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## Central Valley Regional Water Quality Control Board

19 June 2018

Darla Harrel  
I-5 Property Services, Inc.  
HC-1, Box 1, 39482 Hwy 33  
Avenal, California 93204

**CERTIFIED MAIL**  
**7018 0360 0000 1932 6983**

### **NOTICE OF APPLICABILITY (NOA); STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5259; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; I-5 PROPERTY SERVICES, INC.; I-5 AND DORRIS AVENUE WASTEWATER TREATMENT FACILITY; FRESNO COUNTY**

On 6 December 2017, I-5 Property Services, Inc. (Discharger) submitted a Report of Waste Discharge (RWD) for I-5 and Dorris Avenue Wastewater Treatment Facility (Facility). Based on the information provided, the Facility treats and disposes of less than 100,000 gallons per day (gpd), and is therefore eligible for coverage under the general and specific conditions of the State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described below upon the rescission of Order 92-158. You are hereby assigned General Order **2014-0153-DWQ-R5259** 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-R5259. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

### **DISCHARGE DESCRIPTION**

The Discharger owns and operates the Facility in the northwest quadrant of I-5 and Dorris Avenue in Fresno County, approximately 15 miles northeast of Coalinga. The Facility treats domestic wastewater from a commercial development that includes six restaurants, three motels, four service stations and one office. The RWD indicates the average wastewater flow from October 2016 through September 2017 was roughly 34,000 gpd. The Facility has a design flow of 115,000 gpd. However, the Facility only has a disposal capacity of 100,000 gpd according to the water balance provided by the Discharger's consultant on 26 March 2018. The Facility utilizes an aerated pond system consisting of an influent coarse screen, lift station and

three partially-mixed aeration ponds in series. The aeration ponds each have a volume of one million gallons with a detention time of approximately 30 days. Treated effluent from the aeration ponds discharges into the first evaporation/percolation pond and then overflows to the second pond. The first pond has limited percolation capacity and remains full majority of the time, the second pond percolates at about 1.95 inches per day. Depth to ground water is approximately 200 to 600 feet.

Solids are predominantly collected from screening at the influent lift station and biosolids are accumulated at the bottom of the partially-mixed aeration ponds. Solids are disposed of in trash bins and eventually hauled to a landfill. Biosolids depth in the aeration ponds are monitored by the operator and is removed as needed. Dried sludge is stockpiled and is hauled off by a sludge handler every two years. Approximately 25 tons of sludge is generated each time the pond is cleaned.

### **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, with all attachments, and MRP No. 2014-0153-DWQ-R5259. In accordance with the requirements of the General Order, discharges with flow rates greater than 20,000 must be evaluated as described in Attachment 1 of the General Order to determine if nitrogen effluent limits are required. The attached memorandum includes a nitrogen effluent limit evaluation. Based on the evaluation, Central Valley Water Board staff determined that the nitrogen limit for low threat (50% removal) is appropriate for the Facility.

In accordance with Section B.1 of the General Order, treated wastewater discharged to the Facility's pond system **shall not exceed 100,000 gpd as a monthly average.**

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

<b>Site Specific Applicable Setback Requirements</b>		
<b>Equipment or Activity</b>	<b>Domestic Well</b>	<b>Property Line</b>
Treatment System	150 ft. <sup>1</sup>	5 ft. <sup>1</sup>
Impoundment (undisinfected secondary recycled water) <sup>2</sup>	150 ft. <sup>3</sup>	50 ft.

<sup>1.</sup> Setback established by California Plumbing Code, Table K-1

<sup>2.</sup> Undisinfected secondary recycled water is defined in California Code of Regulations, title 22, section 60301.900.

<sup>3.</sup> Setback established by California Code of Regulations, title 22, section 60310(d).

The Discharger shall comply with the pond system requirements specified in Section B.5 of the General Order. Section B.5.a states that sufficient freeboard shall be maintained at all times in ponds to provide adequate storage capacity and prevent wastewater spills. Freeboard shall be measured vertically from the lowest elevation of the pond berm to the pond water surface. If freeboard is less than one foot, the discharger shall immediately implement the contingency plan contained in the Spill Prevention and Emergency Response Plan (Provision E.1.a).

