

**ORDER NO. R3-2017-0028  
NPDES NO. CA0049964**

**WASTE DISCHARGE REQUIREMENTS  
FOR THE SOUTH COUNTY REGIONAL WASTEWATER AUTHORITY  
SOUTH COUNTY REGIONAL WASTEWATER TREATMENT AND RECLAMATION FACILITY**

The following Discharger is subject to waste discharge requirements as set forth in this Order:

**Table 1. Discharger Information**

<b>Discharger</b>	South County Regional Wastewater Authority
<b>Name of Facility</b>	South County Regional Wastewater Treatment and Reclamation Facility
<b>Facility Address</b>	1500 Southside Drive
	Gilroy CA 95020
	Santa Clara County

**Table 2. Discharge Location**

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
001	Treated Wastewater	36° 58' 50" N	121° 32' 00" W	Land Application to Percolation Ponds Adjacent to Llagas Creek
002	Disinfected Tertiary Recycled Domestic Wastewater	36° 58' 52" N	121° 30' 43" W	Pajaro River
003	Disinfected Tertiary Recycled Domestic Wastewater	--	--	Reclamation Use

**Table 3. Administrative Information**

This Order was adopted by the Central Coast Water Board on:	<b>September 21, 2017</b>
This Order shall become effective on:	<b>December 1, 2017</b>
This Order shall expire on:	<b>November 30, 2022</b>
The Discharger shall file a Report of Waste Discharge as an application for reissuance of waste discharge requirements in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	<b>March 25, 2022</b>
The U.S. Environmental Protection Agency (USEPA) and the Central Coast Water Board have classified this discharge as follows:	<b>Major</b>

I, John M. Robertson, Executive Officer, do hereby certify that this order with all attachments is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Coast Region on the date indicated above.



Digitally signed by Michael Thomas  
Date: 2017.10.24 15:33:13 -07'00'

for John M. Robertson, Executive Officer

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## I. FACILITY INFORMATION

Information describing the South County Regional Wastewater Treatment and Reclamation Facility and collections systems (collectively the Facility) is summarized in Table 1 and in Fact Sheet (Attachment F) sections I and II.

## II. FINDINGS

The California Regional Water Quality Control Board, Central Coast Region (hereinafter Central Coast Water Board) finds:

- A. Legal Authorities.** This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters.
- B. Background and Rationale for Requirements.** The Central Coast Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes findings for this Order. Attachments A through E are also incorporated into this Order.
- C. Provisions and Requirements Implementing State Law.** The provisions and requirements in subsections III.B, III.C, IV.B, IV.C, and V.B are included to implement state law only. These provisions and requirements are not required or authorized under the federal CWA; consequently, violations of these provisions and requirements are not subject to the enforcement remedies that are available for NPDES violations.
- D. Notification of Interested Parties.** The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet of this Order.
- E. Consideration of Public Comment.** The Central Coast Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the public hearing are provided in the Fact Sheet of this Order.

**THEREFORE, IT IS HEREBY ORDERED** that Order No. R3-2010-0009 is rescinded upon the effective date of this Order except for enforcement purposes and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

## III. DISCHARGE PROHIBITIONS

- A.** Discharge of treated wastewater at a location or in a manner other than as described by this Order is prohibited.
- B.** The discharge of any waste not specifically regulated by this Order is prohibited.
- C.** Creation of a condition of pollution, contamination, or nuisance, as defined by Section 13050 of the CWC, is prohibited.

- D. The overflow or bypass of wastewater from the Discharger’s collection, treatment, or disposal facilities and the subsequent discharge of untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provisions I.G (Bypass), is prohibited.
- E. Discharge of sludge, residues, or any other wastes into surface waters or into any area where they may enter surface water is prohibited.
- F. The average daily flow in the three driest months of each year shall not exceed 8.5 million gallons per day (MGD). The average daily influent flow in the three wettest months of each year shall not exceed 10.8 MGD.
- G. The discharge of fecal coliform bacteria originating from human sources at Discharge Point No. 002 to the Pajaro River is prohibited.

**IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

**A. Effluent Limitations – Discharge Point No. 002**

The Discharger shall comply with the following effluent limitations at Discharge Point No. 002 with compliance measured at Monitoring Location EFF-002 as described in the attached MRP.

**Table 4. Effluent Limitations**

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Flow	MGD	---	---	9.0
Biochemical Oxygen Demand 5-day @ 20°C (BOD <sub>5</sub> )	mg/L	10	---	20
Total Suspended Solids (TSS)	mg/L	10	---	20
Nitrate (as N)	mg/L	5	---	10
Un-ionized Ammonia (as N)	mg/L	0.025	---	0.050
pH	standard units	7.0 – 8.3 at all times		
Total Dissolved Solids (TDS)	mg/L	1,000	---	---
Sodium	mg/L	200	---	---
Chloride	mg/L	250	---	---
Sulfate	mg/L	250	---	---
Boron	mg/L	1.0	---	---
Chlorine, Total Residual	mg/L	---	---	[1]
Copper, Total Recoverable	µg/L	20	---	42
Lead, Total Recoverable	µg/L	2.1	---	4.2
Chlorodibromomethane	µg/L	0.40	---	0.80
Dichlorobromomethane	µg/L	0.45	---	0.90
Trihalomethanes, Total	µg/L	80	---	160

[1] Chlorine concentrations shall at no time exceed detection levels as determined by amperometric titration or another equally sensitive method.

- 1. **Percent Removal:** The average monthly percent removal of BOD<sub>5</sub> and TSS shall not be less than 85 percent.
- 2. **Turbidity**
  - a. Daily average turbidity shall be less than or equal to 2 NTU.

- b. Turbidity shall be less than 10 NTU at all times.
- c. Turbidity shall not exceed 5 NTU for more than 5 percent off the time.

**3. Total Coliform Bacteria**

- a. The 7-day median concentration shall be less than 2.2 organisms/100 mL.
- b. Coliform concentrations shall not exceed 23 organisms/100 mL in more than one sample in any 30-day period.
- c. Coliform concentrations shall be less than 240 organisms/100 mL at all times.

**B. Land Discharge Specifications**

- 4. The Discharger shall comply with the following specifications at Discharge Point No. 001 for the land application of treated secondary effluent to percolation ponds, with compliance measured at Monitoring Location EFF-001, as described in the attached MRP.

**Table 5. Effluent Limitations**

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Maximum Daily	12-Month Moving Avg.
BOD <sub>5</sub>	mg/L	30	45	---	---
TSS	mg/L	30	45	---	---
Nitrate (as N)	mg/L	5	---	10	---
TDS	mg/L	---	---	---	900
Sodium	mg/L	---	---	---	175
Chloride	mg/L	---	---	---	200
Sulfate	mg/L	---	---	---	150
Boron	mg/L	---	---	---	1.0
pH	mg/L	6.5 – 8.3 at all times			

- 5. Specifications for Discharges of Secondary Treated Wastewater to the Percolation Ponds at Discharge Point No. 001.
  - a. Freeboard shall always exceed two feet in all percolation ponds.
  - b. Extraneous surface drainage shall be excluded from all percolation ponds.
  - c. Irrigation beds and designated percolation ponds shall be disked or plowed at least annually.
  - d. Wastewater shall be confined to land owned or controlled by the Discharger.
  - e. Wastewater shall be confined within bermed areas.
  - f. Wastewater application rates to the percolation ponds shall be consistent with accepted engineering practice.
  - g. Percolation ponds shall be dried to field moisture conditions between applications during dry-weather months. Pond volumes may be optimized in wet-weather months.
  - h. A pathway shall be maintained along the dike between the designated percolation areas and Llagas Creek to allow for inspections.

- i. The wastewater treatment facility, including the percolation ponds, shall be managed to minimize mosquito breeding habitat.

**C. Recycling Specifications – Discharge Point No. 003**

1. Reclamation use of tertiary treated wastewater shall adhere to applicable requirements of CWC sections 13500-13577 (Water Reclamation); California Code of Regulations title 17, sections 7583-7586; title 17 sections 7601-7605; and title 22, sections 60301-60355 (Uniform Statewide Recycling Criteria). Production, distribution and use of recycled water is currently regulated separately under Master Water Reclamation Requirements Order No. 98-052. Specifications related to recycled water production are also included here.
2. Recycled water production shall comply with a title 22 engineering report approved by the Division of Drinking Water that demonstrates or defines compliance with the Uniform Statewide Recycling Criteria (and amendments).
3. Recycled water shall be disinfected tertiary recycled water, as defined by title 22, section 60301.230.
4. Recycled water shall be adequately oxidized, filtered, and disinfected, as defined in title 22.
5. The Discharger shall comply with the following specifications at Discharge Point No. 003 for reclamation of tertiary treated secondary wastewater, with compliance measured at Monitoring Location EFF-003, as described in the attached MRP.

**Table 6. Disinfected Tertiary Recycled Water Limitations**

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
BOD <sub>5</sub>	mg/L	10	20
TSS	mg/L	10	20
Nitrate (as N)	mg/L	5	10

6. Recycled water shall not exceed any of the following turbidity limits:
  - a. An average of 2 NTU within a 24-hour period,
  - b. 5 NTU more than 5 percent of the time within a 24-hour period, and
  - c. 10 NTU at any time.
7. The median concentration of total coliform bacteria measured in the disinfected recycled water shall not exceed the following limits:
  - a. An MPN of 2.2 per 100 mL utilizing the bacteriological results of the last seven days for which analyses have been completed,
  - b. An MPN of 23 per 100 mL in more than one sample in any 30 day period, and
  - c. No sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.
8. Freeboard shall always exceed two feet in all recycled water storage ponds.
9. The Discharger shall discontinue delivery of recycled water to distributors and users during any period in which it has reason to believe that the limits established in this Order

are not being met. The delivery of recycled water shall not be resumed until all conditions that caused the limits to be violated have been corrected.

10. Recycled water shall not exceed any maximum contaminant level established pursuant to sections 116275(c)(1) and (d) of the California Health and Safety Code or established by the U.S. Environmental Protection Agency.
11. Recycled water disinfected with chlorine shall have a CT value (chlorine concentration time modal contact time) of not less than 450 mg-min/L at all times with a modal contact time of at least 90 minutes based on a flow of 9.0 MGD. Monthly average flow of chlorinated recycled water shall not exceed 15 MGD or the total monthly demand of the users.
12. Recycled water disinfected with ultraviolet (UV) light shall comply with the following DDW recommendations:
  - a. Each UV channel must be operated independently to deliver a minimum UV dose of 110 mJ/cm<sup>2</sup> at all times.
  - b. The equations below must be used for each UV reactor as part of the automatic UV disinfection control system for calculating UV dose. They are from the "Wedeco Open Channel TAK55 Wastewater UV Reactor 360W Validation Report Final," Carollo Engineers, dated January 2010.

$$S_o = e^{-0.63} \times e^{0.0452 \times UVT} \times Power^{0.9124}$$

$$RED_{calc} = CR \times 10^{1.863} \times UVA^{-1.695} \times [S/S_o]^{0.927} \times Q^{-0.839}$$

Where: UVT = UV transmittance at 254 nm, expressed as a whole number, e.g., 60 to 72

S = Measured UV sensor value (mW/cm<sup>2</sup>)

S<sub>o</sub> = calculated intensity from new lamp at full power (at same UVT) with clean sleeves, typically expressed as a function of UVT (mW/cm<sup>2</sup>)

ED<sub>calc</sub> = UV dose calculated per bank (mJ/cm<sup>2</sup>)

CR = Confidence factor = 0.938

UVA = UV absorbance at 254 nm (cm<sup>-1</sup>), e.g., between 0.222 and 0.142<sup>1</sup>.

Q = Flow rate, calculated as gpm divided by the number of lamps in one bank (gpm/lamp)

Power = Measured ballast power setting (kW)

- c. The UV disinfection system is limited to the following operational parameter ranges:
  - i. Total plant flow is limited to 8 MGD (4.0 MGD per UV channel). Flow may be increased to 9 MGD total in accordance with DDW recommendations and Executive Officer approval.
  - ii. UVTs at or above 60 percent.
  - iii. UV sensor intensities ranging from 2.0 to 4.3 mW/cm<sup>2</sup>.
- d. Online monitoring of UV intensity, flow, and UVT must be provided at all times.
- e. Flow meters, UV intensity sensors, and UVT monitors must be properly calibrated to ensure proper disinfection.

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<sup>1</sup> At UVT values above 72 percent, the value (72 UVT or UVA=0.142) should be used as the default value in the S<sub>o</sub> and RED calculations respectively.



- f.** At least monthly, all duty UV intensity sensors must be checked for calibration against a reference UV intensity sensor.
- g.** For all UV intensity sensors in use, the ratio of the duty UV sensor intensity to the reference UV sensor intensity must be less than or equal to 1.2. If the calibration ratio is  $>1.2$ , the failed duty UV sensor must be replaced by a properly calibrated sensor and recalibrated by a qualified facility. The reference UV intensity sensors shall be recalibrated at least annually by a qualified facility using a National Institute of Standards and Technology (NIST) traceable standard.
- h.** UVT meter must be inspected and checked against a reference bench-top unit weekly to document accuracy.
- i.** If the on-line analyzer UVT reading varies from the bench-top spectrophotometer UVT reading by 2% or more, the on-line UVT analyzer must be recalibrated by a procedure recommended by the manufacturer.
- j.** Flow meters measuring the flow through a UV reactor must be verified to determine accuracy at least monthly via checking the flow reading against other flow determination methods.
- k.** Each UV reactor at the UV system must be designed with built-in automatic reliability features that must be triggered by critical alarm setpoints.
- l.** Conditions triggering an alarm and startup the redundant bank include the following:
  - i.** the UV dose goes below  $115 \text{ mJ/cm}^2$  , and
  - ii.** whole bank failure.
- m.** Conditions that require diverting effluent to waste include the following:
  - i.** UV dose is below the minimum UV dose of  $110 \text{ mJ/cm}^2$  ,
  - ii.** UVT is below the minimum UVT commissioned of 60%,
  - iii.** UV intensity below the minimum validated of  $2.0 \text{ mW/cm}^2$  ,
  - iv.** complete UV channel failure, and
  - v.** flow above the maximum flow commissioned of 4.0 MGD per channel.
- n.** The UV system must be operated in accordance with an approved operations plan that specifies clearly the operational limits and responses required for critical alarms. The operations plan must be submitted to and approved by DDW prior to issuance of the operating permit. A copy of the approved operations plan must be maintained at the treatment plant and be readily available to operations personnel and regulatory agencies. A quick reference plant operations data sheet must be posted at the treatment plant and include the following information:
  - i.** The alarm set points for flow, UV dose, UV intensity, and UVT.
  - ii.** The values of flow, UV dose, UV intensity, and UVT when effluent must be diverted to waste.
  - iii.** The required frequency of verification and calibration for all meters/analyzers measuring flow, UV intensity, and UV transmittance.
  - iv.** The required frequency of mechanical cleaning and equipment inspection.
  - v.** The UV lamp hour tracking procedures and replacement intervals.
- o.** This UV dose equation assumes that the intensity sensors would measure the decline as the lamps age. Since there is one UV intensity sensor that monitors two

of the 72 lamps in a bank, the two lamps with the highest number of hours must be the ones closest to the UV intensity sensor.

- p. Equivalent or substitutions of equipment are not acceptable without an adequate demonstration of equivalent disinfection performance.

## V. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitation

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge from the wastewater treatment facility shall not cause the following in the receiving waters:

1. Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. Coloration attributable to materials of waste origin shall not be greater than 15 units or 10 percent above natural background color, whichever is greater.
2. Waters shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
3. Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
4. Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
5. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
6. Waters shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.
7. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
8. The suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
9. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increase in turbidity attributable to controllable water quality factors shall not exceed the following limits.
  - a. Where natural turbidity is between 0 and 50 Jackson Turbidity Units (JTU), increases shall not exceed 20 percent.
  - b. Where natural turbidity is between 50 and 100 JTU, increases shall not exceed 10 JTU.
  - c. Where natural turbidity is greater than 100 JTU, increases shall not exceed 10 percent.
10. The pH value shall not be depressed below 7.0 nor raised above 8.3. The change in normal ambient pH levels shall not exceed 0.5 in fresh water.

11. Dissolved oxygen concentrations in receiving waters shall not be reduced below 7.0 mg/L at any time.
12. Natural temperature of receiving waters shall not be altered unless it can be demonstrated to the satisfaction of the Central Coast Water Board that such alteration in temperature does not adversely affect beneficial uses.
13. All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same water body in areas unaffected by the waste discharge.
14. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH<sub>3</sub>) to exceed 0.025 mg/L (as N) in the receiving water.
15. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect the beneficial uses of the receiving water. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. For waters where existing concentrations are presently not detectable or where beneficial uses would be impaired by concentrations in excess of nondetectable levels, total identifiable chlorinated hydrocarbon pesticides shall not be present at concentrations detectable within the accuracy of analytical methods as prescribed in Standard Methods for the Examination of Water and Wastewater, latest edition, or other equivalent methods approved by the Executive Officer.
16. Waters shall not contain organic substances in concentrations greater than the following:

**Table 7. Organic Substances Water Quality Objectives**

Parameter	Water Quality Objective
Phenol	1.0 µg/L
Methylene Blue Activated Substances	0.2 mg/L
Total Phenols	0.1 mg/L
PCBs	0.3 µg/L
Phthalate Esters	0.002 µg/L

17. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. In no circumstance shall receiving waters contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) for radioactivity presented in Table 4 of Title 22 California Code of Regulations, Division 4, Chapter 15, Article 5.
18. Receiving waters shall not contain concentrations of chemical constituents in excess of the primary maximum contaminant levels (MCLs) specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for Organic Chemicals) of Title 22 California Code of Regulations, Division 4, Chapter 15.
19. Fecal coliform concentration, based on a minimum of not fewer than five samples for any 30-day period, shall not exceed a log mean of 200 per 100 mL, nor shall more than 10 percent of samples collected during any 30-day period exceed 400 per 100 mL.
20. The following surface water quality objectives for the Pajaro River shall not be exceeded.

**Table 8. Surface Water Quality Objectives for Pajaro River**

TDS	Chloride	Sulfate	Boron	Sodium
1,000 mg/L	250 mg/L	250 mg/L	1.0 mg/L	200 mg/L

The objectives in Table 8 are annual mean values and are based on preservation of existing quality or water quality enhancement believed to be attainable following control of point sources.

- The following concentrations of metals shall not be exceeded for the protection of aquatic life.

**Table 9. Hardness Dependent Metal Criteria**

Parameter	Receiving Water Hardness (mg/L)	
	> 100 mg/L CaCO <sub>3</sub>	< 100 mg/L CaCO <sub>3</sub>
Cadmium	0.03	0.004
Chromium	0.05	0.05
Copper	0.03	0.01
Lead	0.03	0.03
Mercury	0.0002	0.0002
Nickel	0.4	0.1
Zinc	0.2	0.004

**B. Groundwater Limitations**

Activities at the Facility shall not cause exceedance/deviation from the following water quality objectives for groundwater established by the Basin Plan. The Central Coast Water Board may require the Discharger to investigate the cause of exceedances in the groundwater before determining whether the Discharger caused any water condition that exceeds the following groundwater limitations.

