



# Central Valley Regional Water Quality Control Board

8 June 2020

California Department of Transportation Coalinga-Avenal Safety Roadside Rest Area 1352 W. Olive Avenue Fresno, California 93728 CERTIFIED MAIL 7018 1830 0001 2775 3924

### NOTICE OF APPLICABILITY (NOA), STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5333, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; CALIFORNIA DEPARTMENT OF TRANSPORTATION; COALINGA-AVENAL SAFETY ROADSIDE REST AREA WASTEWATER TREATMENT FACILITY; FRESNO COUNTY

On 14 January 2020, the California Department of Transportation (Discharger or Caltrans) submitted a Report of Waste Discharge (RWD) for coverage of the Coalinga-Avenal Safety Roadside Rest Area Wastewater Treatment Facility (Facility or WWTF) 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 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 below. The Facility's coverage under the General Order is hereby assigned enrollee number **2014-0153-DWQ-R5333**. The Facility's coverage under General Order 2014-0153-DWQ will become effective after Waste Discharge Requirements Order 98-004 is rescinded.

You should familiarize yourself with the entire General Order and its attachments enclosed within 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 treatment system sections of the General Order and the attached Monitoring and Reporting Program (MRP) No. 2014-0153-DWQ-R5333. This MRP was developed after

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

consideration of your waste characterization and site conditions described in the attached memorandum.

#### **DISCHARGE DESCRIPTION**

Caltrans owns and operates the Coalinga-Avenal Safety Roadside Rest Area (Rest Area) and the Facility. The Rest Area is located approximately 15.6 miles southeast of Coalinga in Section 22, Township 21 South, Range 17 East, Mount Diablo Base and Meridian in Fresno County. The existing Facility consists of two comfort stations, one on the northbound side and one southbound side of Interstate 5. Currently, each comfort station is equipped with two septic tanks. Wastewater flows from the septic tanks to a lift station on the northbound side, which is equipped with two grinder pumps. Wastewater is pumped from the lift station into Treatment Pond 1, which is lined and equipped with an aerator. Wastewater gravity flows from Treatment Pond 1 into Disposal Pond 2 and Disposal Pond 3, if needed. Disposal Ponds 2 and 3 are unlined evaporation/percolation ponds. The system is designed to utilize Disposal Pond 3 as an emergency pond in the case of a lift station failure or power outage. The Rest Area and Facility are shown in **Attachment A**, which is incorporated by reference and considered part of this Notice of Applicability.

The January 2020 RWD states that the Rest Area is frequently closed due to clogging at the lift station and proposes to bypass the septic tanks and install a channel grinder on the northbound side prior to the lift station. The RWD indicates the septic tanks will be pumped out and retained for use as an emergency bypass. The RWD also states that liner in Treatment Pond 1 will be replaced with a 60-mil high density polyethylene liner and equipped with two 5-horsepower aerators. Disposal Pond 2 will be lined on its berms to control vegetation while Pond 3 will remain unlined. A site plan for the Facility is shown in **Attachment B**.

# 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-R5333.

In accordance with section B.1 of the General Order, treated wastewater discharged from Treatment Pond 1 to the disposal ponds shall not exceed a **monthly average daily discharge of 40,000 gallons per day (gpd)**. Furthermore, the Discharger shall comply with the effluent limitations specified in Table 1 below. Compliance with the effluent limitations specified in Table 1 shall be determined at the outlet of Treatment Pond 1.

As discussed in the attached memorandum, the Water Quality Control Plan for the Tulare Lake Basin, Third Edition, revised May 2018 (Tulare Lake Basin Plan) includes more stringent effluent limitations for biochemical oxygen demand (BOD) for discharges of domestic wastewater to land. Therefore, this NOA includes the effluent limitations required by the Tulare Lake Basin Plan for BOD for advanced primary treatment. The Discharger shall comply with the applicable requirements, as summarized in the following table.