Section B.5.d states that objectionable odors shall not create nuisance conditions beyond the limits of the wastewater treatment facility. A dissolved oxygen concentration less than 1.0 mg/L in the upper one foot of any wastewater pond shall be evidence of the potential to generate objectionable odors.

Section B.7.f of the General Order states if recycled water is applied, it shall comply with the title 22 water recycling criteria, this General Order, the NOA, a title 22 Engineering Report, and any Department of Drinking Water approval conditions. As of the date of this NOA, the Discharger has not submitted a title 22 Engineering Report for the Facility. Therefore, the Discharger is prohibited from reclaiming the Facility's treated effluent on recycled water use areas until a title 22 Engineering Report for the Facility has been approved by the State Water Resources Control Board, Division of Drinking Water.

As discussed in the attached memorandum, the *Water Quality Control Plan for the Tulare Lake Basin*, Second Edition, revised July 2016 (Tulare Lake Basin Plan) includes more stringent effluent limitations for biochemical oxygen demand (BOD) and total suspended solids (TSS) for discharges of domestic wastewater to land. Therefore, this NOA includes the secondary treatment effluent limitations required by the Tulare Lake Basin Plan for BOD and TSS. The Discharger shall not exceed the following effluent limitation for nitrogen (as specified in Section D.1.a of the General Order) and for BOD and TSS (as specified in the Tulare Lake Basin Plan):

<b>Effluent Limitations for Wastewater Treatment System<sup>1</sup></b>			
<b>Constituent</b>	<b>Units</b>	<b>Monthly Average<sup>2</sup></b>	<b>Annual Average</b>
BOD	mg/L	40	--
TSS	mg/L	40	--
Total Nitrogen (% Reduction)	%	--	50 <sup>3</sup>

BOD denotes biochemical oxygen demand; TSS denotes total suspended solids.

1. The limitations included in this table apply to the treated effluent discharged to the evaporation/percolation ponds.
2. The monthly average concentration is the arithmetic mean of measurements recorded during a calendar month. If only one sample is collected in a calendar month, then that sample measurement is the monthly average concentration.
3. The value represents the minimum percent reduction compared to the untreated wastewater value. Reduction shall be calculated on an annual basis. In no case shall the reduction result in an effluent limit lower than 10 mg/L total nitrogen.

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 this NOA:

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

The General Order requires the Sludge Management Plan to be submitted to the Central Valley Water Board within 90 days of the issuance of this NOA.

By **18 December 2018**, the Discharger shall prepare and submit a Salt and Nutrient Management Plan (pursuant to Provision E.1.d) to ensure that the overall impact of treated wastewater does not degrade groundwater. The plan shall identify and address sources of salinity from the Facility, including, but not limited to:

- 1) The chemicals used for drinking water and wastewater treatment
- 2) The contribution of salinity from sewer users and
- 3) The source water (i.e., potable water supply wells).

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5259 could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation. If flow to the Facility substantially increases and approaches 100,000 gpd, you must contact Central Valley Water Board staff to determine if further analysis is required.

As stated in Provision 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.

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

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to: [centralvalleyfresno@waterboards.ca.gov](mailto:centralvalleyfresno@waterboards.ca.gov). Documents that are 50 MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office: Program: Non-15, WDID: 5D101032001, Facility Name: I-5 and Dorris Avenue Wastewater Treatment Facility, Order: 2014-0153-DWQ-R5259.

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

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2014/wqo2014\\_0153\\_dwq.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf)

Please note that WDRs Order 92-158 is proposed to be rescinded at the **4/5 October 2018** meeting of the Central Valley Water Board. Upon rescission of your individual WDRs, coverage for your facility under the General Order shall become applicable subject to this Notice of Applicability.

If you have any questions regarding this matter, please contact Alex Mushegan by phone at (559) 488-4397 or email at [Alexander.Mushegan@waterboards.ca.gov](mailto:Alexander.Mushegan@waterboards.ca.gov).



