26 September 2022

Michael Sanders
California Dept. of Transportation District 6
1352 West Olive Avenue
Fresno, CA 93728

CERTIFIED MAIL
7022 2410 0000 2157 5035

NOTICE OF APPLICABILITY (NOA); STATE WATER RESOURCES CONTROL BOARD ORDER WQ-2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DISTRICT 6; PHILIP S. RAINE (TIPTON) SAFETY ROADSIDE REST AREA WASTEWATER TREATMENT FACILITY; TULARE COUNTY

On 17 August 2020, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD), including a completed Form 200 and a technical report, from the California Department of Transportation, District 6 (CalTrans or Discharger) for the Philip S. Raine (Tipton) Safety Roadside Rest Area Wastewater Treatment Facility (Facility or WWTF). An updated RWD was submitted on 18 June 2021. The Facility is currently regulated under Waste Discharge Requirements (WDRs) Order No. 83-006.

Based on the information provided, the Facility treats and disposes of less than 100,000 gallons per day (gpd) of domestic wastewater and is therefore eligible for coverage under the general and specific conditions of the State Water Resources Control 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 system and the wastewater discharge described below. You are hereby assigned enrollee number **2014-0153-DWQ-R5377** for your system. After (WDRs) Order 83-006 has been rescinded, coverage under General Order 2014-0153-DWQ will become effective.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which 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-R5377**. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

DISCHARGE DESCRIPTION

The Facility treats domestic wastewater produced from northbound and southbound roadside rest areas along California Route 99, about three miles north of Tipton. (shown in Attachment A and B). WDR No.83-006 specifies a 30-day average daily dry weather flow limitation of 35,000 gallons per day (gpd). The rest areas generate wastewater from rest rooms and RV sanitary stations. The wastewater treatment system is undergoing an upgrade consisting of, in part, installing two new lift stations (with channel grinders and flow meters), two new RV lift stations (with flow meters), a Supervisory Control And Data Acquisition (SCADA) system, two aerators along with a 60-mil high density polyethylene (HDPE) liner for the bottom and side slopes of the first disposal pond, a 60-mil HDPE liner on the side slopes for the second disposal pond, and new piping from lift stations to the ponds. Due to decreased flows at the Facility, the Discharger has requested a new monthly average flow limit of 18,000 gpd.

FACILITY SPECIFIC REQUIREMENTS AND EFFLUENT LIMITATIONS

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, all attachments, and MRP No. 2014-0153-DWQ-R5377.

In accordance with Section B.1.a of the General Order, the monthly average daily flow from the WWTF to the onsite evaporation/percolation pond **shall not exceed 18,000 gpd.**

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

Table 1 - Site Specific Applicable Setback Requirements

Equipment or Activity	Domestic Well (feet)	Ephemeral Stream Drainage (feet)	Property Line (feet)
Septic Tank, Treatment Unit, Treatment System, or Collection System	150	50	5
Impoundment (undisinfected secondary wastewater)	150	150	50

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

1. Pond Systems requirements in Section B.5 of the General Order;

2. Sludge/Solids/Biosolids Disposal requirements in Section B. 8 of the General Order; and

3. Groundwater and Surface Water Limitations specified in Section C.1 of the General Order

Provision E.1 of the General Order requires dischargers enrolled under the General Order to prepare and implement the following reports **by 27 December 2022**:

- 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 and the Sampling and Analysis Plan shall be maintained at the treatment facility and shall be presented to the Regional Water Board staff upon request. The sludge management plan shall be submitted to the Central Valley Water Board **by 27 December 2022.**

On 27 September 2019, Senate Bill 317 was signed by the Governor adding Section 25210.2 to the California Health and Safety Code, which contains chemical sale, use, and discharge prohibitions for recreational vehicle (RV) chemical wastes to land, as of 1 January 2022.

