



California Regional Water Quality Control Board

Central Coast Region



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Edmund G. Brown Jr.
Governor

ORDER NO. R3-2011-0002
NPDES NO. CA0047953

WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF EL PASO DE ROBLES WASTEWATER TREATMENT PLANT

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

Table 1. Discharger Information

Discharger	City of El Paso de Robles
Name of Facility	City of El Paso de Robles Wastewater Treatment Plant
Facility Address	3200 Sulphur Springs Road
	Paso Robles, California 93446
	San Luis Obispo County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

Discharges by the **City of El Paso de Robles** from the discharge points identified below are subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001A	Secondary Treated Domestic Wastewater	35° 38' 59" N	120° 41' 11" W	Salinas River
001B	Secondary Treated Domestic Wastewater	35° 39' 30" N	120° 41' 30" W	Salinas River
001C	Secondary Treated Domestic Wastewater	35° 38' 59" N	120° 41' 11" W	Salinas River

Table 3. Administrative Information

This Order was adopted by the Central Coast Regional Water Quality Control Board on:	May 5, 2011
This Order shall become effective on:	June 25, 2011
This Order shall expire on:	June 25, 2016
The Discharger shall file a Report of Waste Discharge in accordance with California Code of Regulations Title 23, as application for issuance of new waste discharge requirements no later than:	<u>180 days prior to the Order expiration date</u>

IT IS HEREBY ORDERED, that Order No. R3-2004-0031 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Roger W. Briggs, 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 May 5, 2011.

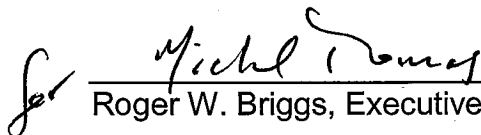
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Roger W. Briggs, Executive Officer

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I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	City of El Paso de Robles
Name of Facility	City of El Paso de Robles Wastewater Treatment Plant
Facility Address	3200 Sulphur Springs Road
	Paso Robles, California 93446
	San Luis Obispo County
Facility Contact, Title, and Phone	Chris Slater, Wastewater Division Supervisor (805) 237-3865
Mailing Address	3200 Sulphur Springs Road, Paso Robles, California 93446
Type of Facility	Publicly Owned Treatment Works (POTW)
Facility Design Flow	4.9 million gallons per day (MGD) (average dry weather design capacity), 10 MGD (peak wet weather design capacity)

II. FINDINGS

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

A. Background. The City of El Paso de Robles (hereinafter the Discharger) is currently discharging pursuant to Order No. R3-2004-0031 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047953. The Discharger submitted a Report of Waste Discharge, dated November 6, 2008, and applied to renew its NPDES permit to discharge up to 4.9 MGD of treated wastewater from the City of El Paso de Robles Wastewater Treatment Plant.

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. Facility Description.

a. **Existing Facility.** The Discharger operates a wastewater collection and treatment facility, which provides service to the City, the community of Templeton, and the California Department of Corrections and Rehabilitation. The Templeton Community Services District and the California Department of Corrections and Rehabilitation own and maintain wastewater collection and transport facilities up to the point of discharge to interceptors owned and maintained by the Discharger. The facility currently serves a population of approximately 36,400 people.

The facility receives domestic, commercial, and industrial wastewater. The current treatment system includes:

- Preliminary treatment with ferric chloride addition, screening, and an aerated grit chamber;
- Two primary clarifiers;
- Two cross-flow plastic media primary trickling filters;
- Two rock media secondary trickling filters;
- Four secondary clarifiers (one rectangular and three circular);
- Disinfection with sodium hypochlorite;
- Chlorine contact chamber;
- Six unlined polishing ponds (Ponds 3 and 4 are aerated).

Treated wastewater may be discharged from one of two points - Discharge Point 001B (formerly known as Discharge Point B), which is the primary outfall from Pond No. 6 to the Salinas River; or Discharge Point 001C (formerly known as Discharge Point C), which is the outfall from Pond No. 3 to the Salinas River. Discharge Point 001C is currently used during pond maintenance, when one or more ponds are out of service. The existing outfall pipe at Discharge Point 001C will be replaced with a polishing channel as part of the pending treatment plant upgrade and will become the primary discharge location. Point 001A is immediately downstream of the chlorine contact chamber and used for effluent total coliform and settleable solids monitoring only (consistent with Order No. R3-2004-0031). Attachment B provides a map of the area around the facility. Attachment C provides a flow schematic of the facility.

- b. **Proposed Facility.** Within the anticipated term of this Order, the Discharger intends to significantly upgrade its wastewater treatment plant to address concerns regarding whole effluent toxicity. The existing WWTP will be upgraded to an advanced secondary treatment process, but be set up to add tertiary treatment facilities to produce recycled water in the long term. Advanced secondary treatment means treatment that meets federal secondary treatment standards for biochemical oxygen demand, total suspended solids, and pH, plus nutrient removal. The advanced secondary treatment process will include new headworks (including grit removal), a rehabilitated primary clarification process, an activated sludge process (biological nutrient removal) with new secondary clarifiers, chloramination, and dechlorination. Treated wastewater will flow into an effluent polishing channel constructed in an area that is currently a polishing pond. The channel will allow treated wastewater to cascade down to the river, thus oxidizing and volatilizing any residual pollutants that may be present in the treated wastewater. The channel will mimic a creek and fan out near the river, delivering

the wastewater by diffuse, laminar flow. Ancillary facilities will include a cogeneration system to produce electric power and heat from biogas, a new standby power generation system, an approximately 6,000 square foot laboratory and operations building, and an approximately 4,000 square foot canopy building for storage of collection system maintenance equipment. The 4.9 MGD capacity of the upgraded treatment plant is based on the City's General Plan, which projects a population of 44,000 by 2025.

Tertiary treatment facilities will be added in approximately 2022. Tertiary facilities will likely include a filtration process and a new chlorine contact chamber.

One of the six existing polishing ponds will be converted into the effluent polishing channel described above. The other five ponds will be re-purposed for stormwater retention. The upgraded plant will have plumbing to temporarily bypass treated wastewater into the three northernmost ponds, to facilitate maintenance of the effluent polishing channel. If necessary, wastewater discharged into these ponds would discharge to the river through the existing outfall at the north end of the northernmost pond. In the future, these ponds may be converted to recycled water storage. In no case would chlorinated wastewater be discharged to the river.

The project will go out to bid for construction as early as March 2011. Construction will require approximately 30 months.

C. Total Dissolved Solids (TDS), Sodium, Chloride, And Sulfate. As part of the Nacimiento Water Project, the City will build a new potable water treatment plant, which will take water from the Nacimiento Reservoir, thereby reducing hardness, TDS, sodium, chloride, and sulfate levels in the potable water supply. Reduced hardness, TDS, sodium, chloride, and sulfate levels in the potable water supply should result in reduced TDS, sodium, chloride, and sulfate levels in the wastewater treatment plant influent.

The potable water supplied by Paso Robles contains salts and other compounds contributing to hardness. That water exhibits a nuisance quality, as witnessed by the communities' pervasive water softening. Several City-specific studies point to self-regenerating water softeners as a major source of high wastewater salinity, including:

- Carollo Engineer's February 2001 "Salt Management Study;"
- Malcolm Pirnie's March 2003 "Final Report, City of Paso Robles Water and Wastewater Quality Concerns – Water Quality Strategy;"
- Malcolm Pirnie's June 2003 Technical Memo, "City Wastewater Total Dissolved Solids Loading Analysis";
- TJ Cross Engineers' February 2007 "Water Resources Plan Integration and Capital Improvement Program"; and
- Paso Robles' June 2009 "Technical Basis for Local Wastewater Limits."

By adding additional salts to the system through the use of water softeners, Paso Robles residential and industrial users exacerbate the condition of nuisance salts. Exacerbating

the extent of a high salt zone decreases beneficial uses, since salty water has fewer beneficial uses than fresh water. Collection system monitoring conducted in October 2008 demonstrated that residential users are the greatest contributors of salt to the City's wastewater system. Control of residential self-regenerating water softeners will contribute to the achievement of water quality objectives.

- D. Legal Authorities.** This Order is issued pursuant to CWA § 402 and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the California Water Code (CWC), commencing with section 13370. It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC, commencing with § 13260.
- E. 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, including a site visit on September 26, 2008. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E are also incorporated into this Order.
- F. California Environmental Quality Act (CEQA).** Pursuant to CWC § 13389, this action to adopt an NPDES permit is exempt from the provisions of the CEQA, Public Resources Code § 21100 to § 21177.
- G. Technology-Based Effluent Limitations.** CWA § 301 (b) and USEPA's NPDES regulations at 40 CFR 122.44 require that permits include, at a minimum, conditions meeting applicable technology-based requirements and any more stringent effluent limitations necessary to meet applicable water quality standards. Discharges authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards established at 40 CFR Part 133 and Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. Discussion regarding development of technology-based effluent limitations is included in the Fact Sheet (Attachment F).
- H. Water Quality-Based Effluent Limitations.** CWA § 301 (b) and NPDES regulations at 40 CFR 122.44 (d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

NPDES regulations at 40 CFR 122.44 (d)(1)(i) mandate 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 is 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 § 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 at 40 CFR 122.44 (d)(1)(vi).

I. Water Quality Control Plans. The Central Coast Water Board has adopted a *Water Quality Control Plan for the Central Coast Region* (the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses established by the Basin Plan for the Salinas River between the Nacimiento Reservoir and the Santa Margarita Reservoir are presented in Table 5, below.

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001A 001B 001C	Salinas River	<ul style="list-style-type: none"> • Municipal and domestic water supply (MUN) • Agricultural supply (AGR) • Industrial process supply (PRO) • Ground water recharge (GWR) • Contact (REC-1) and Non-contact (REC-2) water recreation • Wildlife habitat (WILD) • Cold freshwater habitat (COLD) • Warm freshwater habitat (WARM) • Migration of aquatic organisms (MIGR) • Spawning, reproduction, and/or early development (SPWN) • Rare, threatened or endangered species (RARE) • Commercial and sport fishing (COMM).

Requirements of this Order implement the Basin Plan.

J. 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 water quality criteria for priority pollutants that are applicable to discharges from the City of El Paso de Robles’s wastewater treatment plant.

K. 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* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Central Coast Water Board in the Basin Plan. The SIP became

effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that 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.

- L. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed five years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules or interim effluent limitations.
- M. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and tribal water quality standards (WQS) become effective for CWA purposes [65 Fed. Reg. 24641 (April 27, 2000) (codified at 40 CFR 131.21)]. Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- N. 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 for biochemical oxygen demand (BOD₅), total suspended solids (TSS), settleable solids, oil and grease, and pH, and are discussed in section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to NPDES regulations at 40 CFR 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the CTR and the SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under State law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards

for purposes of the CWA” pursuant to NPDES regulations at 40 CFR 131.21 (c) (1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

- O. Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that 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, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. As discussed in Section III.C.5 of the Fact Sheet, the permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
- P. Anti-Backsliding Requirements.** CWA § 402(o)(2) and § 303 (d) (4) and NPDES regulations at 40 CFR 122.44 (l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, except the limitations for cyanide and bromoform, total dissolved solids, sodium, chloride, and sulfate. As discussed in Section III.C.6 of the Fact Sheet, the permitted discharge is consistent with applicable anti-backsliding provisions of the CWA and NPDES regulations.
- Q. Endangered Species Act.** 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 sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 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. The Discharger is responsible for meeting all requirements of State and federal law regarding threatened and endangered species.
- R. Monitoring and Reporting.** NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. CWC § 13267 and § 13383 also authorize the Central Coast Water Board to require technical and monitoring reports. The Monitoring and Reporting Program, provided as Attachment E to the Order, establishes monitoring and reporting requirements to implement federal and State requirements.
- S. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable pursuant to 40 CFR 122.42. The Central Coast Water Board has also included in this Order special provisions applicable to the

Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

- T. Provisions and Requirements Implementing State Law.** The provisions and requirements in subsections IV.B, IV.C, and V.B of this Order 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.
- U. 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 notification are provided in the Fact Sheet of this Order.
- V. 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.

III. DISCHARGE PROHIBITIONS

- A.** Discharge of treated wastewater at a location or in a manner other than as described by this Order at Discharge Point 001A, 001B, and at Discharge Point 001C during pond maintenance activities is prohibited.
- B.** Creation of a condition of pollution, contamination, or nuisance, as defined by CWC § 13050, is prohibited.
- C.** The discharge of radioactive substances 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 Provision I. G (Bypass), is prohibited.
- E.** Adverse effects of the discharge to beneficial uses of water or threatened or endangered species are prohibited.
- F.** Dry weather daily flow, averaged monthly, shall not exceed the facility's dry weather treatment capacity of 4.9 MGD. Daily flow, averaged monthly from November through April, shall not exceed the facility's wet weather treatment capacity of 10 MGD.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Points 001A, 001B and 001C

1. Final Effluent Limitations

- a.** Conventional and Non-Conventional Pollutants. The Discharger shall maintain compliance with the following effluent limitations at Discharge Points 001A, 001B,

and 001C, with compliance measured at Monitoring Locations EFF-001B and EFF-001C. Monitoring Locations EFF-001B and EFF-001C are described in the attached Monitoring and Reporting Program (MRP).

Table 6. Effluent Limitations for Conventional and Non-Conventional Pollutants

Constituent	Units	Effluent Limits	
		Average Monthly	Average Weekly
BOD ₅	mg/L	25	35
	lb/day ^[1]	1,022	1,430
	kg/day ^[1]	463	649
TSS	mg/L	30	45
	lb/day ^[1]	1226	1,839
	kg/day ^[1]	556	834
Oil and Grease	mg/L	10	18
Settleable Solids	ml/L/hr	0.1	0.3
pH	---	6.5 – 8.3 at all times	
Dissolved Oxygen	mg/L	2.0 minimum	
Nitrogen, Total (as N)	mg/L	10	---
Total Dissolved Solids	mg/L	1,115	---
Sodium	mg/L	255	---
Chloride	mg/L	355	---
Sulfate	mg/L	200	---
Acute Toxicity	TUa	Pass/Fail	
Chronic Toxicity	TUc	1.0	

^[1] Mass emission limitations apply when flows are equal to or less than 4.9 MGD

- b. The average monthly percent removal of BOD₅ and TSS shall not be less than 85 percent.
- c. The median most probable number (MPN) of total coliform organisms in effluent shall not exceed 23 MPN/100 mL, based on the results of the last seven days for which samples have been collected. The MPN of total coliform organisms shall not exceed 2300 MPN/100 mL in any single sample.
- d. Total residual chlorine shall be undetectable at any time as determined by amperometric titration or another equally sensitive method.
- e. **Toxic Pollutants.** The Discharger shall maintain compliance with the following effluent limitations for toxic pollutants at Discharge Points 001A, 001B, and 001C, with compliance measured at Monitoring Locations EFF-001B and EFF-001C, as described in the attached MRP.

Table 7. Effluent Limitations for Toxic Pollutants

Constituent	Units	Effluent Limits	
		Average Monthly	Maximum Daily
Copper	µg/L	21	39
Selenium	µg/L	4.0	8.6

Chlorodibromomethane	µg/L	0.40	0.80
Dichlorobromomethane	µg/L	0.56	1.6
Bis(2-Ethylhexyl)Phthalate	µg/L	1.8	5.4

2. Interim Effluent Limitations

This section of the standardized permit template is not applicable.

B. Land Discharge Specifications

This section of the standardized permit template is not applicable.

C. Reclamation Specifications

This section of the standardized permit template is not applicable.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

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 conditions in 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 causes nuisance or adversely affects 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.
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. At no time or place shall the temperature of any water be increased by more than 5° F above the natural receiving water temperature.
13. 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 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 unionized ammonia (NH₃) 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 non-detectable or where beneficial uses would be impaired by concentrations in excess of non-detectable 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:

Methylene Blue Activated Substances	0.2 mg/L
Phenols	1.0 µg/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 which 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 (CCR), Division 4, Chapter 15, Article 5.
18. Receiving waters 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 CCR, Division 4, Chapter 15.
19. Fecal coliform concentration, based on a minimum of not less 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. Receiving waters shall not contain concentrations of chemical constituents in amounts that adversely affect the agricultural beneficial use. Interpretation of “adverse effect” shall be based on the University of California Agricultural Extension Service guidelines presented in Table 3-3 of the Basin Plan.

Waters used for irrigation and livestock watering shall not contain pollutants in excess of the “Water Quality for Agricultural Water Use” established by Table 3-4 of the Basin Plan.

21. The discharge shall not cause the following surface water quality objectives for the Salinas River above Bradley to be exceeded:

TDS	Chloride	Sulfate	Boron	Sodium
250 mg/L	20 mg/L	100 mg/L	0.2 mg/L	20 mg/L

Objectives, immediately above, are annual mean values and are objectives based on preservation of existing quality or water quality enhancement believed attainable following control of point sources.

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

Table 8. Basin Plan Criteria for protection of Aquatic Life

Parameter	Receiving Water Hardness	
	> 100 mg/L CaCO ₃	< 100 mg/L CaCO ₃
Cadmium ^[1]	0.03 mg/L	0.004 mg/L
Chromium	0.05 mg/L	0.05 mg/L
Copper	0.03 mg/L	0.01 mg/L

Lead	0.03 mg/L	0.03 mg/L
Mercury ^[2]	0.0002 mg/L	0.0002 mg/L
Nickel ^[3]	0.4 mg/L	0.1 mg/L
Zinc	0.2 mg/L	0.004 mg/L

- ^[1] Lower cadmium values not to be exceeded for crustaceans and waters designated SPWN are 0.003 mg/L in hard water and 0.0004 mg/L in soft water.
- ^[2] Total mercury values should not exceed 0.05 mg/L as an average value; maximum acceptable concentration of total mercury in any aquatic organism is a total BOD. burden of 0.5 mg/L wet weight.
- ^[3] Value cited as objective pertains to nickel salts (not pure metallic nickel).

B. Groundwater Limitations

Activities at the treatment facility shall not cause exceedance or deviation from the following water quality objectives for groundwater established by the Basin Plan.

1. Groundwater shall not contain taste or odor producing substances in concentrations that adversely affect beneficial uses.
2. 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.
3. The median concentration of coliform organisms in ground water, over any seven-day period, shall be less than 2.2 organisms per 100 milliliters.
4. 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 CCR, Division 4, Chapter 15.

VI. PROVISIONS

A. Standard Provisions

The Discharger shall comply with all Standard provisions included as Attachment D of this Order.

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

- a. This permit 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 water quality objective.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **Accelerated Toxicity Testing.** As described in Section V.D of Attachment E of this Order (Monitoring and Reporting Program), accelerated monitoring for whole effluent acute and chronic toxicity is required when routine monitoring indicates acute toxicity is present or when the chronic toxicity limitation is exceeded.

3. Best Management Practices and Pollution Prevention

This section of the standardized permit template is not applicable.

4. Construction, Operation and Maintenance Specifications

- a. **Treatment Pond Operations.** A minimum of 2 feet of freeboard shall be maintained in Ponds 1 through 6 at all times (unless technical justification is provided to support lesser freeboard).