*for* Patrick Pulupa  
Executive Officer

Attachments: Attachment A – Facility Map  
Attachment B – Wastewater Flow Schematic  
State Water Resources Control Board Order WQ 2014-0153-DWQ  
(Discharger Only)  
Monitoring and Reporting Program No. 2014-0153-DWQ-R5259  
Review Memorandum of I-5 and Dorris Avenue Wastewater Treatment Facility  
Report of Waste Discharge

cc: Fresno County Environmental Health Services, Fresno  
Fresno County Planning Development Department, Fresno  
Alfonso Manrique, AM Consulting Engineers, Inc. (via email)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5259

FOR

I-5 PROPERTY SERVICES, INC.  
I-5 AND DORRIS AVENUE 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. I-5 Property Services, Inc. (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.

Water Code section 13267 states, in part:

“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

Water Code section 13268 states, in part:

“(a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

The Discharger owns and operates the I-5 and Dorris Avenue Wastewater Treatment Facility (Facility) that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5259. 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 to be revised to reduce the monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

### **POND SYSTEM MONITORING**

#### Influent Monitoring

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

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>	<u>Reporting Frequency</u>
Flow Rate <sup>a</sup>	gpd	Meter	Continuous	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly
Electrical Conductivity	µmhos/cm	Grab	Monthly	Quarterly

<sup>a</sup> gpd denotes gallons per day; mg/L denotes milligrams per liter; µmhos/cm denotes micromhos per centimeter.

<sup>a</sup>. At a minimum, the total flow shall be measured monthly to calculate the average daily flow for the month.

#### Wastewater Pond Monitoring

All treatment and disposal ponds shall be monitored as specified below.

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>	<u>Reporting Frequency</u>
Dissolved Oxygen	mg/L	Grab	Monthly	Quarterly
Freeboard	0.1 feet	Measurement	Monthly	Quarterly
Odors	--	Observation	Monthly	Quarterly
Berm Condition	--	Observation	Monthly	Quarterly

mg/L denotes milligrams per liter.

### Effluent Monitoring

Effluent samples shall be taken from a location that provides representative samples of the wastewater. At a minimum, effluent monitoring shall consist of the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>	<u>Reporting Frequency</u>
Biological Oxygen Demand	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly
Total Suspended Solids	mg/L	Grab	Monthly	Quarterly
Electrical Conductivity	µmhos/cm	Grab	Monthly	Quarterly

mg/L denotes milligrams per liter; µmhos/cm denotes micromhos per centimeter

### **SOLIDS DISPOSAL MONITORING**

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

### **REPORTING**

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernible. The data shall be summarized to clearly illustrate compliance with the General Order and NOA as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate. The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to: [centralvalleyfresno@waterboards.ca.gov](mailto:centralvalleyfresno@waterboards.ca.gov). Documents that are 50 MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:  
 Program: Non-15, WDID: 5D101032001, Facility Name: I-5 and Dorris Avenue Wastewater Treatment Facility, Order: 2014-0153-DWQ-R5259.

#### **A. Quarterly Monitoring Reports**

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

1. Results of all required monitoring.



2. A comparison of monitoring data to the discharge specifications, flow limit, disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. (Data shall be presented in tabular format.)
3. If requested by staff, copies of laboratory analytical report(s) and chain of custody form(s).

**B. Annual Report**

Annual Reports shall be submitted to the Central Valley Water Board by **March 1<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. Calculation of the annual average nitrogen removal rate using the arithmetic mean of nitrogen in effluent samples collected over the calendar year as a percentage of the arithmetic mean of the values of influent samples collected.
3. An evaluation of the performance of the wastewater treatment system, including discussion of capacity issues, nuisance conditions, system problems, and a forecast of the flows anticipated in the next year. A flow rate evaluation, as described in the General Order (Provision E.2.c), shall also be submitted.
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. A discussion/update on the implementation of the Salt and Nutrient Management Plan and the progress in the reduction/minimization of salinity and nitrate in the Facility's discharge.
7. 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 upon the rescission of Order 92-158.