- Groundwater shall not contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses.
- The Discharger shall not cause a statistically significant increase of mineral constituent concentrations in underlying groundwaters as determined by comparison of samples collected from wells located up-gradient and down-gradient of the waters affected by the discharge.
- Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. In no circumstances shall groundwater contain concentrations of radionuclides in excess of the MCLs for radioactivity presented in Table 4 of Title 22 California Code of Regulations, Division 4, Chapter 15, Article 5.
- The median concentration of coliform organisms in groundwater, over any seven-day period, shall not exceed 2.2 organisms/100 mL.
- Groundwater shall not contain concentrations of chemical constituents in excess of the primary MCLs specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for Organic Chemicals) of Title 22 California Code of Regulations, Division 4, Chapter 15.

6. Groundwater shall not contain concentrations of chemical constituents in amounts that adversely affect the agricultural supply beneficial use. Interpretation of adverse effects shall be as described in University of California Agricultural Extension Service guidelines provided in Table 3-3 of the Basin Plan.
7. Groundwater used for irrigation and livestock watering shall not exceed concentrations of chemical constituents in excess of those levels specified for irrigation and livestock watering in Section III, Table 3-4 of the Basin Plan.
8. Groundwater shall not contain pollutants at concentrations greater than the following established in Table 3-8 of the Basin Plan for groundwaters within the Llagas sub-area (Pajaro River sub-basin).

**Table 10. Groundwater Objectives**

Constituent	Median <sup>[1]</sup> , mg/L
Total Dissolved Solids	300
Chloride	20
Sulfate	10
Boron	0.2
Sodium	10
Nitrogen (as N)	5

<sup>[1]</sup> Objectives shown are median values based on data averages; objectives are based on preservation of existing water quality enhancement believed attainable following control of point sources.

**VI. PROVISIONS**

**A. Standard Provisions**

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. **Central Coast Water Board Standard Provisions.** The Discharger shall comply with the Central Coast Water Board Standard Provisions included in Attachment D of this Order.

**B. Monitoring and Reporting Program (MRP) Requirements**

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order. All monitoring shall be conducted according to 40 CFR 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*.

**C. Special Provisions**

**1. Reopener Provisions**

This Order may be reopened and modified in accordance with NPDES regulations at 40 CFR 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any USEPA approved, new, State WQO.

**2. Special Studies, Technical Reports and Additional Monitoring Requirements**

**a. Toxicity Reduction Requirements**

As indicated in section V.C of the MRP, when chronic toxicity is detected in the effluent (reported as “Fail”), the Discharger shall resample immediately, retest, and report the results to the Executive Officer, who will determine whether to initiate an enforcement action, require a Toxicity Reduction Evaluation (TRE) in accordance

with the Discharger's TRE Workplan, or implement other measures.

A TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases - characterization, identification, and confirmation using aquatic organism toxicity tests. The TRE shall include all reasonable steps to identify the source of toxicity. The Discharger shall take all reasonable steps to reduce toxicity to the required level once the source of toxicity is identified.

The Discharger shall maintain a TRE Workplan that describes steps that the Discharger intends to follow in the event that a toxicity effluent limitation established by this Order is exceeded in the discharge. The workplan shall be prepared in accordance with current technical guidance and reference material, including:

- i. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/833/B-99-022).
- ii. Toxicity Identification Evaluation, Phase I (EPA/600/6-91/005F).
- iii. Methods for Aquatic Toxicity Identification Evaluations, Phase II (EPA/600/R-92/080).
- iv. Methods for Aquatic Toxicity Identification Evaluations, Phase III (EPA/600/R-92/081).
- v. At a minimum, the TRE Workplan shall include:
- vi. Actions that will be taken to investigate/identify the causes/sources of toxicity;
- vii. Actions that will be evaluated to mitigate the impact of the discharge, to correct the noncompliance, and/or to prevent the recurrence of acute or chronic toxicity (this list of action steps may be expanded, if a TRE is undertaken); and
- viii. A schedule under which these actions will be implemented.

When chronic toxicity is detected within the effluent as specified in section V.A.1.a of the MRP (reported as "Fail"), the Discharger shall resample immediately and retest for chronic toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Executive Officer as soon as possible following receipt of monitoring results, not to exceed 15 days from the conclusion of each test. The Executive Officer will determine whether to initiate enforcement action, whether to require the Discharger to implement a TRE, or to implement other measures. When the Executive Officer requires the Discharger to conduct a TRE, the TRE shall be conducted giving due consideration to guidance provided by the USEPA's Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3 (USEPA

document Nos. EPA 600/R-91/003 and 600/6/91/005F, 600/R-92/080, and 600/R-92/081, respectively). A TRE, if necessary, shall be conducted in accordance with the following schedule.

**Table 11. Toxicity Reduction Evaluation Schedule**

Action Step	When Required
Take all reasonable measures necessary to immediately reduce toxicity, where the source is known.	Within 24 hours of identification of noncompliance.
Initiate the TRE in accordance to the Workplan.	Within 7 days of notification by the Executive Officer or as otherwise specified in section V.D of the MRP
Conduct the TRE following the procedures in the Workplan.	Within the period specified in the Workplan (not to exceed one year, without an approved Workplan).
Submit the results of the TRE, including summary of findings, required corrective action, and all results and data.	Within 60 days of completion of the TRE.
Implement corrective actions to meet Permit limits and conditions.	To be determined by the Executive Officer.

**3. Best Management Practices and Pollution Prevention – Not Applicable**

**4. Construction, Operation and Maintenance Specifications**

- a. The Facility shall be operated as specified under Special Provision D of Attachment D.
- b. **Additional Specifications for Discharges of Tertiary Treated Wastewater to the Pajaro River at Discharge Point No. 002.**
  - i. Discharge of tertiary treated wastewater to the Pajaro River shall occur only during the months of November through April, on an as needed basis, to facilitate the proper maintenance and safe operation of the percolation ponds.
  - ii. Discharges to the Pajaro River shall occur only when flow in the Pajaro River is greater than 180 MGD, as measured at a gauging station near the point of discharge, and when flow in the Pajaro River is below 6,004 MGD, as measured at the Chittenden gauging station.
- c. **Chlorine Disinfection.** If chlorine is used for disinfection, a CT value (the product of the concentration of a disinfectant and the contact time) of not less than 450 mg-min/L shall be maintained at all times with a modal contact time of at least 90 minutes based on a discharge rate of 9.0 MGD.
- d. **UV Disinfection.** If ultraviolet (UV) light is used for disinfection, the Discharger shall operate the UV disinfection system in compliance at all times with the Discharger’s title 22 engineering report approved by the Division of Drinking Water, the Division of Drinking Water’s recommendations, the Discharger’s operations plan approved by the Division of Drinking Water, and the conditions specified in section IV.C of this Order.

**5. Special Provisions for Municipal Facilities (POTWs Only)**

**a. Biosolids Management**

- i. The handling, management, and disposal of sludge and solids derived from wastewater treatment must comply with applicable provisions of USEPA regulations at 40 CFR 257, 258, 501, and 503, including all monitoring, record keeping, and reporting requirements.
- ii. Sludge and wastewater solids must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Parts 258 and 503 and Title 23, Chapter 15 of the CCR. If the Discharger desires to dispose of solids and/or sludge in a different manner, a request for permit modification must be submitted to the USEPA and to the Central Coast Water Board at least 180 days prior to beginning the alternative means of disposal.
- iii. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR Part 258 pertaining to providing information to the public. In the annual self-monitoring report, the Discharger shall include the amount of sludge placed in the landfill as well as the landfill to which it was sent.
- iv. All requirements of 40 CFR Part 503 and 23 CCR Chapter 15 are enforceable whether or not the requirements of those regulations are stated in an NPDES permit or any other permit issued to the Discharger.
- v. The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.
- vi. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
- vii. The solids and sludge treatment and storage site shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection, at the minimum, from a 100-year storm and protection from the highest possible tidal stage that may occur.
- viii. The discharge of sewage sludge and solids shall not cause waste material to be in position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State.
- ix. The Discharger shall submit an annual report to the USEPA and the Central Coast Water Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40 CFR Part 503. The Discharger shall also report the quantity of sludge removed from the Facility and the disposal method. This self-monitoring report shall be submitted by February 19 of each year and report for the period of the previous calendar year.

**b. Pretreatment**

The Discharger shall be responsible for the performance of all pretreatment requirements contained in 40 C.F.R. and shall be subject to enforcement actions,



penalties, fines, and other remedies by the USEPA, or other appropriate parties, as provided in the CWA, as amended (33 USA 1351 et seq.).

The Discharger shall implement and enforce its Approved Publicly Owned Treatment Works (POTW) Pretreatment Program. Implementation of the Discharger's Approved POTW Pretreatment Program is hereby made an enforceable condition of this permit. USEPA may initiate enforcement action against an industrial user for non-compliance with applicable standards and requirements as provided in the CWA.

The Discharger shall enforce the requirements promulgated under Sections 307(b), (c), and (d) and 402(b) of the CWA. The Discharger shall cause industrial users subject to Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

The Discharger shall perform the pretreatment functions as required in 40 C.F.R. part 403, including, but not limited to:

- i. Implement necessary legal authorities as provided in 40 C.F.R. § 403.8(f)(1);
- ii. Enforce the pretreatment requirements under 40 C.F.R. §§ 403.5 and 403.6;
- iii. Implement the programmatic functions as provided in 40 C.F.R. § 403.8(f)(2); and,
- iv. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 C.F.R. § 403.8(f)(3).

The Discharger shall submit annually a report to the USEPA – Region 9, the Central Coast Water Board, and the State Water Resources Control Board describing the Discharger's pretreatment activities over the previous twelve months. In the event that the Discharger is not in compliance with conditions or requirements of this permit affected by the pretreatment program, it shall also include reasons for non-compliance and a statement how and when it shall comply. This annual report is due by February 1st of each year and shall contain, but not be limited to, the contents described in the "Pretreatment Reporting Requirements" contained in the Attachment E Monitoring and Reporting Program.

The Discharger shall comply, and ensure affected "indirect dischargers" comply, with section II.D.1 of the "Standard Provisions and Reporting Requirements."

## 6. Other Special Provisions

- a. **Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, if applicable, the Discharger shall seek authorization to discharge under and meet the requirements of the State Water Resources Control Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.
- b. **General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).**

This General Permit, adopted on May 2, 2006, is applicable to all "federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment

facility in the State of California.” The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The cities of Gilroy and Morgan Hill own and operate sanitary sewer collection systems tributary to the South County Regional Wastewater Treatment and Reclamation Facility and are required to seek authorization to discharge under and meet the requirements of the General Permit. SCRWA is not required to seek authorization under the General Permit.

**7. Compliance Schedules – Not Applicable**

**8. Salt and Nutrient Management Program**

- c. The Discharger shall maintain and implement an ongoing salt/nutrient management program with the intent of reducing mass loading of salts and nutrients (with an emphasis on nitrogen species) in treated effluent to a level that will ensure compliance with effluent limitations and protect beneficial uses of groundwater.
- d. Salt reduction measures shall focus on all potential salt contributors to the collection system, including water supply, commercial, industrial and residential dischargers. The salt and nutrient management program shall also address the concentration of salts in the wastewater treatment process as a result of excessive hydraulic retention times and/or chemical addition.
- e. Nutrient reduction measures shall focus on optimizing wastewater treatment processes for nitrification and denitrification, or other means of nitrogen removal. Reduction measures may also include source control (non-human waste from commercial and industrial sources) as appropriate.
- f. As part of the salt and nutrient management program, the Discharger shall submit an annual report of salt and nutrient reduction efforts. This salt and nutrient management report shall be included as part of the annual report submitted by January 30<sup>th</sup> of each year, and shall include:
  - i. Salt Component
    - (a) Calculations of annual salt mass discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with analysis of contributing sources;
    - (b) Analysis of wastewater evaporation and salt concentration effects;
    - (c) Analysis of groundwater monitoring results related to salt constituents;
    - (d) A summary of existing salt reduction measures; and,
    - (e) Recommendations and time schedules for implementation of any additional salt reduction measures.
  - ii. Nutrient Component
    - (a) Calculations of annual nitrogen mass (for all identified species) discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with analysis of contributing sources;
    - (b) Analysis of groundwater monitoring results related to nitrogen constituents;
    - (c) Analysis of potential impacts of nitrogen loading on the groundwater basin;

- (d) A summary of existing nitrogen loading reduction measures; and,
  - (e) Recommendations and time schedules for implementation of any additional nitrogen loading reduction measures.
- g.** As an alternative to the salt and nutrient management program requirements described above, upon Executive Officer approval, the Discharger may continue to implement the *Final Salt and Nutrient Management Plan, Llagas Subbasin*, dated December 2014, and future revisions thereto. Documentation and summary of participation in the regional salt and nutrient management plan, implemented under the provisions of State Water Board Resolution No. 2009-0011 (Recycled Water Policy), shall be submitted annually each calendar year, by January 30<sup>th</sup> of the following year.
- 9.** By April 1, 2018, the Discharger shall submit a report for Executive Officer approval evaluating groundwater gradients and flow directions for purposes of determining compliance with Section V.B Groundwater Limitations.

## **VII. COMPLIANCE DETERMINATION**

### **A. General**

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Central Coast and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

### **B. Multiple Sample Data**

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple samples analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" ("DNQ", or "Not Detected" (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

### **C. Average Monthly Effluent Limitation (AMEL)**

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar

month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**D. Average Weekly Effluent Limitation (AWEL)**

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**E. Maximum Daily Effluent Limitation (MDEL)**

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

## ATTACHMENT A – DEFINITIONS

### Arithmetic Mean ( $\mu$ )

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean } = \mu = \sum x / n \quad \text{where: } \sum x \text{ is the sum of the measured ambient water concentrations and } n \text{ is the number of samples.}$$

### Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

### Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

### Bioaccumulate

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

### Carcinogenic

Pollutants or substances that are known to cause cancer in living organisms.

### Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

### Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

### Detected, but Not Quantified (DNQ)

Sample results that are less than the reported Minimum Level, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

**Dilution Credit**

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

**Effluent Concentration Allowance (ECA)**

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Enclosed Bays**

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

**Estimated Chemical Concentration**

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below of the ML value.

**Estuaries**

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

**Inland Surface Waters**

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

**Instantaneous Maximum Effluent Limitation**

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation**

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

**Maximum Daily Effluent Limitation (MDEL)**

The highest allowable daily discharge of a pollutant.

**Median**

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

**Method Detection Limit (MDL)**

The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 C.F.R. part 136, Attachment B.

**Minimum Level (ML)**

The concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

**Mixing Zone**

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

**Not Detected (ND)**

Those sample results less than the laboratory's MDL.

**Ocean Waters**

The territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

**Persistent Pollutants**

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

**Pollutant Minimization Program (PMP)**

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

**Pollution Prevention**

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift

a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

**Reporting Level (RL)**

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

**Source of Drinking Water**

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

**Standard Deviation ( $\sigma$ )**

Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2] / (n - 1))^{0.5}$$

where:

x is the observed value;

$\mu$  is the arithmetic mean of the observed values; and

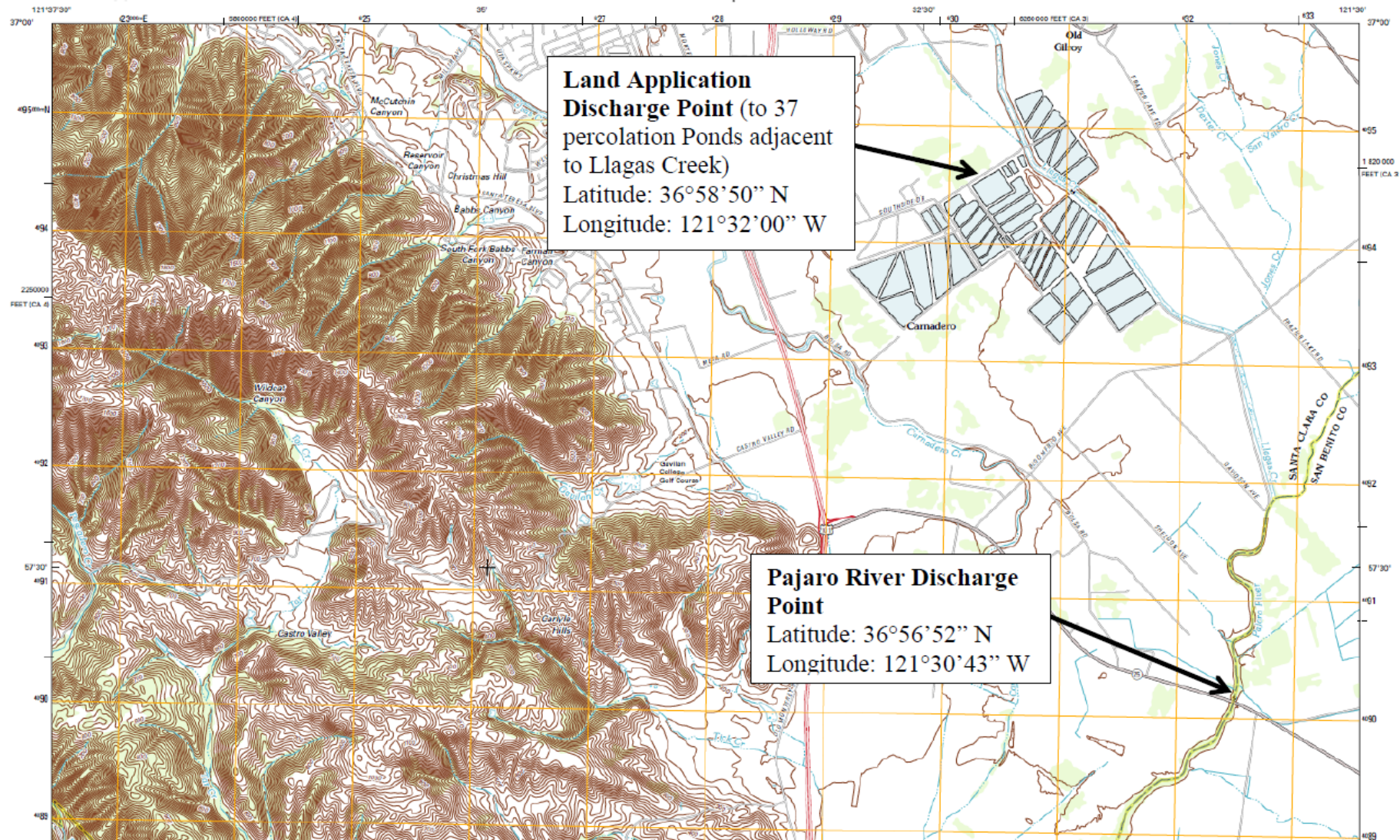
n is the number of samples.

