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## Central Valley Regional Water Quality Control Board

16 May 2023

Davinder Sandhu, President/CEO  
20548 Almaden Road  
San Jose, CA 95120

**CERTIFIED MAIL**  
**7021 1970 0001 5446 4382**

**NOTICE OF APPLICABILITY (NOA); STATE WATER RESOURCES CONTROL BOARD ORDER WQ-2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; DAVINDER SANDHU AND RS FINANCIAL PROPERTIES, LLC; RS UTILITIES WASTEWATER TREATMENT FACILITY; KERN COUNTY**

On 17 January 2023, Derrill G. Whitten (RCE 51930), with Cornerstone Engineering, submitted a completed Form 200 and Report of Waste Discharge (RWD) for the proposed RS Utilities Wastewater Treatment System (Facility) on behalf of Davinder Sandhu and RS Financial Properties, LLC (together, the Discharger). The Facility is a new facility and has not previously been issued waste discharge requirements (WDRs). Subsequent submittals/correspondences between the Discharger and the Central Valley Water Board include a revised RWD submitted on 31 March 2023 with final revisions on 20 April 2023.

Based on the information provided in the RWD, 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 State Water Resources Control Board Order WQ 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-R5390** 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-R5390**. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

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MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

1685 E Street, Fresno, CA 93706 | [www.waterboards.ca.gov/centralvalley](http://www.waterboards.ca.gov/centralvalley)

### DISCHARGE DESCRIPTION

The proposed Facility is approximately 5.3 miles northeast of the center of Shafter, California (see Attachment A). The Facility will receive domestic wastewater from a proposed truck stop including a fueling station, fast food/retail/general commercial development, and a truck wash. Attachment C is a process flow diagram which provides a schematic overview of the facilities. The system is designed for a flow of 10,000 gallons per day (gpd). Gravity sewer lines convey the wastewater to the packaged activated sludge treatment system. The wastewater treatment system includes screening, flow equalization, dissolved air flotation treatment, and activated sludge treatment (including an anoxic tank, an aeration tank, and a clarifier). Treated wastewater is stored in a 3,000-gallon effluent storage tank and then discharged to an onsite leach field.

### 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-R5390. In accordance with Section B.1.a of the General Order, the monthly average total discharge from the WWTF to the leach trenches **shall not exceed 10,000 gpd.**

The General Order states in Section D that the discharge shall not exceed the applicable effluent limitations as described in Table 4 of the General Order. Table 1 below summarizes the applicable 5-day biochemical oxygen demand (BOD<sub>5</sub>) and total suspended solids (TSS) effluent limitations for the Facility's discharge to the onsite leach field. Compliance with this limitation shall be monitored at the Facility's discharge point to the leach field.

**Table 1 – Effluent Limitations**

Constituent	Units	Monthly Average Limit	7-Day Average Limit
BOD <sub>5</sub>	mg/L	30	45
TSS	mg/L	30	45

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 2 below:

**Table 2 – Site-Specific Applicable Setback Requirements**

<b>Equipment or Activity</b>	<b>Domestic Well (feet)</b>	<b>Flowing Stream (feet)</b>	<b>Ephemeral Stream Drainage (feet)</b>	<b>Property Line (feet)</b>	<b>Lake or Reservoir (feet)</b>
Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System	100 (see 1 below)	50	50	5	200
Leach Field	100	100	50	5	200

1. A minimum horizontal separation distance of 100 feet is specified (per California Well Standards) as underlying groundwater is greater than 400 feet deep, the well casing is 400 feet deep, and the annular well seal includes a cement seal to a depth of 100 feet.

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

1. Activated Sludge Systems requirements in Section B.4 of the General Order
2. Subsurface Disposal Systems requirements in Section B.6 of the General Order;
3. Sludge/Solids/Biosolids Disposal requirements in Section B. 8 of the General Order; and
4. 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 14 August 2023**.