Ordered by:

*Clay L. Rodgers*  
for PATRICK PULUPA, Executive Officer  
6/19/18  
DATE

## Central Valley Regional Water Quality Control Board

**TO:** Scott J. Hatton   
Supervising Water Resource Control Engineer  
RCE 67889

**FROM:** Alexander S. Mushegan   
Water Resource Control Engineer  
RCE 84208

Lovdeep Singh   
Scientific Aid

**DATE:** 19 June 2018

**SUBJECT: APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5259; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS; I-5 PROPERTY SERVICES, INC.; I-5 AND DORRIS AVENUE WASTEWATER TREATMENT FACILITY; FRESNO COUNTY**

On 6 December 2017, I-5 Property Services, Inc. (Discharger) submitted a Report of Waste Discharge (RWD) for I-5 and Dorris Avenue Wastewater Treatment Facility (Facility). The Discharger owns and operates the Facility in the northwest quadrant of I-5 and Dorris Avenue in Fresno County (Section 20, Township 19 South, Range 16 East MDB&M), approximately 15 miles northeast of Coalinga. The RWD includes a Form 200 and a technical report prepared by AM Consulting Engineers, Inc. This memorandum provides a summary of Central Valley Water Board's review of the RWD and supplemental information provided by the Discharger's consultant to determine the applicability of this discharge to be covered under State Water Resources Control Board Order WQ 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order).

### BACKGROUND INFORMATION

The Facility is currently permitted under Waste Discharge Requirements (WDR) Order No. 92-158. The Facility originally treated wastewater from three motels, four restaurants and a market. The Discharger proposed a Facility expansion to accommodate for additional commercial developments such as recreation vehicle parks, fast food restaurants and service stations. The proposed expansion was estimated to be completed five years after WDR Order No. 92-158 was issued. In order to increase the treatment capability of the aeration ponds, the Discharger proposed to operate the ponds in series by replacing the existing splash-type surface aerators; expand the evaporation/percolation pond from 10 acre-feet to 14.2 acre-feet; and construct a new 13.5 acre-feet evaporation/percolation pond. The expansion increased the Facility's design capacity to 115,000 gallons per day (gpd).

Historically, the Facility recycled effluent wastewater to irrigate 18.5 acres of privately owned alfalfa fields. According to Matt Gomes (Chief Operator), the Facility no longer recycles treated

effluent from the Facility. On 26 March 2018, the Discharger's consultant, Alfonso Manrique (RCE 63673) provided an updated water balance demonstrating the Facility's onsite percolation ponds have a disposal capacity of up to 100,000 gallons per day.

### **POTENTIAL THREAT TO WATER QUALITY**

The Facility operates an aerated ponds system consisting of an influent coarse screen, lift station, followed by three partially mixed aeration ponds typically in series that discharges to two evaporation/percolation ponds. As previously mentioned, the Facility treatment system is designed for 115,000 gpd. The RWD indicates that from October 2016 through September 2017, the Facility's average influent wastewater flow was approximately 34,000 gpd. The highest daily flow recorded during this period was 60,210 gpd in July 2017. During the same 12-month period, the water supply and effluent average electrical conductivity (EC) concentrations were 592  $\mu\text{mhos/cm}$  and 1,810  $\mu\text{mhos/cm}$ , respectively. According to the RWD, groundwater is of poor quality in regards to EC, with EC levels ranging from 2,500  $\mu\text{mhos/cm}$  to 3,000  $\mu\text{mhos/cm}$ . The RWD also shows an average effluent biological oxygen demand (BOD) concentration of 13.1 milligrams per liter (mg/L). Alfonso Manrique (Consultant) provided nitrogen results from samples collected in January 2018 on 14 February 2018. The results indicated that the average total nitrogen concentration (as N) for the influent in January 2018 was approximately 72 mg/L, and the average effluent nitrogen concentration (as N) was approximately 36 mg/L.

Domestic wastewater flows are transported by a gravity sewer system to the main lift station located at the Facility. The collection system was installed in 1996. The sewer collection system consists of a 4,200 feet, 8-inch diameter vitrified clay pipe. The main lift station is equipped with two submersible pumps, each capable of handling peak flows. In an event a pump fails, warning beacons inform the operator. If both pumps fail, the main lift station wet well is equipped with an emergency overflow that would transfer sewer flows into an emergency storage pond until pumps are restored. The storm water collection system consists of a 24-inch storm water pipe and a storm water retention pond. The pond is intended to contain all storm water collected on the property.

