



Central Valley Regional Water Quality Control Board

28 August 2017

Jerry Marcotte Senior Sanitary Engineer California Department of Transportation 1801 30th Street, MS 9-3/11H Sacramento, CA 95816-8041 Certified Mail: 7015 1520 0000 9052 8016

NOTICE OF APPLICABILITY (NOA), STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5237, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS, CALIFORNIA DEPARTMENT OF TRANSPORTATION, BUTTONWILLOW SAFETY ROADSIDE REST AREA, KERN COUNTY

On 29 June 2017, California Department of Transportation (Discharger) submitted a Report of Waste Discharge (RWD) seeking coverage under State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). Based on the information provided, the system treats and disposes of less than 100,000 gallons per day (gpd), and is therefore eligible for coverage under the general and specific conditions of the General Order. This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described below. You are hereby assigned General Order 2014-0153-DWQ-R5237 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-R5237. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

DISCHARGE DESCRIPTION

The Buttonwillow Safety Roadside Rest Area (Facility) is located at post mile R54.1 on Interstate 5, 1.5 miles northwest of State Route 58 in Kern County: (Latitude: 35° 25' 2" N, Longitude: 119° 25' 26" W). The Facility's original system is approximately 43 years old. The existing onsite wastewater treating system (OWTS) consists of two separate systems, one system is adjacent to the southbound side of I-5 and the other adjacent to the northbound side of I-5. The southbound OWTS consists of two 9,000 gallon septic tanks with 42 seepage pits. The northbound OWTS consists of two 9,000 gallon septic tanks with 48 seepage pits. Each seepage pit is 4 feet in diameter and 20 feet deep.

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

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

The Discharger proposes to enhance both of the OWTS. For the southbound side OWTS, the two septic tanks will be removed and replaced with a 4,700 gallon pump station with dual grinder pumps; a single multi-chambered 20,000 gallon septic tank; and two anaerobic media filter tanks. Each tank is approximately 3,000 gallons. Similarly, on the northbound side, the two septic tanks will also be removed and replaced with a 4,700 gallon pump station with dual grinder pumps, two multi-chambered 15,000 gallon septic tanks, and four anaerobic media filter tanks.

For the southbound side OWTS, the average flow was over 5,000 gallons per day during 2015. The peak flow months were the summer months, and the daily high spike readings occurred during the holidays. For the northbound side OWTS, the average flow was over 3,200 gallons per day. The peak flow months were the same as the southbound side, and the holiday daily spikes were delayed a couple of days as travelers were returning from their trips to southern California.

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-R5237. In accordance with the requirements of the General Order, discharges with flow rates less than 20,000 gpd are not required to meet a nitrogen effluent limitation.

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

Site Specific Applicable Setback Requirements			
Equipment or Activity	Domestic Well	Property Line	
Septic Tank	150 ft. ²	5 ft. ¹	
Seepage Pit	150 ft. ¹	8 ft. ¹	

Setback established by California Plumbing Code, Table K-1.

The General Order states in Section B.2.c that to the maximum extent possible, RV, portable toilet, or similar wastes shall not be discharged to a septic tank or functionally equivalent system (e.g., Imhoff tank) without subsequent additional treatment (e.g., aerated pond, recirculating sand filter, etc.) prior to disposal.

The General Order states in Section B.2.d that septic tanks shall be pumped when any of the following conditions exists:

i. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment.

Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.

- ii. The scum layer is within 3 inches of the outlet device.
- iii. The sludge layer is within 8 inches of the outlet device.

The General Order includes subsurface disposal system requirements in Section B.6. The Facility includes seepage pits; therefore, the Discharger must comply with the requirements in Section B.6. Based on the information provided by the Discharger, the Facility's seepage pits are classified as Class V wells. Therefore, the Discharger must comply with USEPA Underground Injection Control requirements as specified in Section B.6.g. of the General Order.

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5237 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. If flow to the Facility substantially increases and approaches 20,000 gpd, you must contact Central Valley Water Board Staff to determine if further analysis (e.g., Nitrogen Effluent Limit Evaluation) is required.

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 (28 August 2017):

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

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, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office: Program: Non-15, WDID: 5C15NC00218, Facility Name: Buttonwillow Safety Roadside Rest Area, Order: 2014-0153-DWQ-R5237.

In order to conserve paper and reduce mailing costs, a paper copy of the General Order has been sent only to the Discharger. Others are advised that the General Order is available on the State Water Board's web site at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf

If you have any questions regarding this matter, please contact Alex Mushegan by phone at (559) 488-4397 or by email at <u>Alexander Mushegan@waterboards.ca.gov</u>.

Jay J. Lalgers
Jos Pamela C. Creedon
Executive Officer

Attachments:

State Water Resources Control Board Order WQ 2014-0153-DWQ

(Discharger Only)

Monitoring and Reporting Program No. 2014-0153-DWQ-R5237

Review Memorandum of California Department of Transportation Report of

Waste Discharge

cc: Project Manager, Paul Pineda, 1200 Olive Dr, Bakersfield

D-6 Maintenance Supervisor, Larry Heptinstall Jr., 1200 Olive Dr, Bakersfield John Liu, Caltrans Department of Transportation, 1352 W. Olive Avenue, Fresno

Kern County Environmental Health Services, Bakersfield

Kern County Planning and Community Development Department, Bakersfield



Central Valley Regional Water Quality Control Board

TO:

Clay L. Rodgers

Assistant Executive Officer

FROM:

Scott J. Hatton

Water Resource Control Engineer

RCE 67889

Alexander S. Mushegan (

Water Resource Control Engineer

RCE 84208

Lovdeep Singh

Scientific Aid

DATE:

28 August 2017

SUBJECT:

APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER

TREATMENT SYSTEMS, CALIFORNIA DEPARTMENT OF

TRANSPORTATION, BUTTONWILLOW SAFETY ROADSIDE REST AREA,

KERN COUNTY

On 29 June 2017, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) for the California Department of Transportation (Discharger), Buttonwillow Safety Roadside Rest Area (Facility) in Kern County. The Facility is located at post mile R54.1 on Interstate 5, 1.5 miles northwest of State Route 58 in Kern County: (Latitude: 35° 25' 2" N, Longitude: 119° 25' 26" W). The RWD includes a Form 200, applicable filing fee, and a technical report certified by Jerry Marcotte, a California registered professional civil engineer (RCE No. 36844). This memorandum provides a summary of Central Valley Water Board's review of the RWD and the applicability of this discharge to be covered under State Water Resources Control Board Order WQ-2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (General Order).