The Discharger shall post, in a conspicuous location(s), a notice stating the following:

> *"The State of California prohibits the use of products in RV holding tanks, including deodorizers, that contain bronopol, dowicil, formalin, formaldehyde, glutaraldehyde, paraformaldehyde, para-dichlorobenzene, benzene, toluene, xylene, ethylene glycol, 1,1,1-trichloroethane, trichloroethylene, or perchloroethylene. These chemicals can inhibit biological activity in onsite wastewater treatment systems and threaten groundwater and drinking water wells, and are strictly forbidden. Please use bacteria- or enzyme-based products."*

By **27 December 2022**, the Discharger shall submit verification (with photographs) that the notice above is posted at each RV dump area.

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-R5377** 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 Programs are met.

All monitoring reports and other correspondences shall be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the 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**: 248269,
> **Facility Name:** P.S. Raine (Tipton) Safety Roadside Rest Area WWTF,
> **Order:** 2014-0153-DWQ-R5377.

All documents, including responses to inspections and written notifications, submitted to comply with this NOA shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Dale Harvey. Mr. Harvey can be reached at (559) 445-6190 or Dale.Harvey@waterboards.ca.gov. Questions regarding the permitting aspects of the NOA, and notification for termination of coverage under the Small Domestic General Order, shall be directed, via the paperless office system, to the WDR Permitting Unit, attention Jeff Robins. Jeff Robins can be reached at (559) 445-5976 or by email at Jeff.Robins@waterboards.ca.gov.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the

date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at Copies of the laws and regulations applicable to filing petitions (https://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 General Order WQO 2014-0153-DWQ has been sent only to the Discharger. Others are advised that the General Order is available on the State Water Board's website (http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf).

WDRs Order 83-006 are proposed to be rescinded at the 8/9 December 2022 meeting of the Central Valley Water Board. Coverage under General Order 2014-0153-DWQ will become effective upon rescission of your individual WDRs. If you have any questions regarding this matter, please contact Jeff Robins by phone at (559) 445-5976 or by email at Jeff.Robins@waterboards.ca.gov.

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

(see next page for Attachments, Enclosures, and cc's):

Attachments:

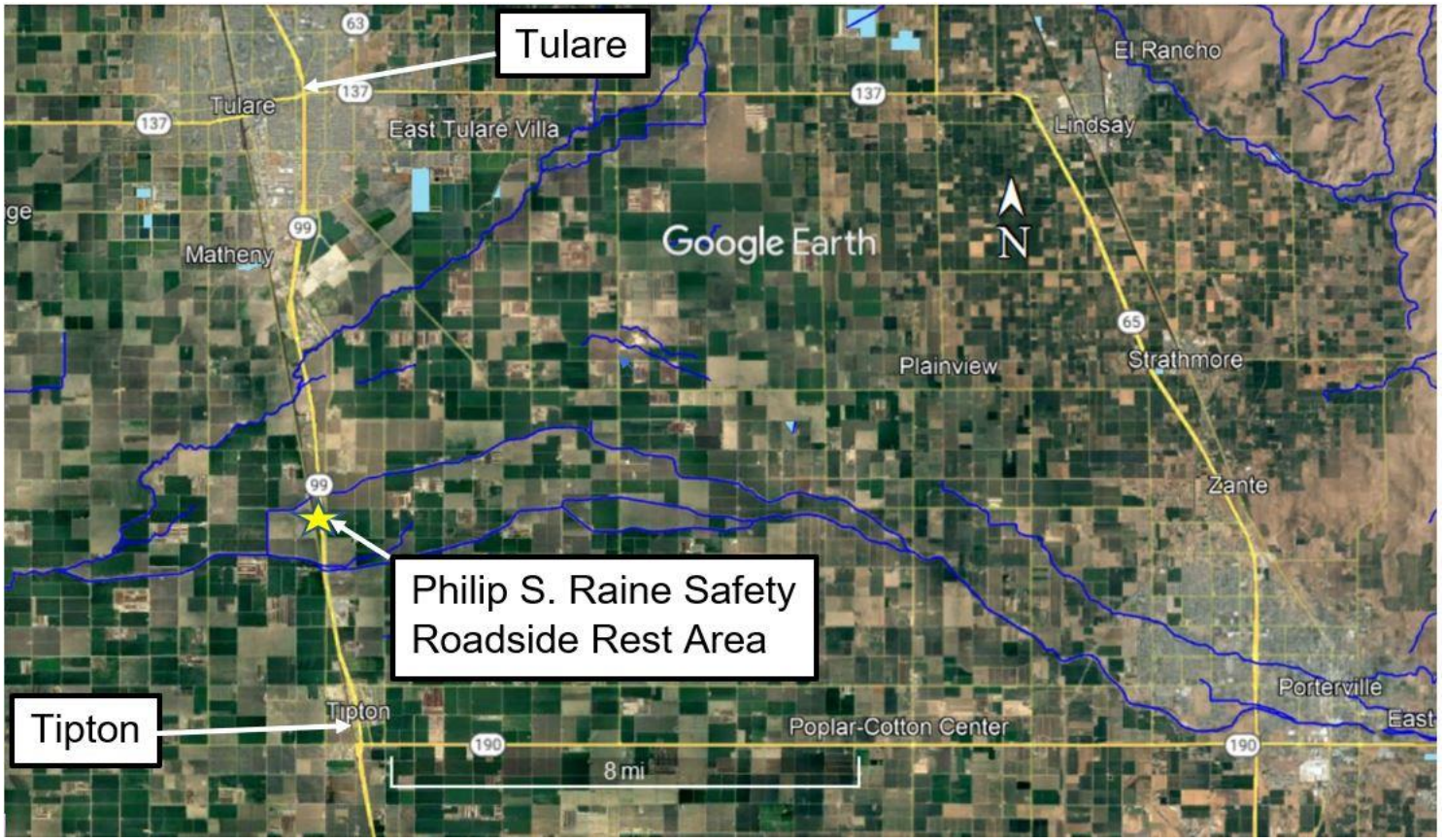
- Attachment A – Site Location Map
- Attachment B – Site Plan Map
- Attachment C – Proposed Process Flow Diagram