5. Special Provisions for Municipal Facilities (POTWs Only)

- a. **Biosolids Management.** 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.

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 ground water contamination. Sites for solids and sludge treatment and storage shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of such sites from erosion, and to prevent drainage from treatment and storage sites.

The treatment, storage, disposal, or reuse of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited into waters of the State. The Discharger is responsible for assuring that all biosolids produced at its facility are used or disposed of in accordance with the above rules, whether the Discharger uses or disposes of the biosolids itself, or transfers them to another party for further treatment, use, or disposal. The Discharger is responsible for informing subsequent preparers, appliers, and disposers of the requirements that they must adhere to under these rules.

- b. **Pretreatment Requirements.** This Order does not include provisions requiring the development and implementation of an industrial pretreatment program in accordance with USEPA requirements at 40 CFR 403. In place of formal pretreatment requirements, this Order requires that the following information be submitted with the Discharger's annual reports.
 - i. A listing of all new industries in the City's service area with adequate information to characterize the quantity and quality of the industrial dischargers;
 - ii. A detailed report of incidents of pass-through or upset caused by industrial discharges to the City's collection system; and
 - iii. A summary report of the inspections/audits of industries that discharge to the City's collection system, as well as analytical results of industrial discharges. This report shall include any corrective and/or enforcement actions taken.

6. Other Special Provisions

- a. **Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment 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. **Statewide 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 Discharger is enrolled under the General Permit.
- c. **Engineering Analysis of Upgraded Facility.** Within six months of completion of plant upgrades, the Discharger shall submit an engineering analysis to the Central Coast Water Board describing changes in operation and/or equipment. The report shall include an assessment of dry and wet weather treatment (flow) capacities.
- d. **Recycled Water Policy Salt/Nutrient Management Plan.** The Discharger shall commit funding and in-kind resources to facilitate development of a regional groundwater basin/sub-basin salt/nutrient management plan that implements the State Water Resources Control Board's Recycled Water Policy, which was adopted via Resolution No. 2009-0011.

7. Compliance Schedules

This section of the standardized permit template is not applicable.

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

A. General

Compliance with effluent limitations for priority 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 Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data

When determining compliance with an AMEL, AWEL, or MDEL for priority pollutants and more than one sample result is available, 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:

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.

ATTACHMENT A – DEFINITIONS

Acute Toxicity:

a. Acute Toxicity expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{96\text{-hr } 50\%LC}$$

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log (100 - S)}{1.7}$$

where: S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

Arithmetic Mean (μ)

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:

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

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.

Bioaccumulative

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

Chronic Toxicity: This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity expressed as Toxic Units Chronic (TU_c) $TU_c = \frac{100}{NOEL}$

b. No Observed Effect Level (NOEL) is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix III.

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.

Degrade: Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

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 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 CWC 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, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

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)

MDL is 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 title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)

ML is 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)

Sample results which are 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. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

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 Central Coast 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 CWC § 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 CWC § 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 Central Coast 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 Central Coast 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.

Satellite Collection System

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Source of Drinking Water

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

Standard Deviation (σ)

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;

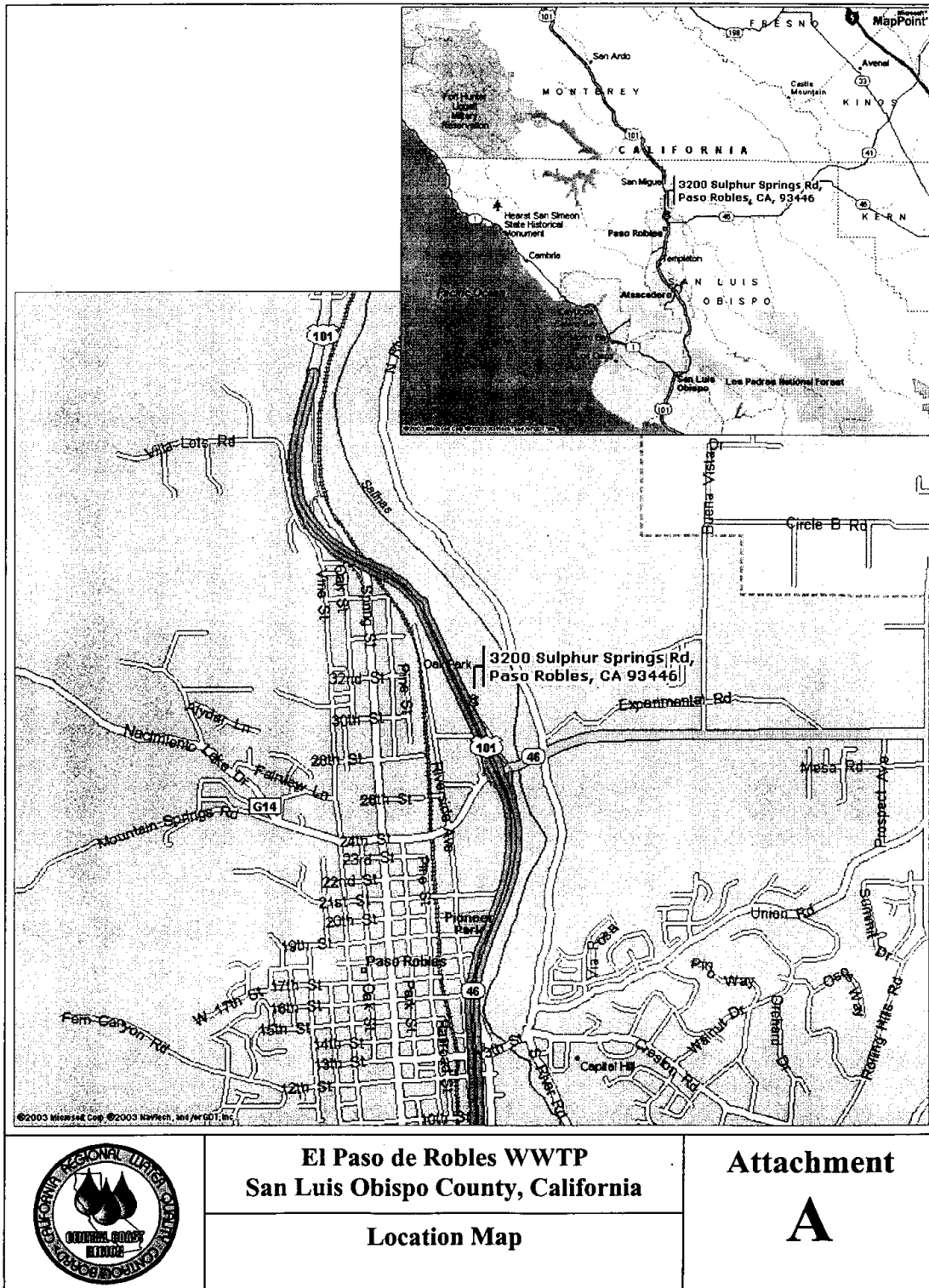
μ is the arithmetic mean of the observed values; and

n is the number of samples.

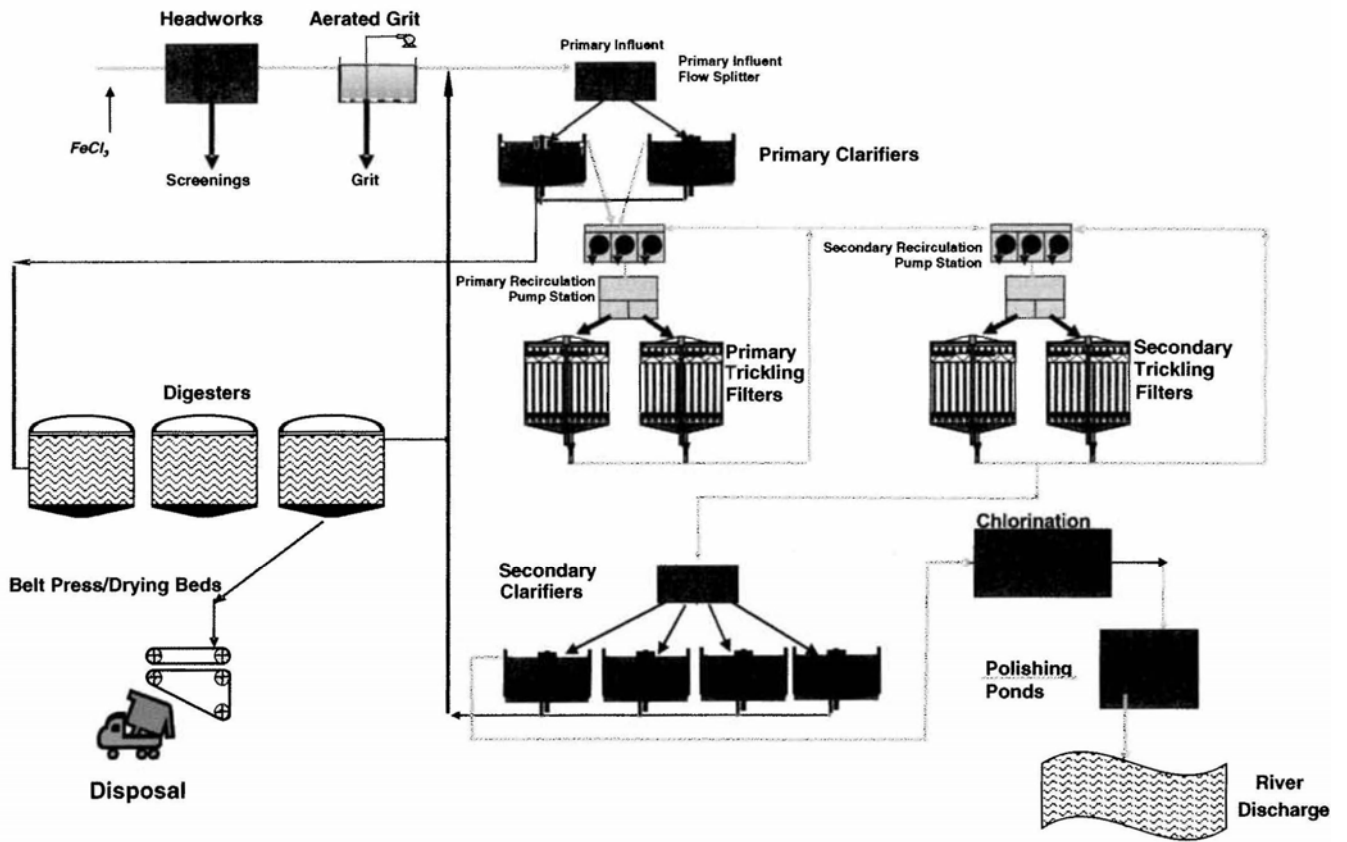
Toxicity Reduction Evaluation (TRE)

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, 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. FEDERAL 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 CWA and the CWC and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under CWC § 307(a) 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 CFR § 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 CFR § 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 CFR § 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 CFR § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR § 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 CFR § 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 CFR § 122.41(i); CWC, § 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 CFR § 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 CFR § 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 CFR § 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 CWC, any substances or parameters at any location. (40 CFR § 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 CFR § 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 CFR § 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 CFR § 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 CFR § 122.41(m)(4)(i).):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A).);

- a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i).);
 - b. The permitted facility was, at the time, being properly operated (40 CFR § 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 CFR § 122.41(n)(3)(iii).); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 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 CFR § 122.41(n)(4).)

II. FEDERAL 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 CFR § 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 CFR § 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 CFR § 122.41(l)(3); § 122.61.)

III. FEDERAL STANDARD PROVISIONS – MONITORING

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

IV. FEDERAL 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 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 CFR § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i).);
2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii).);
3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii).);
4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv).);
5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v).); and
6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 CFR § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1).); and
2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

V. FEDERAL 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 CFR § 122.41(h); CWC § 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 CFR § 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 CFR § 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 CFR § 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 CFR § 122.22(b)(2).); and
 - c. The written authorization is submitted to the Central Coast Water Board and State Water Board. (40 CFR § 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 CFR § 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 CFR § 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 CFR § 122.22(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 CFR § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this 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 CFR § 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 CFR § 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 CFR § 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 CFR § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR § 122.41(l)(6)(ii).):

- a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 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 CFR § 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 CFR § 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 CFR § 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 CFR § 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 CFR § 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 General Order requirements. (40 CFR § 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 CFR § 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 CFR § 122.41(l)(8).)

VI. FEDERAL STANDARD PROVISIONS – ENFORCEMENT

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

VII. FEDERAL 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 CFR § 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 CFR § 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 CFR § 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 CFR § 122.42(b)(3).)

ATTACHMENT D-1 - CENTRAL COAST REGIONAL WATER BOARD STANDARD PROVISIONS (JANUARY 1985)

I. Central Coast General Permit Conditions

A. Central Coast Standard Provisions – 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 CWC § 307(a) 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 an "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 Provisions – Provisions

1. Collection, treatment, and discharge of waste shall not create a nuisance or pollution, as defined by 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 plants 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 terms 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 assure 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, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the affect 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. Production and use of reclaimed water is subject to the approval of the Central Coast Water 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 Water 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 Central Coast Water 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 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 and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the California Department of Health Services 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.

E. Central Coast Standard Provisions – General Reporting Requirements

1. 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.
2. 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.
3. 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.

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.

4. All "Dischargers" shall submit reports to the:

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

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

Regional Administrator
US Environmental Protection Agency, Region 9
Attention: CWA Standards and Permits Office (WTR-5)
75 Hawthorne Street
San Francisco, California 94105

5. 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.
6. Except for data determined to be confidential under Section 308 of the Clean Water Act (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.
7. By January 30th of each year, the discharger shall submit an annual report to the Central Coast Water Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken, or which may be needed, to bring the discharge into full compliance. The report shall address operator certification and provide a list of current operating personnel and their grade of certification. The report shall inform the Board of the date of the Facility's Operation and Maintenance Manual (including contingency plans as described Central Coast Standard Provision – Provision B.9., above), of the date the manual was last reviewed, and whether the manual is complete and valid for the current facility. The report shall restate, for the record, the laboratories used by the discharger to monitor compliance with effluent limits and provide a summary of performance relative to Section C above, 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 applicable, 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 Programs."

F. 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.

G. Central Coast Standard Provisions – 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 not to exceed \$5,000 per day.
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.

H. 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 CWA § 311.
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, 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 flow rate 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.

$$\text{Average} = (X_1 + X_2 + \dots + X_n) / n$$

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, storm waters, 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 Resources Control Board.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. California Water Code (CWC) Sections 13267 and 13383 also authorize the Regional Water Quality Control Boards (Regional Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A. All quarterly monitoring shall 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 Health Services, in accordance with CWC § 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 not be changed without notification to and approval of the Regional 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 ± 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 22151. 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 CFR 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 toxics listed by the California Toxics Rule shall also adhere to guidance and requirements contained in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (2005).

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
---	INF-001	Influent wastewater at the plant headworks, prior to treatment and following all significant input of wastewater to the treatment system
001A	EFF-001A	Effluent wastewater at the point of discharge from the chlorine contact chamber to the effluent polishing ponds or channel
001B	EFF-001B	Effluent wastewater at the point of discharge from Pond 6 - after all treatment, including treatment in the polishing ponds, and prior to contact with the receiving water
001C	EFF-001C	Effluent wastewater at the point of discharge from Pond 3 - after all treatment, including polishing in Ponds 1-3 and the proposed effluent polishing channel, and prior to contact with the receiving water
---	SW-001	The existing surface water monitoring point, in the Salinas River upstream of all outfalls, where representative samples of background water quality conditions can be collected
---	SW-002	The existing surface water monitoring point, in the Salinas River approximately 50 feet downstream of Discharge Point 001B
---	GW-001	The existing upgradient groundwater monitoring well, where representative samples of upgradient groundwater can be collected
---	GW-002	The existing downgradient groundwater monitoring well
---	GW-003	A groundwater monitoring well approximately 8,500 feet downgradient from the discharge point. This monitoring location shall be established within 12 months of the effective date of the permit.
---	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
---	PWS-001	Representative samples of the City's potable water supply

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

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

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
TSS ^[1]	mg/L	24-hr Composite	Weekly
BOD ₅ ^[1]	mg/L	24-hr Composite	Weekly

^[1] Collection of TSS and BOD₅ influent samples shall occur on days that effluent samples are collected.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001B and EFF-001C

1. The Discharger shall monitor effluent at monitoring location EFF-001A, EFF-001B, or EFF-001C, depending on which location is discharging to the Salinas River, 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
Flow Volume	MGD	Metered	Daily
Instantaneous Maximum Flow	MGD	Metered	Daily
Maximum Daily Flow	MGD	Calculated	Monthly
Mean Daily Flow	MGD	Calculated	Monthly
Settleable Solids ^[9]	ml/L	Grab	Weekly
pH ^[1]	s.u.	Grab	Daily
Chlorine Used	lbs/day	Calculated	Daily
Chlorine Residual	mg/L	Grab	Weekly
Dissolved Oxygen	mg/L	Grab	Weekly
BOD ₅	mg/L	24-hr composite	Weekly
TSS	mg/L	24-hr composite	Weekly
Total Coliform Bacteria ^[9]	MPN/100ml	Grab	2x/week
Temperature ^[1]	° F	Instantaneous	Monthly
Oil and Grease	mg/L	Grab	Monthly
Total Nitrogen	mg/L as N	Grab	Quarterly
Un-ionized Ammonia ^[1]	mg/L as N	Calculation	Quarterly
Total Ammonia ^[1]	mg/L as N	Grab	Quarterly
Nitrate	mg/L as N	Grab	Quarterly
Nitrite	mg/L as N	Grab	Quarterly
Acute Toxicity ^[2]	Pass or Fail	24-hr composite	Quarterly
Chronic Toxicity ^[3]	TUc	24-hr composite	Quarterly
TDS	mg/L	24-hr composite	Monthly
Sodium	mg/L	24-hr composite	Monthly
Chloride	mg/L	24-hr composite	Monthly
Sulfate	mg/L	24-hr composite	Monthly
Total Hardness	mg/L	24-hr composite	Quarterly
Copper ^[5]	µg/L	24-hr composite	Quarterly
Selenium ^[5]	µg/L	24-hr composite	Quarterly
trichloromethane	µg/L	24-hr composite	Quarterly
Dichlorobromomethane ^[5]	µg/L	24-hr composite	Quarterly
Chlorodibromomethane ^[5]	µg/L	24-hr composite	Quarterly
tribromomethane	µg/L	24-hr composite	Quarterly
Bis(2-Ethylhexyl)Phthalate ^[5]	µg/L	24-hr composite	Quarterly
CTR Pollutants ^{[4][5][8]}	µg/L	24-hr composite	1X / Permit Term

Title 22 Pollutants ^[6] ^[7] ^[8]	µg/L	24-hr composite	1X / Permit Term
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- ^[1] 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.
- ^[2] Whole effluent acute toxicity monitoring shall be conducted according to the requirements established in Section V.A of this Monitoring and Reporting Plan.
- ^[3] Whole effluent chronic toxicity monitoring shall be conducted according to the requirements established in Section V.B of this Monitoring and Reporting Plan.
- ^[4] Those 126 pollutants with applicable water quality objectives established by the California Toxics Rule (CTR) at 40 CFR 131.38.
- ^[5] 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.
- ^[6] Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by Title 22 of the California Code of Regulations (CRR), Division 4, Chapter 15, section 64432 (Inorganics) and section 64445.1 (Organics).
- ^[7] The Title 22 pollutants are those pollutants for which the Department of Health Services 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.
- ^[8] 24-hour composite samples shall be collected one time, in a dry weather season and within the twelve-month period before application is made to renew the Waste Discharge Requirements for the facility.
- ^[9] Consistent with Table E-1 and the historical compliance point (Order R3-2004-0031) for effluent total coliform bacteria monitoring and settleable solids, the point of compliance for total coliform and settleable solids monitoring shall be EFF-001A.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Whole Effluent Acute Toxicity

1. Acute Toxicity Monitoring Requirements

- a. Bioassays shall be performed to evaluate the toxicity of the discharge in accordance with the following procedures unless otherwise specified by the Regional Water Board’s Executive Officer or designee:
- b. Both test species given below shall be used to measure acute toxicity:

Table E-4. Approved Test for Acute Toxicity

Species	Effect	Test Duration (days)	Reference
Fathead Minnow (<i>Pimephales promelas</i>)	Larval Survival and Growth	7	EPA/821-R-02-012 (Acute)
Water Flea (<i>Ceriodaphnia dubia</i>)	Survival and Reproduction	7	EPA/821-R-02-012 (Acute)

- c. Determination of acute toxicity shall be based on mortality data derived from chronic toxicity tests, utilizing these species, as specified below.
- d. The presence of acute toxicity shall be determined as significantly reduced survival of test organisms at 100 percent effluent compared to a control using a statistical t-test.