**Toxicity Reduction Evaluation (TRE)**

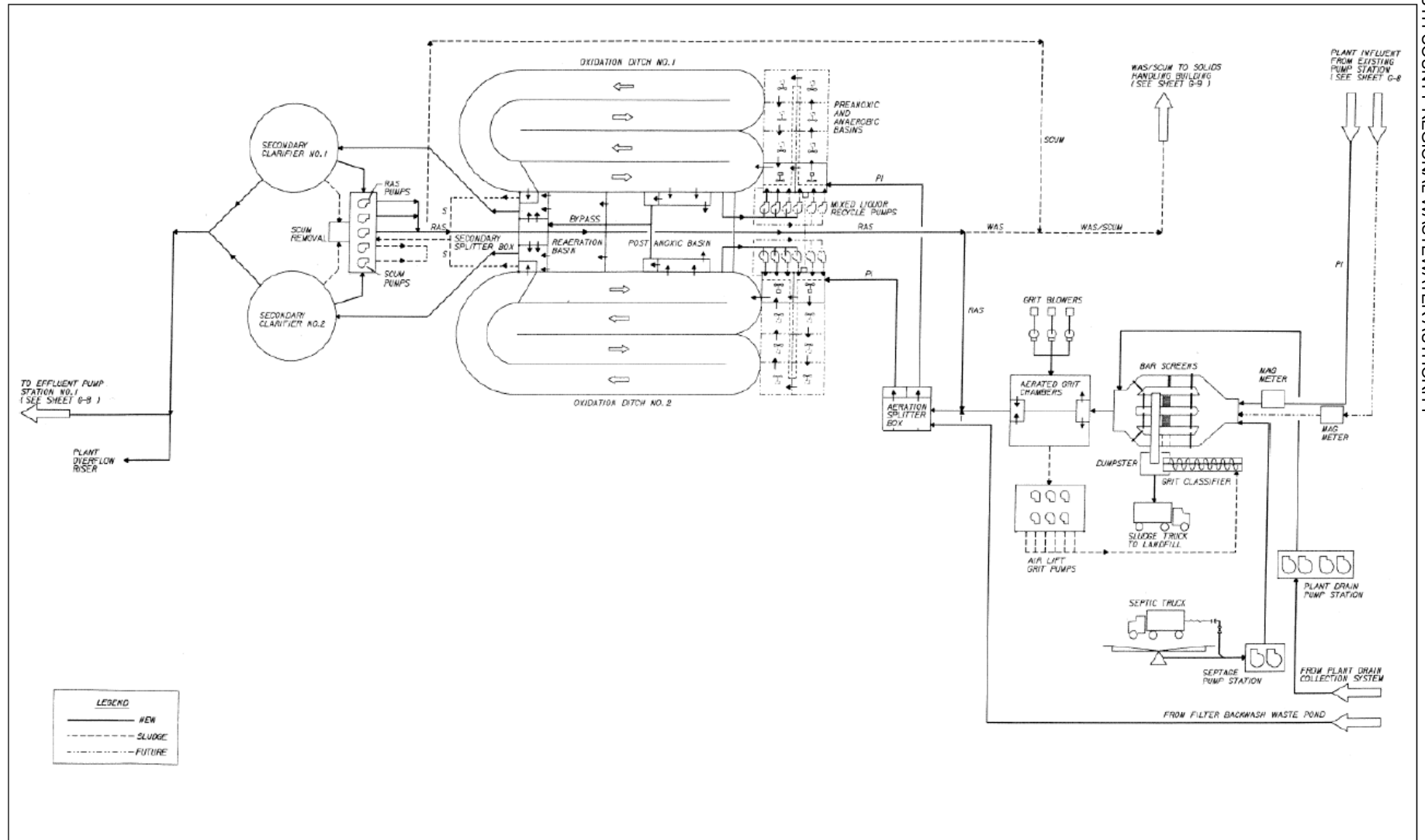
A study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)



**ATTACHMENT B – MAP**



ATTACHMENT C – FLOW SCHEMATIC



## ATTACHMENT D – STANDARD PROVISIONS

### I. STANDARD PROVISIONS – PERMIT COMPLIANCE

#### A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

#### B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

#### C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

#### D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

#### E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

#### F. Inspection and Entry

The Discharger shall allow the Central Coast Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

**G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Central Coast Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
  - c. The Discharger submitted notice to the Central Coast Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
4. The Central Coast Water Board may approve an anticipated bypass, after considering its adverse effects, if the Central Coast Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
5. Notice

- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)
- b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

#### **H. Upset**

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
  - b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

**C. Transfers**

This Order is not transferable to any person except after notice to the Central Coast Water Board. The Central Coast Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

**III. STANDARD PROVISIONS – MONITORING**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B.** Monitoring results must be conducted according to test procedures under 40 C.F.R. part 136 or, in the case of sludge use or disposal, approved under 40 C.F.R. part 136 unless otherwise specified in 40 C.F.R. part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

**VIII. STANDARD PROVISIONS – RECORDS**

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Central Coast Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)
- B. Records of monitoring information shall include:**
  - 1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
  - 2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
  - 3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
  - 4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
  - 5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
  - 6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)
- C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):**
  - 1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
  - 2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

**IV. STANDARD PROVISIONS – REPORTING**

**A. Duty to Provide Information**

The Discharger shall furnish to the Central Coast Water Board State Water Board, or USEPA within a reasonable time, any information which the Central Coast Water Board, State Water



Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Central Coast Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

**B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Central Coast Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).)
3. All reports required by this Order and other information requested by the Central Coast Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
  - c. The written authorization is submitted to the Central Coast Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Central Coast Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

**C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Central Coast Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Central Coast Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

**D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

**E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
  - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The Central Coast Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

**F. Planned Changes**

The Discharger shall give notice to the Central Coast Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):



1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 C.F.R. § 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. § 122.41(l)(1)(iii).)

**G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Central Coast Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 C.F.R. § 122.41(l)(2).)

**H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

**I. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Central Coast Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

**V. STANDARD PROVISIONS – ENFORCEMENT**

The Central Coast Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

**VI. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

**A. Publicly Owned Treatment Works (POTWs)**

All POTWs shall provide adequate notice to the Central Coast Water Board of the following (40 C.F.R. § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2).)

3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

## VII. CENTRAL COAST WATER BOARD STANDARD PROVISIONS

### A. Central Coast Standard Provision – Prohibitions

1. Introduction of “incompatible wastes” to the treatment system is prohibited.
2. Discharge of high-level radiological waste and of radiological, chemical, and biological warfare agents is prohibited.
3. Discharge of “toxic pollutants” in violation of effluent standards and prohibitions established under section 307(a) of the Clean Water Act (CWA) is prohibited.
4. Discharge of sludge, sludge digester or thickener supernatant, and sludge drying bed leachate to drainageways, surface waters, or the ocean is prohibited.
5. Introduction of pollutants into the collection, treatment, or disposal system by and “indirect discharger” that:
  - a. Inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or,
  - b. Flow through the system to the receiving water untreated; and,
  - c. Cause or “significantly contribute” to a violation of any requirement of this Order, is prohibited.
6. Introduction of “pollutant free” wastewater to the collection, treatment, and disposal system in amounts that threaten compliance with this order is prohibited.

### B. Central Coast Standard Provision – Provisions

1. Collection, treatment, and discharge of waste shall not create a nuisance or pollution, as defined by California Water Code (CWC) 13050.
2. All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood.
3. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.
4. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner approved by the Executive Officer.
5. Publicly owned wastewater treatment plans shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Administrative Code.
6. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:
  - a. Violation of any term or condition contained in this order;
  - b. Obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;

- c. A change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; and,
        - d. A substantial change in character, location, or volume of the discharge.
7. Provisions of this permit are severable. If any provision of the permit is found invalid, the remainder of the permit shall not be affected.
8. After notice and opportunity for hearing, this order may be modified or revoked and reissued for cause, including:
  - a. Promulgation of a new or revised effluent standard or limitation;
  - b. A material change in character, location, or volume of the discharge;
  - c. Access to new information that affects the germs of the permit, including applicable schedules;
  - d. Correction of technical mistakes or mistaken interpretations of law; and,
  - e. Other causes set forth under Sub-part D of 40 CFR Part 122.
9. Safeguards shall be provided to ensure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operative procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the effect of accidental discharges shall:
  - a. Identify possible situations that could cause “upset,” “overflow,” or “bypass,” or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered).
  - b. Evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.
10. Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.
11. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with the conditions of this order. Electrical and mechanical equipment shall be maintained in accordance with appropriate practices and standards, such as NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance*; NFPA 70E, *Standard for Electrical Safety in the Workplace*; ANSI/NETA MTS *Standard for Maintenance: Testing Specifications for Electrical Power Equipment and Systems*, or procedures established by insurance companies or industry resources.
12. If the discharger’s facilities are equipped with SCADA or other systems that implement wireless, remote operation, the discharger should implement appropriate safeguards against unauthorized access to the wireless systems. Standards such as NIST SP 800-53, *Recommended Security Controls for Federal Information Systems*, can provide guidance.
13. Production and use of reclaimed water is subject to the approval of the Central Coast Board. Production and use of reclaimed water shall be in conformance with reclamation

criteria established in Chapter 3, Title 22, of the California Administrative Code and Chapter 7, Division 7, of the CWC. An engineering report pursuant to section 60323, Title 22, of the California Administrative Code is required and a waiver or water reclamation requirements from the Central Coast Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved either in this Order or another order issued by this Board.

**C. Central Coast Standard Provisions – General Monitoring Requirements**

1. If results of monitoring a pollutant appear to violate effluent limitations based on a weekly, monthly, 30-day, or six-month period, but compliance or non-compliance cannot be validated because sampling is too infrequent, the frequency of sampling shall be increased to validate the test within the next monitoring period. The increased frequency shall be maintained until the Executive Officer agrees the original monitoring frequency may be resumed.

For example, if copper is monitored annually and results exceed the six-month median numerical effluent limitation in the permit, monitoring of copper must be increased to a frequency of at least once every two months (Central Coast Standard Provisions – Definitions I.G.13.). If suspended solids are monitored weekly and results exceed the weekly average numerical limit in the permit, monitoring of suspended solids must be increased to at least four (4) samples every week (Central Coast Standard Provisions – Definitions I.G.14.).

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services (DHS) for the constituent(s) being analyzed. Bioassay(s) performed in order to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board (State Water Board) and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the DHS or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:
  - a. Data results remain consistent with results of samples analyzed by the Central Coast Water Board;
  - b. A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Central Coast Water Board; and,
  - c. Certification is pursued in good faith and obtained as soon as possible after the program is reinstated.
3. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit and tributary flow and upstream of any mixing with receiving waters.
4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

**D. Central Coast Standard Provisions – General Reporting Requirements**

1. Reports of marine monitoring surveys conducted to meet receiving water monitoring requirements of the Monitoring and Reporting Program shall include at least the following information:
  - a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).
  - b. A description of sampling stations, including differences unique to each station (e.g., station location, grain size, rocks, shell litter, calcareous worm tubes, evident life, etc.).
  - c. A description of the sampling procedures and preservation sequence used in the survey.
  - d. A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to Central Coast Standard Provisions – C.1 above, and Federal Standard Provision – Monitoring III.B. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.
  - e. A brief discussion of the results of the survey. The discussion shall compare data from the control station with data from the outfall stations. All tabulations and computations shall be explained.
2. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the permit. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.
3. The “Discharger” shall file a report of waste discharge or secure a waiver from the Executive Officer at least 180 days before making any material change or proposed change in the character, location, or plume of the discharge.
4. Within 120 days after the discharger discovers, or is notified by the Central Coast Water Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four (4) years, the discharger shall file a written report with the Central Coast Water Board. The report shall include:
  - a. the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity; and,
  - b. a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.
  - c. In addition to complying with Federal Standard Provision – Reporting V.B., the required technical report shall be prepared with public participation and reviewed, approved and jointly submitted by all planning and building departments having jurisdiction in the area served by the waste collection, treatment, or disposal facilities.
5. All “Dischargers” shall submit reports electronically to the:

State Water Board’s California Integrated Water Quality System (CIWQS) database:

<http://ciwqs.waterboards.ca.gov/>

In addition, "Dischargers" with designated major discharges shall submit a copy of each document to:

USEPA, Region 9's Discharge Monitoring Report (NetDMR) database:

<https://netdmr.epa.gov/netdmr/public/login.htm>

Other correspondence may be sent to the Central Coast Region at:

[centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)

6. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Central Coast Water Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing "Discharger" and proposed "Discharger" containing specific date for transfer of responsibility, coverage, and liability between them. Whether a permit may be transferred without modification or revocation and reissuance is at the discretion of the Board. If permit modification or revocation and reissuance is necessary, transfer may be delayed 180 days after the Central Coast Water Board's receipt of a complete permit application. Please also see Federal Standard Provision – Permit Action II.C.
7. Except for data determined to be confidential under CWA §308 (excludes effluent data and permit applications), all reports prepared in accordance with this permit shall be available for public inspection at the office of the Central Coast Water Board or Regional Administrator of USEPA. Please also see Federal Standard Provision – Records IV.C.
8. By January 30 of each year, the discharger shall submit an annual report to the Central Coast Water Board. The report shall contain the following:
  - a. Both tabular and graphical summaries of the monitoring data obtained during the previous year.
  - b. A discussion of the previous year's compliance record and corrective actions taken, or which may be needed, to bring the discharger into full compliance.
  - c. An evaluation of wastewater flows with projected flow rate increases over time and the estimated date when flows will reach facility capacity.
  - d. A discussion of operator certification and a list of current operating personnel and their grades of certification.
  - e. The date of the facility's Operation and Maintenance Manual (including contingency plans as described in Provision B.9), the date the manual was last reviewed, and whether the manual is complete and valid for the current facility.
  - f. A discussion of the laboratories used by the discharger to monitor compliance with effluent limits and a summary of performance relative to Section C, General Monitoring Requirements.

If the facility treats industrial or domestic wastewater and there is no provision for periodic sludge monitoring in the Monitoring and Reporting Program, the report shall include a summary of sludge quantities, analyses of its chemical and moisture content, and its ultimate destination.

If appropriate, the report shall also evaluate the effectiveness of the local source control or pretreatment program using the State Water Resources Control Board's "Guidelines for Determining the Effectiveness of Local Pretreatment Program."

**E. Central Coast Standard Provisions – General Pretreatment Provisions**

1. Discharge of pollutants by "indirect dischargers" in specific industrial sub-categories (appendix C, 40 CFR Part 403), where categorical pretreatment standards have been established, or are to be established, (according to 40 CFR Chapter 1, Subchapter N), shall comply with the appropriate pretreatment standards:
  - a. By the date specified therein;
  - b. Within three (3) years of the effective date specified therein, but in no case later than July 1, 1984; or,
  - c. If a new indirect discharger, upon commencement of discharge

**F. Central Coast Standard Provision – Enforcement**

1. Any person failing to file a report of waste discharge or other report as required by this permit shall be subject to a civil penalty according to Division 7 of the California Water Code.
2. Upon reduction, loss, or failure of the treatment facility, the "Discharger" shall, to the extent necessary to maintain compliance with this permit, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided.

**G. Central Coast Standard Provisions – Definitions (Not otherwise included in Attachment A to this Order)**

1. A "composite sample" is a combination of no fewer than eight (8) individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at the time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.
2. "Daily Maximum" limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. It is normally compared with results based on "composite samples" except for ammonia, total chlorine, phenolic compounds, and toxicity concentration. For all exceptions, comparisons will be made with results from a "grab sample".
3. "Discharger", as used herein, means, as appropriate: (1) the Discharger, (2) the local sewerage entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger", it refers to the discharger.)
4. "Duly Authorized Representative" is one where:
  - a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision V.B.;
  - b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,

- c. the written authorization was submitted to the Central Coast Water Board.
- 5. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in Central Coast Standard Provision – Provision G.2. and instantaneous maximum limits.
- 6. "Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.
- 7. "Incompatible wastes" are:
  - a. Wastes which create a fire or explosion hazard in the treatment works;
  - b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes;
  - c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;
  - d. Any waste, including oxygen demanding pollutants (BOD<sub>5</sub>, etc), released in such volume or strength as to cause inhibition or disruption in the treatment works and subsequent treatment process upset and loss of treatment efficiency; and,
  - e. Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40°C (104°F) unless the treatment works is designed to accommodate such heat.
- 8. "Indirect Discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.
- 9. "Log Mean" is the geometric mean. Used for determining compliance of fecal or total coliform populations, it is calculated with the following equation:

$$\text{Log Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n},$$

in which "n" is the number of days samples were analyzed during the period and any "C" is the concentration of bacteria (MPN/100 ml) found on each day of sampling. "n" should be five or more.

- 10. "Mass emission rate" is a daily rate defined by the following equations:

$$\text{mass emission rate (lbs/day)} = 8.34 \times Q \times C; \text{ and,}$$

$$\text{mass emission rate (kg/day)} = 3.79 \times Q \times C,$$

where "C" (in mg/L) is the measured daily constituent concentration or the average of measured daily constituent concentrations and "Q" (in MGD) is the measured daily flowrate or the average of measured daily flow rates over the period of interest.

- 11. The "Maximum Allowable Mass Emission Rate," whether for a month, week, day, or six-month period, is a daily rate determined with the formulas in paragraph G.10, above, using the effluent concentration limit specified in the permit for the period and the average of measured daily flows (up to the allowable flow) over the period.



12. "Maximum Allowable Six-Month Median Mass Emission Rate" is a daily rate determined with the formulas in Central Coast Standard Provision – Provision G.10, above, using the "six-month Median" effluent limit specified in the permit, and the average of measured daily flows (up to the allowable flow) over a 180-day period.
13. "Median" is the value below which half the samples (ranked progressively by increasing value) fall. It may be considered the middle value, or the average of two middle values.
14. "Monthly Average" (or "Weekly Average", as the case may be) is the arithmetic mean of daily concentrations or of daily mass emission rates over the specified 30-day (or 7-day) period.

$$\text{Average} = (X1 + X2 + \dots + Xn) / n$$

in which "n" is the number of days samples were analyzed during the period and "X" is either the constituent concentration (mg/l) or mass emission rate (kg/day or lbs/day) for each sampled day. "n" should be four or greater.

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial waste, or other waste.
16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.
17. "Pollutant-free wastewater" means inflow and infiltration, stormwaters, and cooling waters and condensates which are essentially free of pollutants.
18. "Primary Industry Category" means any industry category listed in 40 CFR Part 122, Appendix A.
19. "Removal Efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using "Monthly averages" of pollutant concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):  
$$C_{\text{Effluent}} \text{ Removal Efficiency (\%)} = 100 \times (1 - C_{\text{effluent}} / C_{\text{influent}})$$
20. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass". It does not mean economic loss caused by delays in production.
21. "Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.
22. To "significantly contribute" to a permit violation means an "indirect discharger" must:
  - a. Discharge a daily pollutant loading in excess of that allowed by contract with the "Discharger" or by Federal, State, or Local law;
  - b. Discharge wastewater which substantially differs in nature or constituents from its average discharge;
  - c. Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a permit violation or prevents sewage sludge use or disposal; or

- d.** Discharge pollutants, either alone or in conjunction with pollutants from other sources that increase the magnitude or duration of permit violations.
- 23.** "Toxic Pollutant" means any pollutant listed as toxic under Section 307 (a) (1) of the Clean Water Act or under 40 CFR Part 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Federal Standard Provisions V.E.).
- 24.** "Zone of Initial Dilution" means the region surrounding or adjacent to the end of an outfall pipe or diffuser ports whose boundaries are defined through calculation of a plume model verified by the State Water Board

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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## ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (40 C.F.R. § 122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Central Coast Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement federal and California regulations.