Table 1. Entuent Limitations			
Constituent	Units	Monthly Average Limit (see 1)	
BOD <sub>5</sub>	mg/L	70	

hla 1. Effluant Limitationa

1. The monthly average concentration is the arithmetic mean of measurements recorded during the calendar month. If only one sample is collected in a calendar month, then that sample measurement is the monthly average concentration.

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.

Equipment or Activity	Domestic Well	Flowing Stream	Property Line
Impoundment (undisinfected secondary recycled water)	150 ft.	150 ft	50 ft
Septic Tank, Treatment System, or Collection System	150	150	50

#### Table 2: Site Specific Applicable Setback Requirements

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

- 1. All relevant sections of the septic system requirements specified in Section B.2 of the General Order;
- 2. Pond system requirements specified in Section B.5 of the General Order; and
- 3. Sludge/Solids/Biosolids Disposal requirements specified in Section B.8 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 (Day Month Year):

- 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 issuance of the NOA.

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 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-R5333 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.

On 31 May 2018, the Central Valley Water Board adopted Basin Plan amendments incorporating new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (**CV-SALTS**) initiative. Further details of these strategies are discussed in the enclosed memorandum. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of this NOA to ensure the goals of the Salt and Nitrate Control Program are met.

All monitoring reports and other correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: <u>centralvalleyfresno@waterboards.ca.gov</u>. 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: 214984, Facility Name: Coalinga-Avenal Safety Roadside Rest Area, Order: 2014-0153-DWQ-R5333

All documents, including responses to inspections and written notifications, submitted to comply with this General Order shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Russell Walls. Mr. Walls can be reached

at (559) 488-4392 or <u>Russell.Walls@waterboards.ca.gov</u>. Questions regarding the permitting aspects of the General Order, 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 Daniel Benas. Mr. Benas can be reached at (559) 445-5500 or by email at <u>Daniel.Benas@waterboards.ca.gov</u>.

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. <u>Copies of the law and regulations applicable to filing petitions</u> may be found on the internet (http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality) or will be provided upon request.

In order to conserve paper and reduce mailing costs, a paper copy of the General Order has been sent only to the Discharger. Others are advised that the <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/wqo 2014\_0153\_dwq.pdf).

If you have any questions regarding this matter, please contact Daniel Benas by phone at (559) 445-5500, or by email at <u>Daniel.Benas@waterboards.ca.gov</u>.

*Original signed by Clay L. Rodgers for:* Patrick Pulupa Executive Officer

Enclosures, Attachments and cc's on next page

NOA 2014-0153-DWQ-R5333

Caltrans Coalinga-Avenal SRRA WWTF

Attachments: • Attachment A – Site Map • Attachment B – Flow Schematic Enclosures: • Monitoring and Reporting Program 2014-0153-DWQ-R5333 • 8 June 2020 Review Memorandum of Coalinga-Avenal Safety Roadside Rest Area WWTF State Water Resources Control Board WQ 2014-0153-DWQ (Discharger Only) Laurel Warddrip, Senior Scientist, State Water Resources Control cc's: • Board, Division of Water Quality (via email) Russel Walls, Senior Engineer, Compliance and Enforcement Unit, • Central Valley Water Board, Fresno (via email) • Fresno County Environmental Health Department (via email)

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- Kosha Shah, Associate Sanitary Engineer, California Department of Transportation (via email)



ATTACHMENT A – SITE MAP NOTICE OF APPLICABILITY 2014-0153-DWQ-R5333 FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION COALINGA-AVENAL SAFETY ROADSIDE REST AREA WASTEWATER TREATMENT FACILITY FRESNO COUNTY



#### ATTACHMENT B – FLOW SCHEMATIC NOTICE OF APPLICABILITY 2014-0153-DWQ-R5333 FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION COALINGA-AVENAL SAFETY ROADSIDE REST AREA WASTEWATER TREATMENT FACILITY FRESNO COUNTY

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

#### MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5333 FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION COALINGA-AVENAL SAFETY ROADSIDE REST AREA 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 to the California Department of Transportation (Discharger). 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, 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 Coalinga-Avenal Safety Roadside Safety Area Wastewater Treatment Facility (Facility or WWTF) that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5333. 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