Enclosures:

- Monitoring and Reporting Program 2014-0153-DWQ-R5377
- Staff Review Memorandum for P.S. Raine (Tipton) Safety Roadside Rest Area WWTF
- State Water Resources Control Board Order WQ 2014-0153-DWQ (Discharger only

cc:

- Christopher Moskal, State Water Resources Control Board, OCC, Sacramento (via email)
- Laurel Warddrip, State Water Resources Control Board, DWQ, Sacramento (via email)
- Tricia Wathen, State Water Resources Control Board, Division of Drinking Water (via email)
- RB5S-cvsalts@waterboards.ca.gov
- Dale Harvey, Central Valley Water Board, Fresno (via email)
- Tulare County Environmental Health, Visalia, CA
- Kosha Shah, CalTrans (via email)
- Andy Quan, Caltrans (via email)
- Debbie Webster, CVCWA (via email)

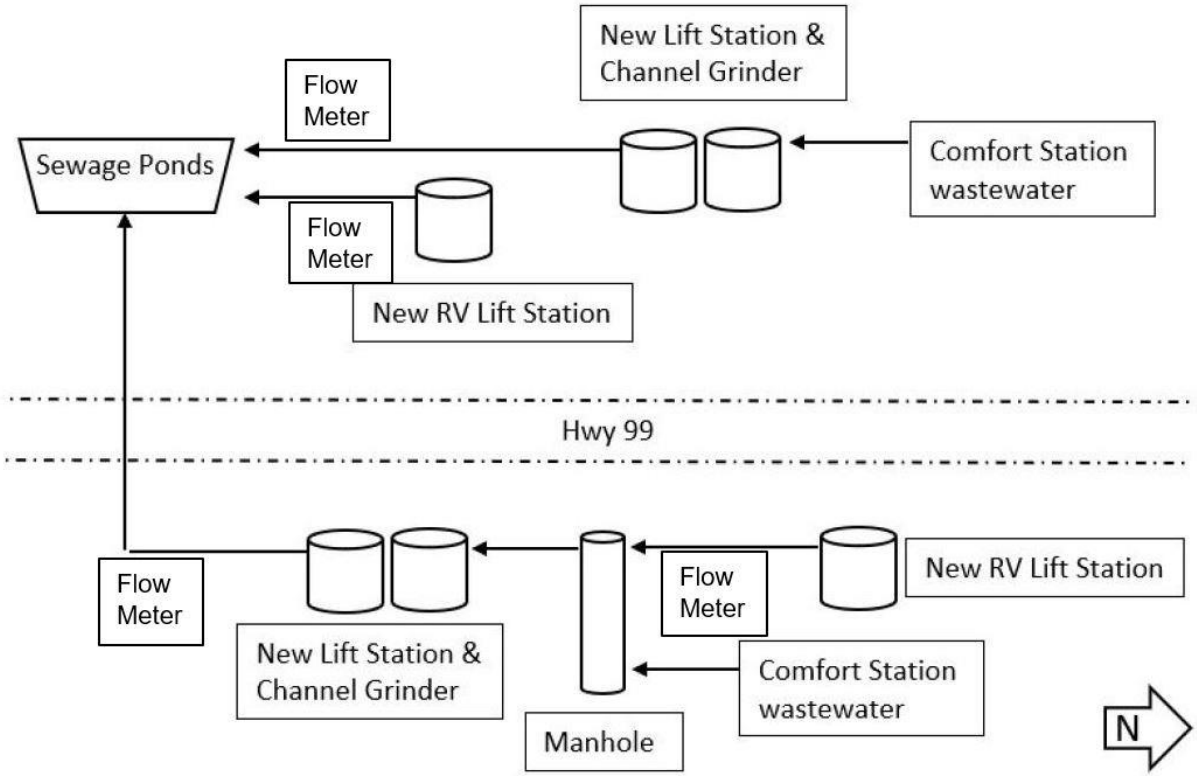


ATTACHMENT A – SITE LOCATION MAP
NOTICE OF APPLICABILITY 2014-0153-DWQ-R5377
FOR
STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DISTRICT 6
P. S. RAINE SAFETY (TIPTON) ROADSIDE REST AREA WWTF
TULARE COUNTY

Drawing Source: Google Earth

ATTACHMENT B – SITE PLAN MAP
NOTICE OF APPLICABILITY 2014-0153-DWQ-R5377
FOR
STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DISTRICT 6
P. S. RAINE SAFETY (TIPTON) ROADSIDE REST AREA WWTF
TULARE COUNTY

Drawing Source: Google Earth



ATTACHMENT C – PROPOSED PROCESS FLOW DIAGRAM
NOTICE OF APPLICABILITY 2014-0153-DWQ-R5377
FOR
STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION – DISTRICT 6
P. S. RAINE SAFETY (TIPTON) ROADSIDE REST AREA WASTEWATER
TREATMENT FACILITY
TULARE COUNTY

Drawing Source: Modified by Water Boards staff from
June 2021 Report of Waste Discharge

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5377
FOR
STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DISTRICT 6
PHILIP S. RAINE SAFETY (TIPTON) ROADSIDE REST AREA
WASTEWATER TREATMENT FACILITY
TULARE 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 State of California, Department of Transportation, District 6 (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 Philip S. Raine (Tipton) Safety Roadside Rest Area Wastewater Treatment System (Facility or WWTF) that is subject to the Notice of

Applicability (NOA) 2014-0153-DWQ-R5377. The NOA enrolls the WWTF under State Water Resources Control Board Order WQ 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order) upon the rescission of WDRs Order 83-006. The reports required in this MRP 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.

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 the requested reduction in monitoring frequency.

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.

POND SYSTEM MONITORING

A. Influent Monitoring

Influent samples shall be taken at a location that represents the influent quality and flow distributed to the first evaporation pond. At a minimum, influent monitoring shall include the monitoring specified in Table 1 below.

Table 1 – Influent Monitoring

Constituent	Units	Sample Type	Monitoring Frequency	Reporting Frequency
Flow	MGD	Meter	Continuous (see 1 below)	Quarterly
BOD_5	mg/L	Grab	Monthly	Quarterly
pH	SU	Grab	Monthly	Quarterly
EC	µmhos/cm	Grab	Monthly	Quarterly
Total Nitrogen (as N)	mg/L	Grab	Quarterly	Quarterly

1. For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation.

B. Wastewater Pond Monitoring

All wastewater treatment and disposal ponds shall be monitored as specified in Table 2 below.

