

Central Valley Regional Water Quality Control Board

7 March 2017

WDID: 5A450119001

Mr. Mike Freeman
Grant Elementary School District
8835 Swasey Drive
Redding, CA 96001

CERTIFIED MAIL:
7016 2140 0000 1629 5743

Mr. Charles Wright
6640 Lockheed Drive
Redding, CA 96002

CERTIFIED MAIL:
7016 2140 0000 1629 5750

NOTICE OF APPLICABILITY (NOA), WATER QUALITY ORDER 2014-0153-DWQ-R5225, GRANT ELEMENTARY SCHOOL DISTRICT, SHASTA COUNTY

On 9 October 2015 Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff inspected the wastewater facilities at Grant Elementary School District (hereafter "Facility") located at 8835 Swasey Drive, west of Redding in Shasta County. Land disposal of partially treated wastewater is to an offsite leach field located on land owned by the U.S. Department of the Interior, Bureau of Land Management. Based on the site inspection and a case file review, the facility treats and disposes of less than 100,000 gallons of wastewater per day, and is therefore eligible for coverage under the general and specific conditions of 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). This letter serves as formal notice that the General Order is applicable to your facility and the wastewater discharge described below. You are hereby assigned General Order 2014-0153-DWQ-R5225 for your facility.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which prescribes 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). This MRP was developed after consideration of your waste characterization and site conditions described in the attached *Technical Memorandum*.

REGULATORY BACKGROUND

Waste Discharge Requirements Order 94-043 (WDRs) were adopted for this facility by the Central Valley Water Board on 25 February 1994. The Monitoring and Reporting Program 94-043 requires the following:

- Monthly flow rates reported in gallons per day
- Monthly effluent sampling for ammonia, nitrate and pH;
- Weekly visual observations of leach field area for soil saturation or ponded liquid;

- Annual sludge monitoring in septic tanks and recirculation tank;
- Monthly reporting by the 20th day of the month following data collection.
-
- **DISCHARGE DESCRIPTION**

The Facility is located on Swasey Drive, approximately 10 miles west of Redding in Shasta County. The Facility is in Section 17, T31N, R5W, MDB&M in Shasta County with surface water drainage to Olney Creek, a tributary to the Sacramento River. The leach fields for final disposal are on property administered by the U.S. Department of the Interior, Bureau of Land Management (Assessor’s Parcel No. 203-280-01).

The wastewater collection system consists of three septic tanks, a lift station, pump tank, recirculation tank, pea gravel filter, and dosing tank. Alternating pumps convey wastewater through a 2,900 foot pipeline to an offsite leach field area. According to Order 94-043, the design capacity of the existing treatment system is 3,000 gallons per day (gpd). The Facility has no groundwater monitoring wells.

This is an existing facility; therefore enrollment under the General Order is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to California Code of Regulations, title 14, section 15301 which applies to ongoing or existing projects.

FACILITY SPECIFIC REQUIREMENTS

The Discharger will maintain exclusive control over the discharge, and shall comply with the terms and conditions of this NOA and the General Order 2014-0153-DWQ-R5XXX, with all attachments.

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

Site Specific Applicable Setback Requirements					
Equipment or Activity	Domestic Well	Flowing Stream ^a	Ephemeral Stream Drainage ^b	Property Line	Lake or Reservoir ^d
Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System ^e	150 ft. ^y 100 ft. ^o 50 ft. ^c	50 ft. ^c	50 ft.	5 ft. ^{c,z}	200 ft. ^w 50 ft. ^c
Leach Field ^f	100 ft. ^{o,c}	100 ft. ^c	50 ft.	5 ft. ^c	200 ft. ^w 100 ft. ^c
^a A flowing stream shall be measured from the ordinary high water mark established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means. ^b Ephemeral Stream Drainage denotes a surface water drainage feature that flows only after rain or snow-melt and does not have sufficient groundwater seepage (baseflow) to maintain a condition of flowing surface water. The drainage shall be measured from a line that defines the limit of the ordinary high water mark (described in “a” above). Irrigation canals are not considered ephemeral					

streams drainage features. The ephemeral stream shall be a “losing stream” (discharging surface water to groundwater) at the proposed wastewater system site.

- c Setback established by California Plumbing Code, Table K-1.
- d Lake or reservoir boundary measured from the high water line.
- e Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection.
- o California Well Standards, part II, section 8. Site-specific conditions may allow reduced setback or require an increased setback. See discussion in Well Standards.
- w Setback established by the Onsite Wastewater Treatment System Policy, section 7.5.5.
- y Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.
- z Collection system to property line setback is not applicable.