B. Whole Effluent Chronic Toxicity

1. Chronic Toxicity Monitoring Requirements

- a. *Sampling.* The Discharger shall collect 24-hour composite samples of the effluent at Discharge Point 001A, 001B or 001C, whichever is discharging at the time, for critical life stage toxicity testing as indicated below. For toxicity tests requiring renewals, 24-hour composite samples collected on consecutive days are required.
- b. *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.
- c. *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).
- d. *Dilution Series.* The Discharger shall conduct toxicity testing at 100% effluent.

2. Chronic Toxicity Reporting Requirements

- a. *Routine Reporting.* Toxicity test results for the current reporting period shall include, at a minimum, for each test:
 - (1) Sample date(s)
 - (2) Test initiation date
 - (3) Test species
 - (4) End point values for each dilution (e.g., number of young, growth rate, percent survival)
 - (5) NOEC value(s) in percent effluent
 - (6) IC15, IC25, IC40, and IC50 values (or EC15, EC25 ... etc.) as percent effluent
 - (7) TUC values (100/NOEC, 100/IC25, or 100/EC25)
 - (8) Mean percent mortality (\pm s.d.) after 96 hours in 100% effluent (if applicable)

- (9) NOEC and LOEC values for reference toxicant test(s)
- (10) IC50 or EC50 value(s) for reference toxicant test(s)
- (11) 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 1, 3, 5, 6(IC25 or EC25), 7, and 8.

C. 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. For the acute toxicity testing using a t-test, two dilutions shall be used, i.e., 100 percent effluent and a control (when a t-test is used instead of an LC50).
3. 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.).
4. 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 re-sample 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.
6. 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.

D. Accelerated Monitoring Requirements

1. When acute toxicity is detected in the effluent, or when the chronic toxicity effluent limitation of 1 TUC, is exceeded 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 the exceedance of the toxicity trigger (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.

E. Conducting Toxicity Identification Evaluations and Toxicity Reduction Evaluations

1. A Toxicity Identification Evaluation (TIE) shall be triggered if testing from the accelerated monitoring frequency indicates any of the following:
 - a. Two of the three acute toxicity tests are reported as failed tests meeting any of the conditions specified in Attachment E, Section V.D.
 - b. The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.
 - c. If a TIE is triggered prior to the completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.
2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the 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. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, August 1999, EPA/833B-99/002; and
- b. 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

This section of the standardized MRP is not applicable to the Discharger.

VII. RECLAMATION MONITORING REQUIREMENTS

This section of the standardized MRP is not applicable to the Discharger.

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Monitoring Locations SW-001 and SW-002

- 1. The Discharger shall monitor the Salinas River at SW-001 and SW-002 as follows.

Table E-5. Surface Water Monitoring Requirements

Parameter	Units	Monitoring Location	Sample Type	Minimum Sampling Frequency
Dissolved Oxygen	mg/L	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct)
Temperature	°F	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct)
pH	unitless	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct)
TDS	mg/L	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct) ^[3]
Sodium	mg/L	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct) ^[3]
Chloride	mg/L	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct) ^[3]
Sulfate	mg/L	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct) ^[3]
Color	Units	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct)
Turbidity	NTU	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct)
Hardness	mg/L	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct)
Total Nitrogen	mg/L	001 and 002	Grab	Quarterly (Jan, Apr, Jul, Oct) ^[3]
CTR Pollutants	µg/L	001	Grab	1X / permit term ^[3]
Title 22 Pollutants	µg/L	001	Grab	1X / permit term ^[3]
River Flow	cfs	USGS Gage ^[4]	--	At time of sampling events

^[1] Those 126 pollutants with applicable water quality objectives established by the CTR at 40 CFR 131.38.

^[2] The Title 22 pollutants are those pollutants for which the Department of Health Services has established MCLs at Title 22, Division 4, Chapter 15, sections 64431 (Inorganic Chemicals) and 64444 (Organic Chemicals) of the California Code of Regulations.

^[3] Monitoring shall coincide with effluent monitoring for the same parameter.

^[4] USGS Gaging Station No. 11147500 (Salinas River at Paso Robles, CA).

- 2. Surface water samples shall be collected only when there is flow in the Salinas River upstream of the discharge point. For monitoring that occurs on a quarterly basis, a minimum of two samples shall be collected per year.

B. Monitoring Locations GW-001, GW-002 and GW-003

1. The Discharger shall monitor groundwater at Monitoring Locations GW-001, GW-002 and GW-003 as follows.

Table E-6. Groundwater Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	s.u.	Grab	Quarterly (Jan, Apr, Jul, Oct)
TDS	mg/L	Grab	Quarterly (Jan, Apr, Jul, Oct)
Sodium	mg/L	Grab	Quarterly (Jan, Apr, Jul, Oct)
Chloride	mg/L	Grab	Quarterly (Jan, Apr, Jul, Oct)
Sulfate	mg/L	Grab	Quarterly (Jan, Apr, Jul, Oct)
Total Hardness	mg/L	Grab	Quarterly (Jan, Apr, Jul, Oct)
Total Nitrogen	mg/L	Grab	Quarterly (Jan, Apr, Jul, Oct)

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids Monitoring, Reporting, and Notification – BIO-001

1. A representative sample of biosolids shall be obtained from the last point in the handling process (i.e., in the drying beds just prior to removal or from a pond bottom). All constituents shall be analyzed annually 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 Concentration (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 C.F.R 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-7. Amount of Biosolids and Frequency for Analysis

Amount ^[1] (dry metric tons/ 365-day period)	Frequency ^[2]
Greater than zero, but less than 290	Once per year.
Equal to or greater than 290 but less than 1500	Once per quarter (four times per year)
Equal to or greater than 1500 but less than 15,000	Once per sixty days (six times per year)
Greater than 15,000	Once per month (twelve times per year)

^[1] 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).

- [2] Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis.

Biosolids shall be analyzed for the constituents in the following table.

Table E-8. Biosolids Monitoring

Constituent	Units	Type of Sample	Sampling/Analysis Frequency
Quantity Removed	Tons or yds ³	Measured during Removal	Continual
Location of Reuse/Disposal	General Public or Specific Site	---	---
Moisture Content	%	Grab	Per Table E-7 (above)
pH	Standard Units	Grab	Per Table E-7 (above)
Total Kjeldahl Nitrogen	mg/kg (dry) ^[1]	Grab	Per Table E-7 (above)
Ammonia(N)	mg/kg	Grab	Per Table E-7 (above)
Nitrate(N)	mg/kg	Grab	Per Table E-7 (above)
Total Phosphorus	mg/kg	Grab	Per Table E-7 (above)
Grease and Oil	mg/kg	Grab	Per Table E-7 (above)
Arsenic	mg/kg	Grab	Per Table E-7 (above)
Boron	mg/kg	Grab	Per Table E-7 (above)
Cadmium	mg/kg	Grab	Per Table E-7 (above)
Copper	mg/kg	Grab	Per Table E-7 (above)
Chromium (total)	mg/kg	Grab	Per Table E-7 (above)
Lead	mg/kg	Grab	Per Table E-7 (above)
Mercury	mg/kg	Grab	Per Table E-7 (above)
Molybdenum	mg/kg	Grab	Per Table E-7 (above)
Nickel	mg/kg	Grab	Per Table E-7 (above)
Selenium	mg/kg	Grab	Per Table E-7 (above)
Zinc	mg/kg	Grab	Per Table E-7 (above)

[1] 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 C.F.R 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 the Amount/Frequency table

above. 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 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 C.F.R 503.33(b).
4. Class 1 facilities (facilities with pretreatment programs or others designated as Class1 by the Regional Administrator) and Federal facilities with greater than five million gallons per day (MGD) influent flow shall sample biosolids for pollutants listed under CWA § 307(a), as required in the pretreatment section of the permit for POTWs with pretreatment programs. Class 1 facilities and Federal facilities greater than 5 MGD shall test dioxins/dibenzofurans using a detection limit of less than one pg/g at the time 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 Title 22 CCR, division 5, chapter 11, article 3 shall be analyzed for comparison with TTLC 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.
6. If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified ground water scientist shall develop a ground water 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 (USEPA Method 9095) at the frequency determined by Table E-7, 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 USEPA Region 9, the State 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-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Discharger shall notify USEPA Region 9 and the affected Regional Water Quality Boards of any non-compliance in writing within five working days of becoming aware of the non-compliance. The Discharger shall require their biosolids management contractors to notify USEPA

Region 9 and the affected Regional Water Quality Boards of any non-compliance within the same time frames.

- b. If biosolids are shipped to another State or Indian lands, the Discharger must send notice at least 60 days prior to the shipment to the permitting authorities in the receiving State or Indian land (the USEPA Regional Office for that area and the State/Indian authorities).
- c. *For land application (in cases where Class B biosolids are directly applied without further treatment):* Prior to reuse of any biosolids from the Discharger's facility to a new or previously unreported site, the Discharger shall notify USEPA, the Central Coast Water Board, and any other affected Regional Water Quality Board. The notification shall include description of the crops or vegetation to be grown, proposed loading rates and determination of agronomic rates.

If any biosolids within a given monitoring period do not meet 40 CFR 503.13 metals concentrations limits, the Discharger (or its contractor) must pre-notify USEPA, and determine the cumulative metals loading to that site to date, as required in 40 CFR 503.12. The Discharger shall notify the applier of all the applier's requirements under 40 CFR 503, including the requirement that the applier certify that the management practices, site restrictions, and any applicable vector attraction reduction requirements have been met. The Discharger shall require the applier to certify at the end of 38 months following application of Class B biosolids that the harvesting restrictions in effect for up to 38 months have been met.

- d. *For surface disposal:* Prior to disposal to a new or previously unreported site, the Discharger shall notify USEPA and the Central Coast Water Board. The notice shall include a description and a topographic map of the proposed site, depth to ground water, whether the site is lined or unlined, site operator, site owner, and any State or local permits. The notice shall describe procedures for ensuring public access and grazing restrictions for three years following site closure. The notice shall include a ground water monitoring plan or description of why ground water monitoring is not required.
9. The Discharger shall submit an annual biosolids report to the USEPA Region 9 Biosolids Coordinator and Central Coast Water Board by February 19th of each year (per USEPA guidance and 40 CFR 503) for the period covering the previous calendar year. This report shall include:
- a. Annual biosolids removed in dry tons and percent solids.
 - b. If appropriate, a narrative description of biosolids dewatering and other treatment processes, including process parameters, including a schematic diagram showing biosolids handling facilities. For example, if drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.

- c. A description of disposal methods, including the following information as applicable related to the disposal methods used at the facility. If more than one method is used, include the percentage and tonnage of annual biosolids production disposed by each method.
 - (1) For landfill disposal include: 1) the Regional Board WDR numbers that regulate the landfills used, 2) the present classifications of the landfills used, 3) the results of any ground water monitoring, 4) certifications of management practices, and 5) the names and locations of the facilities receiving biosolids.
 - (2) For land application include: 1) the location of the site(s), 2) the Regional 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.
 - (3) 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

Executive Officer
Central Coast Water Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

B. Water Supply Monitoring - PWS-001

The Discharger shall conduct monitoring of the potable water supply at the established monitoring location, now identified as PWS-001, in accordance with the requirements of the following table.

Table E-9. Potable Water Supply Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
TDS	mg/L	Grab	Semi-Annually (Apr, Oct)
Sodium	mg/L	Grab	Semi-Annually (Apr, Oct)
Chloride	mg/L	Grab	Semi-Annually (Apr, Oct)
Sulfate	mg/L	Grab	Semi-Annually (Apr, Oct)
Total Hardness	mg/L	Grab	Semi-Annually (Apr, Oct)

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

B. Self Monitoring Reports (SMRs)

1. The Discharger shall submit Self-Monitoring Reports (SMRs) electronically 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 web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
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 monthly, quarterly, and annual SMRs 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. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-10. Monitoring Periods and Reporting Schedule (revised 06/03/11)

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	<u>First day of second calendar month following month of sampling</u>
Daily	Permit effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	
2x/Week	Sunday following permit effective date or on permit effective date if on a Sunday	Two times per week separated by 24 hours.	
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	
Every Two Weeks	Sunday following permit effective date or on permit effective date if on a Sunday	14 day consecutive period	
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 st day of calendar month through last day of calendar month	
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
Annually	January 1 following (or on) permit effective date	January 1 through December 31	February 1
1x/permit term	January 1 following (or on) permit effective date	Permit term	The earliest of May 1, Aug 1, Nov 1, or Feb 1 following the monitoring event

- Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 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 RL, 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 shortened 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 (+ 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. Compliance with effluent limitations for priority 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 Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
6. Multiple Sample Data. When determining compliance with an AMEL <, AWEL, or MDEL> for priority pollutants and more than one sample result is available, 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 SMRs 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. If electronic submittal is not available and hard copy SMRs must be submitted, Discharger shall attach 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.
 - c. If electronic submittal is not available and hard copy SMRs must be submitted, SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

Central Coast Water Board
 895 Aerovista Place, Suite 101
 San Luis Obispo, CA 93401

C. Discharge Monitoring Reports (DMRs)

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 th Floor Sacramento, CA 95814

3. Unless DMRs are submitted electronically through CWIQS, discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of EPA Form 3320-1.

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

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility:

Table F-1. Facility Information

WDID	3 400105001
Discharger	City of El Paso de Robles
Name of Facility	City of El Paso de Robles Wastewater Treatment Plant
Facility Address	3200 Sulphur Springs Road
	Paso Robles, California 93446
	San Luis Obispo County
Facility Contact, Title and Phone	Chris Slater, Wastewater Supervisor (805) 237-3865
Authorized Person to Sign and Submit Reports	Chris Slater, Wastewater Supervisor (805) 237-3865
Mailing Address	1000 Spring Street, Paso Robles, CA 93446
Billing Address	1000 Spring Street, Paso Robles, CA 93446
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	a
Pretreatment Program	Not applicable
Reclamation Requirements	Not applicable
Facility Permitted Flow	4.9 million gallons per day (MGD) (average dry weather) 10 MGD (peak wet weather)
Facility Design Flow	4.9 million gallons per day (MGD) (average dry weather design treatment capacity) 10 MGD (peak wet weather design treatment capacity)
Watershed	Salinas River Watershed
Receiving Water	Salinas River
Receiving Water Type	Inland Surface Water

A. The City of El Paso de Robles (hereinafter the Discharger or City) is the owner and operator of the City of El Paso de Robles Wastewater Treatment Plant, a municipal wastewater treatment plant.

- B.** 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.
- C.** The facility discharges treated wastewater to the Salinas River, a water of the United States, and is currently regulated by Order No. R3-2004-0031, which was adopted on May 14, 2004, and expired on May 14, 2009. The terms and conditions of the current Order will be automatically continued and remain in effect until new Waste Discharge Requirements are adopted pursuant to this Order.
- D.** The Discharger filed a Report of Waste Discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on November 6, 2008.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment

The Discharger operates a wastewater collection and treatment facility, which provides service to the City, the community of Templeton, and the California Department of Corrections and Rehabilitation. The Templeton Community Services District and the California Department of Corrections and Rehabilitation own and maintain wastewater collection and transport facilities up to the point of discharge to interceptors owned and maintained by the Discharger.

The facility currently serves a population of approximately 36,400 people. Treated wastewater may be discharged from one of three points - Discharge Point 001A, which will be/is the discharge from an upgraded treatment facility; 001B (formerly known as Discharge Point B) at the outfall from Pond No. 6 to the Salinas River; and Discharge Point 001C (formerly known as Discharge Point C) at the outfall from Pond No. 3 to the Salinas River. Discharge Point 001C is used during pond maintenance when one or more ponds are out of service for cleaning and/or maintenance.

The facility receives domestic, commercial, and industrial wastewater. The current treatment system includes:

- Preliminary treatment with ferric chloride addition, screening, and an aerated grit chamber;
- Two primary clarifiers;
- Two cross-flow plastic media primary trickling filters;
- Two rock media secondary trickling filters;
- Four secondary clarifiers (one rectangular and three circular);
- Disinfection with sodium hypochlorite;

- Chlorine contact chamber;
- Six unlined polishing ponds (Ponds 3 and 4 are aerated).

Sludge (biosolids) is processed in anaerobic digesters followed by a belt press thickener. Thickened sludge is stockpiled in a concrete-lined drying bed prior to ultimate disposal in the City’s landfill.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point 001A, 001B (Monitoring Location EFF-001B), and Discharge Point 001C (Monitoring Location EFF-001C) are as follows.