- 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 the Sludge Management Plan shall be maintained at the treatment facility and shall be presented to the Regional Water Board staff upon request. A copy of the Sludge Management Plan shall be submitted to the Regional Water Board **by 14 August 2023**.

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-R5390** 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 wastewater flows to the Facility substantially increase and the monthly average flows approach or exceed 10,000 gpd, the Central Valley Water Board staff must be contacted to determine if further analysis is required.

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 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](mailto: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:** 886109,  
**Facility Name:** RS Utilities Wastewater Treatment System,  
**Order:** 2014-0153-DWQ-R5390.

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 Omar Mostafa. Mr. Mostafa can be reached at (559) 445-5197 or [omar.mostafa@waterboards.ca.gov](mailto:omar.mostafa@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](mailto: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) ([https://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](https://www.waterboards.ca.gov/public_notices/petitions/water_quality)) or will be provided upon request. 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](mailto:Jeff.Robins@waterboards.ca.gov).

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

*Original Signed by Scott J. Hatton for:*  
Patrick Pulupa  
Executive Officer

Attachments:

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

Enclosures:

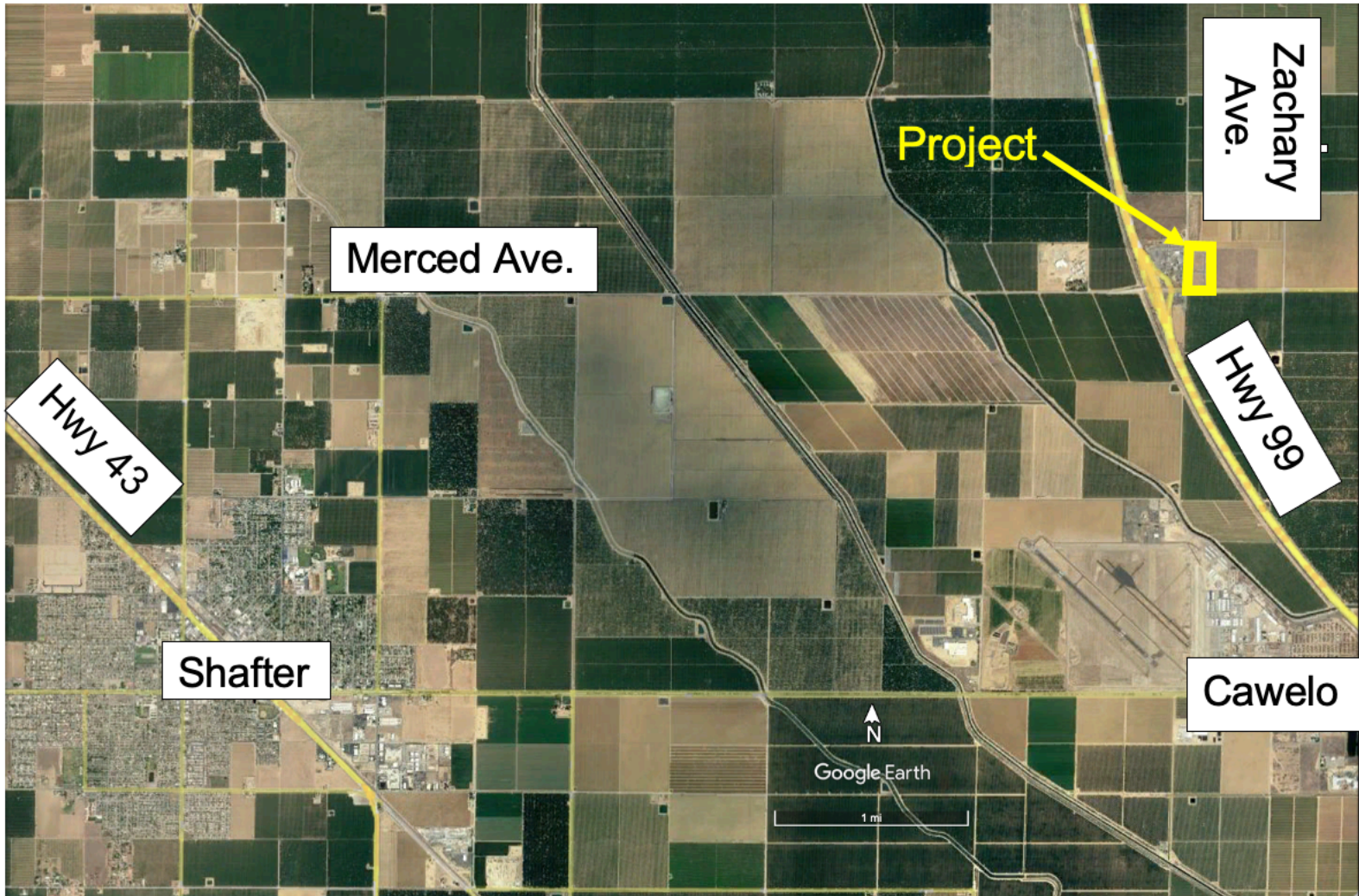
- Monitoring and Reporting Program 2014-0153-DWQ-R5390
- Staff Review Memorandum for RS Utilities WWTF
- State Water Resources Control Board Order WQ 2014-0153-DWQ  
(Discharger only)