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

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

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, MRPs, 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: centralvalleyredding@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disc and mailed to the appropriate regional water board office, in this case 364 Knollcrest Drive, Suite 205, Redding, CA 96002. 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: WDR

WDID: 5A450119001

Facility Name: Grant Elementary School

Order: 2014-0153-DWQ-R5225

Please note that WDRs Order 94-043 is proposed to be rescinded at the **8/9 June 2017** meeting of the Central Valley Water Board. Upon rescission of your individual WDRs, coverage for your facility under the General Order shall become applicable subject to this Notice of Applicability.

If you have any questions regarding submitting an updated report of waste discharge, making changes to your permitted operations, compliance or enforcement please contact Monique Gaido at (530) 224-4205, Monique.Gaido@waterboards.ca.gov, or the footer address.

Original signed by Bryan Smith

(for) Pamela C. Creedon
Executive Officer

MEG:ab

Attachments: Technical Memorandum
Monitoring and Reporting Program
Grant Elementary School District Site Location Map
General Order 2014-0153-DWQ

cc w/o encls: Tim O'Brien, State Water Resources Control Board (SWRCB), Sacramento
Patrick Pulupa, SWRCB, Office of Chief Counsel, Sacramento

Central Valley Regional Water Quality Control Board

TECHNICAL MEMORANDUM

TO: George Low, P.G.
Senior Engineering Geologist

FROM: Monique Gaido, P.G.
Engineering Geologist

DATE: 7 March 2017

SIGNATURE: Original signed by Monique Gaido

SUBJECT: REVIEW OF NITRATE AND SETBACK CONDITIONS FOR GRANT ELEMENTARY SCHOOL DISTRICT, SHASTA COUNTY GENERAL ORDER WQ 2014-0153-DWQ ENROLLMENT

Staff has reviewed the case file and the 29 October 2015 Inspection Report for the Grant Elementary School District. The Report assesses the general condition of the wastewater treatment system and leach field disposal area (Facility). The Discharger has kept adequate maintenance documentation, and all treatment and collection infrastructure appears in good order.

The Grant Elementary School District is located approximately 3.5 miles west of the City of Redding. The Facility consists of a raw sewage lift station, three septic tanks, an effluent lift station with a 1,500 gallon pump tank, a recirculating pump station, a recirculation pea gravel filter and a drain field pump tank. The treatment system discharges to an offsite leach field area with a hydrosplitter and five disposal beds each constructed at 300 linear feet with 12 inches of drain rock and 12 inches of backfill.

The offsite leachfield area is located approximately 2,500 feet southwest of the treatment facility on land owned by the U.S. Department of the Interior, Bureau of Land Management (Assessor's Parcel No. 203-280-001). The design capacity of the wastewater treatment system is 3,000 gallons per day. Based on historical flow data from 2016, average daily wastewater flow is approximately 2,000 gallons per day (gpd) with occasional exceedances due to stormwater infiltration. Flow exceedances are accompanied by decreases in concentrations indicating storm water dilution of wastewater constituents.

Potential Threats to Water Quality

The Facility's disposal area is located approximately 1,600 feet south-southwest of Olney Creek, a tributary of the Sacramento River. According to Department of Water Resources records, the nearest potable water well is approximately 3,000 feet northeast of the Facility's disposal area.

According to available well logs obtained from the Department of Water Resources, the approximate depth to groundwater ranges from 15 to 40 feet. Soils in the leach field area are classified as the Auberry fine sandy loam series. These soils are described as well-drained with moderately low permeability and low potential for flooding.

Completion of the Nitrate Checklist in Attachment 1 of Order 2014-0153-DWQ indicates the following flow and rationale:

A1 Exceed 20,000 gpd? No, average daily flows are generally less than 2,000 gpd. Flows for this Facility are seasonal, with higher flows occurring during the winter months (January–March) and very low flows in summer, when school is not in session. However, current nitrogen concentrations reported are relatively high and the treatment system is outdated. Treatment system effectiveness will be monitored for 50% nitrogen removal in lieu of installing a groundwater monitoring network to monitor groundwater quality due to the disposal field's remote location.

Conclusion: Influent and effluent monitoring for nitrogen will be required to assess 50% reduction prior to subsurface disposal.

Monitoring Requirements

To protect water quality, General Order monitoring requirements will be sufficient. In summary, Staff recommends quarterly reporting of the average daily flow rate; monthly influent monitoring for Total Nitrogen, monthly effluent monitoring for Total Nitrogen and Biological Oxygen Demand, and quarterly leachfield monitoring to assess the pump controllers, presence/absence of saturated soils, odors, animals burrowing, or excessive vegetation.

Quarterly monitoring will be reported by the first day of the second month after the quarter ends (e.g. January-March report is due by May 1st). Annual monitoring will be included with the fourth quarter monitoring.