Table F-2. Historic Effluent Limitations

Parameter	Units	Effluent Limitation		
		Average Monthly (30-Day Average)	Average Weekly (7-Day Average)	Maximum Daily
Flow	MGD	4.9	---	---
BOD ₅	mg/L	25	35	50
	lb/day	1022	1430	2043
	kg/day	463	649	927
TSS	mg/L	30	45	90
	lb/day	1226	1839	3678
	kg/day	556	834	1668
Oil and Grease	mg/L	10	---	20
Settleable Solids	ml/L	0.1	---	0.3
Dissolved Oxygen	mg/L	---	---	2.0 minimum ^[1]
Chlorine Residual	mg/L	---	---	^[2]
TDS	mg/L	---	---	1100
Sodium	mg/L	---	---	225
Chloride	mg/L	---	---	310
Sulfate	mg/L	---	---	180
pH	s.u.	6.5 to 8.3 at all times		
Total Coliform	MPN	---	23 (median)	2300
Copper	µg/L	---	---	29 ^[3]
	µg/L	23.6 ^[4]	---	47.4 ^[4]
Selenium	µg/L	---	---	6.0 ^[3]
	µg/L	4.1 ^[4]	---	8.2 ^[4]
Cyanide	µg/L	---	---	39 ^[3]
	µg/L	4.3 ^[4]	---	8.5 ^[4]
Bromoform	µg/L	---	---	8.6 ^[3]
	µg/L	4.3 ^[4]	---	8.6 ^[4]
Chlorodibromomethane	µg/L	---	---	4.5 ^[3]
	µg/L	0.4 ^[4]	---	0.8 ^[4]

Parameter	Units	Effluent Limitation		
		Average Monthly (30-Day Average)	Average Weekly (7-Day Average)	Maximum Daily
Flow	MGD	4.9	---	---
Dichlorobromomethane	µg/L	---	---	5.5 ^[3]
	µg/L	0.6 ^[4]	---	1.1 ^[4]
Bis(2-Ethylhexyl) Phthalate	µg/L	---	---	5.0 ^[3]
	µg/L	1.8 ^[4]	---	3.6 ^[4]

- [1] Applies when there is no flow upstream of the discharge as measured at the Santa Margarita Dam.
- [2] Undetectable by amperometric titration or an equally sensitive method.
- [3] These limitations for toxic parameters are interim limitations, effective until May 14, 2009.
- [4] These limitations for toxic parameters are final limitations, effective on May 14, 2009.

Representative effluent monitoring data for Discharge Points 001B and 001C from January 2005 through December 2008 are as follows:

Table F-3. Historic Effluent Monitoring Data

Parameter	Units	Minimum Monthly	Maximum Monthly
Flow	MGD	2.8338	3.2060
BOD ₅	mg/L	6	21
TSS	mg/L	8	23
Oil and Grease	mg/L	ND	ND
Settleable Solids	ml/L	<0.1	<0.1
Dissolved Oxygen	mg/L	3.1	9.0
TDS	mg/L	850	1100
Sodium	mg/L	110	255
Chloride	mg/L	220	330
Sulfate	mg/L	110	190
pH	s.u.	7.2	7.7
Total Coliform	MPN	1	27
Copper	µg/L	ND	37
Selenium	µg/L	ND	16
Cyanide	µg/L	ND	ND
Bromoform	µg/L	ND	ND
Chlorodibromomethane	µg/L	ND	0.6
Dichlorobromomethane	µg/L	ND	3.4
Bis(2-Ethylhexyl) Phthalate	µg/L	ND	15
Acute Toxicity	TUa	0	>1
Chronic Toxicity	TUc	0	>1

ND means Not Detected

Representative monitoring data for ground water monitoring wells GW-001 (upgradient) and GW-002 (downgradient) from January 2005 to December 2008 are as follows:

Table F-4. Groundwater Monitoring Data

Parameter	Units	GW-001 Min - Max	GW-002 Min - Max
pH	s.u.	6.7 - 7.4	6.7 - 7.3
TDS	mg/L	810 - 1150	730 - 1400
Sodium	mg/L	130 - 240	100 - 200
Chloride	mg/L	120 - 183	24 - 200
Sulfate	mg/L	150 - 240	42 - 390
Hardness	mg/L	190 - 559	390 - 730
Total Nitrogen	mg/L	ND - 7.3	0.5 - 1.5

Representative monitoring data for surface water monitoring locations SW-001 (upstream) and SW-002 (downstream) from January 2005 to December 2008 are as follows:

Table F-5. Receiving Water Monitoring Data

Parameter	Units	SW-001 Min - Max	SW-002 Min - Max
Dissolved Oxygen	mg/L	10.1 - 11.3	9.8 - 10.5
Temperature	°F	59 - 60	60 - 61
pH	s.u.	7.5 - 8.0	7.5 - 8.0
Color	Units	10 - 340	15 - 100
Turbidity	NTU	0.8 - 160	2.4 - 160
Hardness	mg/L	140 - 340	140 - 320
Total Nitrogen	mg/L	0.6 - 1.6	1.8 - 8.7

C. Compliance Summary

- 1. Effluent Limitation Compliance.** On September 16, 2006, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted Mandatory Penalty Order No. R3-2006-0083, which assessed the Discharger a penalty of \$36,000 for multiple violations of effluent limitations occurring between July 2004 and February 2006 and for late reporting as required by Waste Discharge Requirements.
- 2. Salt Reduction Plan.** As described in section III. D of this Fact Sheet, the Salinas River in the vicinity of the wastewater treatment plant is impaired for chloride and sodium. The previous Order required the Discharger to initiate certain specific actions, which were identified in a Salt Management Study completed in February 2001, to decrease salt loadings attributable to the discharge to the Salinas River.

In its 2006 Annual Report, the Discharger described the following efforts to satisfy the salt reduction requirements of the previous Order.

- The City is participating in the Nacimiento Pipeline Project and expects to begin receiving potable supply from the Nacimiento Reservoir by late 2010. This water would make up approximately 50 percent of the City's supply, with the remaining 50 percent continuing to come from the City's wells. This blended

supply will result in a TDS reduction of approximately 150 mg/L, which should also be realized in influent to the wastewater treatment plant.

- A number of residential customers now use ion exchange water softeners that discharge high TDS regenerant wastes into the City sewer system. When the lower TDS water becomes available as the City’s potable supply, the City will consider an ordinance to restrict/reduce use of the water softeners.
- The City has established various salt reduction goals through an Integrated Water Resource Plan. One component of the plan would identify industrial generators of high TDS, sodium, and chloride. The City’s source control/pretreatment program would address reduction of these parameters from industrial sources through a city-wide Source Control Program.
- Other source control/pretreatment program components will identify other dischargers that could significantly impact wastewater treatment. The facilities will be identified, inspected, and permitted accordingly.
- Pretreatment limits were developed in accordance with the Salt Reduction Plan. Facility audits will be conducted annually to determine if modifications to pretreatment permit are warranted.

D. Planned Changes

To address concerns regarding whole effluent toxicity in its discharge, the City is planning to initiate and complete significant plant upgrades during the anticipated term of this Order. The Discharger believes that conditions of whole effluent toxicity in its discharge are attributable primarily to ammonia, and is therefore considering an activated sludge process to replace the current trickling filters. Biological nutrient removal basins will be used to remove nitrogen from wastewater. Plant upgrades will also address the plant headworks, biogas power generation capability, advanced process controls, as well as an updated laboratory and administrative facilities. The existing polishing ponds will not likely be used as part of the treatment process in the upgraded facility.

The current schedule for the plant upgrades is as follows.

Activity	Estimated Completion Date
Design 90% Complete	November 2010
Finalize Sewer Rate and Connection Fee Increases	February 2011
Complete Final Design, Deliver Bid Set Camera-Ready	January 2011
City Advertise for Bids	March 2011
Bid Opening Date	May 2011
Notice to Proceed with Construction	June 2011
Substantial Completion	July 2013
Complete Construction and Startup	October 2013

The City is also planning to begin producing and distributing recycled water by 2025, so the plant upgrade will include redundant processes as required by California Code of Regulations (CCR) Title 22 recycled water regulations, and stub-outs to facilitate future installation of a filter process and additional chlorine contact chamber necessary to produce Tertiary 2.2 Recycled Water.

Because plant upgrades will not accommodate increased wastewater flows, and because water quality discharged to the Salinas River will improve following completion of the upgrades, this Order has been drafted to address current conditions as well as planned upgrades. In accordance with section VI. C. 6. c of the Order, the Discharger must submit an Engineering Analysis, within 6 months of completing plant upgrades, describing changes in operation and equipment and documenting dry and wet weather treatment (flow) capacities.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order is 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 California Water Code (CWC), commencing with section 13370. It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, CWC division 7, commencing with section 13260.

B. California Environmental Quality Act (CEQA)

Pursuant to CWC § 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plans. The Central Coast Water Board has adopted a *Water Quality Control Plan for the Central Coast Region* (the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the region. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Salinas River between the Nacimiento Reservoir and the Santa Margarita Reservoir are as follows:

Table F-6. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001A 001B 001C	Salinas River	<ul style="list-style-type: none"> • Municipal and domestic water supply (MUN) • Agricultural supply (AGR) • Industrial process supply (PRO) • Ground water recharge (GWR) • Contact (REC-1) and Non-contact (REC-2) water recreation • Wildlife habitat (WILD) • Cold freshwater habitat (COLD) • Warm freshwater habitat (WARM) • Migration of aquatic organisms (MIGR) • Spawning, reproduction, and/or early development (SPWN) • Rare, threatened or endangered species (RARE) • Commercial and sport fishing (COMM).

Requirements of this Order implement the Basin Plan.

- 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 water quality criteria for priority pollutants that are applicable to the receiving water for discharges from the City’s wastewater treatment plant.
- 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* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Central Coast Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control that are applicable to discharges to the Salinas River. Requirements of this Order implement the SIP.
- 4. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes [65 Fed. Reg. 24641 (April 27, 2000) (codified at 40 CFR 131.21)]. Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being

used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

- 5. Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that 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, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that the existing quality of waters 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. As discussed in detail in the Fact Sheet, this Order revises effluent limitations to take into account previously unrecognized water quality influences of natural geothermal water present in the vicinity of the discharge. Changes in effluent limitations of this Order will not result in any changes in the nature and characteristics of the discharge compared to the previous Order and are not expected to result in measurable degradation of the receiving water. The permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
- 6. Anti-Backsliding Requirements.** CWA § 402(o)(2), CWC § 303(d)(4), and NPDES regulations at 40 CFR 122.44 (l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in this Fact Sheet, effluent limitations and other requirements established by this Order satisfy applicable anti-backsliding provisions of the CWA and NPDES regulations.

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

CWA § 303(d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology based limitations on point sources. For all CWC § 303(d) listed water bodies, the Central Coast Water Board must develop and implement TMDLs (total maximum daily loads) that specify waste load allocations (WLAs) for point sources and load allocations for non-point sources.

California's 2010 CWC § 303(d) list of impaired water bodies, which is expected to be approved by the USEPA, identifies the Salinas River in the vicinity of the wastewater treatment plant as being impaired for chloride and sodium. A Total Maximum Daily Load (TMDL) for the Salinas River has not been developed or approved by USEPA. The TMDL development for chloride and sodium is of low priority with expected completion by 2019.

E. Other Plans, Policies and Regulations

- 1. Statewide 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 Discharger is enrolled under the General Permit.

2. **Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, if applicable, the Order requires the Discharger to seek authorization to discharge under and meet the requirements of the State Water Resources 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*. Currently, the Discharger collects all site storm water and processes the stormwater through the treatment and disposal facilities and, consequently, the requirement to seek authorization under Water Quality Order No. 97-03-DWQ does not apply. If future facility modifications cause any stormwater to flow directly to surface waters, then the Order requires the discharger to seek authorization under Water Quality Order No. 97-03-DWQ.

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. NPDES regulations establish two principal bases for effluent limitations. At 40 CFR 122.44 (a) permits are required to include applicable technology-based limitations and standards; and at 40 CFR 122.44 (d) permits are required to include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria (WQC) to protect the beneficial uses of the receiving water. When numeric water quality objectives (WQOs) have not been established, but a discharge has the reasonable potential to cause or contribute to an excursion above a narrative criterion, WQBELs may be established using one or more of three methods described at 40 CFR 122.44 (d): 1) WQBELs may be established using a calculated water quality criterion derived from a proposed State criterion or an explicit State policy or regulation interpreting its narrative criterion; 2) WQBELs may be established on a case-by-case basis using USEPA criteria guidance published under CWA § 304(a); or 3) WQBELs may be established using an indicator parameter for the pollutant of concern.

A. Discharge Prohibitions

1. **Discharge Prohibition III. A** (No discharge at a location or in a manner except as described by the Order). The Order authorizes two points of discharge to surface waters. In addition, limitations and conditions of the Order have been prepared based on specific information provided by the Discharger, including specific wastes described by the Discharger, and information gained by the Regional Water Board through site visits, monitoring reports, and other information. Limitations and

conditions of the Order therefore 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 and discharges at unauthorized locations, the prohibition has been retained from the previous permit. Discharges to surface waters at locations not contemplated by this Order, or discharges of a character not contemplated by this Order are viewed as inconsistent with CWA § 402's prohibition against discharges of pollutants except in compliance with the Act's permit requirements, effluent limitations, and other enumerated provisions.

2. **Discharge Prohibition III. B** (Creation of a condition of pollution, contamination, or nuisance, as defined by CWC § 13050, is prohibited). This prohibition is retained from the previous permit.
3. **Discharge Prohibition III. C** (The discharge of radioactive substances is prohibited). This prohibition is retained from the previous permit.
4. **Discharge Prohibition III. 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 Provision I. G (Bypass), is 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** (Adverse effects of the discharge to beneficial uses of receiving waters or to threatened or endangered species is prohibited.) The discharge shall not adversely affect the designated beneficial uses of the Salinas River or threatened or endangered species. This prohibition is retained from the previous permit.
6. **Discharge Prohibition III. F** (Dry weather daily flows, averaged monthly, shall not exceed 4.9 MGD and peak wet weather flow shall not exceed 10.0 MGD.) This prohibition is retained from the previous permit, where it was expressed as an effluent limitation. The purpose of the prohibition is to assure that influent flows do not exceed the treatment plant's design capacities, and thereby, to assure efficient treatment of wastewater.

B. Technology-Based Effluent Limitations

1. Scope and Authority

NPDES regulations at 40 CFR 122.44 (a) require that permits include applicable technology-based limitations and standards. Where the USEPA has not yet developed technology based standards for a particular industry or a particular pollutant, CWA § 402 (a)(1) and USEPA regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent

limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 CFR 125.3.

At 40 CFR 133 in the Secondary Treatment Regulations, USEPA has established the following minimum required level of effluent quality attainable by secondary treatment.

Table F-7. Secondary Treatment Requirements

Parameter	30-Day Average	7-Day Average
BOD ^[1]	30 mg/L	45 mg/L
TSS ^[1]	30 mg/L	45 mg/L
pH	6.0 – 9.0 s.u.	

^[1] The 30-day average percent removal 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.

Table F-8. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations, Discharge Point 001		
		Average Monthly	Average Weekly	Maximum Daily
BOD ₅ ^[1]	mg/L	25	35	
TSS ^[1]	mg/L	30	45	
Settleable Solids	ml/L	0.1	0.3	
Oil and Grease	mg/L	10	18	
pH	s.u.	6.5 – 8.3		

^[1] The average monthly percent removal of BOD₅ and TSS, as measured at Monitoring Location EFF-001B or EFF-001C, shall not be less than 85 percent.

Average monthly and average weekly technology based effluent limitations for TSS are retained from the previous permit, reflecting requirements of the Secondary Treatment Regulations. Although the Secondary Treatment Regulations at 40 CFR 133 require average monthly and weekly BOD₅ imitations of 30 and 45 mg/L, respectively, the more stringent average monthly and weekly limitations of 25 and 35 mg/L are retained from the previous permit, as the treatment facility has consistently achieved this level of performance. The limitations for pH are retained from the previous permit. Average monthly and average weekly limitations for settleable solids and oil and grease reflect pollutant removals attainable by secondary treatment and they are also retained from the previous permit.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

NPDES regulations at 40 CFR 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.

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 water quality objectives and criteria that are contained in the Basin Plan and in other applicable State and federal rules, plans, and policies, including applicable water quality criteria from the CTR and the NTR.

Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established in accordance with the requirements of 40 CFR 122.44 (d) (1) (vi), using (1) USEPA criteria guidance under CWA § 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.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses described by the Basin Plan for the Salinas River are presented in section II. H of the Order. 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 CFR 122.44 (d) require effluent limitations to control all pollutants which are or may be discharged at a level which 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.

The SIP Section 1.3 requires the Regional Board to use all available valid, relevant, and representative receiving water and effluent data and information to conduct a reasonable potential analysis. On May 21, 2008, the Discharger collected a single set of effluent data for the toxic pollutants with applicable water quality criteria established by the CTR, NTR, and Basin Plan. Since July 2004, the Discharger has collected at least 20 samples for each toxic pollutant with demonstrated reasonable potential.

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. Central Coast Water Board staff used hardness data collected by the Central Coast Ambient Monitoring Program. A geometric mean of 310 mg/L was calculated using hardness data collected at the Salinas River at 13th Street and Salinas River at Highway 41 sampling stations from 1999 to 2006.

To conduct the reasonable potential analysis, the Central Coast 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 these 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.

Trigger 1. If the MEC is greater than C, there is reasonable potential, and an effluent limitation is required.

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.

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.

Based on analysis of effluent data, the Central Coast Water Board, using methods presented in the SIP, finds that the discharge shows reasonable potential to cause or contribute to in-stream excursions above applicable water quality criteria for copper, selenium, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate.

The following table summarizes the RPA for each priority toxic pollutant that was detected in effluent during monitoring events from July 2004 to April 2009. No other pollutants with applicable numeric water quality criteria from the NTR, CTR, and the Basin Plan were measured above detectable concentrations during that monitoring event.

Table F-9. RPA Results

Pollutant	C	MEC	B	RPA Result
Arsenic	50 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	3 µg/L	No Data Available	No
Cadmium	5 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	0.7 µg/L		No
Chromium (VI)	11 µg/L, freshwater aquatic life chronic criterion from the CTR	0.1 µg/L		No
Copper	25 µg/L, freshwater aquatic life chronic criterion from the CTR	37 µg/L		Yes
Lead	13 µg/L, freshwater aquatic life chronic criterion from the CTR	0.5 µg/L		No
Mercury	0.05 µg/L, human health criterion for the consumption of water & organisms from the CTR	0.03 µg/L		No
Nickel	100 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	4 µg/L		No
Selenium	5 µg/L, freshwater aquatic life chronic criterion from the CTR	16 µg/L		Yes
Zinc	200 µg/L, freshwater aquatic life criterion from the Basin Plan	50 µg/L		No
Chlorodibromomethane	0.401 µg/L, human health criterion for the consumption of water & organisms from the CTR	0.6 µg/L		Yes
Chloroform	No Criteria	5.2 µg/L		No
Dichlorobromomethane	0.56 µg/L, human health criterion for the consumption of water & organisms from the CTR	3.4 µg/L		Yes
Bis(2-Ethylhexyl) Phthalate	1.8 µg/L, human health criterion for the consumption of water & organisms from the CTR	15 µg/L		Yes
Aluminum	1000 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	70 µg/L		No
Barium	1000 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	33.3 µg/L		No
Nitrate (as NO ₃)	45000 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	23100 µg/L		No
Nitrate+Nitrate (sum as nitrogen)	10000 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	4800 µg/L	No	

4. WQBEL Calculations

Final WQBELs for copper, selenium, chlorodibromomethane, dichlorobromomethane, and bis(2-Ethylhexyl)phthalate 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.