*cc's Next Page:*

cc's

- 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, DDW, (via email)
- Omar Mostafa, Central Valley Water Board, Fresno (via email)
- Kern County Public Works and Planning Department, Bakersfield, CA
- Abdo Korin, Kern County Environmental Health, Bakersfield (via email)
- Davinder Sandhu, President/CEO/owner (via email)
- Derrill G. Whitten, Cornerstone Engineering (via email)
- Claude Whitten, Cornerstone Engineering (via email)
- Christine Halley Cornerstone Engineering (via email)
- Ryan Parlier, Project Manager, Countryside Construction (via email)
- Debbie Webster, CVCWA (via email)



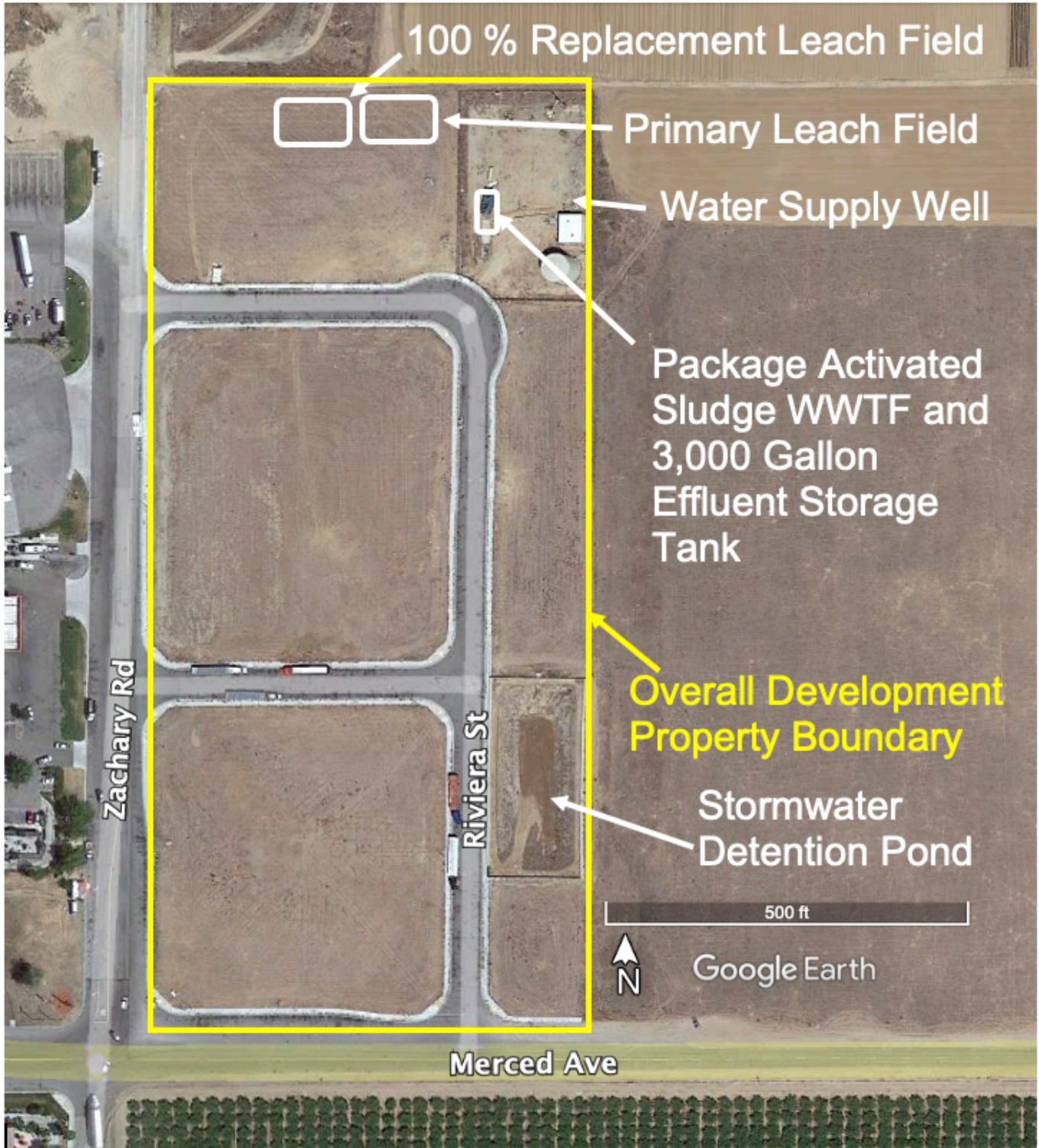


**ATTACHMENT A – SITE LOCATION MAP**

NOTICE OF APPLICABILITY 2014-0153-DWQ-R5390

Drawing Reference: Google Earth

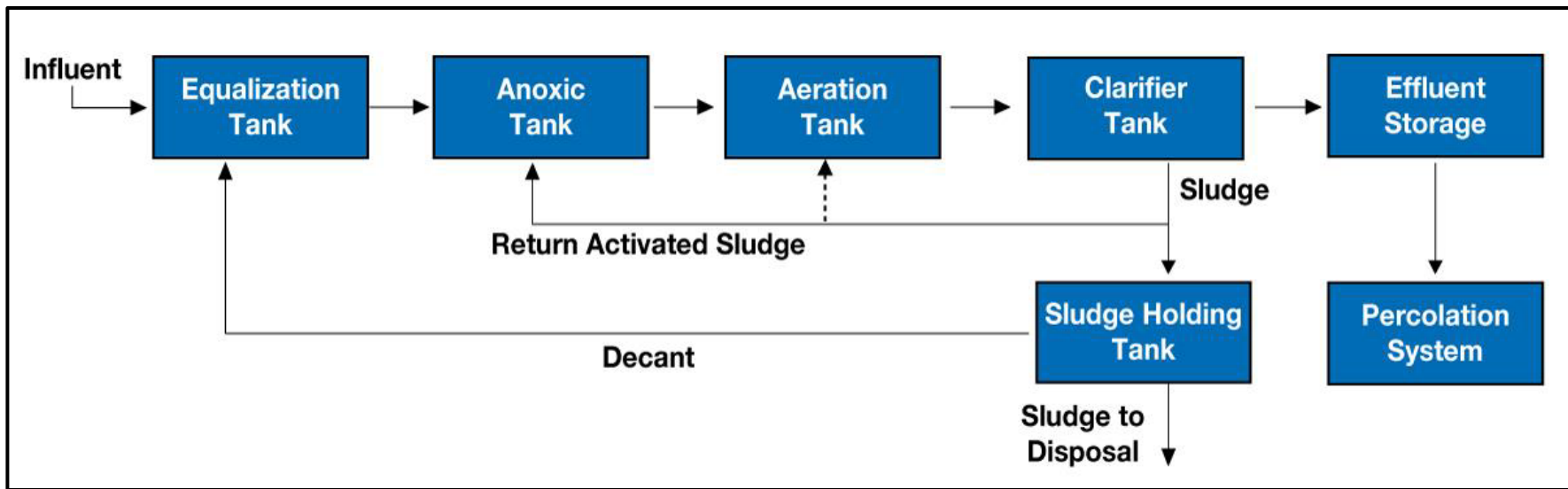




**ATTACHMENT B - SITE PLAN MAP**

NOTICE OF APPLICABILITY 2014-0153-DWQ-R5390  
Drawing Reference: Google Earth





### ATTACHMENT C – PROCESS FLOW DIAGRAM

NOTICE OF APPLICABILITY 2014-0153-DWQ-R5390

Drawing Reference: Report of Waste Discharge (28 March 2023), Cornerstone Engineering/  
Ecologix Environmental Systems (4 June 2015)

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

**MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5390  
FOR  
DAVINDER SANDHU AND RS FINANCIAL PROPERTIES, LLC;  
RS UTILITIES WASTEWATER TREATMENT FACILITY  
KERN COUNTY**