Table 2 – Wastewater Pond Monitoring

Constituent	Units	Sample Type	Frequency	Reporting Frequency
EC	µmhos/cm	Grab	Monthly	Quarterly
DO (see 1 below)	mg/L	Grab	Monthly	Quarterly
Freeboard	0.1 feet	Measurement	Monthly	Quarterly
Odors	--	Observation	Monthly	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, when there is sufficient water in the pond(s). If there is insufficient water in the pond(s) no sample shall be collected and the reason provided in the quarterly monitoring report. Should the DO be below 1.0 mg/L during a monthly sampling event, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected ponds until the problem has been resolved.
2. The Discharger shall observe the condition of the lined ponds and check the liner for evidence of rips, tears, and/or leaks on a monthly basis. In addition, the Discharger shall conduct integrity testing of the pond liners once every five years beginning in 2027 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.

RECREATIONAL VEHICLE MONITORING

Any wastewater system that has accepted recreational vehicle, portable toilet, or similar waste in the previous 12 months shall perform the following additional monitoring. Samples shall be collected to characterize effluent that is stored in the wastewater ponds. Wastewater shall be monitored as specified below.

Table 3 – Recreational Vehicle Monitoring Requirements

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Zinc	mg/L	Grab	Quarterly	Quarterly
Phenol	mg/L	Grab	Quarterly	Quarterly
Formaldehyde	mg/L	Grab	Quarterly	Quarterly

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 treatment facility. 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.

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the 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: 248269,
Facility Name: Philip S. Raine SRRA,
Order: 2014-0153-DWQ-R5377

C. Quarterly Monitoring Reports

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

1. Results of all required monitoring.
2. A comparison of monitoring data to the 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).

D. Annual Report

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

1. Tabular and graphical summaries of all monitoring data collected during the year.
2. An evaluation of the performance of the wastewater treatment system, including discussion of the capacity issues, nuisance conditions, system problems and a forecast of the flows anticipated in the next year. A flow rate evaluation, as described in the General Order (Provision E.2.c), shall also be submitted.
3. 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 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 on the first day of the month following rescission of WDRs Order 83-006.

Ordered by:

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

9/26/2022
(Date)

GLOSSARY

BOD_5	Five-day biochemical oxygen demand
$CaCO_3$	Calcium carbonate
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
TDS	Total dissolved solids
TKN	Total Kjeldahl nitrogen
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-hr Composite	Samples shall be a flow-proportioned composite consisting of at least eight aliquots over a 24-hour period.
Daily	Every day except weekends or holidays.
Twice Weekly	Twice per week on non-consecutive days.
Weekly	Once per week.
Twice Monthly	Twice per month during non-consecutive weeks.
Monthly	Once per calendar month.
Quarterly	Once per calendar quarter.
Semiannually	Once every six calendar months (i.e., two times per year) during non-consecutive quarters.
Annually	Once per year.
mg/L	Milligrams per liter
mg/kg	Milligrams per kilogram
mL/L	Milliliters [of solids] per liter
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
gpd	Gallons per day
gal/acre/mo	Gallons per acre per month
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters
NA	Denotes not applicable
NTU	Nephelometric Turbidity Units
RV	Recreational Vehicle
UV	Ultraviolet
mJ/cm^2	Millijoules/cm^2
SU	Standard pH units

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

Jeff Robins
Water Resource Control Engineer
RCE 94056

DATE: 26 September 2022

APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DISTRICT 6; PHILIP S. RAINE (TIPTON) SAFETY ROADSIDE REST AREA WASTEWATER TREATMENT FACILITY; TULARE COUNTY

On 17 August 2020, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD), including a completed Form 200 and a technical report, from the California Department of Transportation (Discharger or Caltrans) for the Philip S. Raine (Tipton) Safety Roadside Rest Area Wastewater Treatment Facility (Facility or WWTF). An updated RWD was submitted on 18 June 2021. The Facility is currently regulated under Waste Discharge Requirements (WDRs) Order No. 83-006. The 2021 RWD was stamped and signed by Kosha Shah, Senior Sanitary Engineer (RCE 73864) with Caltrans. This memorandum provides a summary of Central Valley Water Board staff's review of the RWD, and subsequent materials, 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 Discharger owns and operates the Facility, which is about 3.3 miles north of Tipton along both sides California Route 99 (see Attachments A and B of the NOA). The

Facility is on Assessor's Parcel Number (APN) Nos. 228-140-015 and 228-140-013, located in Section 13, Township 21 S, Range 24 E, Mount Diablo Base & Meridian (36.1067° N, 119.3239° W).