$ECA = C + D (C - B)$, where

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

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 aquatic life criterion/objective (copper and selenium), 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. Based on the 20 samples collected between July 2004 and April 2009, the CV for copper is 0.5 and the CV for selenium is 0.7. Derivation of the multipliers is presented in Section 1.4 of the SIP.

Multipliers for calculating LTAs at the 99th percentile occurrence probability and the resulting LTAs are as follows.

Table F-10. Calculation of Water Quality Based Effluent Limitations

Pollutant	ECA		ECA Multiplier		LTA (µg/L)	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Copper	42	25	0.373	0.581	15.6	14.5
Selenium	---	5.0	0.281	0.481	---	2.4

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 CV is 0.5 for copper and 0.7 for selenium, and 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. The MDEL and AMEL multipliers (from Table 2 of the SIP) and the final WQBELs for copper and selenium are calculated as follows.

Table F-11. Calculation of Water Quality Based Effluent Limitations

Pollutant	LTA	MDEL Multiplier	AMEL Multiplier	MDEL (µg/L)	AMEL (µg/L)
Copper	14.5	2.68	1.45	39	21
selenium	2.4	3.56	1.65	8.6	4.0

Step 4: When the most stringent water quality criterion/objective is a human health criterion/objective (chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate, 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 bis(2-ethylhexyl)phthalate are determined as follows.

Table F-12. Calculation of Water Quality Based Effluent Limitations

Pollutant	ECA	CV	MDEL/AMEL Multiplier	MDEL (µg/L)	AMEL (µg/L)
Chlorodibromomethane	0.401	0.6	2.01 (3.11/1.55)	0.80	0.40
Dichlorobromomethane	0.56	1.5	2.89 (6.93/2.4)	1.6	0.56
Bis(2-ethylhexyl)phthalate	1.8	1.7	3.01 (7.95/2.64)	5.4	1.8

The previous permit (Order No. R3-2004-0031, adopted on May 14, 2004) established interim effluent limitations for copper, selenium, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate with final effluent limitations to become effective on May 14, 2009. In accordance with the SIP, a schedule for compliance with final effluent limitations for these pollutants cannot extend more than five years beyond May 14, 2004, and therefore, this Order establishes final effluent limitations which shall become immediately effective upon adoption of this Order.

Table F-13. Summary of Water Quality-Based Effluent Limitations

Constituent	Units	Effluent Limits		
		Average Monthly	Average Weekly	Maximum Daily
pH	s.u.	6.5 – 8.3 at all times		
Dissolved Oxygen	mg/L	---	---	2.0 minimum
TDS	mg/L	1115	---	
Sodium	mg/L	255	---	
Chloride	mg/L	355	---	
Sulfate	mg/L	200	---	
Chlorine	mg/L	Total residual chlorine shall be undetectable at any time as determined by amperometric titration or another equally sensitive method		
Total Coliform Bacteria	MPN / 100 mLs	The median most probable number (MPN) of total coliform organisms in effluent shall not exceed 23 MPN/100 mL, based on the results of the last seven days for which samples have been collected. The MPN of total coliform organisms shall not exceed 2300 MPN/100 mL in any single sample		
Copper	µg/L	21	---	39
Selenium	µg/L	4.0	---	8.6
Chlorodibromomethane	µg/L	0.40	---	0.80
Dichlorobromomethane	µg/L	0.56	---	1.6
Bis(2-Ethylhexyl)Phthalate	µg/L	1.8	---	5.4

5. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the 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 toxicity 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 specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that 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 permit did not include numeric effluent limitations for whole effluent toxicity, but it required monitoring for whole effluent acute and chronic toxicity, including accelerated monitoring when acute toxicity was detected or chronic toxicity was measured above 1 TUc. Results of this monitoring is presented in the following table and show that, from 2004 through 2008, acute and chronic toxicity levels commonly exceeded the 1.0 TUa and 1.0 TUc, levels which the Central Coast Water Board view as protective of the narrative water quality objective for toxicity established by the Basin Plan.

Table F-14. Whole Effluent Toxicity Test Results

Sampling Event	Unit	Acute Toxicity	Chronic Toxicity
3rd Quarter of 2004	TUa and TUc	0	1
4th Quarter of 2004	TUa and TUc	0	1
1st Quarter of 2005	TUa and TUc	0.41	1
2nd Quarter of 2005	TUa and TUc	>1.0	>1.0
3rd Quarter of 2005	TUa and TUc	>1.0	>1.0
4th Quarter of 2005	TUa and TUc	0.41	>1.0
1st Quarter of 2006	TUa and TUc	>1.0	>1.0
2nd Quarter of 2006	TUa and TUc	>1.0	>1.0
3rd Quarter of 2006	TUa and TUc	>1.0	>1.0
4th Quarter of 2006	TUa and TUc	0.2	>1.0
1st Quarter of 2007	TUa and TUc	>1.0	>1.0
2nd Quarter of 2007	TUa and TUc	>1.0	>1.0
3rd Quarter of 2007	TUa and TUc	>1.0	>1.0
4th Quarter of 2007	TUa and TUc	>1.0	>1.0
1st Quarter of 2008	TUa and TUc	>1.0	>1.0
2nd Quarter of 2008	TUa and TUc	>1.0	>1.0
3rd Quarter of 2008	TUa and TUc	>1.0	>1.0
4th Quarter of 2008	TUa and TUc	>1.0	>1.0

Based on results of WET monitoring during the previous permit term, the Central Coast Water Board has determined that the discharge from the City’s wastewater treatment plant has the reasonable potential to cause or contribute to exceedances of the Basin Plan’s narrative water quality objective for toxicity, and in accordance with NPDES regulations at 40 CFR 122.44 (d), this Order is establishing effluent limitations for whole effluent acute toxicity of pass/fail and whole effluent chronic toxicity of 1.0 TUc.

- 6. **Chlorine.** Water quality based effluent limitations are established for chlorine at the minimum levels of detection and are based on the following water quality criteria recommended by the USEPA in *Quality Criteria for Water 1986* (the Gold Book, EPA 440/5-86-001).

Table F-15. USEPA Recommended Water Quality Criteria for Chlorine

Pollutant	Recommended Water Quality Criteria	
	Chronic	Acute
Chlorine	0.011 µg/L	0.019 µg/L

- 7. **Bacteria and Dissolved Oxygen.** Effluent limitations for bacteria and dissolved oxygen are retained from the previous permit and reflect applicable water quality criteria for the Salinas River.
- 8. **TDS, Sodium, Chloride, Sulfate.** The Discharger has a history of effluent salt violations dating back to the early 1970s, particularly for total dissolved solids (TDS), sodium (Na) and chloride (Cl). Since it is the Central Coast Water Board’s duty to establish appropriate effluent limits for salinity or salt parameters/constituents pursuant to the Basin Plan, violations should not occur over such a long time period. To this day, violations continue despite the best efforts of the Discharger and the Central Coast Water Board. Review of the violations shows that historic effluent limitations for salts were not sufficiently based on site-specific conditions and that basing salt limits on site-specific conditions will provide for more appropriate and reasonable salt regulation. The remainder of this discussion details staff’s analysis in support of revised effluent limitations for salts.

Basin Plan Water Quality Objectives

The Basin Plan contains specific, numeric surface water quality objectives within Table 3-7 presented as median numbers for the Salinas River above Bradley (an approximately 50 mile stretch of the river starting at its headwaters). According to the Basin Plan, “these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin.” Chapter 3, section II.A.3 of the Basin Plan also says,

“It must be recognized that the median values indicated in Table 3-7 are values representing gross areas of a water body. Specific water quality objectives for a particular area may not be directly related to the objectives indicated. Therefore,

application of these objectives must be based upon consideration of the surface and ground water quality naturally present...”

The language preceding Table 3-7 as noted above also indicates, “the issuance of requirements must be tempered by consideration of beneficial uses within the immediate influence of the discharge.”

Basin Plan Chapter 3, Section II (Water Quality Objectives) also contains language regarding the application of water quality objectives based on controllable water quality conditions (i.e. those that may be reasonably controlled by a discharger). As with the language preceding Table 3-7, the application of this language is tempered by the protection of beneficial uses.

The Basin Plan also sets forth numeric water quality objectives for the Paso Robles subbasin of Paso Robles Groundwater Basin within Table 3-8. The objectives contained within Table 3-8 are also qualified by the same Basin Plan language as noted above for the Table 3-7 surface water quality objectives.

It should be noted that using the Basin Plan’s median numbers as effluent limits, without considering natural variation, violates statistical theory. A “median” number is a measure of central tendency. By definition, half of the dataset that generated the median will exceed the median. If the median number is considered a maximum number, then half the baseline data exceeds that number and would be in violation of that number. Clearly, using median numbers as maximum numbers is not a scientifically valid means of maintaining baseline water quality. To be valid and defensible, effluent limits must reflect unimpaired water quality naturally present.

The record suggests that the Central Coast Water Board realized the futility of using the Basin Plan Table 3-7 surface water quality objectives as effluent limits within previous permits and did the next best thing by imposing “tight” limits based on the supply water quality plus a small increment. This is a common convention within existing waste discharge requirements in the Central Coast Region. Nonetheless, the Discharger frequently exceeds the existing “tight” limits. When the City exceeds the limits, it is subject to a mandatory minimum penalty of \$3,000 for each serious and chronic violation. The Discharger is currently liable for approximately \$60,000 in outstanding mandatory minimum penalties for TDS, Na and Cl effluent limit violations since October 2009 (Expedited Payment Program No. R3-2011-0013).

Sources and Control of Salt Loading

Salts originate from both natural and unnatural sources. Natural salts leach from minerals within the local aquifer into the City’s groundwater supply. The City’s water supply consists of blended water from nine wells that tap the Paso Robles Groundwater Basin and five wells that draw from the Salinas River underflow. The City does not currently obtain supply water from a surface source, but use of Nacimiento water is pending. Salt concentrations vary with the supply well location and depth. Since 1980, groundwater elevations have dropped in the area of the City’s wells, forcing them to draw from saltier portions of the aquifer. As a result, the

City’s existing municipal water [groundwater] supply is of significantly poorer water quality with respect to the numeric objectives contained within Table 3-7. The following figure compares water supply, wastewater influent and effluent quality with the Table 3-7 water quality objectives.

Figure F-1. Comparison of Average (1992 to 2008) Water Supply, Wastewater Influent and Wastewater Effluent Concentrations for Paso Robles with Table 3-7 Numeric Water Quality Objectives

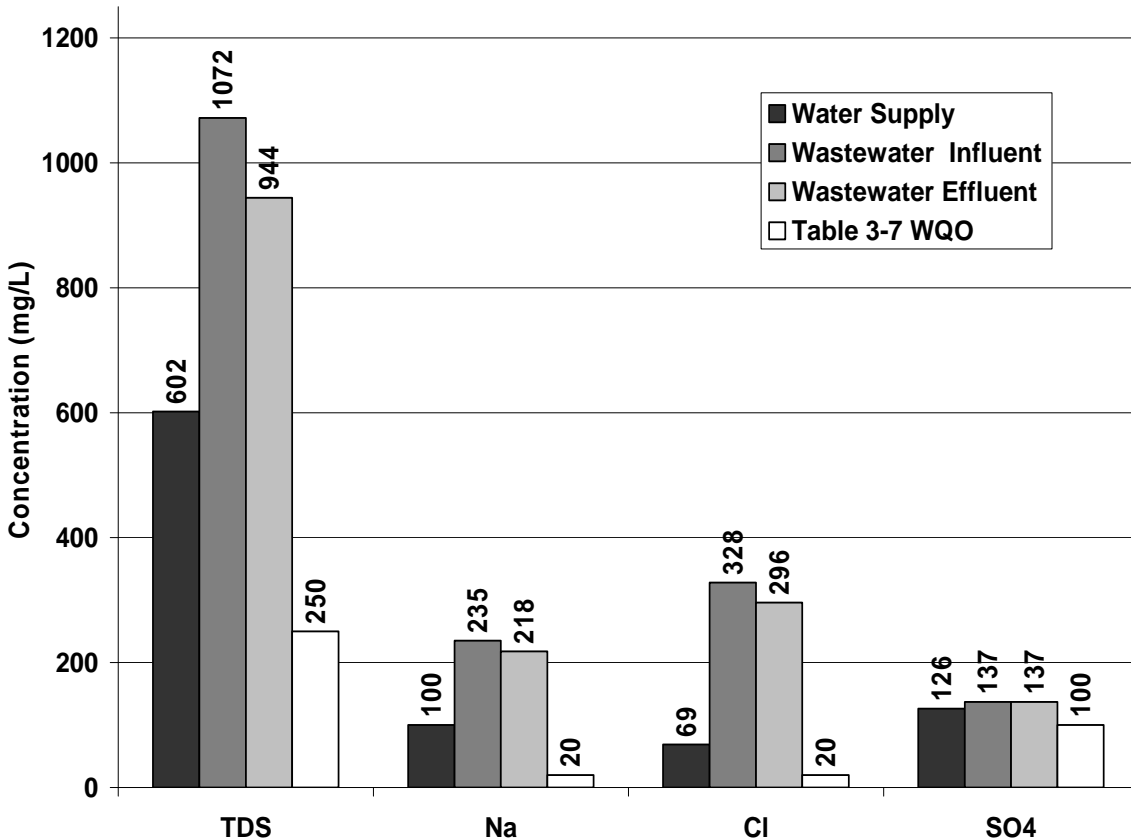


Figure F-1 shows that average water supply concentrations of TDS, Na and Cl are roughly 2.4, 5 and 3.5 times the Table 3-7 water quality objective, respectively. In addition, an average water supply hardness of 17.2 grains per gallon or 294 mg/L CaCO₃ (hardness above 181 mg/L is considered very hard) governs the widespread use of water softeners that results in approximately 78, 135 and 375 percent increases in TDS, Na and Cl concentrations, respectively, from the water supply to the wastewater facility influent. “Hard” water is typically considered a nuisance, and water softeners are used to reduce scaling and improve taste. Self-regenerating water softeners typically add significant amounts of both Na and Cl that in turn also increase TDS concentrations. In addition, other activities, such as sanitary waste disposal and industrial processes, also add salts to the waste stream. The Domestic use of self-regenerating water softeners has been shown to be the largest source of salt loading to the wastewater facility.

The City only has limited control over the sources of salt loading to its wastewater treatment facility. To meet existing effluent limits, salts must be removed from the supply water and/or wastewater (source control versus end of pipe wastewater treatment). On a community-wide basis, the removal of salts from a wastewater stream is generally not cost effective unless it is being implemented for the purposes of water recycling. Regardless of whether water recycling is at play, the most cost effective method for reducing salt loading is source control. As such, all available source control strategies should be evaluated and implemented as feasible prior to applying treatment technologies such as reverse osmosis (RO) to remove salts. In the City's case, salt loading is primarily attributable to the existing groundwater supply and contributions from industrial, commercial and residential sources, primarily due to water softeners, within the collection system. As such, controlling those sources to the maximum extent practicable is the most reasonable and potentially effective strategy.

To address the salt loading issue the City has implemented three reasonable controls and is poised to implement a fourth following the adoption of the proposed permit. The City is implementing a source control program with dedicated staff to reduce salt and other constituent loading from commercial and industrial sources, has conducted outreach regarding the use of self-regenerating water softeners, has procured a better quality (contains approximately one third of the hardness within the City's existing water supply) source of surface water supply from Nacimiento Lake (at a cost of approximately \$80 million that does not include the requisite and pending surface water treatment facility), and is the project lead for the development of a regional salt and nutrient management plan. In addition, the proposed permit contains findings that will allow the City to implement a pending sewer use ordinance restricting the use of self-regenerating water softeners (pursuant to AB 1366 and CWC Section 13148). The City has already developed the ordinance and is awaiting approval of the proposed permit before it can legally implement it. Significant improvements/reductions in effluent salinity are anticipated with the scheduled startup of the City's surface water treatment facility in 2015 and the implementation of the sewer use ordinance.

It should be noted that RO treatment would not be likely to achieve the numeric limits contained within Table 3-7. The Carmel Area Wastewater District (CAWD) recently commissioned a \$22 million, 1.8 MGD microfiltration and RO tertiary treatment facility (water recycling) specifically designed to reduce salinity constituents. The new facility cannot meet the numeric objectives for TDS, Na and Cl contained within Table 3-7 for the Salinas River above Bradley. These costs do not include significant ongoing operation and maintenance costs and more importantly do not include RO brine reject handling and disposal costs given the CAWD facility has the ability to discharge RO reject via its existing ocean outfall. The City's facility is well inland of the coast and does not have any reasonable means of disposing of RO reject brine. Therefore, RO or other tertiary treatment technologies would not be cost effective or appropriate given they would be unlikely to meet the Table 3-7 numeric objectives and would generate a potentially toxic

brine waste stream for which there are limited disposal alternatives. In addition to the brine generation and disposal issues, RO treatment is very energy intensive and would be likely to contribute significantly to the facilities carbon footprint. According to AB 32, the climate change law, state agencies are to consider this factor in its decision making.

Consequently, the City is implementing reasonable control measures to reduce salt loading to the Salinas River and Paso Robles Groundwater basin. These measures are anticipated to result in significant reductions in salt loading over time.

Site Specific Water Quality, Hydrogeology and Geochemistry Conditions

The Central Coast Water Board’s Central Coast Ambient Monitoring Program (CCAMP) samples the upper Salinas River in four locations above Bradley. Figure F-2 compares the CCAMP upstream to downstream mean (average) concentration data for TDS, Na and Cl with the Basin Plan Table 3-7 numeric water quality objectives (CCAMP data does not include sulfate). This figure also notes the relative location of the City’s discharge, confluence of the Nacimiento and Salinas Rivers, and Bradley with respect to the CCAMP monitoring stations.