This Monitoring and Reporting Program (MRP) describes requirements for the RS Utilities Wastewater Treatment System (Facility). This MRP is issued pursuant to Water Code Section 13267. Davinder Sandhu and RS Financial Properties, LLC (collectively referred to as 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 was issued Notice of Applicability (NOA) 2014-0153-DWQ-R5390, which enrolls the Facility under State Water Resources Control Board Order WQ 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic*

*Wastewater Treatment Systems* (General Order). 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.

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.

### **ACTIVATED SLUDGE TREATMENT SYSTEM MONITORING**

Effluent samples shall be taken at an area that represents the effluent quality and flow distributed to the leach field. At a minimum, effluent monitoring shall include the monitoring specified in Table 1 below.

**Table 1 – Effluent Monitoring**

<b>Constituent</b>	<b>Units</b>	<b>Sample Type</b>	<b>Monitoring Frequency</b>	<b>Reporting Frequency</b>
Flow	MGD	Meter (see 1 below)	Continuous (see 2 below)	Quarterly
BOD <sub>5</sub>	mg/L	Grab	Monthly	Quarterly
TSS	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. Flow rate may be metered or estimated based on potable water supply readings or

- other approved method. Flow rates may be measured as influent or effluent flow.
2. 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.

### **SUBSURFACE DISPOSAL AREA MONITORING**

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 of the leach field systems shall, at a minimum, include the monitoring specified in Table 2 below.

**Table 2. Subsurface Disposal Area Monitoring**

<b>Constituent</b>	<b>Inspection Frequency</b>	<b>Reporting Frequency</b>
Pump Controllers, Automatic Valves, Etc. (See 1 below)	Monthly	Quarterly
Nuisance Odor Conditions	Monthly	Quarterly
Saturated Soil Conditions (See 2 below)	Monthly	Quarterly
Plant Growth (See 3 below)	Monthly	Quarterly
Vectors or Animal Burrowing (See 4 below)	Monthly	Quarterly

1. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
2. Inspect a disposal area for saturated conditions.
3. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
4. Evidence of animals burrowing shall be immediately investigated, and burrowing animal populations controlled as necessary.

### **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](mailto: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:** 886109,  
**Facility Name:** RS Utilities Wastewater Treatment Facility,  
**Order:** 2014-0153-DWQ-R5390

#### **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).
4. A copy of the logs from the wastewater collection system observations conducted during the quarter. The Discharger shall note if any repairs were conducted or need to be conducted.

## **B. Annual Report**

Annual Reports shall be submitted to the Regional Water Board **by March 1<sup>st</sup> 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. Copies of laboratory analytical report(s) and chain of custody form(s).
4. 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.
5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
6. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.