BACKGROUND INFORMATION

The Facility's original system is approximately 43 years old. The existing onsite wastewater treating system (OWTS) consists of two separate systems, one system is adjacent to the southbound side of I-5 and the other adjacent to the northbound side of I-5. The southbound OWTS consists of two 9,000 gallon septic tanks with 42 seepage pits. The northbound OWTS consists of two 9,000 gallon septic tanks with 48 seepage pits. Each seepage pit is four feet in diameter and 20 feet deep.

The Discharger proposes to enhance both of the OWTS. For the southbound side OWTS, the two septic tanks will be removed and replaced with a 4,700 gallon pump station with dual grinder pumps a single multi-chambered 20,000 gallon septic tank; and two anaerobic media filter tanks. Each tank is approximately 3,000 gallons. Similarly, on the northbound side, the two septic tanks will also be removed and replaced with a 4,700 gallon pump station with dual grinder pumps, two multi-chambered 15,000 gallon septic tanks and four anaerobic media filter tanks. According to Caltrans staff, these upgrades are anticipated to be completed by Fall 2018.

POTENTIAL THREAT TO WATER QUALITY

For the southbound side OWTS, the average flow was over 5,000 gallons per day during 2015. The peak flow months were the summer months, and the daily high spike readings occurred during the holidays. For the northbound side OWTS, the average flow was over 3,200 gallons per day. The peak flow months were the same as the southbound side, and the holiday daily spikes were delayed a couple of days as travelers were returning from their trips to southern California.

Four percolation tests (2 for the northbound side, 2 for southbound side) were performed at the rest area. The results indicated that, on the northbound side, the 12" diameter holes had percolation rates of 1/4" per hour and 1/8" per hour. For the southbound side, the holes had percolation rates of 1/2" per hour and 6" per hour.

The soil logs show that the borings consist of:

Northbound Side		
0 to 8'	Silty clay	
8' to 10'	Silty Fine Sand	
10' to 12'	Clayey Silt	
12' to 14'	Silty Clayey fine Sand	
14' to 32'	Silty Clayey Med Course Sand (cleans up @ 15' +/-)	

Southbound Side		
0 to 10'	Silty Clay	
10' to 12'	Silty Fine Sand	
12' to 20'	Slightly Sandy Clay	
20' to 30'	Sand	

The Discharger states that no groundwater was detected at the depth of approximately 37 feet. Depth to groundwater is approximately 100 feet according to the Thirtieth Annual Water Supply Report by the United States Department of Interior, Mid Pacific Region. The technical report states that using the information from the soil logs, a typical 20 ft. seepage pit will drain on the northbound side at approximately 618 gallons per day and at approximately 575 gallons per day on the southbound side. Based on the information provided by the Discharger, the Facility's seepage pits are classified as Class V wells. Therefore, the Discharger must comply with USEPA Underground Injection Control requirements as specified in Section B.6.g. of the General Order.

MONITORING REQUIREMENTS

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

- Septic Tank Monitoring
- Subsurface Disposal Area
- Solids Disposal Monitoring

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5237

FOR

CALIFORNIA DEPARTMENT OF TRANSPORTATION BUTTONWILLOW SAFETY ROADSIDE REST AREA KERN COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. This MRP is issued pursuant to California Water Code section 13267. California Department of Transportation (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 the Executive Officer.

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 (Facility) that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5237. The reports are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to California 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 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.

SEPTIC TANK MONITORING

Monitoring of the septic tank shall include the following:

Parameter	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow Rate	gpd	Metered ^a	Continuous	Annually

gpd denotes gallons per day.

Septic tanks shall be inspected and/or pumped at least as frequently as described below. Inspection of sludge and scum depth are not required if the tanks are pumped at least annually.

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

NA denotes not applicable.

Septic tanks 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 first compartment.
- 2. The scum layer is within 3 inches of the outlet device.
- 3. The sludge layer is within 8 inches of the outlet device.

If a septic tank is pumped during the year, the pumping report shall be submitted with the annual report. All pumping reports shall be submitted with the next regularly scheduled monitoring report. At

Flow rate may be metered or estimated based on potable water supply meter readings or other approved method.

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:

Constituent	Inspection Frequency	Reporting Frequency
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
Seepage Pit Condition ^e	Quarterly	Quarterly

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

SOLIDS DISPOSAL MONITORING

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

The Central Valley Water Board has gone to a Paperless Office System. 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: Program: Non-15, WDID: 5C15NC00218, Facility Name: Buttonwillow Safety Roadside Rest Area, Order: 2014-0153-DWQ-R5237.

A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Central Valley 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 discharge specifications, 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 Central Valley Water Board by **March 1**st **following the monitoring year**. The Annual Report shall include the following:

- 1. Tabular and graphical summaries of all monitoring data collected during the year.
- An evaluation of the performance of the wastewater treatment system, 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.
- 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.
- 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:

Pamela C. Creedon, Executive Officer

DATE