Figure F-2. Salinas River Salinity Parameter Data (CCAMP) vs. Basin Plan Table 3-7 Water Quality Objectives for Salinas River above Bradley

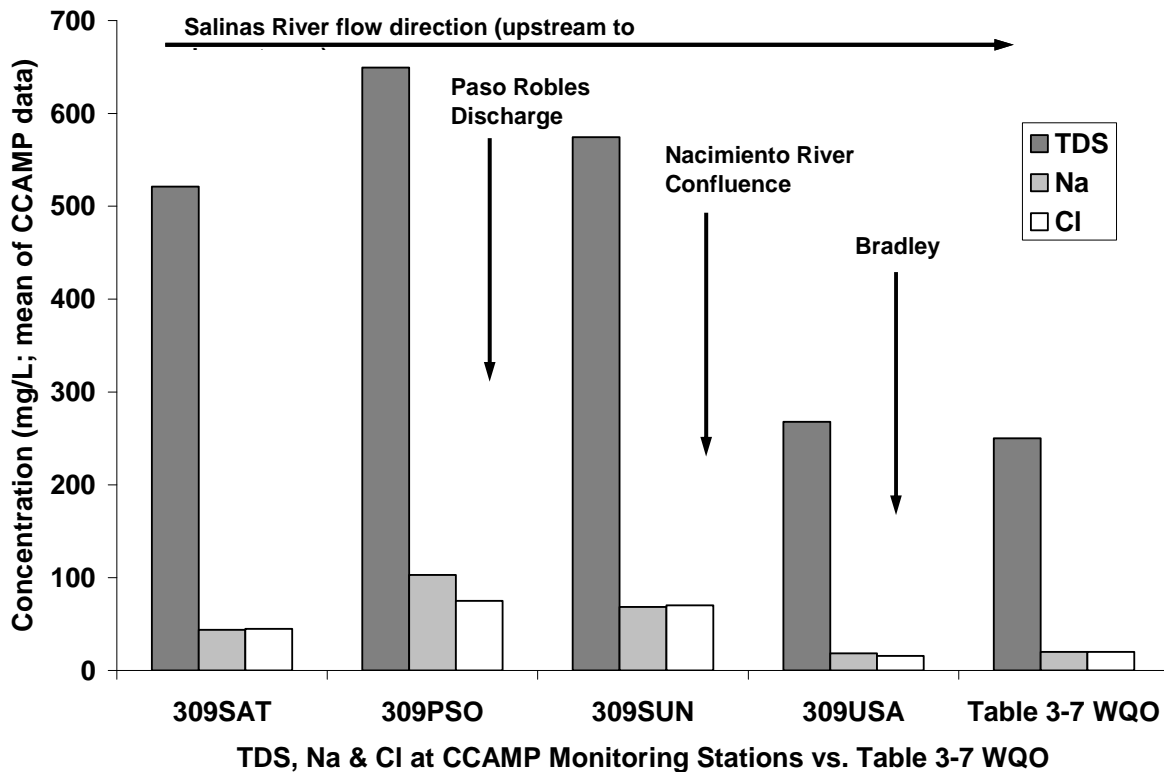


Figure F-2. Notes:

Physical description of CCAMP monitoring station locations

309SAT: Salinas River at HWY 41 bridge

309PSO: Salinas River at 13th Street in Paso Robles

309SUN: Salinas River upstream of Nacimiento at Bradley Road

309USA: Salinas River upstream of San Ardo at Bradley bridge

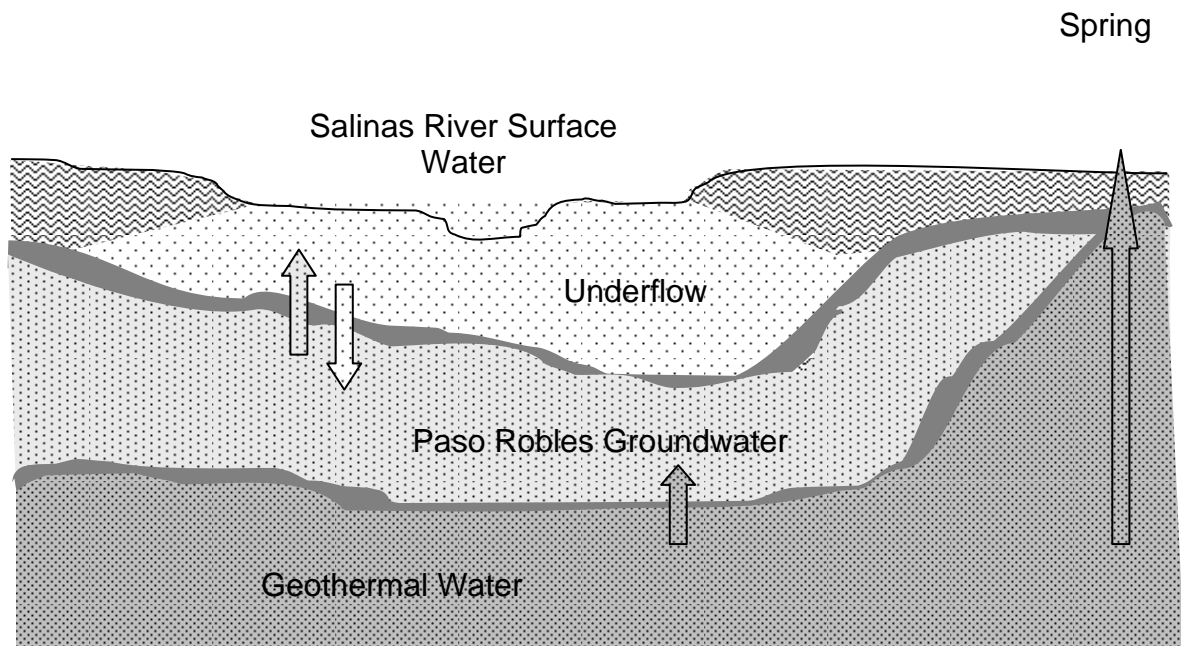
The CCAMP data presented in Figure F-2 clearly show an increase in TDS, Na, and Cl concentrations upstream of the discharge point (roughly double the Table 3-7 water quality objectives) and a decrease in concentrations between the upstream and downstream CCAMP monitoring stations relative to the discharge point. Additional decreases in TDS, Na and Cl concentrations are observed downstream of the Nacimiento River and the mean concentrations within the Salinas River just upstream of Bradley approximate the Basin Plan Table 3-7 water quality objectives. Although the discharge may be causing slight increases in TDS, Na and Cl concentrations within the immediate vicinity of the discharge as noted within the model used to develop the proposed effluent limitations (see discussion below), CCAMP data indicate Salinas River water quality improves downstream of the discharge point for these three parameters. In effect, the CCAMP data indicates the discharge is not causing or contributing to increases in salinity parameters or excursions of the Table 3-7 Water Quality Objectives in downstream portions of the Salinas River.

Evaluation of these data indicate surface water quality objectives contained within Table 3-7 are representative of water quality conditions at the head waters of the Salinas River just downstream of Santa Margarita Reservoir and the Salinas River downstream of its confluence with the Nacimiento River, but not that of segments of the river/watershed in the vicinity of Paso Robles that are subject to geothermal influences as discussed below.

Upstream and downstream water quality within the Salinas River differs significantly from the Basin Plan's water quality objectives due to the presence of a low-temperature geothermal zone underlying the Paso Robles Groundwater Basin, which underlies the Salinas River, as shown in Figure F-3.

The structure of the Salinas River/Paso Robles Groundwater Basin/Geothermal zone is conceptualized in Figure F-4. In this conceptual model, waters mix because of “leaky” aquitards and higher-pressure geothermal water finds its way into the Paso Robles Groundwater Basin, alluvium of the Salinas River and also to the ground surface, where it expresses as springs. There are a number of documented geothermal springs and wells in the immediately vicinity of the City’s wastewater treatment facility located at 3200 Sulphur Springs Road.

Figure F-4. Hydrogeologic (Cross-section) Conceptual Model of the Salinas River and Paso Robles Groundwater Basin

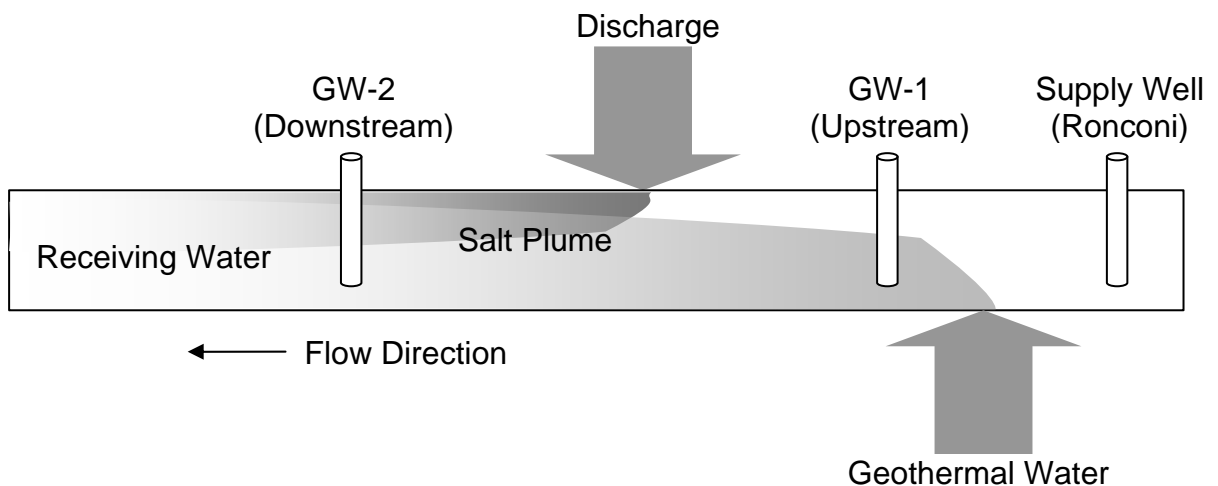


The geothermal water chemistry differs from the groundwater and the surface water chemistry. In the vicinity of Paso Robles, the geothermal water influences the quality of the groundwater and surface water. That natural condition makes the Salinas River water quality near Paso Robles different from the Basin Plan’s greater Upper Salinas River water quality objectives as the CCAMP data show in Figure F-2. Instead of relying on the Basin Plan Table 3-7 numeric water quality objectives for the Upper Salinas River, which are values representing gross areas of a 50-mile long river segment, discharge limits for the City should be, according to the Basin Plan, related to water quality naturally present in the vicinity of the discharge while also protecting beneficial uses within the immediate influence of the discharge.

In the simplest model, a high-salt discharge will increase downstream salt concentrations. Available water quality data and hydrogeologic information suggest the Paso Robles discharge case is more complicated given the intrusion of geothermal waters appears to affect comparisons of upgradient and downgradient groundwater quality. Evaluation of water quality data for the City’s upgradient and

downgradient groundwater (alluvium) monitoring wells and upstream Ronconi water supply wells indicate the Rinconi wells are of significantly better quality with respect to salts and that concentrations of TDS, Na, and Cl within the City’s upgradient groundwater monitoring well (GW-1) are greater than or equal to concentrations within the downgradient monitoring well (GW-2) in approximately 43, 71 and 53 percent, respectively, of the samples collected (54 to 60 samples collected between 1994 and 2008). Figure F-5 is a conceptual model of a transect along the Salinas River passing through the Discharger’s wells and point of discharge that provides a visual interpretation of what is likely occurring in the vicinity of the City’s discharge.

Figure F-5. Hydrogeologic (Transect) Conceptual Model of the Salinas River and Paso Robles Groundwater Basin



An evaluation of the groundwater monitoring well data and conceptual model indicate changes in downstream salt concentrations are likely governed by interactions between the discharge, geothermal water and river flow conditions. In addition, groundwater monitoring data suggest geothermal sources are likely a significant contributing factor given upstream groundwater concentrations frequently exceed downgradient concentrations.

In 1993, the Water Board commissioned a report titled, *A STUDY OF THE PASO ROBLES GROUND WATER BASIN TO ESTABLISH BEST MANAGEMENT PRACTICES AND ESTABLISH SALT OBJECTIVES*. This report concluded,

“There appear to be at least three distinct types of water in the Basin, based on analysis of well chemistry through Piper Plots. Naturally salty waters are common, and many waters show evidence of blends between at least two of the water types.

...It does not appear that a single discharge standard can be applied throughout the Basin, due to the variability of natural waters.”

Data suggest that the City discharges to an area that naturally exhibits relatively high salts compared to other areas of the Salinas River and its underflow. Therefore, the Discharger should not be held to effluent limits that are uncharacteristic of the receiving water. However, the Discharger should not be allowed to exacerbate the local condition of high salts by adding additional salts to the system without implementing reasonable measures to control/reduce loading.

Water supplies near Paso Robles already exhibit nuisance quality; otherwise water softening would not be so rampant. The abovementioned report says:

“An estimate of salt loading of TDS and Sodium due to home water softeners from each household has been made. Comparing the salt loading calculations it is clear that home water softeners contribute significantly to the amount of salt that must be either passed through, or processed by, the wastewater treatment plant. Due to the impact of home softeners on the ion loadings, emphasis is laid on developing alternative treatment methods to minimize the ion concentrations in the effluent wastewater from the treatment plant and to simultaneously reduce the hardness of water.”

Although the Discharger is not currently pursuing alternative treatment methods, such as RO, to reduce effluent loading, the Discharger is pursuing a multi-pronged source control approach to reduce salts as noted above.

Proposed Salt Limits

Typically, waste discharge requirements incorporate the Basin Plan’s specific, numeric water quality objectives as effluent limits. Although convention generally sets effluent limits at the Basin Plan’s water quality objectives, the existing Paso Robles WWTP NPDES Permit does not use the Table 3-7 Basin Plan numeric water quality objectives for the Salinas River (above Bradley) as effluent limits. Instead, the existing and proposed effluent limits more closely match the Basin Plan numeric water quality objectives for the Paso Robles [Groundwater] subbasin (Table 3-8) which are higher than the applicable surface water quality objectives. With minimal context, it may be inadequately protective to use groundwater objectives for protection of surface waters. However, available water quality data, as discussed herein, indicate the Discharger’s loading of TDS, Na, and Cl are primarily governed by groundwater supply quality and that surface water quality conditions in the vicinity of the discharge more closely approximate the applicable Basin Plan water quality objectives for groundwater. In addition, during most of the year when the Salinas River is dry, the discharge percolates into the dry river channel and essentially becomes groundwater or underflow within the river alluvium. During the wet season when the river is flowing, the discharge is subject to considerable dilution and salt loading is essentially imperceptible downstream of the discharge.

The following figure compares the existing and proposed effluent limitations for TDS, Na, Cl, and sulfate (SO₄) with the Basin Plan water quality objectives contained within Tables 3-7 and 3-8.

Figure F-6. Comparison of Basin Plan Water Quality Objectives with Existing and Proposed Effluent Limitations

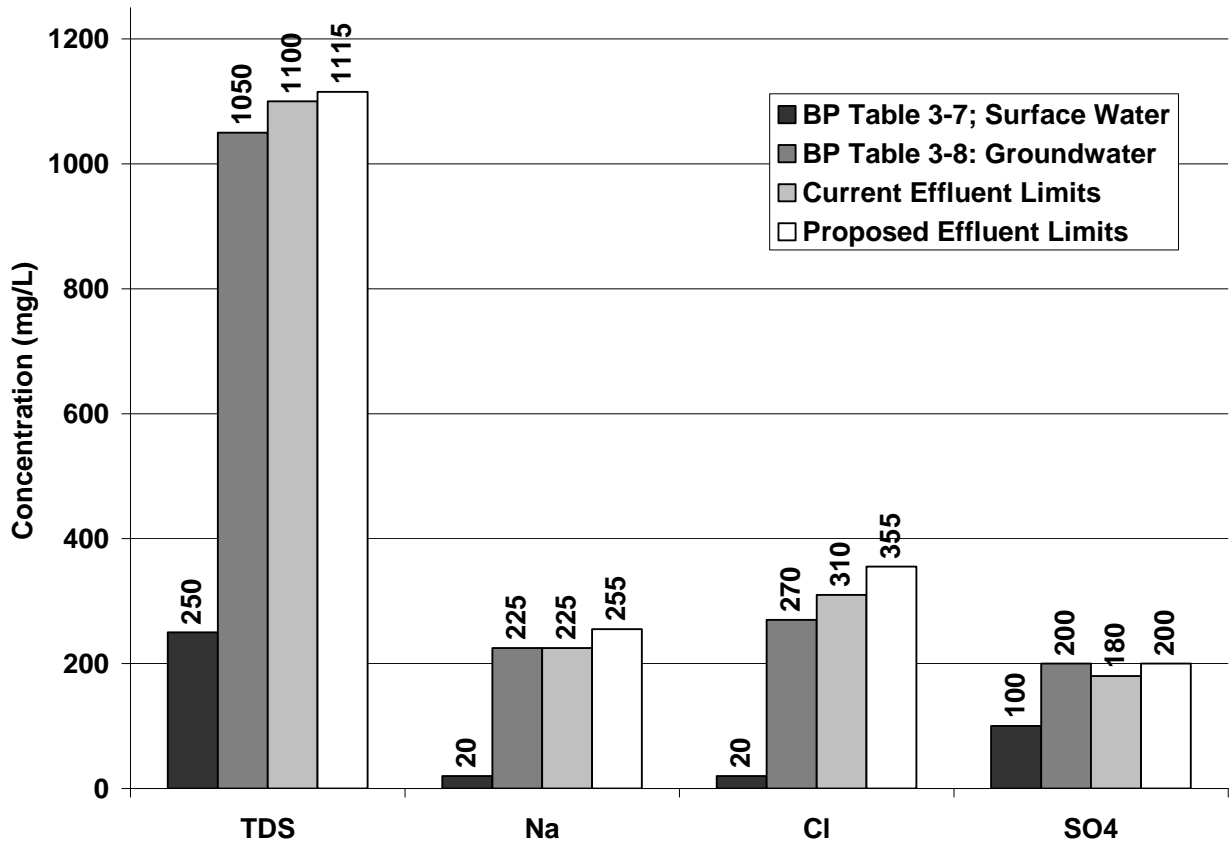


Figure F-6 shows that the existing and proposed effluent limitations are more consistent with the Basin Plan objectives for groundwater than for surface water. As discussed above, allowances were made in the previous permit regarding the Discharger’s relatively poor groundwater supply quality. The proposed limits are based on a more robust review and analysis of site specific water quality conditions as allowable pursuant to the Basin Plan language preceding Table 3-7.

The proposed effluent limitations were developed within the following report prepared for the City of Paso Robles in response to a Central Coast Water Board staff request for a site specific study:

Fugro West, Incorporated, June 2009 Final Report, *“Groundwater Flow and Solute Transport Modeling in Support of the City of Paso Robles’ Proposed Revisions to Waste Discharge Requirements Related to the Wastewater Treatment Plant”*

This report was intended to describe local water quality conditions in the vicinity of the discharge and to model the potential impact of the discharge on the receiving

water. The report makes a convincing case for a slight upward change in effluent limits for salts by taking into account localized geothermal zone water intruding into the freshwater aquifer, and the corresponding local, natural elevated salt zone into which the City discharges. The modeling suggests that City’s discharge does not significantly alter local, natural water quality. Based on the model results, the City recommended the following:

The water quality objectives for TDS, sulfates, sodium and chloride in the Central Coast Basin Plan are median values based on data averages. Salt loading to the Salinas River does not change significantly on a daily basis. As such, the effluent limitations in the revised WDR for the City of Paso Robles WWTP for these constituents should be based on a long-term average, not a daily maximum. Compliance determination for TDS, sodium, chloride, and sulfate should be based on a monthly average, or an annual running average like the City of San Luis Obispo NPDES permit. Use of daily maximum effluent limits for the City’s continuous’ discharge would be inconsistent with 40 CFR Part 122.45(d).

The Central Coast Water Board concurs with the City’s contention that effluent salt concentrations do not change significantly on a daily basis. The City is also correct that the use of daily maximum effluent limits for the City’s continuous discharge would be inconsistent with 40 CFR Part 122.45(d), which promulgates NPDES permit conditions as follows:

“Continuous discharges. For continuous discharges all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as:

- (1) Maximum daily and average monthly discharge limitations for all dischargers other than publicly owned treatment works; and
- (2) Average weekly and average monthly discharge limitations for POTWs.”