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."*

D. Sandhu & RS Financial Properties LLC - 6 -  
RS Utilities WWTF  
MRP No. 2014-0153-DWQ-R5390

16 May 2023

The Discharger shall begin implementing the above monitoring on 1 June 2023.

Ordered by:

*Original Signed by Scott J. Hatton for:*  
PATRICK PULUPA, Executive Officer

*5/16/2023*  
(Date)

## GLOSSARY

BOD <sub>5</sub>	Five-day biochemical oxygen demand
CaCO <sub>3</sub>	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
UV	Ultraviolet
mJ/cm <sup>2</sup>	Millijoules/cm <sup>2</sup>
SU	Standard pH units



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## 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:** 16 May 2023

**APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; DAVINDER SANDHU AND RS FINANCIAL PROPERTIES, LLC; RS UTILITIES WASTEWATER TREATMENT FACILITY; KERN COUNTY**

On 17 January 2023, Derrill G. Whitten (RCE 51930) with Cornerstone Engineering, submitted a completed Form 200 and Report of Waste Discharge (RWD) for the proposed RS Utilities Wastewater Treatment System (Facility or WWTF) on behalf of Davinder Sandhu (facility owner) and RS Financial Properties LLC (landowner). Davinder Sandhu and RS Financial Properties, LLC are collectively referred to as the Discharger. Subsequent submittals/correspondences between the Discharger and the Central Valley Water Board include a revised RWD on 31 March 2023 with final changes on 20 April 2023.

A RWD was initially received by the Central Valley Water Board for this site on 2 June 2009 by an earlier owner. The owner for the proposed facility in the 2009 submittal was Dipmala Enterprises LLC (land and facility owner). The Central Valley Water Board staff found the application to be incomplete in a letter dated 26 June 2009. For the facility associated with the 2009 Report of Waste Discharge, the project application was never finished and the project was never built.

The Facility is a new facility and has not previously been issued waste discharge requirements (WDRs). 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 proposed Facility is at 17162 Riviera St., Bakersfield, CA 93308 (35.533° N, 119.185° W, about 5.3 miles northeast of Shafter), as shown in Attachment A of the Notice of Applicability (NOA). The Assessor's Parcel Numbers (APNs) for components of the wastewater, stormwater, and potable water systems are summarized in Table 1.

**Table 1 – Assessor's Parcel Numbers (APN)**

<b>Feature</b>	<b>Assessor's Parcel Number</b>
Leach Field and 100% Back-up	073-320-14
Activated Sludge Package Plant and Potable Water Well	073-320-01
Stormwater Basin	073-320-04

The Facility will receive domestic wastewater from a proposed truck stop including a fueling station, fast food/retail/general commercial development, and a truck wash. The system is not proposed to accept discharges from RV holding tanks or portable toilets. The RWD and enrollment under the Small Domestic General Order only authorize the discharge of domestic wastewater to the proposed treatment and disposal system. For the discharge of other waste streams (e.g., potable water reverse osmosis brine or truck wash water), the Discharger is required to apply for separate waste discharge requirements (WDRs).

Attachment C of the NOA is a process flow diagram, which provides a schematic overview of the WWTF. The RWD states that the WWTF will consist of an activated sludge treatment system designed for a monthly average flow of up to 10,000 gallons per day (gpd). The RWD estimates that the WWTF will receive an average monthly flow rate of 8,850 gpd and a maximum daily flow of 13,275 gpd. Gravity sewer lines convey the wastewater through a bar screen to the primary treatment/equalization/dissolved air flotation tank (EQ Tank).

Following the EQ tank, wastewater is pumped into the activated sludge and secondary treatment system. The activated sludge system is composed of an anoxic tank, aeration tank, a clarifier, and a return activated sludge line. Magnesium hydroxide can be added to the aeration tank for supplemental alkalinity in the aerobic zone (required for nitrification and pH control). Wasted sludge is sent to the aerated sludge holding tank (estimated to be emptied twice per year). The treated effluent is sent to a 3,000-gallon effluent storage tank and is finally sent to the leach field. The 3,000-gallon effluent storage tank will be 8 feet high and be 8.5 feet in diameter. Secondary treated wastewater from the tank will be gravity fed to a distribution box and then the leach field.