### I. GENERAL MONITORING PROVISIONS

- A. Quarterly monitoring may be performed any time during the monitoring quarter (calendar year), but samples representative of two consecutive quarterly periods must be separated by at least one month. Unless otherwise specified by the Monitoring and Reporting Program, annual sampling shall be performed any time during the calendar year, but samples representative of two consecutive annual periods must be obtained at least six months apart.
- B. Laboratories analyzing monitoring samples shall be certified by the Department of Public Health (DPH), in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.
- C. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall now be changed without notification to and approval of the Central Coast Water Board.
- D. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 10$  percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references.
  - 1. *A Guide to Methods and Standards for the Measurement of Water Flow*, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)
  - 2. *Water Measurement Manual*, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.)
  - 3. *Flow Measurement in Open Channels and Closed Conduits*, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22050. Order by NTIS No. PB-273 535/5ST.)
  - 4. *NPDES Compliance Sampling Manual*, U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)

- E. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- F. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- G. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 C.F.R. 136, Guidelines Establishing Test Procedures for Analysis of Pollutants. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxic pollutants specified in Table 1 of the California Ocean Plan shall be conducted in accordance with procedures described in the California Ocean Plan and restated in this MRP.
- H. Monitoring and sampling periods are defined as follows unless otherwise specified in this MRP:
  - Daily:** Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
  - Weekly:** Sunday through Saturday (Note: For weekly monitoring and sampling periods that start in one monthly reporting period but end in the next, the Discharger may report the weekly data in the monthly monitoring report containing the last day of the weekly period.)
  - Monthly:** 1<sup>st</sup> day of calendar month through last day of calendar month.
  - Annually:** January 1<sup>st</sup> through December 31<sup>st</sup>

**II. MONITORING LOCATIONS**

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

**Table E-1. Monitoring Station Locations**

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
---	INF-001	Influent wastewater at the plant headworks, prior to treatment and following all significant input of wastewater to the treatment system
001	EFF-001	Secondary-treated wastewater at a point located after all secondary treatment and prior to discharge to the percolation ponds
002	EFF-002	Tertiary-treated wastewater at a point after all treatment and prior to contact with the receiving water
003	EFF-003	Tertiary-treated wastewater at a point after all treatment and prior to discharge to recycled water distribution system
---	SW-001	Surface water at a location at the drain on the south side of East Ponds at culvert prior to entering Llagas Creek
---	SW-002	Surface water at a location at the drain on the north side of South Ponds at culvert prior to entering Llagas Creek

<b>Discharge Point Name</b>	<b>Monitoring Location Name</b>	<b>Monitoring Location Description (include Latitude and Longitude when available)</b>
---	SW-003A	Surface water at a location at the farm drainage east of the East Ponds
	SW-004	Surface water at a location at the drain at the southeast corner of Pond S9 that drains to Llagas Creek
---	SW-005A	Surface water at a location at the outlet of Miller Slough near Luchessa Avenue bridge
---	SW-006A	Surface water at a location at the outlet of the city storm drain near Luchessa Avenue bridge
---	SW-007	Surface water at a location in Llagas Creek 600 feet north of Bloomfield Road
---	SW-008	Surface water at a location in Llagas Creek 637 feet north of the northwest corner of Pond E1 and south of Highway 152
---	SW-009	Surface water at a location in Llagas Creek 1,000 feet north of Highway 152
---	SW-010	Surface water at a location in Llagas Creek on the north side of Bloomfield Road bridge
---	RSW-011	Receiving water at a representative location in Pajaro River at least 100 feet upstream of Discharge Point No. 002
---	RSW-012	Receiving water at a representative location in Pajaro River at least 100 feet downstream of Discharge Point No. 002
---	GW-001	Groundwater well MW1/PWA located within the municipal ponds
---	GW-002	Groundwater well PWF located within the municipal ponds
---	GW-003	Groundwater well MW13 located within the municipal ponds
---	GW-004	Groundwater well MW24 located within the municipal ponds
---	GW-005	Groundwater well MW2/PWB located within the municipal ponds
---	GW-006	Groundwater well MW7/PWT located within the municipal ponds
---	GW-007	Groundwater well PWX located within the municipal ponds
---	GW-008	Groundwater well PWC located within the municipal ponds
---	GW-009	Groundwater well MW12/PWV located within the municipal ponds
---	GW-010	Groundwater well PWY located within the municipal ponds
---	GW-011	Groundwater well MW3/PWD located within the former food process ponds
---	GW-012	Groundwater well MW6/PWH located within the former food process ponds
---	GW-013	Groundwater well MW4/PWK located within the former food process ponds
---	GW-014	Groundwater well MW5/PWN located within the former food process ponds
---	GW-015	Groundwater well PWR located within the former food process ponds
---	GW-016	Groundwater well PWE located within the former food process ponds
---	GW-017	Groundwater well PWI located within the former food process ponds
---	GW-018	Groundwater well PWL located within the former food process ponds

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
---	GW-019	Groundwater well PWP located within the former food process ponds
---	GW-020	Groundwater well PWS located within the former food process ponds
---	GW-021	Groundwater well MW8/PWG located within the former food process ponds
---	GW-022	Groundwater well MW9/PWJ located within the former food process ponds
---	GW-023	Groundwater well PWM located within the former food process ponds
---	GW-024	Groundwater well PWQ located within the former food process ponds
---	GW-025	Groundwater well MW10 located north of Southside Drive
---	GW-026	Groundwater well MW21 located east of the railway line
---	GW-027	Groundwater well MW26 located within the municipal ponds
---	BIO-001	Biosolids at the last point in the biosolids handling process where representative samples of residual solids from the treatment process can be obtained

**III. INFLUENT MONITORING REQUIREMENTS**

**A. Monitoring Location INF-001**

1. The Discharger shall monitor influent to the Facility at Monitoring Location INF-001 as follows:

**Table E-2. Influent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	Continuous
Instantaneous Maximum Flow	MGD	Metered	Continuous
Maximum Daily Flow	MGD	Metered	Continuous
Mean Daily Flow	MGD	Calculated	Continuous
Total Suspended Solids (TSS) <sup>[2]</sup>	mg/L	24-hr Composite <sup>[1]</sup>	1/Week
Biochemical Oxygen Demand (5-day @ 20°C) BOD <sub>5</sub> <sup>[2]</sup>	mg/L	24-hr Composite <sup>[1]</sup>	1/Week
Specific Conductance	µmhos/cm	Metered	Continuous

<sup>[1]</sup> Composite samples may be taken by a proportional sampling device approved by the Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed one hour.

<sup>[2]</sup> Collection of TSS and BOD<sub>5</sub> influent samples shall occur on days that effluent samples are collected.

**IV. EFFLUENT MONITORING REQUIREMENTS**

**A. Monitoring Location EFF-002**

1. The Discharger shall monitor effluent at Monitoring Location EFF-002 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

**Table E-3: Effluent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	Continuous
Instantaneous Maximum Flow	MGD	Metered	Continuous
Maximum Daily Flow	MGD	Metered	Continuous
Mean Daily Flow	MGD	Metered	Continuous
BOD <sub>5</sub>	mg/L	Grab	1/Week
TSS	mg/L	Grab	1/Week
Settleable Solids	mL/L	Grab	1/Week
pH <sup>[1]</sup>	standard units	Grab	1/Day
Chlorine Used	lbs/day	Calculated	Continuous <sup>[2]</sup>
Chlorine Residual	mg/L	Metered	Continuous <sup>[2]</sup>
Modal Contact Time	minutes	Metered/Calculated	Continuous <sup>[2]</sup>
Dissolved Oxygen	mg/L	Grab	1/Week
Turbidity	NTU	Metered	Continuous
Fecal Coliform Bacteria	MPN/100 mL	Grab	1/Week
Total Coliform Bacteria	MPN/100 mL	Grab	1/Week
Temperature <sup>[1]</sup>	°F	Instantaneous	1/Day
Color	Color Units	Grab	1/Month
Un-ionized Ammonia (as N) <sup>[1]</sup>	mg/L	Calculation	1/Week
Total Ammonia (as N) <sup>[1]</sup>	mg/L	Grab	1/Week
Nitrate (as N)	mg/L	Grab	1/Week
Total Kjeldahl Nitrogen (as N)	mg/L	Grab	1/Month
Nitrite (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month
Total Phosphorus (as P)	mg/L	Grab	1/Month
Total Dissolved Solids (TDS)	mg/L	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Chloride	mg/L	Grab	1/Month
Sulfate	mg/L	Grab	1/Month
Boron	mg/L	Grab	1/Month
Alkalinity	mg/L	Grab	1/Month
Calcium	mg/L	Grab	1/Month
Carbonate	mg/L	Grab	1/Month
Electrical Conductivity	µmhos/cm	Grab	1/Month
Fluoride	mg/L	Grab	1/Month
Aluminum	µg/L	Grab	1/Month
Magnesium	mg/L	Grab	1/Month
Copper, Total Recoverable	µg/L	24-hr Composite	1/Month
Iron, Total Recoverable	µg/L	Grab	1/Month
Lead, Total Recoverable	µg/L	24-hr Composite	1/Month
Zinc, Total Recoverable	µg/L	Grab	1/Month
Manganese	mg/L	Grab	1/Month
Potassium	mg/L	Grab	1/Month
Chlorodibromomethane	µg/L	24-hr Composite	1/Month <sup>[3]</sup>
Dichlorodibromomethane	µg/L	24-hr Composite	1/Month <sup>[3]</sup>



**Table E-3: Effluent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Trihalomethanes, Total	µg/L	24-hr Composite	1/Month <sup>[3]</sup>
Chronic Toxicity <sup>[4]</sup>	TUc	24-hr Composite	1/Year
CTR Pollutants <sup>[5] [6] [9]</sup>	µg/L	24-hr Composite	1/Permit Term
2,3,7,8-TCDD equivalent <sup>[6] [9]</sup>	µg/L	24-hr Composite	1/Permit Term
Title 22 Pollutants <sup>[7] [8] [9]</sup>	µg/L	24-hr Composite	1/Permit Term

<sup>[1]</sup> Temperature and pH are to be measured at the same time the total ammonia sample is collected. Results shall be used to calculate and report unionized ammonia concentrations.

<sup>[2]</sup> Chlorine monitoring is not required when chlorine is not being used for disinfection. The Discharger shall specify within the Self Monitoring Report if chlorination took place during the monitoring period.

<sup>[3]</sup> Monitoring for this parameter shall be reduced to once per year upon the discontinuation of chlorine disinfection and three continuous non-detect results for each parameter. Monitoring for this parameter shall return to monthly upon the detection of this parameter within the effluent until a minimum of three consecutive non-detect results are observed.

<sup>[4]</sup> Whole effluent chronic toxicity monitoring shall be conducted according to the requirements established in Section V.A of this Monitoring and Reporting Plan.

<sup>[5]</sup> Those 126 pollutants with applicable water quality objectives established by the California Toxics Rule (CTR) at 40 CFR 131.38.

<sup>[6]</sup> Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix 4 of the SIP are the lowest calibration standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of the CTR; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML.

<sup>[7]</sup> Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by Title 22 of the California Code of Regulations, Division 4, Chapter 15, section 64432 (inorganics) and section 64445.1 (organics).

<sup>[8]</sup> The Title 22 pollutants are those pollutants for which the Department of Public Health has established Maximum Contaminant Levels (MCLs) at Title 22, Division 4, Chapter 15, sections 64431 (inorganic chemicals) and 64444 (organic chemicals) of the California Code of Regulations.

<sup>[9]</sup> 24-hour composite samples shall be collected one time within the twelve-month period before application is made to renew the Waste Discharge Requirements for the facility.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Whole Effluent Chronic Toxicity

#### 1. Chronic Toxicity Monitoring Requirements

- a. **Toxicity Trigger.** The discharge at EFF-002 is subject to determination of “Pass” or “Fail” and “Percent (%) Effect” from a single-effluent concentration chronic toxicity test at the discharge instream waste concentration (IWC) using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response  $0.75 \times$  Mean control response. A test result that rejects this null hypothesis is reported as “Pass”. A test result that does not reject this null hypothesis is reported as “Fail”. The relative “Percent (%) Effect” at the discharge IWC is defined and reported as:  $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$ .
- b. **Discharge IWC for Chronic Toxicity.** The chronic toxicity IWC for discharges from Discharge Point No. 002 and monitored at EFF-002 shall be 100 percent effluent.

- c. **Sampling.** The Discharger shall collect 24-hour composite samples of the effluent at the compliance point station specified in a table above, for critical life stage toxicity testing as indicated below. For toxicity tests requiring renewals, 24-hour composite samples collected on consecutive days are required.
- d. **Test Species.** The Discharger shall utilize the water flea, *Ceriodaphnia dubia*, (survival and reproduction test); fathead minnow, *Pimephales promelas* (larval survival and growth test); and green alga, *Selanastrum capricornutum* (growth test), as test species. The Executive Officer may change to another test species if data suggest that another test species is more sensitive to the discharge.
- e. **Methodology.** Sample collection, handling, and preservation shall be in accordance with USEPA protocols. In addition, bioassays shall be conducted in compliance with the most recently promulgated test methods, currently "*Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*", Fourth Edition (EPA-821-R-02-013), with exceptions granted the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).

## 2. Chronic Toxicity Reporting Requirements

- a. **Routine Reporting.** Toxicity test results for the current reporting period shall include, at a minimum, for each test:
  - i. "Pass" or "Fail" results and Percent Effect, consistent with section V.A.1.a of this MRP.
  - ii. Sample date(s)
  - iii. Test initiation date
  - iv. Test species
  - v. End point values for each dilution (e.g., number of young, growth rate, percent survival)
  - vi. NOEC value(s) in percent effluent
  - vii. IC15, IC25, IC40, and IC50 values (or EC15, EC25...etc.) as percent effluent
  - viii. TUc values (100/NOEC, 100/IC25, or 100/EC25)
  - ix. Mean percent mortality ( $\pm$ s.d.) after 96 hours in 100% effluent (if applicable)
  - x. NOEC and LOEC values for reference toxicant test(s)
  - xi. IC50 or EC50 value(s) for reference toxicant test(s)
  - xii. Available water quality measurements for each test (pH, D.O., temperature, conductivity, hardness, salinity, ammonia)
- b. **Compliance Summary.** The results of the chronic toxicity testing shall be provided in the self-monitoring report and shall include a summary table of chronic toxicity

data from at least eleven of the most recent samples. The information in the table shall include items listed above under 2.a, specifically item numbers i, ii, iv, and v.

**B. Quality Assurance**

1. The use of a dilution series for this Discharger is not applicable, because there is no dilution in the receiving water.
2. If organisms are not cultured in-house, concurrent testing with a referenced toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests also shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc.).
3. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the toxicity test references, then the permittee must resample and retest within 15 working days or as soon as possible. The retesting period begins when the Discharger collects the first sample required to complete the retest.
4. The reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD) for each test result. The test sensitivity bound is specified for each test method in the respective methods manuals.

**C. Accelerated Monitoring Requirements**

1. When chronic toxicity is detected (results in "Fail") during regular toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring to confirm the effluent toxicity.
2. The Discharger shall implement an accelerated monitoring frequency consisting of performing three toxicity tests in a six-week period following the first failed test results.
3. If implementation of the generic Toxicity Reduction Evaluation (TRE) work plan indicates the source of toxicity (for instance, a temporary plant upset), then only one additional test is necessary. If exceedance of the toxicity trigger is detected in this test, the Discharger will continue with accelerated monitoring requirements or implement the Toxicity Identification and Toxicity Reduction Evaluations.
4. If none of the three tests indicated exceedance of the toxicity trigger, then the Discharger may return to the normal bioassay testing frequency.

**D. Conducting Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluations (TRE)**

1. A Toxicity Identification Evaluation (TIE) shall be triggered if during accelerated testing:
  - a. Sampling only occurs one day during the calendar month and results in a "Fail" and the Percent Effect is  $\geq 0.50$ .
  - b. Sampling occurs more than one day during the calendar month and the median of no more than three independent chronic toxicity tests results in a "Fail" using the TST method.
2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the United States Environmental Protection Agency (USEPA), which include the following:
  - a. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (USEPA, 1992a);

- b. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (USEPA, 1991a);
      - c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (USEPA, 1993a); and
      - d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993b).
- 3. As part of the TIE investigation, the Discharger shall be required to implement its TRE work plan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period shall result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE include the following:
  - a. Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (TREs) (USEPA, April 1989) (EPA/600/2-88/070);
  - b. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, August 1999, EPA/833B-99/002; and
  - c. Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program dated March 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement.

## **VI. LAND DISCHARGE MONITORING REQUIREMENTS**

### **A. Monitoring Locations EFF-001**

- 1. The Discharger shall monitor secondary effluent that is to be land applied at monitoring location EFF-001 as follows.

**Table E-4. Land Discharge Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	Continuous
Instantaneous Maximum Flow	MGD	Metered	Continuous
Maximum Daily Flow	MGD	Metered	Continuous
Mean Daily Flow	MGD	Metered	Continuous
BOD <sub>5</sub>	mg/L	24 hr Composite	1/Week
TSS	mg/L	24 hr Composite	1/Week
Settleable Solids	mL/L	Grab	1/Week
pH <sup>[1]</sup>	standard units	Grab	1/Day
Total Ammonia (as N) <sup>[1]</sup>	mg/L	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Total Kjeldahl Nitrogen (as N)	mg/L	Grab	1/Month
Nitrite (as N)	mg/L	Grab	1/Quarter
Orthophosphate (as P)	mg/L	Grab	1/Quarter
Total Phosphorus (as P)	mg/L	Grab	1/Quarter
TDS	mg/L	Grab	1/Quarter
Sodium	mg/L	Grab	1/Quarter
Chloride	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
Alkalinity	mg/L	Grab	1/Quarter
Calcium	mg/L	Grab	1/Quarter
Carbonate	mg/L	Grab	1/Quarter
Electrical Conductivity	µmhos/cm	Grab	1/Quarter
Fluoride	mg/L	Grab	1/Quarter
Copper, Total Recoverable	µg/L	Grab	1/Quarter
Iron, Total Recoverable	µg/L	Grab	1/Quarter
Zinc, Total Recoverable	µg/L	Grab	1/Quarter
Manganese	mg/L	Grab	1/Quarter
Potassium	mg/L	Grab	1/Quarter
Title 22 Pollutants <sup>[3] [4] [5]</sup>	µg/L	24-hr Composite	1/Year

- <sup>[1]</sup> Temperature and pH are to be measured at the same time the total ammonia sample is collected. Results shall be used to calculate and report unionized ammonia concentrations.
- <sup>[2]</sup> Chlorine monitoring is not required when chlorine is not being used for disinfection. The Discharger shall specify within the Self Monitoring Report if chlorination took place during the monitoring period.
- <sup>[3]</sup> Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by Title 22 of the California Code of Regulations, Division 4, Chapter 15, section 64432 (inorganics) and section 64445.1 (organics).
- <sup>[4]</sup> The Title 22 pollutants are those pollutants for which the Department of Public Health has established Maximum Contaminant Levels (MCLs) at Title 22, Division 4, Chapter 15, sections 64431 (inorganic chemicals) and 64444 (organic chemicals) of the California Code of Regulations.
- <sup>[5]</sup> 24-hour composite samples shall be collected one time, in a dry weather season and within the twelvemonth period before application is made to renew the Waste Discharge Requirements for the facility.

**VII. RECLAMATION MONITORING REQUIREMENTS**

**A. MONITORING LOCATIONS EFF-003**

1. When producing recycled water, the discharger shall monitor recycled water at location EFF-003 as follows.

**Table E-5. Recycled Water Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	Continuous
Total Coliform	MPN/100mL	Grab	Daily
Turbidity	NTU	Metered	Continuous
Dissolved Oxygen	Mg/L	Grab	Daily
Dissolved Sulfides	mg/L	Grab	3/Week
pH	standard units	Grab	1/Day
Chlorine Residual <sup>[1]</sup>	mg/L	Metered	Continuous

<sup>[1]</sup> Chlorine monitoring is not required when chlorine is not being used for disinfection. The Discharger shall specify within the Self Monitoring Report if chlorination took place during the monitoring period.