The soil in the area is predominately Polvadero sandy loam. The alluvial soil is derived from sedimentary rock. Permeability is low and water holding capacity is moderate to high. The Facility's water source is the Coalinga Canal, approximately 1,000 feet west of the Facility. This setback distance meets the setback requirements for impoundment (undisinfected secondary recycled water) from *Table 3: Summary of Wastewater System Setbacks* of the General Order. The canal water is treated at a small surface water treatment facility located on the property. The surface water treatment facility has a domestic water supply permit (Permit No. 03-23-09P-008) issued on 6 January 2009. As previously mentioned, the Facility's average influent flow from October 2016 to September 2017 was about 34,000 gpd.

### **NITROGEN LIMIT EVALUATION**

The 2017 RWD states that the General Order's low-threat nitrogen effluent limitation (50% removal) is applicable to the Facility's discharge. The General Order requires that wastewater systems with a flowrate greater than 20,000 gpd be evaluated to determine if nitrogen effluent limits are required as described in Attachment 1 of the General Order. To determine if a nitrogen effluent limit is necessary, Attachment 1 of the General Order includes site-specific considerations that should be considered when evaluating a discharge and the need for nitrogen control. These site-specific considerations include groundwater depth, percolation rate, wastewater strength, and if nitrogen is a constituent of concern for the area. Since the Facility's flowrate exceeds 20,000 gpd, a nitrogen effluent limit evaluation was conducted for the Facility.

According to the December 2017 RWD, the approximate infiltration rate at the site is 1.95 inches per day, and the depth to groundwater in the area ranges from 200 to 600 feet. Based on the California Department of Water Resources Groundwater Information Center Interactive Map for fall 2017, the groundwater depth is approximately 400 feet. In January 2018, the Discharger collected influent and effluent samples for nitrogen on two separate days. The influent total nitrogen results were 58 mg/L and 85 mg/L (as N). These influent concentrations fall within the concentration range listed in Table 1 of the General Order (35 mg/L to 100 mg/L) for typical untreated domestic wastewater.

Nitrate is a constituent of concern for the Central Valley. Portions of the Valley have nitrate accumulations in the groundwater and soil from historic and ongoing discharges. High nitrate concentrations can impact drinking water quality. The results of the January 2018 effluent samples for nitrogen were 36 mg/L and 37 mg/L. These concentrations exceed the applicable nitrate plus nitrite drinking water maximum contaminant level (MCL) of 10 mg/L. The December 2017 RWD did not provide a summary of the groundwater quality for nitrogen nor does it provide an evaluation of the Facility's impacts on groundwater in regards to nitrogen. In addition, the Discharger does not propose to reclaim any of its treated wastewater. All treated wastewater is discharged to the onsite percolation ponds. Therefore, based on the limited information available for the Facility, it appears a nitrogen effluent limit for the Facility should be required.

For nutrients such as nitrate, the potential for degradation depends not only on the quality of the treated effluent, but the ability of the vadose zone below the percolation ponds to provide an environment conducive to nitrification and denitrification to convert the effluent nitrogen to nitrate and the nitrate to nitrogen gas before it reaches the water table. As previously stated, the depth to groundwater in the area is around 400 feet. Thus, the low-threat nitrogen effluent limitation (50% removal) is appropriate for the Facility's discharge since the site specific conditions provide adequate attenuation for nitrogen.

### **BASIN PLAN REQUIREMENTS**

General Order, Finding 6 states, in part, that 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 *Water Quality Control Plan for the Tulare Lake Basin*, Second Edition, revised July 2016 (Tulare Lake Basin Plan) in pages IV-10 through IV-10.01 specifies effluent limitations for discharges of domestic wastewater to land. For secondary treatment, the Tulare Lake Basin Plan requires, for both BOD and suspended solids, 80 percent removal or reduction to 40 mg/L, whichever is more restrictive. These effluent limitations are more restrictive than the effluent limitations specified in the General Order for a wastewater pond system (BOD effluent limitation of 90 mg/L).