The Discharger provided a 21 March 2023 Site Evaluation Report, which included percolation tests conducted on 14 March 2023 within the area of the leach field. The Report recommended “Soil Type 2” be used for the leach field design (per California Plumbing Code [CPC]). Per Table H201.1(2) of the CPC, Type 2 soil has a maximum absorption capacity of 4.0 gal/ft<sup>2</sup>/day. The leach field is designed to dispose of 10,000 gpd. Therefore, the required total absorption surface area is 2,500 ft<sup>2</sup>. Based on Kern County’s “Special Trench Design” (the trench design proposed by the Discharger), which allows 7 ft<sup>2</sup>/ft of absorption area, the required trench length for the WWTF is 360 feet. The proposed leach field system will consist of four, ninety-foot-long trenches and will be three feet wide. The lateral separation of the trenches will be eleven feet. Both the primary leach field and the 100% back-up leach field area are designed to meet the required 150-foot separation between the leach field and a public well (page six of the Kern County Onsite Manual). Prior to construction of the trenches, a septic system permit must be issued by the Kern County Environmental Health Division.

### POTENTIAL THREAT TO WATER QUALITY

Since the Facility is not in existence yet, there is no historical wastewater monitoring data for this facility. The RWD characterizes the anticipated raw wastewater and treated effluent quality, which is summarized in Table 2 below.

**Table 2 – Wastewater Characteristics**

Constituent	Raw Wastewater	Post -Treatment Effluent
BOD <sub>5</sub> (mg/)	200-290	< 30
TSS (mg/L)	200-290	< 30
Total Nitrogen (mg/L)	35-100	< 10
Total Phosphorus (mg/L)	6-12	51% reduction
EC (µmhos/cm).	Source plus 500	No change
Sodium (mg/L)	Source plus 83	No change
Chloride (mg/L)	75	No change

The [Department of Water Resources CADWR Land Use Viewer](https://gis.water.ca.gov/app/CADWRLandUseViewer/?page=home) (<https://gis.water.ca.gov/app/CADWRLandUseViewer/?page=home>) shows the site is mostly surrounded by deciduous cropland and smaller acreage of truck crops and young perennials.

The Discharger will utilize one well for drinking water (identified in Attachment B of the NOA) that is 1,020 feet deep with a 400-foot casing. The well is screened from 400 feet to 1,001 feet deep. The casing is sealed from 0 to 100-foot depth with cement. The Discharger proposes to treat the extracted groundwater from the well using a reverse

osmosis water treatment system, which should be capable of removing a variety of constituents/parameters (e.g., aluminum, EC, TDS, chloride, iron nitrate, and sulfate) that exceed California Drinking Water Maximum Contaminant Levels (MCLs). The most recent untreated source water quality test results are shown in Table 3 below.

**Table 3 – Source Water Quality (Prior to RO Treatment)**

Constituent/Parameter	Result
Date Sampled	11/21/2017
EC (µmhos/cm @ 25°C)	1,750
Total Dissolved Solids (mg/L)	1,600
Nitrate as Nitrogen (mg/L)	20
Nitrite as N	<0.050
Hardness, Total (mg/L as CaCO <sub>3</sub> )	700
Sodium (mg/L)	96
Potassium (mg/L)	5.5
Chloride (mg/L)	270
Sulfate (mg/L)	470
Total Alkalinity (mg/L as CaCO <sub>3</sub> )	42
Manganese (µg/L)	26
Iron (µg/L)	2,700
Aluminum (µg/L)	260
1,2,3 Trichloropropane (µg/L)	0.067
1,2-Dibromo-3-chloropropane (µg/L) (DBCP)	<0.01
Ethylene Dibromide (µg/L) (EDB)	<0.01

As for groundwater levels, the RWD documented findings associated with 13 bore holes to a depth of approximately 10-50 feet completed in 2009 (“Preliminary Geotechnical Investigation: Proposed Commercial Center- Merced Avenue and Zachary Road, Kern County, California”). No free groundwater was encountered. The RWD mentions that groundwater levels were recorded at around 680 feet below ground surface (bgs) in a nearby water well (around 800 feet away).