The Facility treats domestic wastewater generated from rest rooms and RV sanitary stations from northbound and southbound roadside rest areas. WDRs Order 83-006 specifies a 30-day average daily dry weather flow limitation of 35,000 gallons per day (gpd). The WWTF is under construction from January 2022 to June 2023, as discussed in more detail below. The Discharger has requested a new monthly average flow limit of 18,000 gpd. Flows at the WWTF have decreased in the past few decades due to the installation of low-flow toilets and water conserving fixtures.

Existing Facility

On the southbound side of the highway, wastewater from the restrooms and RV sanitary station is collected in a lift station, which is pumped to four clay-lined ponds (operated in series) located on the southbound side of the highway. On the northbound side of the highway, the existing system consists of an RV lift station and restrooms that send wastewater to a manhole, followed by a lift station. All the collected wastewater is then pumped to the four clay-lined evaporation ponds, in series, on the southbound side.

Changes to Facility

Attachment C of the NOA includes a process flow diagram of the proposed Facility upgrades. As part of the upgrade, two, five-horsepower aerators will be added to the first pond in the series. The bottom and side slopes of the first pond will be lined with a 60-mil high density polyethylene (HDPE) liner. The second pond in the series will be lined with a 60-mil HDPE on the side slopes only. No work is proposed for the third and fourth ponds. Each of the four ponds measures 300 feet by 200 feet on top and 260 feet by 160 feet on the bottom with a maximum storage depth of five feet and two feet of free board. The tract of land between Pond No.1 and Pond No. 2 provides a depression/drainage path for stormwater to flow from the east side of the ponds to the west side of the ponds.

As part of the upgrade, wastewater flow meters will be added after all the lift stations (both the main lift stations and the RV lift stations) on both the northbound and southbound facilities.

POTENTIAL THREAT TO WATER QUALITY

The Discharger has not regularly reported data. According to the Discharger, there is missing data in some months due to problems with their contract operator. The upgrade is anticipated to resolve the data lapses due to addition of a Supervisory Control and Data Acquisition (SCADA) system. Based on the limited data from the 2021 RWD, the WWTF flows averaged around 10,000 gpd for 2019 and 7,000 gpd for 2020 (first year of the COVID-19 pandemic). Available water quality data from the Pond No. 1 is summarized in Table 1. According to the Discharger, the second, third, and fourth ponds are typically dry. Furthermore, the Discharger sampled Pond No. 1 for zinc,

formaldehyde, and phenol on 29 July 2021. The results are shown in Table 2 below.

Table 1 – Pond Water Quality Data

Date	BOD (mg/L)	pH (s.u.)	EC (µmhos/cm)	TDS (mg/L)
10/17/2017	120	7.9	2,380	1,350
11/16/2017	68	8.1	2,470	1,180
3/26/2018	58	8.4	1,640	848
5/11/2018	50	8.3	2,420	1,430
7/13/2018	15	8.0	1,710	1,110
8/16/2018	51	8.0	1,780	1,250
9/14/2018	110	7.4	2,040	1,360
11/16/2018	170	8.1	2,330	1,140
3/29/2019	310	7.7	1,770	852
4/5/2019	27	7.9	1,710	842
5/17/2019	58	8.5	1,710	998
6/21/2019	420	7.8	1,930	1,430
7/19/2019	120	7.9	2,090	1,600
8/2/2019	380	8.2	3,370	1,980
Average	140	7.9	2,096	1,240

Table 2 – Effluent RV Waste Characterization (July 2021 Sample)

Constituent	Concentration (µg/L)
Zinc	130
Formaldehyde	720
Phenol	13

According to the California Department of Water Resources Sustainable Groundwater Management Act (SGMA) groundwater elevation contour maps SGMA Groundwater Elevation Contour Maps (https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels), utilizing Spring 2021 groundwater elevation contour maps, overall regional flow is to the west, and groundwater at the site is approximately 80 feet above mean sea level. The depth to groundwater contour map indicates the depth to groundwater at the site is approximately 180 to 185 feet below the ground surface.