### **MONITORING REQUIREMENTS**

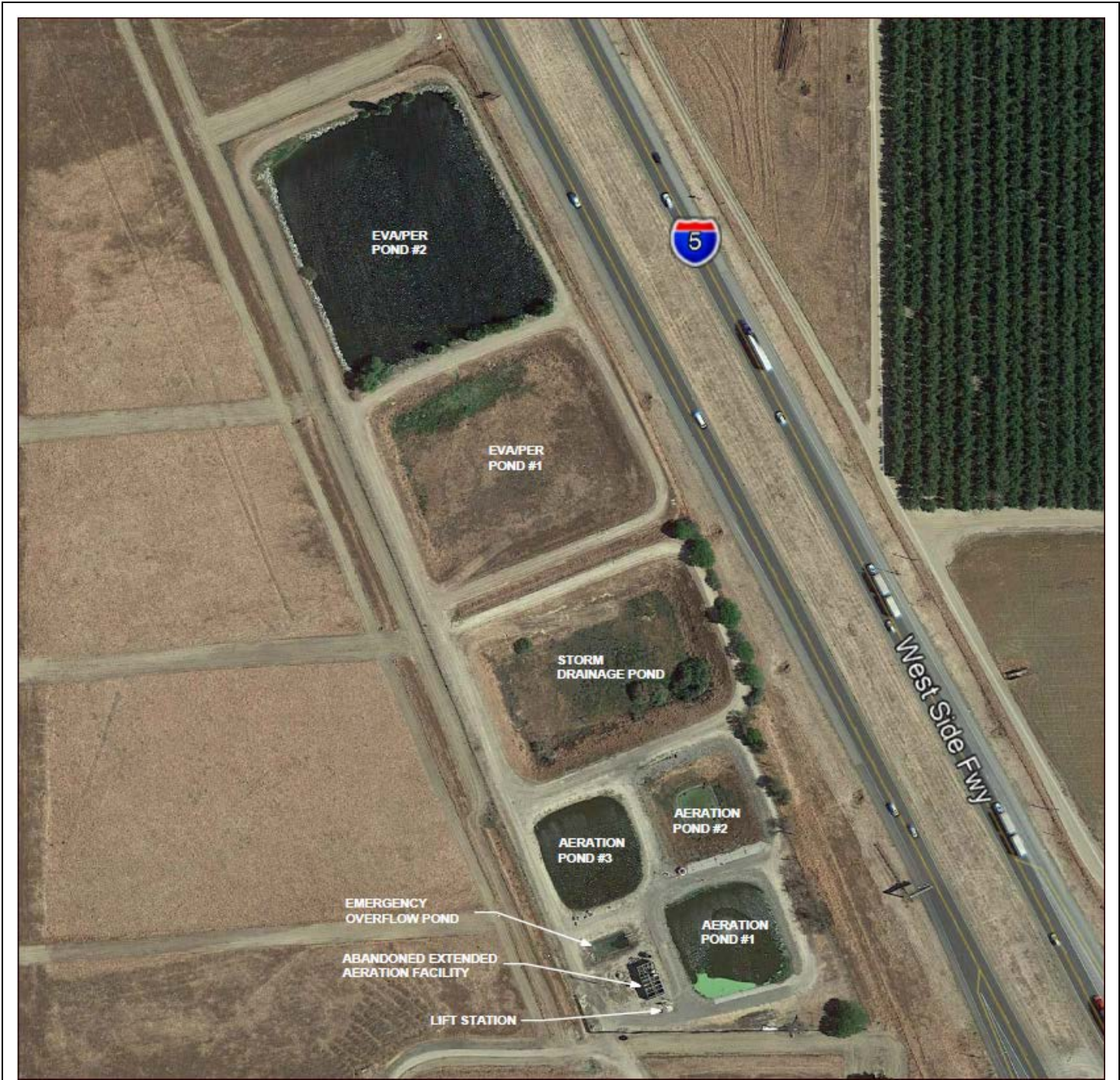
Monitoring requirements included in the following sections from Attachment C of the General Order are appropriate for this discharge:

- Pond System Monitoring and
- Solids Disposal Monitoring.

**CV-SALTS**

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. These programs, once effective, could change how the Central Valley permits discharges of salt and nitrate.