# **Pond Influent Monitoring**

Influent samples shall be taken from a location that provides representative samples of the wastewater and flow rate entering Treatment Pond 1. At a minimum, influent monitoring shall consist of the following:

Table 1: Influent Monitor	ing
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Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow Rate	gpd	Meter	Continuous	Quarterly
BOD <sub>5</sub>	mg/L	Grab	Monthly	Quarterly

			Sample	Reporting
Constituent	Units	Sample Type	Frequency	Frequency
EC	µmhos/cm	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly

#### Pond Effluent Monitoring

Effluent samples shall be taken from the outlet of Treatment Pond 1, prior to discharge to the disposal ponds. At a minimum, effluent monitoring shall consist of the following:

#### Table 2: Effluent Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
рН	S.U.	Grab	Monthly	Quarterly
EC	µmhos/cm	Grab	Monthly	Quarterly
BOD <sub>5</sub>	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly

#### 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
DO (see 1 below)	mg/L	Grab	Weekly	Quarterly
Freeboard	0.1 feet	Measurement	Weekly	Quarterly
Odors		Observation	Weekly	Quarterly
Berm Condition		Observation	Monthly	Quarterly
Liner Condition (see 2 below)		Observation	Monthly	Quarterly

- 1 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 weekly 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 pond 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 2020 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

# SLUDGE/BIOSOLIDS 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 should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: <u>centralvalleyfresno@waterboards.ca.gov</u>. 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: 214984, Facility Name: Coalinga-Avenal Safety Roadside Rest Area, Order: 2014-0153-DWQ-R5333

### A. Quarterly Monitoring Reports

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

- 1. Results of all required monitoring.
- 2. 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 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. 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.
- 6. The results of monthly pond liner observations and quinquennial integrity testing of the pond liner.

#### 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/), 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. 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/). 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 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 implement the above monitoring program after rescission of WDRs Order 98-004.

Ordered by:

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

> 06/08/2020 (Date)

# GLOSSARY

BOD <sub>5</sub>	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 eight aliquots	Samples shall be a flow-proportioned composite consisting of at least 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



Daniel B. Benas Water Resource Control Engineer

Ernesto P. Garcia Scientific Aid

**DATE**: 8 June 2020

#### APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ-2014-0153-DWQ-R5333; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; CALIFORNIA DEPARTMENT OF TRANSPORTATION; COALINGA-AVENAL SAFETY ROADSIDE REST AREA WASTEWATER TREATMENT FACILITY; FRESNO COUNTY

On 14 January 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 from the California Department of Transportation (Discharger or Caltrans) for the Coalinga-Avenal Safety Roadside Rest Area Wastewater Treatment Facility (Facility) in Fresno County. The Facility is located on both the north and southbound sides of Interstate 5 just south east of Coalinga (36.0898°, -120.1150°) in Fresno County. The RWD requested coverage under the State Water Resources Control Board's Order WQ 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order) for the Facility. This memorandum provides a summary of the applicability of this discharge to be covered under the General Order.

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

# **BACKGROUND INFORMATION**

The Facility is currently regulated by Waste Discharge Requirements (WDRs) Order No. 98-004, which authorizes a monthly average discharge of up to 40,000 gallons per day from two comfort stations to four septic tanks and a lined treatment pond and two disposal ponds. Prior to Order No. 98-004 the system was regulated by Fresno County and consisted of four septic tanks, which discharged to 64 seepage pits. Order No. 98-004 indicates that the subsurface disposal system failed numerous times resulting in surfacing sewage. The Discharger constructed the current disposal system (i.e., one lined treatment pond followed by two unlined disposal ponds in series) in response to the failed subsurface disposal system.