2. In the event the Producer is unable to comply with the conditions of the water recycling requirements and prohibitions, the Producer shall immediately notify the Central Coast Water Board by telephone and submit a written follow-up report with two weeks of the noncompliance. The written report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps are being taken to prevent the problems from recurring.
3. An annual self-monitoring report shall be submitted to the Central Coast Water Board by January 30 of the following year. The report shall include:
  - a. A letter transmitting self-monitoring reports should accompany each report. The letter shall include a discussion of violations found during the reporting period and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Producer has previously submitted a report describing corrective actions or a time schedule for implementing corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the Producer or the Producer’s authorized agent, under penalty of perjury, that to the best of the signer’s knowledge the report is true, accurate, and complete.
  - b. Tabulations of the results of each required analysis by the Producer specified in Table E-5 by date, time, type of sample, and station.

**VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER**

**A. Monitoring Locations SW-001, SW-002, SW-003A, SW-004, SW-005A, SW-006A, SW-007, SW-008, SW-009, SW-010, RSW-011, and RSW-012**

1. The Discharger shall monitor surface waters at Monitoring Locations SW-001, SW-002, SW-003A, SW-004, SW-005A, SW-006A, SW-007, SW-008, SW-009, and SW-010 as follows.

**Table E-6. Surface Water Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Daily Flow <sup>[2]</sup>	MGD	Metered	1/Quarter
Instantaneous Maximum Flow	MGD	Metered	1/Quarter
Maximum Daily Flow	MGD	Metered	1/Quarter
Mean Daily Flow	MGD	Metered	1/Quarter
Chemical Oxygen Demand	mg/L	Grab	1/Quarter
Nitrate	mg/L	Grab	1/Quarter
Ammonia, Total	mg/L	Grab	1/Quarter
Un-ionized Ammonia	mg/L	Calculated	1/Quarter
Phosphorous, Total (as P)	mg/L	Grab	1/Quarter
Orthophosphate (as P)	mg/L	Grab	1/Quarter
Chlorophyll α	mg/L	Grab	1/Quarter
TDS	mg/L	Grab	1/Quarter
Sodium	mg/L	Grab	1/Quarter
Chloride	mg/L	Grab	1/Quarter
Dissolved Oxygen	mg/L	Grab	1/Quarter
Temperature	°F	Grab	1/Quarter
pH	standard units	Grab	1/Quarter
Fecal Coliform	MPN/100mL	Grab	1/Quarter

<sup>[1]</sup> Quarterly monitoring shall occur in March, June, September, and December.

<sup>[2]</sup> Flow reporting shall include maximum daily flow, mean daily flow, and average monthly flow. If no flow meter or gauging station exists, flow rate shall be estimated as accurately as possible.

2. The Discharger shall monitor surface waters at Monitoring Locations RSW-011 and RSW-012 as follows. Receiving water monitoring shall occur concurrently with effluent monitoring at EFF-002 and is only applicable when discharge to Pajaro River is occurring, except for flow for determination of acceptable discharge periods. Discrete discharge periods are defined by lapses in discharge flows of 24 hours or more. When discrete discharges occur at Discharge Point No. 002, receiving water monitoring shall occur at least once during the first discrete discharge period of the sampling period.

**Table E-7. Receiving Water Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	1/Quarter
Instantaneous Maximum Flow	MGD	Metered	1/Quarter
Maximum Daily Flow	MGD	Metered	1/Quarter
Mean Daily Flow	MGD	Metered	1/Quarter
BOD <sub>5</sub>	mg/L	Grab	1/Quarter
TSS	mg/L	Grab	1/Quarter
Nitrate	mg/L	Grab	1/Quarter
Nitrite	mg/L	Grab	1/Quarter
Total Ammonia <sup>[1]</sup>	mg/L	Grab	1/Quarter
Un-ionized Ammonia <sup>[1]</sup>	mg/L	Calculated	1/Quarter
Total Kjeldahl Nitrogen	mg/L	Grab	1/Quarter
Phosphorous, Total (as P)	mg/L	Grab	1/Quarter
Orthophosphate (as P)	mg/L	Grab	1/Quarter
Chlorophyll α	mg/L	Grab	1/Quarter
TDS	mg/L	Grab	1/Quarter
Sodium	mg/L	Grab	1/Quarter
Chloride	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
Aluminum	mg/L	Grab	1/Quarter
Manganese	mg/L	Grab	1/Quarter
Potassium	mg/L	Grab	1/Quarter
Dissolved Oxygen	mg/L	Grab	1/Quarter
Temperature <sup>[1]</sup>	°F	Grab	1/Quarter
pH <sup>[1]</sup>	standard units	Grab	1/Quarter
Turbidity	NTU	Grab	1/Quarter
Fecal Coliform	MPN/100mL	Grab	1/Quarter
Alkalinity	mg/L	Grab	1/Quarter
Bicarbonate	mg/L	Grab	1/Quarter
Calcium	mg/L	Grab	1/Quarter
Carbonate	mg/L	Grab	1/Quarter
Fluoride	mg/L	Grab	1/Quarter
Electrical Conductivity	µmhos/cm	Grab	1/Quarter
Magnesium	mg/L	Grab	1/Quarter
Copper, Total Recoverable	µg/L	Grab	1/Quarter
Iron, Total Recoverable	µg/L	Grab	1/Quarter
Zinc, Total Recoverable	µg/L	Grab	1/Quarter
Chlorodibromomethane	µg/L	Grab	1/Quarter <sup>[2]</sup>
Chlorodibromomethane	µg/L	Grab	1/Quarter <sup>[2]</sup>
Trihalomethanes, Total	µg/L	Grab	1/Quarter <sup>[2]</sup>
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/Quarter



Parameter	Units	Sample Type	Minimum Sampling Frequency
CTR Pollutants <sup>[3]</sup> <sup>[4]</sup>	µg/L	24-hr Composite	1/Permit Term <sup>[7]</sup>
2,3,7,8-TCDD equivalent <sup>[4]</sup>	µg/L	24-hr Composite	1/Permit Term <sup>[7]</sup>
Title 22 Pollutants <sup>[5]</sup> <sup>[6]</sup>	µg/L	24-hr Composite	1/Permit Term <sup>[7]</sup>

- <sup>[1]</sup> Temperature and pH are to be measured at the same time the total ammonia sample is collected. Results shall be used to calculate and report unionized ammonia concentrations.
- <sup>[2]</sup> Monitoring for this parameter shall be reduced to once per year upon the discontinuation of chlorine disinfection and three continuous non-detect results for each parameter at EFF-002. Monitoring for this parameter shall return to quarterly upon the detection of this parameter within the effluent until a minimum of three consecutive non-detect results are observed.
- <sup>[3]</sup> Those 126 pollutants with applicable water quality objectives established by the California Toxics Rule (CTR) at 40 CFR 131.38.
- <sup>[4]</sup> Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix 4 of the SIP are the lowest calibration standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of the CTR; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML.
- <sup>[5]</sup> Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by Title 22 of the California Code of Regulations, Division 4, Chapter 15, section 64432 (inorganics) and section 64445.1 (organics).
- <sup>[6]</sup> The Title 22 pollutants are those pollutants for which the Department of Public Health has established Maximum Contaminant Levels (MCLs) at Title 22, Division 4, Chapter 15, sections 64431 (inorganic chemicals) and 64444 (organic chemicals) of the California Code of Regulations.
- <sup>[7]</sup> 24-hour composite samples shall be collected one time within the twelve-month period before application is made to renew the Waste Discharge Requirements for the facility.

**B. Monitoring Locations GW-001 through GW-027**

- 1. The Discharger shall monitor groundwater at Monitoring Locations GW-001 through GW-027 as follows. Prior to sampling, wells shall be purged until dissolved oxygen levels, pH, and electrical conductivity have stabilized.

**Table E-8. Groundwater Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Groundwater Elevation <sup>[1]</sup>	Feet	Observations	Quarterly
pH <sup>[2]</sup>	standard units	Grab	<sup>[3]</sup>
Electrical Conductivity <sup>[2]</sup>	µmhos/cm	Grab	<sup>[3]</sup>
Alkalinity <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Bicarbonate <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Boron <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Calcium <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Carbonate <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Chloride <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Fluoride <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Magnesium <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Manganese <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Nitrate <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Nitrite <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Potassium <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Sodium <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>
Sulfate <sup>[2]</sup>	mg/L	Grab	<sup>[3]</sup>

Parameter	Units	Sample Type	Minimum Sampling Frequency
TDS <sup>[2]</sup>	mg/L	Grab	[3]
Copper, Total Recoverable <sup>[2]</sup>	µg/L	Grab	[3]
Iron, Total Recoverable <sup>[2]</sup>	µg/L	Grab	[3]
Zinc, Total Recoverable <sup>[2]</sup>	µg/L	Grab	[3]

<sup>[1]</sup> Applicable to Monitoring Locations GW-001 through GW-024.

<sup>[2]</sup> Applicable to Monitoring Locations GW-003, GW-004, GW-005, GW-006, GW-011, GW-013, GW-014, GW-020, GW-025, GW-026, and GW-027.

<sup>[3]</sup> Quarterly monitoring shall be performed at Monitoring Locations GW-003, GW-004, GW-011, GW-014, and GW-025. Bi-annual monitoring shall be performed at Monitoring Locations GW-005, GW-006, GW-013, GW-020, GW-026, and GW-027.

**IX. BIOSOLIDS MONITORING**

**A.** The following information shall be submitted with the Annual Report required by Standard Provision C.16. Adequate detail should be included to characterize biosolids in accordance with 40 CFR 503.

1. A representative sample of residual solids (biosolids) shall be obtained from the last point in the handling process (i.e., in the drying beds just prior to removal). All constituents shall be analyzed annually for total concentrations for comparison with total threshold limit concentration (TTL) criteria. The Waste Extraction Test shall be performed on any constituent when the total concentration of the waste exceeds ten times the STLC limit for that substance. Twelve (12) discrete representative samples shall be collected at separate locations in the biosolids ready for disposal. These 12 samples shall be composited to form one (1) sample for constituent analysis. For accumulated, previously untested biosolids, the Discharger shall develop a representative sampling plan including number and location of sampling points, and collect representative samples. The analysis shall test for the metals required in 40 CFR 503.16 (for land application) or 503.26 (for surface disposal), using the methods in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (EPA Publication SW-846, all applicable editions and updates), as required in 503.8(b)(4), at the minimum frequencies established therein, provided in the table below.

**Table E-9. Amount of Biosolids and Frequency for Analysis**

Amount <sup>[1]</sup> (dry metric tons/365 day period)	Frequency <sup>[2]</sup>
Greater than zero, but less than 290	1/Year.
Equal to or greater than 290 but less than 1,500	1/Quarter (four times per year)
Equal to or greater than 1,500 but less than 15,000	1/60 days (six times per year)
Greater than 15,000	1/Month (twelve times per year)

<sup>[1]</sup> For land application, either the amount of bulk biosolids applied to the land or the amount prepared for sale or give-away in a bag or other container for application to the land (dry weight basis). If the Discharger's biosolids are directly land applied without further treatment by another preparer, biosolids shall also be tested for organic-N, ammonium-N, and nitrate-N at the frequencies required. For surface disposal, the amount of biosolids placed on an active sludge unit (dry weight basis).

<sup>[2]</sup> Test results shall be expressed in mg pollutants per kg biosolids on a 100% dry weight basis.

The Discharger shall monitor biosolids at least once every 60 days until data collected over a 365 day period establishes a new basis for monitoring frequency pursuant to 40 CFR 503. Biosolids monitoring requirements are summarized in Table E-9 below.

For accumulated, previously untested biosolids, the Discharger shall develop a representative sampling plan, including number and location of sampling points, and collect representative samples.

All constituents shall be analyzed for total concentrations for comparison with total threshold limit concentration (TTLC) criteria. The Waste Extraction Test shall be performed on any constituent when the total concentration of the waste exceeds ten times the soluble threshold limit concentration limit for that substance. [California Code of Regulations, Title 22, Division 4.5, Chapter 11, Article 3]

**Table E-10. Biosolids Monitoring Requirements**

Constituent	Units	Type of Sample	Sampling/Analysis Frequency
Quantity Removed	Tons or yds <sup>3</sup>	Measured	Continual
Location Reuse/Disposal	General Public or Specific Site	--	--
Moisture Content	%	Grab	[1]
pH	standard units	Grab	[1]
Total Kjeldahl Nitrogen	mg/kg (dry) <sup>1</sup>	Grab	[1]
Ammonia (N)	mg/kg	Grab	[1]
Nitrate (N)	mg/kg	Grab	[1]
Total Phosphorus	mg/kg	Grab	[1]
Oil and Grease	mg/kg	Grab	[1]
Arsenic	mg/kg	Grab	[1]
Antimony	mg/kg	Grab	[1]
Barium	mg/kg	Grab	[1]
Beryllium	mg/kg	Grab	[1]
Boron	mg/kg	Grab	[1]
Cadmium	mg/kg	Grab	[1]
Cobalt	mg/kg	Grab	[1]
Copper	mg/kg	Grab	[1]
Chromium (Total)	mg/kg	Grab	[1]
Lead	mg/kg	Grab	[1]
Mercury	mg/kg	Grab	[1]
Molybdenum	mg/kg	Grab	[1]
Nickel	mg/kg	Grab	[1]
Selenium	mg/kg	Grab	[1]
Silver	mg/kg	Grab	[1]
Thallium	mg/kg	Grab	[1]
Tin	mg/kg	Grab	[1]
Vanadium	mg/kg	Grab	[1]
Zinc	mg/kg	Grab	[1]
Pesticides	mg/kg	Grab	[1]
Organic Lead	mg/kg	Grab	[1]
PCBs	mg/kg	Grab	[1]

[1] Once every 60 days if sludge solids are being reclaimed or disposed of that year. Monitoring shall be prior to reclamation and disposal of biosolids

[2] Total sample (including solids and any liquid portion) to be analyzed and results reported as mg/kg based on the dry weight of the sample.

2. Prior to land application, the Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR 503.32 (unless transferred to another preparer who demonstrates pathogen reduction).

Prior to disposal in a surface disposal site, the Discharger shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.

If pathogen reduction is demonstrated using a "Process to Significantly/Further Reduce Pathogens" (PFRP), the Discharger shall maintain daily records of the operating parameters to achieve this reduction.

The following applies when biosolids from the Discharger are directly land applied as Class B, without further treatment by a second preparer. If the Discharger demonstrates pathogen reduction by direct testing for fecal coliforms and/or pathogens, samples must be drawn at the frequency in Table E-9. If the Discharger demonstrates Class B pathogen reduction by testing for fecal coliform, at least seven grab samples must be drawn and analyzed during each monitoring event, and a geometric mean calculated from these seven samples. If the Discharger demonstrates Class A pathogen reduction by testing for fecal coliform and/or salmonella, plus one of the PFRP processes or testing for enteric viruses and helminth ova at least four samples of fecal coliform or salmonella must be drawn during each monitoring event. All four samples must meet the limits specified in 40 CFR 503.32(a).

3. For biosolids that are land applied or placed in a surface disposal site, the Discharger shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 40 CFR 503.33(b).
4. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the regional administrator) and Federal facilities with greater than five MGD influent flow shall sample biosolids for pollutants listed under Section 307(a) of the CWA (as required in the pretreatment section of the permit for POTWs with pretreatment programs). Class 1 facilities and Federal facilities greater than five MGD shall test dioxins/dibenzofurans using a detection limit of less than one pg/g at the times of their next priority pollutant scan if they have not done so within the past five years, and once per five years thereafter.
5. The biosolids shall be tested annually, or more frequently if necessary, to determine hazardousness. All constituents regulated under CCR Title 22, division 5, chapter 11, article 3 shall be analyzed for comparison with Total Threshold Limit Concentration (TTCL) criteria. The Waste Extraction Test shall be performed on any constituent when the total concentration of the waste exceeds ten times the Soluble Threshold Limit Concentration (STLC) limit for that substance.
6. If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.
7. Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (EPA Methods 9095) at the frequency determined by Table E-8, or more often if necessary to demonstrate that there are no free liquids.
8. The Discharger, either directly or through contractual agreements with their biosolids management contractors, shall comply with the following notification requirements:
  - a. *Notification of non-compliance.* The Discharger shall notify EPA Region 9, the Central Coast Water Board, and the Regional Board located in the region where the biosolids are used or disposed, of any non-compliance within 24 hours if the non-



used, include the percentage and tonnage of annual biosolids production disposed by each method.

- i. For landfill disposal include: 1) the central Coast Water Board WDR numbers that regulate the landfills used, 2) the present classifications of the landfills used, 3) the results of any groundwater monitoring, 4) certifications of management practices, and 5) the names and locations of the facilities receiving biosolids.
  - ii. For land application include: 1) the location of the site(s), 2) the Central Coast Water Board's WDR numbers that regulate the site(s), 3) the application rate in lbs/acre/year (specify wet or dry), 4) certifications of management practices and site restrictions, and 5) subsequent uses of the land.
  - iii. For offsite application by a licensed hauler and composter include: 1) the name, address and USEPA license number of the hauler and composter.
- d. Copies of analytical data required by other agencies (i.e., USEPA or County Health Department) and licensed disposal facilities (i.e., landfill, land application, or composting facility) for the previous year.
  - e. Descriptions of pathogen reduction methods and vector attraction reduction methods. Including supporting time and temperature data, and certifications, as required in 40 CFR 503.17 and 503.27.
  - f. Names, mailing address, and street addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, or for other use or disposal methods not covered above, and amounts delivered to each.
  - g. For all biosolids used or disposed at the Discharger's facility, the site and management practice information and certification required in 40 CFR 503.17 and 503.27.
  - h. For all biosolids temporarily stored, the information required in 40 CFR 503.20 is required to demonstrate temporary storage.
  - i. Reports shall be submitted to:  
  
Regional Biosolids Coordinator  
USEPA (WTR-7)  
75 Hawthorne St.  
San Francisco, CA 94105-3901  
  
Central Coast Regional Water Quality Control Board  
[centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)

## **X. OTHER MONITORING REQUIREMENTS**

### **A. Pond Maintenance**

The Discharger shall report on pond conditioning work conducted in the previous year with a summary included in the Facility's Annual Report, due January 30<sup>th</sup> of each year. The summary shall also contain a description of any problems encountered in operation of the system during the reporting period.