No groundwater monitoring is required at this time.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM 2014-0153-DWQ-R5225

FOR

GRANT ELEMENTARY SCHOOL DISTRICT AND BUREAU OF LAND MANAGEMENT

SHASTA 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 Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board (Regional Water Board) Executive Officer.

The State Water Resources Control Board (State Water Board) and Regional Water Boards have transitioned to the paperless office system. In some regions, Dischargers will be directed to submit reports (both technical and monitoring reports) to the State Water Board's Electronic Content Management (ECM) database via email in portable document format (pdf). The email address for the ECM submittal is: centralvalleyredding@waterboards.ca.gov

Water Code section 13267 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.”

Water Code section 13268 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 wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ. 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 Regional 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 Board California Environmental Laboratory Accreditation Program 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.

AEROBIC TREATMENT UNIT MONITORING

Influent Monitoring

Influent samples shall be taken from a location that provides representative samples of the wastewater quality entering the treatment system. At a minimum, influent monitoring shall consist of the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>	<u>Reporting Frequency</u>
Total Nitrogen	mg/L	Grab	Monthly	Quarterly

mg/L denotes milligrams per liter.

Effluent Monitoring

Samples of effluent shall be taken at an area that represents the effluent quality distributed to the disposal area. At a minimum, effluent monitoring shall consist of the following:

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>	<u>Reporting Frequency</u>
Flow Rate	gpd	Metered ^a	Continuous	Quarterly
Biochemical Oxygen Demand	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly

gpd denotes gallons per day.
 mg/L denotes milligrams per liter.

^{a.} Flow rate may be metered or estimated based on potable water supply meter readings or other approved method. Flow rates may be measured as influent or effluent flow.

Aerobic treatment units may be integrated in a treatment train and all components shall be inspected to verify operational status. It is highly recommended that a service agreement with a qualified service provider/vendor be required by the Regional Water Board's Executive Officer. Because aerobic treatment units generate more biosolids than septic systems (similar to the activated sludge process), systems shall be inspected and/or pumped at least as frequently as described below. Depending upon the amount of solids removed from the aerobic treatment unit, less frequent inspections may be allowed by the Regional Water Board's Executive Officer. Inspections of sludge and scum depth are not required if the tanks are pumped at least annually.

<u>Parameter</u>	<u>Units</u>	<u>Measurement Type</u>	<u>Inspection/Reporting Frequency</u>
Sludge depth and scum thickness in each compartment of each tank	Feet	Staff Gauge	Quarterly
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Quarterly
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Quarterly
Effluent filter condition (if equipped, clean as needed)	NA	NA	Quarterly

NA denotes not applicable.

Aerobic treatment units shall be pumped when any one of the following conditions exists:

1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the final settling tank or interferes with the operation of the system (mixed liquor aerator solids shall not exceed the manufacturer's recommendation).
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches of the outlet device.

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

Subsurface disposal areas may be configured many different ways (e.g. traditional leach field, pressure-dosed, drip system, mound/at grade, gravel less, etc.). In general, monitoring shall be sufficient to determine if wastewater is evenly applied, the disposal area is not saturated, burrowing animals and/or deep rooted plants are not present, and odors are not present. Inspection of dosing pump controllers, automatic distribution valves, etc. is required to maintain optimum treatment in the disposal area (and any sand or media filter if present). Monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Inspection Frequency</u>	<u>Reporting Frequency</u>
Pump Controllers, Automatic Valves, etc. ^a	Quarterly	Quarterly
Nuisance Odor Condition	Quarterly	Quarterly
Saturated Soil Conditions ^b	Quarterly	Quarterly
Plant Growth ^c	Quarterly	Quarterly
Vectors or Animal Burrowing ^d	Quarterly	Quarterly

- a. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
- b. Inspect a disposal area for saturated conditions. If a mound system is used, inspect perimeter base for signs of wastewater seepage or saturated soil conditions.
- c. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
- d. Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.

SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility 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 discernible. 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.

During the life of this General Order, the State Water Board or Regional Water Board may require the Discharger to electronically submit monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) program Internet web site or alternative database. Electronic submittal procedures will be provided when directed to begin electronic submittals. Until directed to electronically submit monitoring reports, the Discharger shall submit hard copy monitoring reports.

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.

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. If requested by staff, 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 facility, including discussion of 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. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order.
4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
5. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.

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 the those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The Discharger shall implement the above monitoring program as of the date of this MRP.

Ordered by:

Original signed by Bryan Smith for

PAMELA C. CREEDON, Executive Officer

7 March 2017

DATE

LOCATION MAP



DRAWING REFERENCE:
GOOGLE EARTH
MAP DATA: © 2016 GOOGLE
NO SCALE

LOCATION MAP

GRANT ELEMENTARY SCHOOL
BUREAU OF LAND MANAGEMENT
SHASTA COUNTY