Central Valley Water Board staff reviewed the data on the [California Department of Water Resources Sustainable Groundwater Management Act website](https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels) (https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels) to assess the direction of regional groundwater flow and depth to groundwater. For Spring 2022, regional groundwater flow at the site was generally to the northwest. The depth to groundwater was approximately 450 feet bgs.

To help 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) (https://www.waterqualitydata.us/portal). Four wells were located within 1.33 miles of the discharge location (Well A = 028S026E09D001M; Well B = 028S026E04M001M,



Well C 028S026E05F001M; and Well D 028S026E05E002M). The data is summarized in Table 4 below. In Table 4, “NM.” means no measurement was shown.

**Table 4 – Groundwater Quality from Nearby Wells**

Constituent/Parameter)	Well A	Well B	Well C	Well D
Date Sampled	12/13/1954	3/1/1956	12/10/1954	9/27/1956
Well Hole Depth (ft bgs)	700	759	700	NM
EC (µmhos/cm @ 25°C)	681	NM	330	1010
TDS (mg/L)	391	300	211	672
Nitrate (as N) (mg/L)	3.8	3.2	2.7	15.4
pH (SU)	7.9	7.8	7.7	7.6
Hardness, Ca, Mg (mg/L as CaCO <sub>3</sub> )	210	120	98	300
Magnesium (mg/L)	5.9	6.8	4.4	5.2
Calcium (mg/L)	74	39	32	110
Sodium (mg/L)	52	36	36	96
Chloride (mg/L)	140	77	34	62
Sulfate (mg/L)	64	28	40	250
Alkalinity (mg/L as CaCO <sub>3</sub> )	53	50	82	98
Boron (µg/L)	50	NM	50	0.0
Iron (µg/L)	100	NM	100	NM

**MONITORING REQUIREMENTS**

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

- Activated Sludge Monitoring;
- Subsurface Disposal Area Monitoring; and
- Solids Disposal Monitoring.

**NITROGEN LIMIT EVALUATION**

The General Order requires that wastewater systems with a flow rate greater than 20,000 gallons per day be evaluated to determine if nitrogen effluent limits are required, as described in Attachment 1 of the General Order. The design capacity for the Facility is 10,000 gpd. Therefore, a Nitrogen Effluent Limit Evaluation is not required for the Facility.

**SALT AND NITRATE CONTROL PROGRAMS**

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). The Basin Plan amendments became effective on 17 January 2020 and were revised by the Central Valley Water Board in 2020 [with Resolution R5-2020-0057](#)

([https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/resolutions/r5-2020-0057\\_res.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf)). For the Salt Control Program, dischargers that are unable to comply with stringent salinity requirements will instead need to meet performance-based requirements and participate in a basin-wide effort known as the Prioritization and Optimization Study (P&O Study) to develop a long-term salinity strategy for the Central Valley. As part of the application process, the Discharger submitted a Notice of Intent (NOI) for the Salt Control Program (**CV-SALTS ID: 2828**) selecting the Alternative Permitting Option. The Discharger signed up for the P&O study and paid their fee on 27 February 2023.

For the Nitrate Control Program, the Facility is within a Priority 2 basin/subbasin, the San Joaquin Valley-Kern County (Basin 5-022.14). The Discharger submitted a Notice of Intent (NOI) for the Nitrate Control Program on 8 February 2023 (selecting Pathway B).

More information on the Salt and Nitrate Control Programs can be found at the [CV-SALTS Website](https://www.cvsalinity.org/public-info) (<https://www.cvsalinity.org/public-info>).