**XI. REPORTING REQUIREMENTS**

**A. General Monitoring and Reporting Requirements**

The Discharger shall comply with all Federal Standard Provisions and Central Coast Water Board Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

**B. Self-Monitoring Reports (SMRs).**

1. The Discharger shall electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal. The Discharger shall use the current version of the Permittee Entry Template (PET) tool to configure data into the applicable CIWQS Data Format, and shall update that template according to this Order (e.g., add/delete parameters, revise limits, update monitoring locations, etc.). Blank versions of the latest PET tool are available at [http://www.waterboards.ca.gov/water\\_issues/program/ciwqs/chc\\_npdes.shtml](http://www.waterboards.ca.gov/water_issues/program/ciwqs/chc_npdes.shtml).
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit SMR’s including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Sampling and monitoring as required by this MRP shall begin on the effective date of this Order. The Discharger shall complete all required monitoring and reporting according to the following schedule unless otherwise directed by the Executive Officer:

**Table E-11. Monitoring Periods and Reporting Schedule**

SMR Name	Permit Section for Monitoring and Sampling Data Included in Report	SMR Submittal Frequencies	SMR Due Date
NPDES Monitoring Report	MRP Sections III (Influent), IV (Effluent), and V (Whole Effluent Toxicity)	Monthly	First day of second calendar month following monitoring period
NPDES Monitoring Report	MRP Section IV (Effluent)	Once per permit term	270 days prior to permit expiration
Land Discharge Report	MRP Section VI (Land Discharges)	Monthly	First day of second calendar month following monitoring period
Land Discharge Report	MRP Section VI (Land Discharges)	Quarterly	First day of second calendar month following monitoring period
Land Discharge Report	MRP Section VI (Land Discharges)	Annual	February 1 <sup>st</sup> following calendar year of monitoring

SMR Name	Permit Section for Monitoring and Sampling Data Included in Report	SMR Submittal Frequencies	SMR Due Date
Reclamation Monitoring Report	MRP Section VII (Recycled Water)	Annual	January 30 <sup>th</sup> following calendar year of monitoring
NPDES Monitoring Report	MRP Section VIII (Receiving Water)	Quarterly	First day of second calendar month following monitoring period
NPDES Monitoring Report	MRP Section VIII (Receiving Water)	Annual	February 1 <sup>st</sup> following calendar year of monitoring
NPDES Monitoring Report	MRP Section VIII (Groundwater)	Quarterly	First day of second calendar month following monitoring period
Biosolids Technical Report	MRP Section IX (Biosolids)	Annually	February 19 <sup>th</sup> following calendar year of monitoring
Land Discharge Report	MRP Section X (Pond Maintenance)	Annually	January 30 <sup>th</sup> following calendar year of monitoring
Summary Report	Attachment D, Standard Provision, VIII.D.8	Annually	January 30 <sup>th</sup> following calendar year of monitoring
Report of Waste Discharge		One Time	March 31, 2022

- 4. Reporting Protocols.** The Discharger shall report with each sample result the applicable reported Minimum Level (reported ML, also known as the Reporting Level, or RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 C.F.R. part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the reported ML, but greater than or equal to the laboratory’s MDL, shall be reported as “Detected, but Not Quantified,” or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words “Estimated Concentration” (may be shorted to “Est. Conc.”). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy ( $\pm$  a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.



- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
- d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

**5. Compliance Determination.**

- a. Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).
- b. Using groundwater elevation data collected as required by Table E-8, the Discharger shall calculate the groundwater gradient for each sampling event and shall determine whether each well is an up-gradient or down-gradient well for purposes of determining compliance with Section V.B Groundwater Limitations. Using quarterly data and the report required by Special Provision C.9, the Executive Officer will evaluate the need for and may discontinue this requirement if the results are sufficiently consistent from year to year.

**6. Multiple Sample Data.** When determining compliance with an average monthly effluent limitation (AMEL), average weekly effluent limitation (AWEL), or maximum daily effluent limitation, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

**7. The Discharger shall submit SMR's in accordance with the following requirements:**

- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

- b.** The Discharger shall include in their CIWQS upload a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation. Uploaded reports must also include laboratory data sheets for the analytical results being presented.

**C. Discharge Monitoring Reports (DMRs)**

DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at: <[http://www.waterboards.ca.gov/water\\_issues/programs/discharge\\_monitoring](http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring)>.

**D. Other Reports**

- 1.** The Discharger shall report the results of any special monitoring, TREs, or other data or information that results from the Special Provisions, section VI.C, of the Order. The Discharger shall submit such reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

## ATTACHMENT F – FACT SHEET

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**ATTACHMENT F – FACT SHEET**

This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order. As described in section II.B, the Central Coast Water Board incorporates this Fact Sheet as findings of the Central Coast Water Board supporting the issuance of this Order.

**I. PERMIT INFORMATION**

The following table summarizes administrative information related to the facility.

**Table F-1. Facility Information**

<b>WDID</b>	3 430100001
<b>Discharger</b>	South County Regional Authority
<b>Name of Facility</b>	South County Regional Wastewater Treatment and Reclamation Facility
<b>Facility Address</b>	1500 Southside Drive
	Gilroy, California 95020
	Santa Clara County
<b>Facility Contact, Title and Phone</b>	Saeid Vaziry, Chief Engineer (408) 846-8842
<b>Authorized Person to Sign and Submit Reports</b>	Saeid Vaziry, Chief Engineer (408) 846-8842
<b>Mailing Address</b>	7351 Rosanna Street, Gilroy, CA 95020
<b>Billing Address</b>	SAME
<b>Type of Facility</b>	POTW
<b>Major or Minor Facility</b>	Major
<b>Threat to Water Quality</b>	1
<b>Complexity</b>	B
<b>Pretreatment Program</b>	Yes
<b>Recycling Requirements</b>	Water Board Order No. 98-052
<b>Facility Permitted Flow</b>	8.5 million gallons per day (MGD) (dry weather secondary treatment capacity)
	10.8 MGD (average daily wet weather treatment capacity)
<b>Facility Design Flow</b>	8.5 MGD (dry weather secondary treatment capacity)
	9.0 MGD (tertiary treatment capacity)
<b>Watershed</b>	Pajaro River Watershed
<b>Receiving Water</b>	Pajaro River
<b>Receiving Water Type</b>	Inland Surface Water

- A.** The South County Regional Wastewater Authority (hereinafter Discharger) is the owner and operator of the South County Regional Wastewater Treatment and Reclamation Facility (hereinafter Facility), a publicly owned treatment works (POTW).

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- B.** The Discharger is regulated pursuant to National Pollutant Discharge Elimination System (NPDES) Permit No. CA0049964. It was previously regulated by Order No. R3-2010-0009, which was adopted on March 18, 2010, and expired on March 18, 2015. The Facility discharges secondary treated wastewater to 37 percolation ponds and disinfected tertiary

treated wastewater to the Pajaro River, a water of the United States, under emergency wet weather conditions. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

The Discharger must file a petition with the State Water Resources Control Board (State Water Board), Division of Water Rights, and receive approval for any change in the point of discharge, place of use, or purpose of use of treated wastewater that decreases the flow in any portion of a watercourse. The State Water Board retains the jurisdictional authority to enforce such requirements under Water Code section 1211.

- C. The Discharger filed a report of waste discharge and submitted an application for reissuance of its WDRs and NPDES permit on September 18, 2014.

## II. FACILITY DESCRIPTION

### A. Description of Wastewater and Biosolids Treatment and Controls

The Facility provides municipal wastewater treatment and disposal for the cities of Gilroy and Morgan Hill. The Facility consists of a secondary treatment plant with a headworks, pre-anoxic basins, oxidation ditches, and secondary clarifiers and a tertiary treatment plant with anthracite media filters, chlorine disinfection, and dechlorination. An ultraviolet (UV) light disinfection system has been installed and approved for use by the Division of Drinking Water. The secondary treatment facilities are rated to treat an average dry weather flow of 8.5 MGD and the tertiary treatment facilities have a firm capacity of 9.0 MGD. The UV disinfection system is currently limited to 8 MGD.

Secondary effluent is disposed of in a system of 37 percolation ponds with a combined area of 395 acres. The percolation ponds have an estimated average disposal capacity of 11 MGD. The pond system is typically run in irrigation mode, where the goals are to minimize water in storage, to maximize percolative and evaporative area. Effluent is typically applied so that the water infiltrates within 12 days of application and soil is rested for at least 2 days before reapplication. Effluent is typically applied to each pond in a layer of between 6 to 12 inches deep, with a maximum of 18 inches. Ponds must be disked or plowed annually during the dry season to break up accumulated soils and keep the soils aerated. Pond storage capacity is approximately 320 million gallons.

Tertiary treated Title 22 recycled water from the Facility is distributed for beneficial reuse. Demand for reclaimed water averages between 2 and 3 MGD, with higher usage in the summer months. Disinfected tertiary treated effluent may be discharged to the Pajaro River under emergency wet weather.

Biosolids are dewatered using belt presses. Dewatered biosolids are transported by Synagro for beneficial reuse in Dos Palos. Grit and screenings are disposed of at the Monterey Regional Waste Management District landfill in Marina.

### B. Discharge Points and Receiving Waters

Secondary treated effluent is distributed at Discharge Point No. 001 (36° 58 50" N; 121° 32' 00" W) for land application to 37 percolation ponds adjacent to Llagas Creek. Tertiary treated effluent may be discharged under emergency wet weather conditions to Pajaro River, a water of the U.S., via Discharge Point No. 002 (36° 57 00" N; 121° 30' 43" W).

**C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data**

Effluent limitations contained in the existing Order for discharges from Discharge Point No. 002 (Monitoring Location EFF-002) are summarized below. No discharges occurred during the permit term, thus representative monitoring data is not available.

**Table F-2. Historic Effluent Limitations and Monitoring Data**

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Flow	MGD	---	---	9.0
Biochemical Oxygen Demand 5-day @ 20°C (BOD <sub>5</sub> )	mg/L	10	---	20
Total Suspended Solids (TSS)	mg/L	10	---	20
Nitrate (as N)	mg/L	5	---	10
Un-ionized Ammonia (as N)	mg/L	0.025	---	0.050
pH	standard units	6.5 – 8.3 at all times		
Total Dissolved Solids (TDS)	mg/L	1,000	---	---
Sodium	mg/L	200	---	---
Chloride	mg/L	250	---	---
Sulfate	mg/L	250	---	---
Boron	mg/L	1.0	---	---
Chlorine, Total Residual	mg/L	---	---	[1]
Copper, Total Recoverable	µg/L	20	---	42
Lead, Total Recoverable	µg/L	2.1	---	4.2
Chlorodibromomethane	µg/L	0.40	---	0.80

[1] Chlorine concentrations shall at no time exceed detection levels as determined by amperometric titration or another equally sensitive method.

1. **Percent Removal:** The average monthly percent removal of BOD<sub>5</sub> and TSS shall not be less than 85 percent.
2. **Turbidity**
  - a. Daily average turbidity shall be less than or equal to 2 NTU.
  - b. Turbidity shall be less than 10 NTU at all times.
  - c. Turbidity shall not exceed 5 NTU for more than 5 percent off the time.
3. **Total Coliform Bacteria**
  - a. The 7-day median concentration shall be less than 2.2 organisms/100 mL.
  - b. Coliform concentrations shall not exceed 23 organisms/100 mL in more than one sample in any 30-day period.
  - c. Coliform concentrations shall be less than 240 organisms/100 mL at all times.

**D. Compliance Summary**

No discharges to the Pajaro River occurred over the previous permit term, and no effluent or receiving water exceedances have been identified.

On March 17-18, 2014, the Central Coast Water Board, with assistance from an USEPA contractor, conducted a pretreatment audit of the Discharger's pretreatment program. The audit found that members of City staff appear to have a good general grasp of the general pretreatment requirements. The pretreatment compliance audit, however, revealed several deficiencies with the Authority's revised sewer use ordinance (SUO). The revised SUO does not contain definitions or the definitions were incorrect for best management practices (BMPs), control authority, new source, significant noncompliance (SNC), slug load or slug discharge, and trace. In addition, the revised SUO does not adequately prohibit all federally specified prohibitions and the local limits section contains confusing and inconsistent limits for total identified chlorinate hydrocarbons and toxic organic compounds. Furthermore, the revised SUO does not provide adequate legal authority to control discharges to the treatment system, to require all federal reporting and notification requirements, to copy a user's records, and to immediately halt or prevent any discharge to the Facility. The revised SUO also establishes inappropriate analytical methods approval abilities for the Discharger's Program Administrator. Finally, the Discharger's enforcement response plan (ERP) contains additional flow diagrams that might not be necessary and could cause confusion.

The audit revealed several deficiencies with the Discharger's program implementation procedures. The Authority failed:

- to identify all users that are subject to categorical pretreatment standards;
- to comply with its established procedures for reissuing permits and requiring permit applications;
- to conduct compliance inspections at its established frequency;
- to comply with pH holding times;
- to adequately review all received reports and notification; and
- to publish industrial users in SNC.

On October 8, 2014, the Central Coast Water Board transmitted the audit report to the Discharger, requiring a response in the Discharger's annual report due January 30, 2015. In the report, the Discharger reported that all issues identified in the inspection report have been addressed.

#### **E. Planned Changes**

SCRWA's flow projection studies to track influent flow trends and ensure treatment capacity predict that current permitted plant capacity will be exceeded between 2021 and 2025. SCRWA is therefore planning a treatment plant expansion for completion by 2024 to keep pace with permitted development and planned population growth.

The planned expansion project will consist of a parallel treatment system utilizing membrane bioreactor (MBR) technology and a phased implementation approach. The MBR process train will be constructed in parallel with the two existing oxidation ditches. The new process train will be designed to treat wastewater to meet the quality requirements for percolation pond disposal, river discharge, and Title 22 compliant tertiary disinfected effluent for recycled water use. In order to meet these quality requirements, the biological process will be designed for BOD removal, nitrification and denitrification.

The new MBR treatment system will consist of headworks improvements, bioreactor and membrane tanks, blowers and electrical equipment, chemical facilities, and solids handling



screw presses. The headworks improvements will be installed downstream of the existing headworks to split the flow between the existing oxidation ditches and the MBR process train and to provide fine screening to protect the membranes. Following screening, two parallel series of bioreactor tanks will provide BOD and nitrogen removal by oxidation, nitrification, and denitrification in a series of un-aerated and aerated zones with internal recycle. Mixed liquor will then flow to two parallel series of membrane tanks, where hollow-fiber membranes will be used to separate suspended solids from the treated liquid. Aeration air blowers will be installed in a new building along with supporting electrical equipment. Chemical storage tanks and metering equipment will be provided to feed hypochlorous acid and citric acid for periodic membrane cleaning operations. A new solids-handling building will be constructed to house screw presses to dewater the biological solids produced by the MBR process train. The MBR process train will discharge either to the percolation ponds or to the existing parallel UV and chlorination disinfection systems ahead of the recycled water system and the river discharge.

The Discharger is performing additional studies on the UV disinfection system and is planning to request an increased UV disinfection system flow limit from 8 MGD to 9 MGD.

### III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the requirements and authorities described in this section.

#### A. Legal Authorities

This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters.

#### B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

#### C. State and Federal Laws, Regulations, Policies, and Plans

1. **Water Quality Control Plan.** The Regional Water Quality Control Board (Central Coast Water Board) adopted *Water Quality Control Plan for the Central Coastal Basin* (hereinafter Basin Plan), the most recent version released in June 2011, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan.

Beneficial uses established by the Basin Plan for Pajaro River are presented below:

**Table F-3. Basin Plan Beneficial Uses**

Discharge Point	Receiving Water Name	Beneficial Use(s)
002	Pajaro River	Municipal and Domestic Supply (MUN) Agricultural Supply (AGR) Industrial Process Supply (PRO) Ground Water Recharge (GWR) Water Contact (REC-1) Non-Contact Recreation (REC-2) Wildlife Habitat (WILD) Cold Freshwater Habitat (COLD) Warm Freshwater Habitat (WARM) Migration of Aquatic Organisms (MIGR) Fish Spawning (SPWN) Freshwater Replenishment (FRSH) Commercial and Sport Fishing (COMM)

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.
3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (hereinafter State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria USEPA promulgated for California through the NTR and the priority pollutant objectives the Central Coast Water Board established in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria USEPA promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, which became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
4. **Antidegradation Policy.** Federal regulation 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Central Coast Water Board’s Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
5. **Anti-Backsliding Requirements.** CWA sections 402(o) and 303(d)(4) and 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding

provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

6. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State, including protecting rare, threatened, or endangered species. The Discharger is responsible for meeting all applicable Endangered Species Act requirements.

#### D. Impaired Water Bodies on CWA 303(d) List

CWA section 303(d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d) listed water bodies and pollutants, the Central Coast Water Board must develop and implement Total Maximum Daily Loads (TMDLs) that will specify Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for non-point sources.

The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. The 2010 303(d) list identified the Pajaro River as impaired for boron, chlordane, chloride, chlorpyrifos, dichlorodiphenyldichloroethane, dieldrin, E. coli, fecal coliform, low dissolved oxygen, nitrate, nutrients, polychlorinated biphenyls, sedimentation/siltation, sodium, turbidity, and pH. TMDLs have been developed for chlorpyrifos and diazinon, fecal coliform, nitrate, sediment, and nutrients.

This Order implements the requirements of all applicable TMDLs. See sections IV.C.10 through IV.C.13 for more information.

#### E. Other Plans, Polices and Regulations

1. **Storm Water Management.** For the control of storm water discharged from the site of the wastewater treatment facilities, the Order requires the Discharger to seek authorization to discharge under and meet the requirements of the State Water Resource Control Board's Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*, if applicable.
2. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).** The General Permit, adopted on May 2, 2006, is applicable to all "federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The cities of Gilroy and Morgan Hill own and operate sanitary sewer collection systems tributary to the South County Regional Wastewater Treatment and Reclamation Facility and are required to seek authorization to discharge under and meet the requirements of the General Permit. SCRWA is not required to seek authorization under the General Permit.

- 3. Recycled Water Policy.** The State Water Board's Recycled Water Policy, which was adopted via Resolution No. 2009-0011, calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. The Discharger participated in the development of a salt and nutrient management plan, finalized by Santa Clara Valley Water District in December 2014. This Order allows the Discharger to either comply with existing salt and nutrient reporting requirements or to implement the water district's salt and nutrient management plan.

#### IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

##### A. Discharge Prohibitions

- 1. Discharge Prohibition III.A.** (No discharge at a location or in a manner except as described by the Order). The limitations and conditions established by the Order are based on specific information provided by the Discharger and gained by the Regional Water Board through site visits, monitoring reports, and other information. Discharges to surface waters at locations not contemplated by this Order or discharges of a character not contemplated by this Order are therefore viewed as inconsistent with CWA section 402's prohibition against discharges of pollutants except in compliance with the Act's permit requirements, effluent limitations, and other enumerated provisions. This prohibition is retained from the previous permit.
- 2. Discharge Prohibition III.B.** (The discharge of any waste not specifically regulated by this Permit is prohibited). Because limitations and conditions of the Order have been prepared based on specific information provided by the Discharger and specific wastes described by the Discharger, the limitations and conditions of the Order do not adequately address waste streams not contemplated during drafting of the Order. To prevent the discharge of such waste streams that may be inadequately regulated, the Order prohibits the discharge of any waste that was not described by to the Regional Water Board during the process of permit reissuance.
- 3. Discharge Prohibition III.C** (Creation of a condition of pollution, contamination, or nuisance, as defined by Section 13050 of the CWC, is prohibited). This prohibition is retained from the previous permit.
- 4. Discharge Prohibition III.D** (Overflows and bypasses prohibited). The discharge of untreated or partially treated wastewater from the Discharger's collection, treatment, or disposal facilities represents an unauthorized bypass pursuant to 40 CFR 122.41 (m) or an unauthorized discharge, which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by the Order.
- 5. Discharge Prohibition III.E** (Discharges of other wastes prohibited). This prohibition is retained from the previous permit, and is based on the solid waste discharge prohibition against the discharge of solids to surface waters contained in section VI.D.1 of the Basin Plan.

- 6. **Discharge Prohibition III.F** (Dry and wet weather daily flows, averaged monthly, shall not exceed 8.5 and 10.8 MGD, respectively). This prohibition is based on the requirements of the previous permit. This prohibition is retained from the previous permit. The purpose of the prohibition is to ensure that influent flows do not exceed the treatment plant’s design capacities, and thereby, to ensure efficient treatment of wastewater.
- 7. **Discharge Prohibition III.G** (Discharge of fecal coliform to the Pajaro River is prohibited). This prohibition is retained from the previous permit and implements the TMDL for fecal coliform bacteria for the Pajaro River watershed, adopted by the Regional Water Board through Order No. R3-2009-0008.