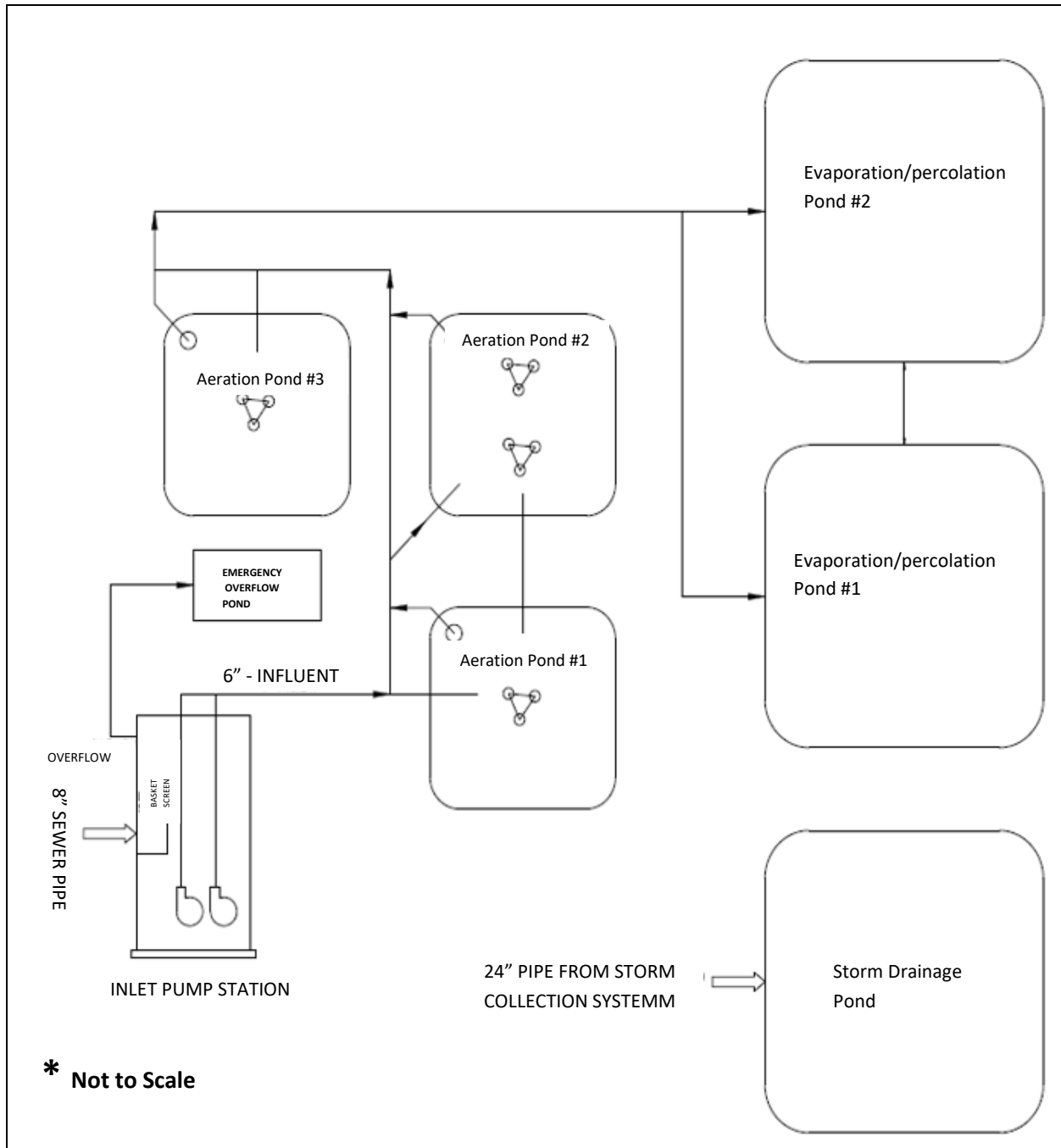


Drawing Reference  
Report of Waste Discharge,  
6 December 2017

**Attachment A-Facility Map**  
I-5 Property Services, Inc.  
I-5 and Dorris Avenue Wastewater  
Treatment Facility

Scale  
|-----|  
300 ft.





Drawing Reference  
 Report of Waste Discharge,  
 6 December 2017

**Attachment B - Flow Schematic**  
 I-5 Property Services, Inc.  
 I-5 and Dorris Avenue  
 Wastewater Treatment Facility