The June 2009 Fugro report represents an improved understanding of the water quality dynamics in the vicinity of the City’s Discharge. Based on the improved understanding, it is appropriate to change the effluent salt limits to reflect that understanding and to come into conformance with CFR Part 122.45(d). The permit renewal incorporates the City’s recommended salt effluent limitations, which are tabulated below with the previous/current permit limits.

Table F-16. Comparison of Existing and Proposed Salinity Limits

Parameter (mg/L)	Current Limits (DailyMaximum)	Proposed Limits (Monthly Average)
TDS	1,100	1,115
Sodium	225	255
Chloride	310	355
Sulfate	180	200

Evaluation of Applicable Water Quality Criteria & Beneficial Uses

There are limited beneficial use based numeric water quality criteria for the salinity constituent TDS, Na, Cl, and Sulfate. The secondary MCLs that are applicable to the designated municipal and domestic supply (MUN) beneficial uses of the receiving surface water and groundwater are summarized as follows:

Table F-17. Secondary Maximum Contaminant Levels (MCL)

Parameter (mg/L)	Recommended	Upper	Short-Term
TDS	500	1,000	1,500
Chloride	250	500	600
Sulfate	250	500	600

Note: secondary MCLs (drinking water standards) are based on taste and odor (i.e. they are not a health based standard)

Table 3-3 of the Basin Plan contains “Guidelines for Interpretation of Quality of Water for Irrigation” that are applicable to the agricultural supply (AGR) beneficial use. Guidelines for specific salinity constituents contained within Table 3-3 that are consistent with the constituents (and units) contained within in Tables 3-7 and 3-8 are excerpted below for reference.

Table F-18. Water Quality Guidelines for Irrigation*

Parameter (mg/L)	No Problem	Increasing Problem	Severe
Salinity (TDS)**	< 480	480 – 1,920	> 1,920
Specific ion toxicity from root absorption			
Chloride	< 142	142 - 355	> 355
Specific ion toxicity from foliar absorption			
Chloride	< 106	> 106	----
Sodium	< 69	> 69	----

Notes:

* Guidelines excerpted from Table 3-3 of the Basin Plan

** Based on the conversion of electrical conductivity (EC) to TDS; mmho/cm (EC) x 640 = mg/L TDS (approximate)

Specific numeric water quality objectives to protect the AGR beneficial use are very difficult if not impossible to determine for salinity parameters because the potential for impacts are based on a number of factors such as crop type, means of irrigation, climate, soil type and chemistry of the applied water. This complexity is inherent in the range of the available “guidelines.”

No other numeric water quality objectives or guidelines are contained within the Basin Plan for the salinity constituents in question as they may relate to all other listed beneficial uses of the Salinas River or Paso Robles subbasin. However, narrative objectives are common for most beneficial uses which generally state that water shall not contain concentrations of chemical constituents that cause observable or measurable impacts. As with the irrigation water quality guidelines

this general narrative objective is very subjective and it is difficult to determine when a measurable impact has occurred.

The proposed effluent limitations are protective of the “recommended” MCL for sulfate, approximate the “upper” MCL for TDS, and are protective of the “upper” MCL for chloride. There is no applicable MUN criterion (or criteria) for sodium, which is commonly added to water supplies for “softening” purposes.

The only known beneficial use receptors that could reasonably be impacted by the discharge are shallow irrigation wells screened within the alluvium. The two closest receptors are two shallow irrigation wells located directly across the Salinas River from the Discharger’s wastewater facility. The shallow alluvial wells are upgradient of the primary discharge point from Pond 6 and cross gradient from the secondary discharge point from Pond 3 (discharges from pond three occur infrequently during pond maintenance activities). Water quality data from these wells indicate TDS, Na, and Cl concentration ranges of 1,050 to 1,110, 145 to 210, and 86 to 190 mg/L, respectively. Given the location of the wells it is unlikely the discharge influences the wells during discharges from Pond 6 under dry or flowing river conditions or from Pond 3 during flowing river conditions. Although the wells may be under the influence of discharges from Pond 3 during dry river conditions, it is anticipated that dilution is likely occurring as a result of underflow conditions with the alluvium. Nonetheless, these wells are not utilized for drinking water supply purposes or direct application for irrigation without prior blending with another water supply. Water from these wells is blended with City water for irrigation purposes (due to naturally occurring salinity) and is blended with water from deeper geothermal wells for hot spring purposes (to control temperature).

The next closest potential receptors are approximately 3,800 feet downstream of the wastewater facility property. Undeveloped rural parcels begin approximately 1,500 feet downstream and the first developed parcel is about 3,800 feet downstream. Existing poor water quality within the alluvial aquifer precludes its use as a domestic (MUN) supply and domestic wells are located away from the river within upland areas (not prone to flooding) that are screened within the deeper portions of Paso Robles groundwater basin which generally produce better quality water if located outside of the geothermal zone. Additional shallow alluvial wells could be located downstream of the discharge, but they would also be relatively unsuitable for irrigation purposes without blending regardless of any measurable impacts due to the City’s discharge.

Although surface water diversions are common for agricultural practices, surface water diversions downstream of the discharge are generally infeasible due to dry conditions when irrigation water is typically required. There are no known surface water diversions within several miles downstream of the discharge.

Conclusion

Consistent with the Basin Plan, the proposed effluent limitations for salinity constituents are based on a regional assessment of water quality conditions, are within the reasonable control of the discharger to meet, and are protective of

downstream beneficial uses. Applying more stringent effluent limitations would be neither reasonable or appropriate and would likely result in little to no benefit in water quality given the Discharger's loading is barely perceptible within the background receiving water quality conditions.

The revised effluent limitations will provide the Discharger relief from significant ongoing mandatory minimum penalties for the violation of salt related effluent limitations and will allow them to spend the funds otherwise put towards fines on the implementation of source control measures to reduce salt loading to the wastewater facility and ultimately the watershed.

D. Final Effluent Limitations

Final, technology-based and water quality-based effluent limitations established by the Order are discussed in the preceding sections of the Fact Sheet.

1. Satisfaction of Anti-Backsliding Requirements

The Order satisfies applicable CWA anti-backsliding provisions. All limitations and requirements of the Order are at least as stringent as those of the previous permit, with the exception of cyanide and bromoform, total dissolved solids, sodium, chloride, and sulfate.

Effluent limitations for cyanide and bromoform are not retained, as these pollutants no longer demonstrate reasonable potential. Elimination of effluent limitations that do not show reasonable potential is consistent with the anti-backsliding exception at CWA § 402(o)(2)(B)(i), where information is available which was not available at the time of permit issuance. Here, the effluent data generated during the term of the previous permit indicates that cyanide and bromoform are no longer discharged at concentrations that may cause or contribute to exceedances of applicable water quality criteria.

The water quality-based numerical limitations from the existing permit for total dissolved solids, sodium, chloride, and sulfate have been replaced with less stringent water quality-based limitations. The general prohibition against backsliding found in CWA § 402(o)(1) contains several exceptions. Specifically, under CWA § 402(o)(2), a permit may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant if :

- information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance, and
- technical mistakes or mistaken interpretations of law were made in issuing the permit.

At the time of the existing permit's issuance, the site-specific, natural conditions of geothermal water intrusion into the discharge area were not considered. The geothermal water intrusion naturally elevates local total dissolved solids, sodium, chloride, and sulfate concentrations. Consideration of naturally higher total dissolved solids, sodium, chloride, and sulfate concentrations in the discharge area would have justified the application of less stringent effluent limitations for total dissolved solids, sodium, chloride, and sulfate. Consequently, relaxing limitations for total dissolved solids, sodium, chloride, and sulfate would not violate the anti-backsliding provisions of the CWA, in accordance with CWA § 402(o), since the exceptions to the provisions have been satisfied.

The Basin Plan establishes water quality standards, which are composed of *beneficial uses* and *water quality objectives*. The Basin Plan states that application of water quality objectives must be based upon consideration of the surface and groundwater quality naturally present. Effluent limitations result from the application of water quality objectives. The effluent limitations in this permit for total dissolved solids, sodium, chloride, and sulfate are based upon consideration of the surface water and groundwater quality naturally present. CWA § 303(d)(4) allows relaxation of water quality-based effluent limitations, provided that attainment of water quality standards is ensured and antidegradation requirements are considered. By adopting this renewed NPDES Permit, the Regional Water Board finds that the limits are sufficient to ensure that the water quality standards are or will be attained.

2. Satisfaction of Antidegradation Policy

Provisions of the Order are consistent with applicable anti-degradation policy expressed by NPDES regulations at 40 CFR 131.12 and by State Water Board Resolution No. 68-16. As discussed in paragraph IV.C.8, above, this permit includes less stringent effluent limit for certain salt constituents. This revision to the effluent limits is consistent with the antidegradation policy because the permit requires best practicable treatment or control of the discharge, takes into account site-specific circumstances, and does not result in exceedances of the water quality standards. Also, as described above, the increase in the effluent limit is subject to an exemption for backsliding. The discharger has not achieved full compliance with the existing effluent limits and the revised effluent limits for salt constituents will not result in higher concentration discharges than has been achieved under the previous permit. Limitations and conditions of the Order assure maintenance of the existing quality of receiving waters and do not authorize increased rates of discharge or increased pollutant loadings to the receiving water.

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 TSS, BOD₅, settleable solids, oil and grease, and pH. Restrictions on these pollutants are discussed in Section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal

technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

Final, technology and water quality based effluent limitations are summarized in sections IV.B and C of this Fact Sheet.

E. Interim Effluent Limitations

The Order does not establish interim effluent limitations and schedules for compliance with final effluent limitations.

F. Land Discharge Specifications

This section of the standardized permit template is not applicable.

G. Reclamation Specifications

This section of the standardized permit template is not applicable.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving water quality is a result of many factors, some unrelated to the discharge. This Order considers these factors and is designed to minimize the influence of the discharge on the receiving water. Specific water quality objectives established by the Basin Plan to meet this goal for all inland surface waters are included as Receiving Water Limitations in Section V.A of this Order.

B. Groundwater

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

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. CWC Sections 13267 and 13383 also authorize the Central Coast Water Board to require technical and monitoring reports. Rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program (MRP), which is presented in Attachment E of this Order, is presented below.

A. Influent Monitoring

The influent monitoring requirements are unchanged and are retained from the previous Order.

B. Effluent Monitoring

Most effluent monitoring requirements are unchanged and are retained from the previous Order. Differences include:

- Because effluent limitations for cyanide and bromoform are not in this Order, routine monitoring for these pollutants is no longer required. It should be noted that monitoring of these parameters is required once per permit term as part of the CTR pollutant scan.
- Because the receiving water for this discharge is assigned the beneficial use of municipal and domestic supply, in addition to monitoring for the CTR pollutants one time in the permit term, the Discharger must also monitor for the CCR Title 22 pollutants – those pollutants with primary MCLs established by the Department of Public Health.

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. This Order retains acute and chronic toxicity monitoring requirements for Discharge Points 001B and 001C from the previous permit.

D. Receiving Water Monitoring

1. Surface Water

With two exceptions, receiving water monitoring requirements are unchanged and are retained from the previous Order. This Order requires receiving water monitoring one time during the term of the permit for the CTR and the CCR Title 22 pollutants to provide characterization of background conditions in the Salinas River. In addition, this Order requires quarterly upstream and downstream monitoring for total dissolved solids, sodium, chloride and sulfate, and concurrent monitoring of Salinas River flows via the upstream USGS gaging station.

2. Groundwater

Groundwater monitoring requirements are unchanged and are retained from the previous Order.

E. Other Monitoring Requirements

Potable water supply monitoring requirements are unchanged and are retained from the previous Order.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

NPDES regulations at 40 CFR 122.41 (a) (1) and (b - n) 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. 40 CFR 123.25 (a) (12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41 (j) (5) and (k) (2), because the enforcement authority under the CWC is more stringent. In lieu of these conditions, this Order incorporates by reference CWC §13387(e).

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

C. 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.

i. Special Studies and Additional Monitoring Requirements

The Order includes the requirement to conduct accelerated whole effluent toxicity monitoring upon the detection of acute toxicity in the effluent, or upon the exceedance of the chronic toxicity effluent limitation.

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

The Order does not establish construction, operation, or maintenance specifications.

5. Special Provisions for Municipal Facilities (POTWs Only)

a. Biosolids Management

Provisions regarding sludge handling and disposal ensure that such activities will comply with all applicable regulations.

40 CFR Part 503 sets forth USEPA's final rule for the use and disposal of biosolids, or sewage sludge, and governs the final use or disposal of biosolids. The intent of this federal program is to ensure that sewage sludge is used or disposed of in a way that protects both human health and the environment.

USEPA's regulations require that producers of sewage sludge meet certain reporting, handling, and disposal requirements. As the USEPA has not delegated the authority to implement the sludge program to the State of California, the enforcement of sludge requirements that apply to the Discharger remains under USEPA's jurisdiction at this time. USEPA, not the Central Coast Water Board, will oversee compliance with 40 CFR Part 503.

b. Pretreatment

This Order does not include provisions requiring the development and implementation of an industrial pretreatment program, in accordance with 40 CFR 403.

In December 2008, the City hired an Industrial Waste Manager position to develop and administer the industrial waste program. The City began inspecting facilities that generate Fats, Oils, and Grease in June 2008 to comply with the Sanitary Sewer Management Plan and has adopted a revised industrial waste ordinance. The City is currently developing industrial waste fees and a pretreatment database.

6. Other Special Provisions

a. Storm Water

The 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 Activities*, if applicable.

b. Statewide 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 Discharger is enrolled under the General Permit.

c. Engineering Analysis of Upgraded Facility.

Within six months of completion of plant upgrades, the Discharger shall submit an engineering analysis to the Central Coast Water Board reporting the capacity determination for the upgraded plant. As this Order was being drafted, the Discharger believes that the dry and wet weather treatment capacities (flow) will not change. Because effluent limitations and other permit conditions are based on the current design flow of 4.9 MGD, if the design flow changes, these limitations and conditions may no longer be appropriate.

d. Recycled Water Policy Salt/Nutrient Management Plan.

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. Pursuant to the letter from statewide water and wastewater entities dated December 19, 2008 and attached to Resolution No. 2009-0011, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Central Coast Water Board staff. The special provision was added to establish participation in development of a regional groundwater basin/sub-basin salt/nutrient management plan.

7. Compliance Schedules

The Order does not establish interim effluent limitations and schedules for compliance with final effluent limitations.

VIII. PUBLIC PARTICIPATION

The Central Coast Water Board is considering the issuance of WDRs that will serve as a NPDES permit for the City of El Paso de Robles Wastewater Treatment Plant. As a step in the WDR adoption process, Central Coast Water Board staff has developed tentative WDRs. The Central Coast Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge

and has provided them with an opportunity to submit their written comments and recommendations.

B. Written Comments

The staff determinations are tentative. Interested persons were invited to submit written comments concerning these tentative WDRs. To be fully responded to by staff and considered by the Central Coast Water Board, written comments were to have been received at the Central Coast Water Board offices by 5:00 p.m. on **December 9, 2010**. Staff received written comments from the City of Paso Robles and the USEPA. Those comments are summarized, along with staff's response to the comments, as follows:

1. City of Paso Robles Comments and Responses

(Comments submitted within November 24, 2010 letter via electronic correspondence)

a. Comment concerning Page 5, Finding B.a, Discharge Point Descriptions

- i. The discharge point descriptions in this section should be corrected. Treated wastewater will be discharged to the Salinas River at two points, not three. To clarify, the City currently *monitors* its discharge at three locations:

- A – Immediately downstream of the chlorine contact chamber, upstream of any ponds;
- B – Discharge from Pond 6 to the Salinas River, at the north end of the facility; and
- C – Discharge from Pond 3 to the Salinas River.

The treatment plant upgrade will simply replace the existing outfall pipe at location C with a creek-like polishing channel. Discharge locations B and C will remain the same. Consider these corrections:

“Treated wastewater may be discharged from one of ~~three~~ two points – Discharge Point 001A, which will be/is the outfall from the upgraded treatment facility to the Salinas River; 001B (formerly known as Discharge Point B), which is the primary outfall from Pond No. 6 to the Salinas River; or Discharge Point 001C (formerly known as Discharge Point C), which is the outfall from Pond No. 3 to the Salinas River. Discharge Point 001C is currently used during pond maintenance, when one or more ponds are out of service. The existing outfall pipe at Discharge Point 001C will be replaced with a polishing channel as part of the treatment plant upgrade, thus 001C will become the primary discharge location. Point 001A is immediately downstream of the chlorine contact chamber and is used for monitoring only.”

These corrections should be reflected in the effluent limitations on pages 11 and 12, as well as the monitoring location descriptions and effluent monitoring requirements on pages E-4 and E-5.

The upgraded treatment plant's effluent polishing channel will become habitat for birds and other wildlife, so the City prefers its compliance point for total coliform organisms be specified as 001A, immediately downstream of the disinfection process.

ii. Staff Response

This comment is consistent with the compliance monitoring for total coliform bacteria and settleable solids contained within the existing permit (Order No. R3-2004-0031). The proposed Order and Monitoring and Reporting Program (Attachment E) have been modified to facilitate ongoing compliance with total coliform bacteria and settleable solids at Discharge Point 001A (Effluent Monitoring Location EFF-001A as noted within tables E-1 and E-4).

b. Comment concerning Page 12, Effluent Limitation 1.d, Chlorine

- i. The City's existing NPDES permit states, "Effluent discharged to the Salinas River, *when surface flow is contiguous with the Nacimiento River*," shall have chlorine residual that is "undetectable by amperometric titration or an equally sensitive method." The proposed permit does not contain this language and there is no explanation for this change in the Fact Sheet.

The existing "when surface flow is contiguous with the Nacimiento River" language is specific to the City's discharge and environmental setting. This stretch of the Salinas River does not flow on its surface except for a few months each wet season. The City's discharge normally flows only a couple thousand feet downstream before percolating into the deep alluvium of the river. When the river is not flowing, migratory fish such as steelhead trout that are particularly sensitive to chlorine are not present. However, humans are present. City staff has observed people recreating in the City's wastewater discharge throughout the year. Previous Central Coast Water Board staff determined it would better to allow some residual chlorine when the river is not flowing to ensure protection of public health, rather than require the effluent to be completely dechlorinated throughout the year. The existing permit language protects both public health and sensitive aquatic life, by only requiring the discharge to be completely dechlorinated when the river is flowing.

The City requests the effluent chlorine limitation only apply when the Salinas River is a live stream, as determined by the operator of the Salinas Reservoir (Santa Margarita Lake) Dam, the County of San Luis Obispo County Public Works Department. The permit limitation should be revised as follows:

“When Salinas River surface flow is contiguous with the Nacimiento River, as determined by the County of San Luis Obispo Public Works Department, operator of the Salinas Reservoir Dam, total chlorine residual shall be undetectable at any time as determined by amperometric titration or another equally sensitive method.”