**B. Technology-Based Effluent Limitations – Discharge Point No. 002**

**1. Scope and Authority**

CWA section 301(b) and 40 C.F.R. section 122.44 require that permits include conditions meeting technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet water quality standards. The discharges authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 C.F.R. section 133 as summarized below.

**Table F-4. Secondary Treatment Requirements**

Parameter	Units	30-Day Average	7-Day Average
BOD <sub>5</sub> <sup>[1]</sup>	mg/L	30	45
TSS <sup>[1]</sup>	mg/L	30	45
pH	standard units	6.0 – 9.0 at all times	

<sup>[1]</sup> The 30-day average percent removal for BOD<sub>5</sub> and TSS shall not be less than 85 percent.

**2. Applicable Technology-Based Effluent Limitations**

The following table summarizes technology-based effluent limitations established by the Order for the discharge to the Pajaro River at Discharge Point No. 002.

**Table F-5. Technology-Based Effluent Limitations – Discharge Point No. 002**

Parameter	Units	Average Monthly	Average Weekly
BOD <sub>5</sub> <sup>[1]</sup>	mg/L	10	20
TSS <sup>[1]</sup>	mg/L	10	20
pH	standard units	6.0 – 9.0 at all times	

<sup>[1]</sup> The 30-day average percent removal for BOD<sub>5</sub> and TSS shall not be less than 85 percent.

- a. **BOD<sub>5</sub> and TSS.** All technology-based effluent limitations are retained from the previous permit. Effluent limitations established in the previous Order for BOD<sub>5</sub> and TSS are more stringent than required by the Secondary Treatment Regulations at 40 CFR 133. The more stringent average monthly and average weekly effluent limitations for BOD<sub>5</sub> and TSS are retained from the previous permit, as the treatment facility has consistently achieved the level of performance necessary to comply with the effluent limitations, and as required by State and federal anti-backsliding requirements.

In addition, 40 C.F.R. § 133.102, in describing the minimum level of effluent quality attainable by secondary treatment, states that the 30-day average percent removal

shall not be less than 85 percent. If 85 percent removal of BOD<sub>5</sub> and TSS must be achieved by a secondary treatment plant, it must also be achieved by a tertiary (i.e., treatment beyond secondary level) treatment plant. This Order contains a limitation requiring an average of 85 percent removal of BOD<sub>5</sub> and TSS over each calendar month.

- b. **pH.** Federal Regulations, 40 C.F.R. part 133, establishes technology-based effluent limitations for pH. The secondary treatment standards require the pH of the effluent to be no lower than 6.0 and no greater than 9.0 standard units. This technology-based effluent limitation is not as stringent as the WQBELs for pH as discussed in section IV.C.7 of this Fact sheet; therefore, this Order establishes the more stringent WQBELs for pH.
- c. **Flow.** According to the Report of Waste Discharge, the Facility is designed to provide a tertiary level of treatment for up to a design flow of 9.0 MGD. The previous order permitted a maximum daily flow of 9.0 MGD. This Order retains the maximum daily flow limitation of 9.0 MGD based on the tertiary treatment design capacity of the Facility.

### C. Water Quality-Based Effluent Limitations – Discharge Point No. 002

#### 1. Scope and Authority

CWA Section 301(b) and 40 C.F.R. section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards, including numeric and narrative objectives within a standard.

Section 122.44(d)(1)(i) of 40 C.F.R. requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs, when necessary, is intended to protect the designated uses of receiving waters as specified in the Basin Plan and achieve applicable WQOs and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

#### 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses described by the Basin Plan for the Pajaro River are presented in section III.C.1 of this Fact Sheet. Water quality criteria applicable to this receiving water are established by the CTR, the NTR, and by the Basin Plan.

### 3. Determining the Need for WQBELs

NPDES regulations at 40 C.F.R. 122.44(d) require effluent limitations to control all pollutants that are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.

The SIP, statewide policy that became effective on May 22, 2000, establishes procedures to implement water quality criteria from the NTR and CTR and for priority, toxic pollutant objectives established in the Basin Plan. The implementation procedures of the SIP include methods to determine reasonable potential (for pollutants to cause or contribute to excursions above State water quality standards) and to establish numeric effluent limitations, if necessary, for those pollutants which show reasonable potential.

SIP Section 1.3 requires the Regional Water Board to use all available, valid, relevant, and representative receiving water and effluent data and information to conduct a reasonable potential analysis. No discharge occurred over the previous permit term; however, the Discharger has provided data representative of the expected effluent quality for a limited number of parameters taken on June 18, 2013, for the toxic pollutants with applicable water quality criteria established by the CTR, NTR, and Basin Plan.

Some freshwater water quality criteria for metals are hardness dependent; i.e., as hardness decreases, the toxicity of certain metals increases and the applicable water quality criteria become correspondingly more stringent. Regional Water Board staff used hardness data collected by the Central Coast Ambient Monitoring Program for the Pajaro River at Betabel Road, which is located immediately downstream from Discharge Point No. 002. A hardness value of 338 mg/L as CaCO<sub>3</sub> was calculated using 27 hardness data points from 2005 through 2011 and used to determine hardness-base criteria.

To conduct the reasonable potential analysis, the Regional Water Board identified the maximum observed effluent (MEC) and background (B) concentrations for each priority toxic pollutant from receiving water and effluent data provided by the Discharger and compared this data to the most stringent applicable water quality criterion (C) for each pollutant from the NTR, CTR, and the Basin Plan. Section 1.3 of the SIP establishes three triggers for a finding of reasonable potential.

- a. **Trigger 1.** If the MEC is greater than C, there is reasonable potential, and an effluent limitation is required.
- b. **Trigger 2.** If B is greater than C, and the pollutant is detected in effluent (MEC > ND), there is reasonable potential, and an effluent limitation is required.
- c. **Trigger 3.** After reviewing other available and relevant information, a permit writer may decide that a WQBEL is required. Such additional information may include, but is not limited to: the facility type, the discharge type, solids loading analyses, lack of dilution, history of compliance problems, potential toxic impact of the discharge, fish tissue residue data, water quality and beneficial uses of the receiving water, CWA 303(d) listing for the pollutant, and the presence of endangered or threatened species or their critical habitat.

The Facility has not discharged over the term of the current permit term, thus effluent data for Discharge Point No. 002 is not available to evaluate reasonable potential. However, section 1.3 of the SIP allows for the consideration of other information to evaluate reasonable potential. The Discharger provided water quality monitoring data for

tertiary effluent from June 2013. Because the wastewater discharged to Pajaro River via Discharge Point No. 002 will be composed completely of tertiary effluent, this data is expected to be representative of discharges to Discharge Point No. 002. Thus, an RPA has been performed for dichlorobromomethane, bromoform, chloroform, chlorodibromomethane, and total trihalomethanes based on the tertiary effluent data provided in Attachment B of the ROWD.

Based on analysis of effluent data, the Regional Water Board, using methods presented in the SIP, finds that the discharge does have reasonable potential to cause or contribute to in-stream excursions above applicable water quality criteria for dichlorobromomethane, chlorodibromomethane, and trihalomethanes.

The following table summarizes the RPA for each priority, toxic pollutant, or Title 22 pollutant for which data was available June 2013. No other pollutants with applicable, numeric water quality criteria from the NTR, CTR, and the Basin Plan were measured above detectable concentrations during the monitoring event.

**Table F-6. Summary of RPA Results**

Parameter	Units	N <sup>[1]</sup>	MEC <sup>[2]</sup>	Most Stringent Criteria	Background	RPA Result
Bromoform	µg/L	1	ND	4.30 <sup>[3]</sup>	--	No
Chlorodibromomethane	µg/L	1	4.8	0.40 <sup>[3]</sup>	--	Yes
Chloroform	µg/L	1	100	No Criteria	--	No
Dichlorobromomethane	µg/L	1	26	0.56 <sup>[3]</sup>	--	Yes
Trihalomethanes, Total	µg/L	1	131	80	--	Yes

[1] Number of data points available for the RPA.

[2] If there is a detected value, the highest reported value is summarized in the table. If there are no detected values, if available, the lowest MDL is summarized in the table.

[3] Based on CTR criteria for the protection of human health for the consumption of water and organisms.

[4] Based on EPA and California MCL for total trihalomethanes.

Additionally, the previous order established effluent limitations for lead and copper. Because effluent data is not available to re-evaluate the presence of these pollutants within the effluent discharged to Pajaro River, reasonable potential for these parameters remains, and effluent limitations for lead and copper have been carried over from the previous order.

**4. WQBEL Calculations**

Final WQBELs for chlorodibromomethane, dichlorobromomethane, and total trihalomethanes have been determined using the methods described in Section 1.4 of the SIP.

**Step 1:** For each water quality criterion/objective, an effluent concentration allowance (ECA) is calculated from the following equation to account for dilution and background levels of each pollutant.

$$ECA = C + D (C - B), \text{ where}$$

C = the applicable water quality criterion (adjusted for receiving water hardness and expressed as total recoverable metal, if applicable).



- D = the dilution credit (here D = 0, as the Central Coast Water Board has no information with which to justify credit for dilution).
- B = the background concentration

**Step 2:** For each ECA based on an aquatic life criterion, the long-term average discharge condition (LTA) is determined by multiplying the ECA times a factor (multiplier), which adjusts the ECA to account for effluent variability. The multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. When the data set contains less than 10 sample results, or 80 percent or more of the data are reported as nondetect (ND), the CV is set equal to 0.6. Derivation of the multipliers is presented in Section 1.4 of the SIP.

**Step 3:** WQBELs, including an average monthly effluent limitation (AMEL) and a maximum daily effluent limitation (MDEL) are calculated using the most limiting (the lowest) LTA. The LTA is multiplied times a factor that accounts for averaging periods and exceedance frequencies of the effluent limitations, and for the AMEL, the effluent monitoring frequency. Here, the sampling frequency is set equal to 4 (n = 4). The 99th percentile occurrence probability was used to determine the MDEL multiplier and a 95th percentile occurrence probability was used to determine the AMEL multiplier. Table 2 of the SIP presents the MDEL and AMEL multipliers as a function of the CV. When the data set contains less than 10 sample results, or when 80 percent or more of the data set is reported as non-detect (ND), the CV is set equal to 0.6. Otherwise, the CV is calculated as the standard deviation divided by the mean.

**Step 4:** When the most stringent water quality criterion is a human health criterion (i.e., chlorodibromomethane, dichlorobromomethane, and total trihalomethanes), the AMEL is set equal to the ECA, and the MDEL is calculated by multiplying the ECA times the ratio of the MDEL multiplier to the AMEL multiplier. Final WQBELs for chlorodibromomethane, dichlorobromomethane, and total trihalomethanes are determined as follows:

**Table F-7. Summary of Limitation Calculations**

Parameter	ECA (ug/L)	MDEL/AMEL Multiplier	MDEL (ug/L)	AMEL (ug/L)
Chlorodibromomethane	0.401	3.11/1.5 = 2.01	0.80	0.40
Dichlorobromomethane	0.45	3.11/1.5 = 2.01	0.90	0.45
Trihalomethanes, Total	80	3.11/1.5 = 2.01	160	80

As previously discussed, the previous order established effluent limitations for lead and copper. Because effluent data is not available to re-evaluate the presence of these pollutants within the effluent discharged to Pajaro River, reasonable potential for these parameters remains, and effluent limitations for lead and copper have been carried over from the previous order.

**Table F-8. Copper and Lead Effluent Limitations**

Parameter	MDEL (ug/L)	AMEL (ug/L)
Copper, Total Recoverable	42	20
Lead, Total Recoverable	4.2	2.1

## 5. Whole Effluent Toxicity (WET)

WET limitations protect receiving water from the aggregated toxic effect of a mixture of pollutants in effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. There are two types of WET tests – acute and chronic. An acute test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan requires that all waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Survival of aquatic organisms in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same water body in areas unaffected by the waste discharge or for another control water.

The previous order established accelerated monitoring triggers for acute and chronic whole effluent toxicity (WET). The accelerated monitoring trigger for acute toxicity was determined as a significantly reduced survival of test organisms at 100 percent effluent compared to a control using a statistical t-test. The accelerated monitoring trigger for whole effluent chronic toxicity was 1.0 TUc.

In 2010, USEPA endorsed the peer-reviewed Test of Significant Toxicity (TST) two-concentration hypothesis testing approach in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) as an improved hypothesis-testing tool to evaluate data from USEPA’s toxicity test methods. The TST hypothesis testing approach reliably identifies toxicity in relation to the chronic (0.25 or more) and acute (0.20 or more) mean responses of regulatory management concern, more so than commonly implemented NOEC hypothesis-testing approaches, such as that used in the current permit for chronic toxicity. Additionally, the TST method results are more transparent than the point estimate model approaches also typically implemented throughout the State for acute toxicity, which are not designed to address the question of statistical uncertainty around the modeled toxicity test result in relation to the effect level of concern. The previous permit did apply a t-test analysis for the acute toxicity determination, however the TST method applies additional regulatory management decisions to the evaluation not previously considered in the previous permit.

The TST is the superior approach for addressing statistical uncertainty when used in combination with USEPA’s toxicity test methods and is implemented in federal permits issued by USEPA Region 9. Use of the TST approach to establish the numeric monitoring trigger is expected to be protective of the Basin Plan’s narrative toxicity objective, and at least as protective as the limitations established in the current permit.

The TST’s null hypothesis for chronic toxicity is:

H0: Mean response (In-stream Waste Concentration (IWC) in % effluent)  $\leq$  0.75 mean response (control)

Results obtained from a single-concentration chronic toxicity test are analyzed using the TST approach and an acceptable level of chronic toxicity is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P".

The chronic IWC (in % effluent) for Discharge Point No. 002 is 100%. The chronic WET limit for Discharge Point No. 002 is expressed as a null hypothesis (H0) and regulatory management decision (b value) of 0.75 for the chronic toxicity methods in the MRP. The null hypothesis for this discharge is:

H0: Mean response (100% effluent)  $\leq$  0.75 mean response (control)

Results obtained from a single-concentration chronic toxicity test shall be analyzed using the TST hypothesis testing approach in the MRP. Compliance with this chronic toxicity limitation is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P".

If chronic toxicity results for effluent samples exceed the chronic toxicity trigger, the Permittee must initiate accelerated monitoring as specified in the MRP (Attachment E, section V). After accelerated monitoring, if conditions of chronic toxicity are found to persist, the Permittee will be required to conduct a Toxicity Reduction Evaluation, as described by the MRP.

Chronic toxicity testing measures mortality and sub lethal effects of the effluent on the test species and is typically considered to be a more conservative indicator of effluent toxicity than acute toxicity testing. Toxicity in the effluent that would result in a failed acute toxicity test under the previous order is expected to be detected via the TST method for chronic toxicity. Based on the application of the TST method for chronic toxicity, the acute toxicity monitoring requirement has been removed in an effort to minimize costs of compliance to the Discharger. This change is consistent with State and federal anti-backsliding requirements as the chronic toxicity trigger, monitoring requirements, and TIE requirements are not considered to be less stringent than those established in the previous order.

This Order establishes a requirement for the Permittee to conduct a screening test using at least one vertebrate, invertebrate, and plant species. After the screening test is completed, monitoring can be reduced to the most sensitive species.

#### **6. Total Dissolved Solids (TDS), Sodium, Chloride, Sulfate, and Boron**

This Order retains effluent limitations for TDS, sodium, chloride, sulfate, and boron from the previous order. These limitations reflect water quality objectives established in Table 3-7 of the Basin Plan for the Pajaro River at Chittenden, applied as end-of-pipe effluent limitations.

#### **7. pH**

The previous Order established effluent limitations for pH based on the MUN water quality objective of 6.5 to 8.3 standard units (s.u.). The Pajaro River's beneficial uses include WARM (protection of warm freshwater habitat). Section II.A.2.a of the Basin Plan establishes WQOs for pH for waters designated as WARM of 7.0 and 8.5 s.u. The effluent limitations established in the Order must be protective of all beneficial uses of the receiving water. Thus, a pH range of 7.0 to 8.3 s.u. has been established and is protective of all applicable beneficial uses of the Pajaro River.

## **8. Un-ionized Ammonia**

This Order retains effluent limitations for un-ionized ammonia from the previous permit. These limitations reflect water quality objectives established by section II. A. 2 of the Basin Plan for all inland surface waters of the Region, applied as end-of pipe effluent limitations.

## **9. Chlorine, Total Coliform Bacteria, and Turbidity**

The Department of Public Health (DPH) has developed reclamation criteria, CCR, Division 4, Chapter 3 (Title 22), for the reuse of wastewater. Title 22 requires that for spray irrigation of food crops, parks, playgrounds, schoolyards, and other areas of similar public access, wastewater be adequately disinfected, oxidized, coagulated, clarified, and filtered, and that the effluent total coliform levels not exceed 2.2 MPN/100 mL as a 7-day median; 23 MPN/100 mL, not to be exceeded more than once in a 30-day period; and 240 MPN/100 mL, at any time.

Title 22 also requires that recycled water used as a source of water supply for non-restricted recreational impoundments be disinfected tertiary recycled water that has been subjected to conventional treatment. A non-restricted recreational impoundment is defined as "...an impoundment of recycled water, in which no limitations are imposed on body-contact water recreational activities." Title 22 is not directly applicable to surface waters; however, the Regional Water Board finds that it is appropriate to apply an equivalent level of treatment to that required by the DPH's reclamation criteria because the receiving water is used for irrigation of agricultural land and for contact recreation purposes. The stringent disinfection criteria of Title 22 are appropriate since the undiluted effluent may be used for the irrigation of food crops and/or for body-contact water recreation. Coliform organisms are intended as an indicator of the effectiveness of the entire treatment train and the effectiveness of removing other pathogens.

Water quality based effluent limitations from the previous permit for total coliform bacteria, and turbidity are retained from the previous order, and reflect Title 22 recycled water requirements for disinfected secondary recycled water production.

The Discharger currently uses chlorine disinfection to meet Title 22 requirements, and is expected to convert from chlorine disinfection to UV disinfection at the end of 2015. Because the conversion to UV disinfection has not yet occurred, the Facility retains reasonable potential for chlorine within the final effluent. Chlorine is acutely toxic to aquatic life and USEPA has developed National Ambient Water Quality Criteria (NAWQC) for protection of freshwater aquatic life for chlorine residual. The recommended 4-day average (chronic) and 1 hour average (acute) criteria for chlorine residual are 0.011 mg/L and 0.019 mg/L, respectively. These criteria are below typical detection limits for chlorine residual analysis. As such, the previous order established an effluent limitation of non-detect at all times as determined by amperometric titration or another equally sensitive method. This effluent limitation is protective of the Basin Plan's narrative toxicity objective. The effluent limitation in the previous order for chlorine of non-detect has been retained.