Waste Discharge Requirements Order 98-004 includes the following limits:

- Flow limit of 40,000 gpd.
- BOD effluent limit of 40 mg/L (monthly average) and 80 mg/L (daily maximum).
- Settleable solids effluent limit of 0.2 ml/l (monthly average) and 0.5 ml/l (daily maximum).
- Electrical conductivity (EC) effluent limitation requiring that the maximum discharge shall not exceed the source water EC plus 500  $\mu$ mhos/cm.
- Treatment pond pH between 6.5 to 8.5

The January 2020 RWD consisted of a Form 200 technical Report titled *Sewage Disposal System Engineer's Report.* The RWD was prepared by Kosha Shah, a California registered civil engineer (RCE 73864). The RWD proposes to discontinue use of the septic tanks, install a channel grinder, reline the treatment pond, and line the berm of the first disposal pond (more detail contained in next section).

# **DESCRIPTION OF DISCHARGE**

The existing Facility consists of two comfort stations on the northbound and southbound sides of Interstate 5, each equipped with two septic tanks. Wastewater flows from the septic tanks to a lift station on the northbound side, which is equipped with two grinder pumps. Wastewater is pumped from the lift station into Treatment Pond 1, which is lined and equipped with an aerator. Wastewater gravity flows from Treatment Pond 1 into Disposal Pond 2 and Disposal Pond 3 if needed. Disposal Ponds 2 and 3 are unlined evaporation/percolation ponds. The system is designed to utilize Pond 3 as an emergency pond in the case of a lift station failure or power outage.

The RWD states that the comfort stations are frequently closed due to clogging at the lift station and proposes to upgrade the Facility to prevent future clogging issues. The Discharger proposes to bypass the septic tanks and install a channel grinder on the northbound side prior to the lift station. The RWD indicates the septic tanks will be pumped out and retained for use as a system bypass in the case of emergency. The RWD also states that the liner in Treatment Pond #1 will be replaced with a 60-mil high

density polyethylene liner and equipped with two 5-horsepower aerators. Disposal Pond #2 will be lined on the berms to control vegetation, while Disposal Pond #3 will remain unlined. The RWD also indicates that the proposed daily average flow rate will be 19,500 gpd after retrofitting the comfort stations with low flow fixtures. In a 27 May 2020 email, Kosha Shah indicated that construction of the Facility upgrades had begun.

In a 2 March 2020 email, Kosha Shah (Caltrans engineer) provided a copy of *Notice to Bidders and Special Provisions* (Notice to Bidders) for the proposed project. The Notice to Bidders includes project specifications, which in part, require the contractor to submit working drawings and a construction quality assurance (CQA) plan for the new liner at least 60 days prior to installation. The email also included current flow information and a spreadsheet showing the projected flow reduction from installation of low-flow components in the comfort stations.

The Discharger did not characterize effluent from the Facility in the RWD; however, the Discharger did submit self-monitoring reports for March, May, June and July in 2019 (the only self-monitoring reports submitted in 2019). Table 1 below shows effluent quality for these months, flow data was not submitted.

Month	BOD	TDS	EC	рΗ
Mar-19	26	500	1,290	7.68
May-19	30	584	969	6.97
Jun-19	32	530	971	7.25
Jul-19	27	437	935	7.64

 Table 1 - Effluent Characterization 2019

The RWD does not include flow data, but just states that the current flow rate averages 20,000 gpd and will be reduced to approximately 19,500 gpd with installation of low flow fixtures in the comfort stations. In a 2 March 2020 email the discharger provided a graph showing flow at the Facility in 2016. The graph shows an average flow of 19,900 gpd with peak flows up to 58,400 gpd.

The Facility's monthly average discharge is under 100,000 gallons per day (gpd) and is therefore eligible for coverage under the General Order. The current discharge is approximately 20,000 gpd and the Discharger predicts the flow rate will be 19,500 gpd with the installation of low-flow components. Due to the lack of monthly flow data for the discharge staff is concerned with the ability of the Discharger to comply with a monthly average flow limit of 20,000 gpd and recommends keeping the current flow limit of 40,000 gpd.