The County of San Luis Obispo Public Works Department is required by State Water Resources Control Board to monitor the Salinas River system and announce the beginning and end of live stream conditions. Attached is an example announcement. The City will use these announcements to begin and end effluent chlorine monitoring.

ii. Staff Response

The comment suggests that no chlorine monitoring occur unless the surface flow is contiguous with the Nacimiento River. The comment also indicates that the Salinas River surface flow is not contiguous with the Nacimiento River, except for a few months each wet season. Furthermore, the comment notes that the discharge creates an isolated pool in the Salinas River. Such an isolated pool would serve as a haven for wildlife. Chlorine is toxic to many forms of wildlife. The suggestion to allow chlorinated effluent to enter the Salinas River is highly unusual and not appropriate as it would harm the habitat beneficial use. For that reason, Central Coast Water Board staff made effluent chlorine monitoring mandatory at all times, not just when the surface flow is contiguous with the Nacimiento River. The original fact sheet should have included the reason for changing the effluent chlorine monitoring requirement. This response corrects that omission.

c. Comment concerning Page E-5, Biosolids Monitoring Frequency

i. The biosolids monitoring frequency specified in Table E-7 conflicts with the monitoring frequency specified in Table E-8. Please remove one or the other to eliminate this conflict. The City prefers to monitor its biosolids prior to disposal (approximately four times per year).

ii. Staff response

The biosolids monitoring frequency should conform to Table E-7. Table E-8 has been corrected to reflect conformance with Table E-7.

d. Comment concerning Page E-8, Monitoring and Reporting Program Section D, Accelerated Monitoring Requirements

i. This accelerated whole effluent toxicity monitoring requirement is intended for discharges where the cause of toxicity is not known. The City has completed accelerated toxicity monitoring, established that ammonia is the cause of ongoing effluent toxicity, and is currently working on a major

wastewater treatment plant upgrade to address the ammonia toxicity problem. The City requests an exception to this accelerated monitoring requirement when the City's contract laboratory determines whole effluent toxicity is caused solely by ammonia.

ii. Staff response

The accelerated toxicity monitoring requirement is intended for discharges where the cause of toxicity is not known. That situation could arise in the future, so the requirement should remain in place. The proposed Permit's accelerated monitoring requirements are intended for require accelerated monitoring at the onset of a toxicity indication.

e. Comment (this additional comment was formally provided by Discharger within 12/8/2010 electronic correspondence to Central Coast Water Board staff engineer Tom Kukol)

- i. The Fact Sheet includes a strong argument for why the Basin Plan's surface water quality objectives for salts (TDS, sodium, chloride, and sulfate) are not relevant to the unique conditions surrounding the Paso Robles wastewater discharge, and why effluent limits must be based on a site-specific analysis. The Basin Plan objectives for salts are not realistic or achievable with reasonable controls. For example, the Basin Plan objectives for TDS and chloride are 250 and 20 mg/L, respectively. Paso Robles' water supply average TDS and chloride concentrations are 602 and 69 mg/L, respectively, many times greater than the Basin Plan objectives. In order for the City's wastewater discharge to meet the Basin Plan water quality objectives, the City would likely have to treat its water supply and/or wastewater discharge with reverse osmosis processes and pipe the reject brine 30 miles west to the Pacific Ocean for discharge. This would not be reasonable or cost-effective.

Waters in the vicinity of Paso Robles are naturally elevated in salts due to well-documented geothermal influences. Warm mineral water springs can be found throughout Paso Robles, including at the wastewater treatment plant. Central Coast Water Board staff appropriately considered these geothermal influences and the fate of salts in the Paso Robles wastewater discharge in establishing the proposed effluent limits. The proposed effluent limits are specific, measurable, achievable, and realistic. The groundwater flow and solute transport model prepared by Fugro West, Inc. demonstrates the proposed effluent limits will protect downstream water users.

The City fully appreciates the problem of high wastewater salinity and is making every effort to reduce it. The City has invested over \$80 million in new infrastructure necessary to deliver a softer water supply from Lake Nacimiento. This softer water supply will reduce or eliminate the need for self-regenerating water softeners, thus reduce wastewater salinity. Second,

the City has an industrial waste program that is focused on controlling salt discharges from industries. The City's sewer use ordinance now contains numeric limits for salts that effectively require all commercial and industrial customers to reduce use of self-regenerating water softeners. City studies show that residential customers with self-regenerating water softeners remain the largest source of salt. The City is prepared to prohibit installation of residential self-regenerating water softeners. However, CWC § 13148 is clear that before the City may do this, the Central Coast Water Board must make a finding that control of residential softeners is necessary. The proposed permit contains such a finding.

The City of Paso Robles would appreciate Central Coast Water Board approval of staff's proposed effluent limits. Approval of the permit would allow City staff to move on to the important work of controlling salt discharges and upgrading the City's wastewater treatment plant.

ii. Staff response

Central Coast Water Board staff concurs that the Discharger is implementing reasonable and appropriate measures within its control to address salinity issues and that the proposed effluent limitations are based on site-specific receiving water conditions and are protective of receiving water quality and beneficial uses. Staff would like to add that the Discharger has also gone above and beyond facility-specific efforts to address regional salinity issue by taking a leadership role in organizing local stakeholders for the development and implementation of a regional salt and nutrient management plan pursuant to the Recycled Water Policy. More stringent effluent limits for salinity constituents, particular those purely based on the surface water quality objectives contained within Table 3-7 of the Basin Plan, would not be reasonable or achievable, nor would they be likely to result in any measurable improvement in receiving water quality based existing receiving water quality conditions.

2. United States Environmental Protection Agency Comments and Responses

(Comments submitted by December 8, 2010 letter via electronic correspondence)

a. Comment (complete letter excerpted below)

Thank you for the opportunity to review and comment on the public notice draft permit (NPDES Permit No. CA0047953) for the discharge from the City of El Paso de Robles Wastewater Treatment Plant to the Salinas River. We are concerned that the proposed water quality-based effluent limitations for Total Dissolved Solids (TDS), Sodium, Chloride, and Sulfate are insufficient to result in attainment of applicable Basin Plan objectives and therefore do not meet Clean Water Act requirements. Pursuant to 40 CFR 123.44, we reserve the right to object to issuance of this permit if our concerns are not addressed; however, we

are committed to working with the Central Coast Water Board to ensure the permit meets Clean Water Act requirements.

The limits in the permit for TDS, sodium, chloride and sulfates would not meet the objectives set forth in the Central Coast Region Basin Plan. Section II.A.3. of the Basin Plan describes water quality objectives for specific inland surface waters, enclosed bays and estuaries. Within this section, Table 3-7 sets forth objectives for all of the above pollutants for the Salinas River above Bradley, the area of discharge. These objectives, along with current and proposed limits, are illustrated in the table below:

Pollutant (mg/L)	Objective	Current Limit	Proposed Limit
TDS	250	1,100	1,115
Chloride	20	310	355
Sodium	20	225	255
Sulfate	100	180	200

These proposed limits would cause or contribute to exceedences of the applicable water quality objective for the receiving water. Federal regulations at 40 CFR 122.44(d)(1)(i) states that “limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standards...” Because the receiving water is characterized in the fact sheet as being composed entirely of effluent from the Paso Robles WWTP for half of the year, any discharge with concentrations of pollutants above the objectives laid out in the Basin Plan would contribute to an excursion above the water quality standards.

Aside from being inconsistent with objectives in the Basin Plan, the draft permit and associated fact sheet provide an insufficient rationale for the proposed limits. According to the fact sheet, the limits were adopted based on recommendations by the discharger without any rigorous discussion of how they would meet Basin Plan requirements in the fact sheet. Upon request, Central Coast Water Board staff supplied USEPA staff with a copy of “The Final Report of Groundwater Flow and Solute Transport Modeling in Support of the City of Paso Robles’ Proposed Revisions to Waste Discharge Requirements Related to the Wastewater Treatment Plant” in which the limits were calculated. In this document, limits are calculated based on application of a mixing zone with subsurface groundwater. However, even with use of a mixing zone, which is likely inappropriate in this situation, the proposed limits would not meet Basin Plan objectives downstream from the mixing zone. For example, the proposed 355 mg/L chloride limitation was derived to meet an instream target of 215 mg/L approximately 8,500 feet downstream of the discharge in the groundwater. This target value is far higher

than the applicable 20 mg/L objective for chloride. The permit and fact sheet do not show how this proposed limit is protective of the beneficial uses in the Salinas River and consistent with the Basin Plan. Rigorous explanations for both the water-quality based objective and the application of a mixing zone should be incorporated directly into the fact sheet.

Since the limits for the four pollutants are less stringent than the current limits, the elevated limits also trigger anti-backsliding concerns. 40 CFR 122.44(l)(2) states that "...a permit may not be renewed, reissued, or modified... to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit." The fact sheet rationalizes that this limit elevation is allowed under exception (B)(1) which states, "information is available which was not available at the time of previous permit issuance and which would have justified the application of a less stringent effluent limitation at the time of permit reissuance." It appears that none of the new information compiled on salinity in groundwater and proximal surface water for this reissuance of this permit would justify the application of less stringent effluent limits. The elevated limits in the permit appear to violate federal anti-backsliding requirements.

Finally, the draft permit and fact sheet do not show how the limit derivation accounts for existing impairments in the Salinas River for chloride and sodium. California's EPA-approved CWA § 303(d) List of Water Quality Limited Segments identifies the Salinas River between the Nacimiento River and the Santa Margarita Reservoir, the segment to which El Paso de Robles discharges, as impaired by chlorides and sodium. Although no TMDL has been written, the Board should take into account these impairments and furthermore ensure that the discharge is consistent with water quality standards for the parameters of concern.

The permitting issue faced in this permit by this regional board is not unique; in fact, it is currently being addressed by several regional water quality control boards across the state. In the Los Angeles Region, a TMDL was written for chloride in order to address the impairment presented from high salinity. The TMDL has resulted in the consideration of upgrading certain facilities to reverse osmosis treatment. The Santa Ana Region's Basin Plan was amended in 2004 in order to incorporate a section on total dissolved solids management in its implementation chapter and the Central Valley Regional Board is currently pursuing an approach of incorporating a variance into their water quality standards to address pollutants associated with high salinity.

The Central Coast Water Board should not adopt the proposed permit limits for TDS, sodium, chloride, and sulfate. New limits should be calculated that are stringent enough to implement Basin Plan objectives, protective of the receiving water's beneficial uses, and consistent with Clean Water Act requirements.

b. Staff Response

The proposed limits are consistent with the Central Coast Water Board's Basin Plan, not just the numeric water quality objectives within Tables 3-7 (surface

water) and 3-8 (groundwater), and are protective of site-specific surface water and groundwater quality conditions and beneficial uses. Section IV.C.8. of the Fact Sheet previously referenced, and has been modified to emphasize, the Basin Plan language preceding Table 3-7 (note: this language is also applicable to Table 3-8 by reference). This language states that numeric “water quality objectives stated within Table 3-7 are median values representing gross areas of a water body, they may not be directly related to a particular area, and **the application of these objectives must be based upon consideration of the surface and groundwater quality naturally present**” [emphasis added]. The language preceding Table 3-7 also indicates that “the issuance of requirements must be tempered by consideration of beneficial uses within the immediate influence of the discharge.” The Fact Sheet has been updated to show that beneficial uses were considered and that the proposed limits are protective of existing beneficial uses within the immediate influence of the discharge to the extent practicable given background salinity conditions within the receiving waters govern the overall water quality conditions as discussed below and within the Fact Sheet.

The surface water quality objectives contained within Table 3-7 are representative of water quality conditions at the head waters of the Salinas River just down stream of Santa Margarita Reservoir and the Salinas River downstream of its confluence with the Nacimiento River, but not those of segments of the river/watershed in the vicinity of Paso Robles that are subject to geothermal influences. The analyses contained within section IV.C.8. of the Fact Sheet and the June 2009 Fugro West, Inc. *Groundwater Flow and Solute Transport Modeling* report used to develop the proposed TDS, Na, Cl and SO₄ effluent limitations considered site-specific surface water and groundwater quality conditions as well as downstream beneficial uses.

During the dry season the receiving water within the Salinas River is effluent dominated in so far as the discharged effluent completely percolates/recharges into the alluvium (losing stream) within a relatively short distance downstream of the discharge and essentially becomes groundwater or under flow within the alluvium (not within the Paso Robles Groundwater Basin proper). When the Salinas River is flowing during the wet season or due to releases from Santa Margarita Reservoir, the effluent is subject to significant dilution within the river and any increase in the concentration of the salinity constituents in question due to the discharge are imperceptible within the accuracy of the analytical techniques used to measure them. In the absence of upstream and downstream surface water monitoring (not required within the existing permit; one sample set collected on March 6, 2007) within the immediate vicinity of the discharge, more distal upstream and downstream Central Coast Ambient Monitoring Program (CCAMP) surface water quality data indicate a decrease in TDS, Na, and Cl concentrations relative to the vicinity of the discharge. Although modeling indicates shallow groundwater within the alluvium appears to be most at risk of impacts from the discharge, upstream and downstream groundwater monitoring data indicate no significant increase or decrease in salinity constituents as a

result of the Discharge. In fact, upstream groundwater concentrations are frequently greater than or equal to downstream groundwater concentrations for TDS, Na, Cl and SO₄.

As the comments suggest, salinity impairment within the Salinas River, as well as other areas, is a watershed or regional issue that requires a regional perspective and approach (i.e., TMDL and regional management plan). The Discharger is currently acting as the project lead for the development of a salt and nutrient management plan for the Paso Robles Hydrologic Area pursuant to the Recycled Water Policy (State Water Board Resolution No. 2009-0011). The resulting management plan is subject to Central Coast Water Board review and approval and will be incorporated into the Basin Plan as appropriate (by amendment). The salt and nutrient management plan requirements within the Recycled Water Policy are based on the process model used to develop the 2004 Santa Ana Region Basin Plan amendment for TDS. Regional and collaboratively driven salt and nutrient management planning efforts are currently underway for various watersheds/basins within the Central Coast Region. Consequently, the various salinity and nutrient water quality objectives contained within Tables 3-7 and 3-8 are likely to change based on more robust regional evaluations of salt and nutrient sources, loading and assimilative capacity.

Basin Plan Chapter 3, Section II (Water Quality Objectives) also contains language regarding the application of water quality objectives based on controllable water quality conditions (i.e., those that may be reasonably controlled by a discharger). As with the language preceding Table 3-7, the application of this language is tempered by the protection of beneficial uses. The Fact Sheet has also been updated to reflect this language along with the following discussion.

The hydrogeology and geochemistry of the area indicate the Cl and Na listings for the Salinas River between the confluence with the Nacimiento River and Santa Margarita Reservoir are likely a result of natural conditions and not that of anthropogenic sources given there are no other point source discharges to the Salinas River upstream of the Discharger's outfall that could impart significant salt loading. In addition, the Discharger's existing municipal water [groundwater] supply is also of significantly poorer water quality with respect to the numeric objectives contained within Table 3-7. The water supply contains concentrations of TDS, Na, and Cl roughly three times the numeric objectives contained with Table 3-7 (sulfate is roughly 1.3 times the stated objective). In addition, an average water supply hardness of 17.2 grains per gallon or 294 mg/L CaCO₃ (hardness above 181 mg/L is considered very hard) leads to the widespread use of water softeners that results in approximately 80, 135 and 375 percent increases in TDS, Na and Cl concentrations, respectively, within the wastewater facility influent. The domestic use of self-regenerating water softeners has been shown to be the largest source of salt loading to the wastewater facility.

To address these issues the Discharger has implemented three reasonable controls and is poised to implement a fourth following the adoption of the

proposed permit. The Discharger is implementing a source control program to reduce salt loading from commercial and industrial sources, has conducted outreach regarding the use of self-regenerating water softeners, has procured a better quality (contains approximately one third of the hardness within the City's existing water supply) source of surface water supply from Nacimiento Lake (at a cost of approximately \$80 million that does not include the requisite and pending surface water treatment facility), and is the project lead for the development of a regional salt and nutrient management plan as discussed above. In addition, the proposed permit contains findings that will allow the Discharger to implement a pending sewer use ordinance restricting the use of self-regenerating water softeners (pursuant to AB 1366 and CWC § 13148). The Discharger has already developed the ordinance and is awaiting approval of the proposed permit before it can legally implement it. Significant reductions in effluent salinity are anticipated with the scheduled startup of the City's surface water treatment facility in 2015 and the implementation of the sewer use ordinance.

Applying the numeric limits contained within Table 3-7 may not even be achievable with reverse osmosis (RO). The Carmel Area Wastewater District (CAWD) recently commissioned a \$22 million 1.8 MGD microfiltration and RO tertiary treatment facility specifically designed to reduce salinity constituents. This new facility that cannot meet the numeric objectives for TDS, Na, and Cl contained within Table 3-7 for the Salinas River above Bradley. These costs do not include significant ongoing operation and maintenance costs and more importantly do not include RO brine reject handling and disposal costs given the CAWD facility has the ability to discharge RO reject via its existing ocean outfall. The Discharger's facility is well inland of the coast and does not have any reasonable means of disposing of RO reject brine. Therefore, RO or other tertiary treatment technologies would not be cost effective or appropriate given they would be unlikely to meet the Table 3-7 numeric objectives. In addition to the brine generation and disposal issues, RO treatment is very energy intensive and would be likely to contribute significantly to the facility's carbon footprint, in conflict with the State's climate change law (SB 21).

Given the above discussion, and that contained within the Fact Sheet, the existing and proposed effluent limitations for TDS, Na, Cl, and SO₄ more closely approximate the ambient surface water and groundwater conditions in the vicinity of the discharge. The effluent limits also more closely approximate the numeric water quality objectives for groundwater contained within Basin Plan Table 3-8 than for the Table 3-7 surface water quality objectives, which appear to have no technical or statistical relevance to the vicinity of the discharge.

Applying effluent limitations for salinity constituents that are not within the reasonable control of a point source discharger to meet and that are not based on a regional assessment of water quality conditions will be overly burdensome on the Discharger and will not result in measurable improvements in regional water quality conditions given the discharge loading is barely perceptible within the background receiving water quality conditions. Therefore, applying the

numeric limits contained with Table 3-7 as proposed by these comments is neither reasonable or appropriate and would likely result in little to no benefit in water quality.

Section IV.C.8. of the Fact Sheet has been significantly updated based on the above comments with an emphasis on the clarification of site specific water quality data/conditions and an evaluation of beneficial uses within the immediate vicinity of the discharge location. In addition, upstream and downstream quarterly surface water monitoring requirements have been added to the Monitoring and Reporting Program (Attachment E) to gather better data regarding the potential impacts of the discharge on surface water conditions within the immediate vicinity of the discharge.

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: **May 5, 2011**
Time: **8:30 a.m.**
Location: **Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401**

Interested persons were invited to attend and provide public comment/testimony. The Central Coast Water Board approved the WDRs as part of the public meeting agenda consent calendar given no interested persons requested to provide testimony.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Board to review the decision of any Regional Board regarding the final WDRs. The petition must be submitted within 30 days of this Regional Board's action to the following address:

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

E. Information and Copying

The Report of Waste Discharge (ROWD), related documents, effluent limitations and special provisions, comments received, and other information 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 Matthew Keeling at (805) 549-3685 or mkeeling@waterboards.ca.gov.