## **10. Chlorpyrifos and Diazinon**

On July 11, 2013, the Regional Water Board adopted Resolution No. R3-2013-0011, amending the Basin Plan to implement a TMDL for chlorpyrifos and diazinon in the Pajaro River Watershed, including the Pajaro River. The TMDL was approved by USEPA on November 12, 2013. The TMDL is fully approved and effective. The TMDL finds that discharges of chlorpyrifos and diazinon from irrigated agriculture caused

exceedances of the water quality objectives for toxicity and pesticides, and assigns responsible parties load allocations. The TMDL specifies that the requirements described in the Conditional Waiver of Waste Discharge Requirements For Discharges from Irrigated Lands (Agricultural Order) will result in achieving the TMDL and that no other regulatory mechanism is required to implement and achieve the TMDL.

Typically if a TMDL does not provide a waste load allocation (WLA) to a specific point source, the WLA is assumed to be zero, and no discharge of the pollutant is allowable. However, the TMDL specifically states that “no other regulatory mechanism is required to implement and achieve these TMDLs;” it is clear that the implementation of a WLA of zero within NPDES permits for point sources is not intended. Further, there is no effluent data available to indicate that chlorpyrifos and diazinon are present in the effluent and contributing to the impairment of the receiving water. After considering the requirements of the TMDL, the lack of effluent data, and the infrequent discharge from the Facility, effluent limitations for chlorpyrifos and diazinon are not established in this Order. For future evaluation to verify that the Facility is not contributing to the impairment of the receiving water, annual effluent monitoring for chlorpyrifos and diazinon has been established.

#### **11. Fecal Coliform Bacteria**

On March 20, 2009, the Regional Water Board adopted Resolution No. R3-2009-0008, amending the Basin Plan to implement a TMDL for fecal coliform in the Pajaro River Watershed, including the Pajaro River. The TMDL was approved by the State Water Board on April 20, 2010, the Office of Administrative Law on July 12, 2010, and by USEPA on August 3, 2010. The TMDL is fully approved and effective. The TMDL establishes a waste load allocation (WLA) of “zero loading allowed from this source” for the Discharger. The previous order implemented this WLA as a discharge prohibition for the discharge of fecal coliform bacteria originating from human sources at Discharge Point No. 002 to the Pajaro River. Consistent with the requirements of the TMDL, this Order retains the discharge prohibition for the discharge of fecal coliform bacteria originating from human sources via Discharge Point No. 002.

#### **12. Nutrients**

The previous order established effluent limitations for nitrate based on Title 22 MCLs of 5 mg/L as a 30-day average and 10 mg/L as a daily maximum. In December 2005, the Regional Water Board adopted Resolution No. R3-2005-0131, amending the Basin Plan to implement a TMDL for nitrate in the Pajaro River Watershed, including the Pajaro River.

*The nitrate TMDL specifically states, “The South County Regional Wastewater Authority (SCRWA) facility was granted a permit to release treated wastewater into the Pajaro River during specific flow conditions. The discharge is planned to begin in 2006 and is provided effluent limits of 5 mg/L nitrate-N as a 30-day mean and 10 mg/L nitrate-N for a daily maximum. The SCRWA facility is given a waste load allocation that will be equal to the effluent limit in the permit. When the facility starts discharging, they will not cause an increase in receiving water nitrate-N concentration above the numeric target. Therefore no additional requirements are necessary.”*

Consistent with the WLAs specified within the nitrate TMDL, this permit retains the effluent limitations for nitrate established in the previous order.

In addition to the nitrate TMDL, on July 30, 2015, the Regional Water Board adopted Resolution No. R3-2015-0004, amending the Basin Plan to implement a TMDL for nitrate, un-ionized ammonia, and orthophosphate in the Pajaro River Basin, including the Pajaro River. The TMDL was approved by USEPA on October 6, 2016. The TMDL is fully approved and effective.

The nutrient TMDL specifically states, *“Based on available information, the existing effluent limitations and conditions in Order No. R3-2010-0009 would be expected to be capable of implementing and attaining the proposed waste load allocations identified in these TMDLs.”*

Consistent with the WLAs specified within the TMDL, this permit retains the effluent limitations for nitrate and un-ionized ammonia established in the previous order, and carries over receiving water limitations for biostimulatory substances and dissolved oxygen. Numeric limitations for orthophosphate are not required at this time. It is anticipated that limiting nitrate in the effluent will minimize eutrophication, achieve water quality objectives, protect beneficial uses, and meet the intent of the TMDL.

In addition, receiving water monitoring requirements have been established for phosphorus, orthophosphorus, and chlorophyll a. This receiving water monitoring, combined with those previously established for dissolved oxygen, nitrate, ammonia, and un-ionized ammonia, will provide data to evaluate if further measures are necessary to comply with the TMDL during future permit renewals.

### **13. Sediment**

On December 2, 2005, the Regional Water Board adopted Resolution No. R3-2005-0132, amending the Basin Plan to implement a TMDL for sediment in the Pajaro River Watershed, including the Pajaro River. The TMDL was approved by USEPA on May 3, 2007. The TMDL is fully approved and effective. The TMDL finds that discharges of chlorpyrifos and diazinon from irrigated agriculture caused exceedances of the water quality objectives for toxicity and pesticides, and assigns responsible parties load allocations.

The TMDL specifies that the key regulatory mechanisms for implementation include NPDES permits for stormwater discharges, waste discharge requirements for sand and gravel mining operations, waiver of waste discharge requirements for irrigated agriculture and timber harvest activities, and individual or cooperative nonpoint source pollution control programs for all other discharge types. Additionally, section 7.4 Implementation and Tracking and TMDL Evaluation, specifies implementation within NPDES stormwater permits for MS4 municipalities, but is silent on NPDES discharges for non-stormwater discharges. Non-stormwater point sources are not identified as contributors to the impairment.

Typically if a TMDL does not provide a waste load allocation (WLA) to a specific point source, the WLA is assumed to be zero, and no discharge of the pollutant is allowable. However, the TMDL specifies the regulatory mechanisms to implement and achieve the TMDL and does not specify implementation via NPDES permits for non-stormwater discharges. Additionally, Order No. R3-2010-0009 acknowledges the sediment TMDL, and specifically states, *“The TMDL for sediment requires no actions by SCRWA”*.

Consistent with the requirements of the TMDL and the previous order, this Order does not establish specific actions or effluent limitations for the Discharger for sediment. The Discharger is not expected to contribute to the impairment of Pajaro River.

**D. Final Effluent Limitation Considerations**

**1. Anti-Backsliding Requirements**

This Order complies with the anti-backsliding provisions of CWA sections 402(o) and 303(d)(4) and 40 C.F.R. section 122.44(l), which generally require effluent limitations in a reissued permit to be as stringent as those in the previous permit. The requirements of this Order are at least as stringent as those in the previous order.

**2. Antidegradation Policies**

This Order complies with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16. It continues the status quo with respect to the level of discharge authorized in the previous order, which is the baseline by which to measure whether degradation will occur. This Order does not allow for a reduced level of treatment or increase effluent limitations relative to those in the previous order.

**3. Stringency of Requirements for Individual Pollutants**

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD<sub>5</sub>, TSS, and pH. Effluent limitations for flow have been carried over based on State and federal anti-backsliding and antidegradation requirements. Restrictions on these pollutants are discussed in the Fact Sheet, in section IV.B. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains more stringent effluent limitations as necessary to meet water quality standards. Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement CWA requirements.

**1. Summary of Final Effluent Limitations – Discharge Point No. 002**

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 002, with compliance measured at Monitoring Location E-002 as described in the attached Monitoring and Reporting Program (MRP) (Attachment E).

**Table F-9. Final Effluent Limitations**

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Flow	MGD	---	---	9.0
Biochemical Oxygen Demand 5-day @ 20°C (BOD <sub>5</sub> )	mg/L	10	---	20
Total Suspended Solids (TSS)	mg/L	10	---	20
Nitrate (as N)	mg/L	5	---	10
Un-ionized Ammonia (as N)	mg/L	0.025	---	0.050
pH	standard units	7.0 – 8.3 at all times		

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Total Dissolved Solids (TDS)	mg/L	1,000	---	---
Sodium	mg/L	200	---	---
Chloride	mg/L	250	---	---
Sulfate	mg/L	250	---	---
Boron	mg/L	1.0	---	---
Chlorine, Total Residual	mg/L	---	---	1
Copper, Total Recoverable	µg/L	20	---	42
Lead, Total Recoverable	µg/L	2.1	---	4.2
Chlorodibromomethane	µg/L	0.40	---	0.80
Dichlorobromomethane	µg/L	0.45	---	0.90
Trihalomethanes, Total	µg/L	80	---	160

<sup>1</sup> Chlorine concentrations shall at no time exceed detection levels as determined by amperometric titration or another equally sensitive method.

1. **Percent Removal:** The average monthly percent removal of BOD<sub>5</sub> and TSS shall not be less than 85 percent.
2. **Turbidity**
  - a. Daily average turbidity shall be less than or equal to 2 NTU.
  - b. Turbidity shall be less than 10 NTU at all times.
  - c. Turbidity shall not exceed 5 NTU for more than 5 percent off the time.
3. **Total Coliform Bacteria**
  - a. The 7-day median concentration shall not exceed 2.2 organisms/100 mL.
  - b. Coliform concentrations shall not exceed 23 organisms/100 mL in more than one sample in any 30-day period.
  - c. Coliform concentrations shall be less than 240 organisms/100 mL at all times.

**E. Interim Effluent Limitations – Not Applicable**

**F. Land Discharge Specifications**

**1. BOD<sub>5</sub> and TSS**

Numeric effluent limitations for BOD<sub>5</sub> and TSS, including an 85 percent removal requirement, for the land application at Discharge Point No. 001 are retained from the previous permit and reflect wastewater quality achievable by secondary treatment technology.

**2. TDS, Sodium, Chloride, Sulfate, and Boron**

Numeric effluent limitations for TDS, sodium, chloride, sulfate, and boron at Discharge Point No. 001 are retained from the previous permit and are based on interpretation of Basin Plan Tables 3-3 and 3-4 for the protection of agricultural irrigation uses of groundwater.

**3. Nitrate Nitrogen**

Numeric effluent limitations for nitrate at Discharge Point No. 001 are retained from the previous permit and are based on the Title 22 MCL for nitrate as nitrogen.



**4. pH**

Numeric effluent limitations for pH at Discharge Point No. 001 are retained from the previous order and are based on water quality objectives for the protection of the agricultural use beneficial use.

**5. Additional Discharge Specifications**

Additional operational and engineering specifications for Discharge Point No. 001 are retained from the previous permit to ensure proper operation and maintenance of the percolation ponds.

**G. Reclamation Specifications**

- 6.** California Water Code section 13523 provides authority for the Regional Water Board to prescribe water reclamation requirements for a facility producing reclaimed water, the user, or both. Production, distribution, and use of recycled water are currently regulated separately under Master Water Reclamation Requirements Order No. 98-052. Specifications related to recycled water production are also included in this order for the first time.

**V. RATIONALE FOR RECEIVING WATER LIMITATIONS**

**A. Surface Water**

The receiving water limitations in sections V.A and V.B of the Order are based on Basin Plan narrative and numeric water quality objectives and requires compliance with federal and State water quality standards in accordance with the CWA and regulations adopted thereunder.

**B. Groundwater**

Groundwater limitations established by the Order include general objectives for groundwater established by the Basin Plan for Central Coast Region.

**VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

40 CFR Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Central Coast Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E, establishes monitoring and reporting requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

**A. Influent Monitoring**

Influent flow monitoring is necessary to understand Facility operations. BOD<sub>5</sub> and TSS monitoring is necessary to evaluate compliance with this Order's 85 percent removal requirement. Influent monitoring requirements have been retained from the previous Order.

**B. Effluent Monitoring – Monitoring Location EFF-002**

Effluent monitoring is necessary to determine compliance with effluent limitations and evaluate compliance with applicable water quality objectives and criteria. Effluent monitoring requirements from the previous Order (R3-2010-0009) for Discharge Point No. 002 are retained in this Order with some exceptions. See section VI.C below for information regarding the revisions to whole effluent toxicity testing requirements.

Effluent monitoring for dichlorobromomethane and total trihalomethans has been established to evaluate compliance with newly established effluent limitations. Because the Discharger may operate an ultraviolet disinfection system that may reduce the presence of trihalomethans, monitoring requirements have been revised to allow a reduced monitoring frequency if the discharger is no longer chlorinating and has three monitoring events of non-detect results for each parameter.

**C. Whole Effluent Toxicity Testing Requirements**

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. As discussed in section IV.C.5 of this Fact Sheet, to minimize costs of compliance, acute toxicity monitoring has been removed. Chronic toxicity has been retained and converted to USEPA's TST method. The use of chronic toxicity testing and the TST method is more conservative than acute toxicity testing and anticipated to be at least as protective as acute toxicity testing.

**D. Reclaimed Water Monitoring**

Reclaimed water is addressed under Master Reclamation Order No. 98-052. Monitoring requirements related to producing recycled water are included in this order for the first time.

**E. Receiving Water Monitoring**

Surface water receiving water monitoring requirements are necessary to evaluate compliance with water quality objectives and the protection of beneficial uses. Receiving water monitoring requirements are retained from the previous Order. Additionally, monitoring for phosphorous, orthophosphorous, and chlorophyll a have been added for future analysis with TMDL requirements for nutrients.

**F. Land Discharge Monitoring Requirements**

Land Monitoring requirements have been carried over from the previous Order and are necessary to evaluate compliance with numerical and narrative water quality objectives, characterize the effluent, and evaluate potential impacts on groundwater.

**G. Other Monitoring Requirements**

1. Biosolids monitoring requirements have been retained from the previous order and are based on the requirements of 40 CFR Part 503.
2. Pond maintenance requirements are retained from the previous order and are necessary to evaluate compliance with the operational conditions of this Order.

**VII. RATIONALE FOR PROVISIONS**

**A. Standard Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. section 122.42, are provided in Attachment D to the order.

Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations

must be included in the Order. Section 123.25(a)(12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

## **B. Special Provisions**

### **1. Reopener Provisions**

The Order may be modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any new State water quality objectives that are approved by the USEPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

### **2. Special Studies and Additional Monitoring Requirements**

The Order retains the requirement to conduct accelerated whole effluent toxicity monitoring upon the detection of toxicity in the effluent and requires the Discharger to perform a TRE upon the determination of continued toxicity within the effluent.

### **3. Best Management Practices and Pollution Prevention**

The Order does not establish requirements regarding best management practices and pollution prevention.

### **4. Construction, Operation, and Maintenance Specifications**

- a. This Order requires the Discharger to operate the Facility consistent with the requirements of 40 CFR 122.41(e), summarized in Special Provision D of Attachment D.
- b. Specifications regarding the discharge of tertiary treated wastewater to Pajaro River have been retained from the previous order. Flow limitations are based on a 2004 Final Report submitted by the Discharger titled "*Effluent Management Plan, South County Regional Wastewater Authority.*" The low river flow limitation for discharge of 180 MGD reportedly ensures a minimum available dilution of 20:1. A high river flow limitation of 6,004 MGD reportedly ensures the Discharger does not contribute to downstream flooding events. The specifications have been moved from effluent limitations to the more appropriate operational specifications section of the Order. These specifications ensure appropriate discharge conditions on which the discharge requirements of this Order are based.
- c. This Order carries over chlorine contact requirements based on Title 22 requirements. New requirements for UV disinfection are also included.

### **5. Special Provisions for Municipal Facilities (POTWs Only)**

#### **a. Biosolids Management**

The use and disposal of biosolids is regulated under federal and State laws and regulations, including permitting requirements and technical standards included in 40 CFR 503. The Discharger is required to comply with the standards and time schedules contained in 40 CFR 503.

Title 27, CCR, Division 2, Subdivision 1, Section 20005 establishes approved methods for the disposal of collected screenings, residual sludge, biosolids, and other solids removed from liquid wastes. Requirements to ensure the Discharger disposes of solids in compliance with State and federal regulations have been included in this Order. Additionally, these requirements have been retained from the previous Order.

**b. Pretreatment Requirements**

POTWs with a total design flow greater than 5 MGD and receiving flow from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to pretreatment standards are required to establish POTW pretreatment program unless the regulatory authority exercises its option to assume local responsibilities as provided for in 40 CFR 403.10(e). This Order retains pretreatment requirements based on 40 CFR Part 403.

**6. Other Special Provisions**

**a. Discharges of Storm Water.**

This Order does not address discharges of storm water from the treatment and disposal site, except to require coverage by and compliance with applicable provisions of General Permit No. CAS000001 – *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction*.

**b. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-003-DWQ).**

This General Permit, adopted on May 2, 2006, is applicable to all “federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California.” The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The cities of Gilroy and Morgan Hill own and operate sanitary sewer collection systems tributary to the South County Regional Wastewater Treatment and Reclamation Facility and are required to seek authorization to discharge under and meet the requirements of the General Permit. SCRWA is not required to seek authorization under the General Permit.

**7. Compliance Schedules – Not Applicable**

**VIII. PUBLIC PARTICIPATION**

The Central Coast Water Board is considering the issuance of WDRs that will serve as an NPDES permit for the South County Regional Wastewater Authority - Wastewater Treatment and Reclamation Facility. As a step in the WDR adoption process, the Central Coast Water Board staff has developed tentative WDRs and encourages public participation in the WDR adoption process.

**A. Notification of Interested Parties**

The Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written

comments and recommendations. Notification was provided through publication in the San Jose Mercury News on June 28, 2017, and posting at the facility.

The Central Coast Water Board's web address is <http://www.waterboards.ca.gov/centralcoast/> where the public has been provided access to the agenda including any changes in dates and locations.

## **B. Written Comments**

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments are due either by email, in person, or by mail to the Executive Office at the Central Coast Water Board at:

[centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)

Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906

To be fully responded to by staff and considered by the Central Coast Water Board, the written comments were due at the Central Coast Water Board office by 5:00 p.m. on July 26, 2017. Water Board staff received an email from the Discharger during the public comment period with two minor comments:

1. In footnote 3 to Table E-8 in the MRP, page E-18, monitoring location GW-20 is unnecessarily listed twice; and
2. There is an inconsistency between the word "reportable" used on page 19 of the Permit (Section VII Compliance Determination, A. General, "...effluent limitations for reportable pollutants...") and the word "priority" used on page E-23 of the MRP (Section XI.B.5.a Compliance Determination, "...effluent limitations for priority pollutants...").

**Response:** Water Board staff removed the duplicate groundwater monitoring location from Table E-8. Water Board staff replaced the word on page E-23 with the word "reportable" to be consistent with the language in the permit (page 19).

## **C. Public Hearing**

The Central Coast Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: September 21-22, 2017  
Time: 8:30 a.m.  
Location: Santa Barbara County Planning and Development Hearing Room  
123 E. Anapamu Street  
Santa Barbara, CA 93101

Interested persons were invited to attend. At the public hearing, the Central Coast Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

## **D. Reconsideration of Waste Discharge Requirements**

Any aggrieved person may petition the State Water Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be received by the State Water Board at the following address within 30 calendar days of the Regional Water Board's action.

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

For instructions on how to file a petition for review, see:  
[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/wqpetition\\_instr.shtml](http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml)

**E. Information and Copying**

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged through the Central Coast Water Board by calling (805) 549-3147.

**F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Central Coast Water Board reference this Facility, and provide a name, address, and phone number.

**G. Additional Information**

Requests for additional information or questions regarding this order should be directed to Harvey Packard at (805) 542-4639 ([Harvey.packard@waterboards.ca.gov](mailto:Harvey.packard@waterboards.ca.gov)) or Sheila Soderberg at (805) 549-3592 ([Sheila.Soderberg@waterboards.ca.gov](mailto:Sheila.Soderberg@waterboards.ca.gov)).