To determine underlying groundwater quality, Central Valley Water Board staff reviewed available well data for nearby wells using the National Water Quality Monitoring Council's Water Quality Portal website (https://www.waterqualitydata.us/portal). Three wells were located within three miles of the discharge location (Well #1 = 021S024E13A002M, Well #2 = 021S024E03R001M, and Well #3 = 021S024E11C001M). The data for the most recent sampling dates are

summarized in Table 3 below. If there were two sample results from a single day both are shown with a "/" between them. "NM" means not measured. "ND" means not detected.

Table 3 – Nearby Groundwater Well Quality

Constituent/Parameter	Well #1	Well #2	Well #3
Date Sampled	1 Dec 2015	12 Jan 2005	21 July 2015
Well Hole Depth (ft bgs)	280	300	147
Water Depth (ft bgs)	NM	NM	77
EC (µmhos/cm @ 25ºC)	279	226	1,440
DO (mg/L)	1.5	1.8	4.5
Nitrate (as N) (mg/L)	2.97	ND	34.4
Nitrite (as N) (mg/L)	0.003	0.004	ND
Ammonia and Ammonium (as N) (mg/L)	0.02	0.03	ND
Organic Nitrogen (mg/L)	0.15	ND	ND
pH (SU)	8.9/9.0	9.4	6.8/7.6
Hardness Ca, Mg (mg/L as $CaCO_3$)	35.3	ND	299
Sodium (mg/L)	50	50.5	208
Potassium (mg/L)	0.16	0.08	0.65
Chloride (mg/L)	8.71	8.49	65.3
Sulfate (mg/L)	17.0	9.81	75.8
Alkalinity (mg/L as $CaCO_3$)	103	91	443
Arsenic (µg/L)	16.4	33.4	1.4
Iron (µg/L)	ND	53.4	ND
Lead (µg/L)	NM	5.0	0.381

MONITORING REQUIREMENTS

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

- Pond System Monitoring,
- Recreational Vehicle Discharge Monitoring
- Solids Disposal Monitoring.

NITROGEN LIMIT EVALUATION

The General Order requires that wastewater systems with a flow rate greater than 20,000 gallons per day (gpd) be evaluated to determine if nitrogen effluent limits are required, as described in Attachment 1 of the General Order. The effluent flow limit is 18,000 gpd so no effluent flow limit evaluation is required

SALT AND NITRATE CONTROL PROGRAMS

As part of the Central Valley Salinity Alternatives for Long Term Sustainability (CVSALTS) initiative, the Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting (Resolution R5-2018-0034). Pursuant to the Basin Plan amendments, dischargers were sent a Notice to Comply on 5 January 2021 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 Discharger was given until 15 July 2021 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). The Discharger submitted a Notice of Intent (**CV-SALTS ID: 2369**) on 10 June 2021 selecting Option 2 and is participating in the Prioritization and Optimization Study.

For the Nitrate Control Program, dischargers that are unable to comply with stringent nitrate requirements will be required to take on alternative compliance approaches that involve providing replacement drinking water to persons whose drinking water is affected by nitrates. Dischargers may comply with the Nitrate Control Program either individually (Pathway A) or collectively as part of a Management Zone Group (Pathway B). The WWTF falls within Groundwater Sub-Basin 5-022.13 (San Joaquin Valley – Tule Basin), a Priority 1 basin. A Notice to Comply for the Nitrate Control Program was issued to the Discharger on 29 May 2020. To comply with the Nitrate Control Program, the Discharger joined the Tule Basin Management Zone (Pathway B) on 23 June 2021. More information on the Salt and Nitrate Control Programs can be found at the CV-SALTS Website (https://www.cvsalinity.org/public-info).