIED SCHOOL DISTRICT FOOTHILL ELEMENTARY SCHOOL WASTEWATER TREATMENT FACILITY FRESNO COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. This MRP is issued pursuant to Water Code section 13267. The Sierra Unified School District (District or Discharger) shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

Section 13267 of the California Water Code states, in part:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports."

Section 13268 of the California Water Code states, in part:

- "(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying and information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).
- (b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs."

The Discharger owns and operates the Foothill Elementary School Wastewater Treatment Facility (WWTF or Facility) located in Prather that is subject to Notice of Applicability (NOA) 2014-0153-DWQ-R5337 enrolling the Facility under State Water

Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ, *General Water Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). The reports are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Resources Control Board, Environmental Laboratory Accreditation Program (ELAP) certified laboratory, or:

- 1. The user is trained in proper use and maintenance of the instruments.
- 2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer.
- 3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
- 4. Field calibration reports are maintained and available for at least three years.

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

POND SYSTEM MONITORING

Influent Monitoring

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

Table 1: Influent Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow Rate	gpd	Metered (see 1. below)	Continuous	Quarterly
EC	µmhos/cm	Grab	Monthly	Quarterly
BOD ₅	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Annually	Annually

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

Effluent Monitoring

Effluent samples shall be taken from a location that provides representative samples of the treated wastewater discharged from the Facultative Pond. At a minimum, effluent monitoring shall consist of the following:

Table 2: Effluent Monitoring

- doi- 1. Indiana maintaining					
Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency	
рН	pH units	Grab	Monthly	Quarterly	
EC	µmhos/cm	Grab	Monthly	Quarterly	
BOD ₅	mg/L	Grab	Monthly	Quarterly	
Total Nitrogen (as N)	mg/L	Grab	Annually	Annually	

Wastewater Pond Monitoring

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

Table 3. Wastewater Pond Monitoring

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

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Odors		Observation	Monthly	Quarterly
Berm Condition		Observation	Monthly	Quarterly
Liner Condition (see 2 below)		Observation	Monthly	Quarterly

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- DO shall be measured between 8:00 am and 10:00 am and shall be taken opposite the pond inlet at a depth of approximately one foot. Should the DO be below 1.0 mg/L during a monthly sampling event, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected ponds until the problem has been resolved.
- 2. The Discharger shall observe the condition of the lined ponds and check the liner for evidence of rips, tears, and/or leaks on a monthly basis. In addition, the Discharger shall conduct integrity testing of the pond liners once every five years beginning in 2021 and include the results of the integrity testing in the Annual report. Integrity testing shall include an electrical leak survey of the liner or other method that has been approved by the Executive Officer.

SOLIDS DISPOSAL MONITORING

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

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernable. The data shall be summarized to clearly illustrate compliance with the General Order and NOA as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

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Program: Non-15, Place ID: 224827,

Facility Name: Foothill Elementary School WWTF,

Order: 2014-0153-DWQ-R5337

A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Regional Water Board on the **first day of the second month after the quarter ends** (e.g. the January-March Quarterly Report is due by May 1st). The reports shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the quarterly reports shall include:

- 1. Results of all required monitoring.
- 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 all laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

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

- 1. Tabular and graphical summaries of all monitoring data collected during the year.
- An evaluation of the performance of the wastewater treatment system, including discussion of the capacity issues nuisances' conditions, system problems and a forecast of the flows anticipated in the next year. A flow rate evaluation, as described in the General Order (Provision E.2.c), shall also be submitted.
- 3. Results of the electrical leak survey and liner integrity testing as required.
- 4. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order.
- 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 <u>State Water Resources Control Board's Water Quality Control Policy</u> (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 30th 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.
- 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.
 - 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 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 implement the above monitoring program in the first month following the date WDRs Order 94-107 is rescinded.

Ordered by:

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

7/3/2020 (Date)

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

mgd Million gallons per day

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

NA Denotes not applicable





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

Kathleen Carpenter Engineering Geologist

PG 8014

Ernesto P. Garcia Scientific Aid

DATE: 3 July 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; SIERRA UNIFIED SCHOOL DISTRICT; FOOTHILL ELEMENTARY SCHOOL WASTEWATER TREATMENT FACILITY; FRESNO COUNTY

On 6 March 2020, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) consisting of a Form 200 and technical report for Sierra Unified School District's Foothill Elementary School Wastewater Treatment Facility (Facility or WWTF). The technical report was prepared and signed by Alfonso Manrique (RCE 63673), a California registered professional civil engineer with AM Consulting Engineers, Inc. This memorandum provides a summary of the applicability of this discharge for coverage under the State Water Resources Control Board's WQ Order 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (General Order).

BACKGROUND INFORMATION

Sierra Unified School District (hereafter District or Discharger) owns and operates the Facility which provides wastewater treatment and disposal for Foothill Elementary School at 29147 Auberry Road near Prather in Fresno County (37° 02' 29" N,

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

Foothill Elementary School

119° 31' 28" W). The Facility is currently regulated by Waste Discharge Requirements (WDRs) Order 94-107, which authorizes a discharge of up to 33,000 gallons per day (gpd) to lined ponds and a spray field.

The Foothill Elementary School has a non-transient non-community water system permit with the State Water Resources Control Board, Division of Drinking Water (System No. CA1000476). The Foothill Elementary School drinking water system consists of four groundwater supply hard rock wells (majority of domestic water supplied by Well No. 1). However, one well has been disconnected due to high uranium concentrations.