# NITROGEN EVALUATION

As stated above, the annual average daily flow rate is approximately 20,000 gpd and the Discharger is predicting an annual average daily flow rate of 19,500 gpd with the

installation of low flow fixtures in the comfort stations. Due to the lack of monthly flow data, staff is recommending retaining the current flow limit of 40,000 gpd, therefore a nitrogen evaluation is appropriate. Based on the following information (from the 14 January 2020 RWD and self-monitoring reports) and the guidelines in Attachment 1 of the General Order, no nitrogen limit is proposed at this time.

- 1. The disposal area (i.e., unlined ponds) do not meet the definition of shallow groundwater or excessive percolation rate as described in Table 5 of Attachment 1 of the General Order.
  - a. Percolation rate of 4 inches/hour to 13 inches/hour,
  - b. Depth to groundwater is approximately 330 feet below ground surface.
- As shown in Table 1 above the effluent does not exceed typical domestic wastewater strength. This determination is based on limited BOD and TSS information because the Dischargers current Monitoring and Reporting Program does not require nitrogen sampling.
- 3. As discussed above, the treatment pond is lined and, therefore, will mitigate the potential for the wastewater to impact underlying groundwater. The disposal ponds are unlined, but the depth to groundwater will allow for additional attenuation of nitrogen before reaching groundwater.
- As discussed below, the Facility lies within Groundwater Basin 5-22.09 (San Joaquin Valley – Westside), a non-prioritized basin/sub-basin for the nitrate component of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative.

#### POTENTIAL THREAT TO WATER QUALITY

The Coalinga Safety Roadside Test Area is located within the Kettleman Hydrologic Area (No. 558.50) with the wastewater treatment outside any floodplain area. Based on information gathered from the California Department Groundwater Information Center Interactive Map Application (<u>https://gis.water.ca.gov/app/gicima/</u>) using Spring 2018 data, groundwater underlying the disposal ponds is approximately 330 feet below ground surface.

The Information Sheet of Order No. 98-004 describes borings and percolation tests conducted by the Discharger to characterize soils under the disposal ponds. Specifically, 10 borings and 4 percolation tests were conducted. The boring samples indicated area soils are fine sands, silts, and clay. The percolation tests indicate onsite soils having percolation rates varying from 4 inches/hour to 13 inches/hour.

Based on available information, including the depth to groundwater, underlying soil conditions, expected strength of the domestic wastewater, and proposed flowrate, the proposed Facility appears to meet the conditions of the Small Domestic General Order.

# **BASIN PLAN REQUIREMENTS**

The Water Quality Control Plan for the Tulare Lake Basin, Third Edition, revised May 2018 (Basin Plan) specifies effluent limitations for discharges of domestic wastewater to land in section 4.1.11.5 of the Basin Plan. For advanced primary treatment, the Basin Plan requires 60 to 70 percent removal or reduction to 70 mg/L, whichever is more restrictive, for both biochemical oxygen demand (BOD) and suspended solids. The Basin Plan states that advanced primary treatment is "satisfactory for smaller facilities in outlying or remote areas where the potential for odors and other nuisances are low".

General Order, Finding 6 states, in part:

[The] General Order requires Dischargers to comply with all applicable Basin Plan Requirements, including any prohibitions and/or water quality objectives, governing the discharge. The Discharger must comply with any more stringent standards in the applicable Basin Plan. In the event of a conflict between the requirements of this General Order and the Basin Plan, the more stringent requirement prevails.

The BOD effluent limitation in the Basin Plan of 70 mg/L is more restrictive than the BOD effluent limitation specified in the General Order of 90 mg/L for a wastewater pond system. Therefore, the more stringent effluent limitation will apply to the discharge from Treatment Pond 1.

# MONITORING REQUIREMENTS

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

- Pond Monitoring
- Solids Disposal

# SALT AND NITRATE CONTROL PROGRAMS

As part of the 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 Facility falls within Groundwater Basin 5-22.09 (San Joaquin Valley – Westside), a non-prioritized basin/sub-basin. Implementation within a non-prioritized basin/sub-basin will occur as directed by the Central Valley Water Board Executive Officer.