Originally, the Facility was designed to treat domestic wastewater from Foothill Elementary School and from an adjacent residential development of approximately 2,000 homes. Maximum daily and average daily discharge flows of 39,325 and 31,500 gpd were anticipated, and, consequently, a 9.4-acre spray field was proposed to be added for disposal. However, the residential development was never constructed. Therefore, the proposed spray field was never added.

The March 2020 RWD included water balances demonstrating that the current Facility has disposal capacity for an average flow of 15,000 gpd and requested the flow limit be reduced to 15,000 gpd. The Facility currently serves approximately 600 students and 80 staff members. Wastewater flows to the Facility are currently estimated based on domestic water use. According to the March 2020 RWD, average flows are estimated at about 5,000 gpd.

DESCRIPTION OF DISCHARGE

The Facility consists of headworks, a lined facultative pond, a chlorine contact chamber, and two lined evaporation/storage ponds (referred to as Overflow Basin and Evaporation Pond). The reported volumes of the Facultative Pond, Overflow Basin, and Evaporation Pond are 7.32 acre-feet, 1.55 acre-feet, and 29.69 acre-feet, respectively. All three ponds are lined with 80-mil high density polyethylene (HDPE) geomembrane liner, which was installed in 1993. The headworks receives wastewater from the gravity sewer collection system and consists of an in-line grinder (comminutor) with a bypass equipped with a manually cleaned bar screen. Screened wastewater flows into the facultative treatment pond, which is stratified to provide aerobic and anerobic zones for nitrification/denitrification. Treated effluent is pumped to the chlorine contact chamber via the effluent pump station (equipped with two submersible pumps; one active, one standby) located at the end of the facultative treatment pond.

The chlorine contact chamber was designed and built to disinfect effluent before discharge to the spray field. Since the WWTF never reached design flows and the spray field was never constructed, effluent flows through the chlorine contact chamber but is not disinfected (i.e., no chlorine is injected). The Overflow Basin stores treated effluent before entering the evaporation pond. According to the March 2020 RWD, at the current flows, discharge to the evaporation pond generally only occurs during the winter. The Facility also includes a stormwater runoff collection pond (with a storage capacity

Foothill Elementary School

volume of 13.97 acre-feet), which serves as emergency storage if both the Evaporation Pond and Overflow Basin are filled.

POTENTIAL THREAT TO WATER QUALITY

According to the March 2020 RWD, the WWTF is located within the foothills of eastern Fresno County within the Auberry-Prather area. The Auberry-Prather area is dominated by bedrock complex like the Sierra Nevada, which is primarily composed of metamorphosed sedimentary and volcanic rocks that have intruded from below by intrusive igneous (granitic) rocks. Soil is classified as sandy loam by the US Soil Conservation Service and considered well drained with a depth of four feet below site grade (bsg). The soil is underlain by decomposed granite, which reaches a depth of up to 37 feet bsg. Precipitation is the primary source of recharge to the groundwater system. Groundwater is approximately 30 feet bsg and has a specific conductance of approximately 350 µmhos/cm.

According to the RWD, the Discharger conducts daily routine inspections and maintenance at the WWTF but does not sample the wastewater since all wastewater is contained in lined ponds and not sent to the spray field as proposed in WDRs Order 94-107. As part of the RWD preparation, the Discharger collected influent and effluent samples from the facultative pond on a weekly basis for three weeks. The samples were analyzed for biochemical oxygen demand (BOD), total suspended solids (TSS), and nitrogen. Based on the available data, influent BOD, TSS, and total nitrogen ranged from 28 to 250 mg/L, 48 to 430 mg/L, and 47 to 58 mg/L, respectively. Effluent BOD, TSS, and total nitrogen ranged from 33 to 73 mg/L, 75 to 150 mg/L, and 9 to 11 mg/L, respectively.

In accordance with Attachment 1 of the General Order, with flows less than 20,000 gpd a nitrogen effluent evaluation is not required. In addition, with treatment, storage, and disposal in lined ponds the discharge does not pose a significant threat to groundwater quality. To maintain the integrity of the pond liners and protection of groundwater quality the monitoring and reporting program shall require integrity testing of the pond liners at least once every five years.

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

As part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV SALTS) initiative, the Central Valley Water Board adopted Basin Plan amendments (Resolution R5-2018-0034) incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting. On 16 October 2019, the State Water Resources Control Board adopted Resolution No.

2019-0057 approving the Central Valley Water Board Basin Plan amendments and also directed the Central Valley Water Board to make targeted revisions to the Basin Plan amendments within one year from the approval of the Basin Plan amendments by the Office of Administrative Law. The Office of Administrative Law approved the Basin Plan amendments on 15 January 2020 (OAL Matter No. 2019-1203-03).

Pursuant to the Basin Plan amendments, dischargers will receive a Notice to Comply with instructions and obligations for the Salt Control Program within one year of the effective date of the amendments. Upon receipt of the Notice to Comply, the District will have no more than six months to inform the Central Valley Water Board of their choice between Option 1 (Conservative Option for Salt Permitting) or Option 2 (Alternative Option for Salt Permitting). For the Nitrate Control Program, the WWTF falls outside a prioritized groundwater basin. The closest prioritized basin is Groundwater Basin 5-22.08 (San Joaquin Valley – Kings). Implementation within a non-prioritized basin/sub-basin will occur as directed by the Central Valley Water Board Executive Officer. More information related to the Salt and Nitrate Control Programs can be found at the CV-SALTS Website (https://www.cvsalinity.org/public-info).