California Regional Water Quality Control Board
Central Coast Region

Linda S. Adams
Secretary for Environmental Protection

895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
(805) 549-3147 • Fax (805) 543-0397
http://www.waterboards.ca.gov/centralcoast/

Arnold Schwarzenegger
Governor

ORDER NO. R3-2009-0019
NPDES NO. CA0047902

WASTE DISCHARGE REQUIREMENTS AND MASTER RECLAMATION PERMIT FOR THE CITY OF SAN JUAN BAUTISTA WASTEWATER TREATMENT AND RECLAMATION PLANT

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

Table 1. Discharger Information

Discharger	City of San Juan Bautista
Name of Facility	City of San Juan Bautista Wastewater Treatment and Reclamation Plant
Facility Address	1120 Third Street
	San Juan Bautista, California 95045
	San Benito County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a **minor** discharge.	

The discharge by the **City of San Juan Bautista** from the discharge points identified below is 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
001	Treated Domestic Wastewater	36 º 50' 58.11" N	-121 º 32' 41.90" W	Unnamed Drainage Channel tributary to the San Benito River
002	Disinfected Tertiary Recycled Domestic Wastewater	---	---	Reclamation Use

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	**May 8, 2009**
This Order shall become effective on:	**May 9, 2009**
This Order shall expire on:	**May 9, 2014**
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	**180 days prior to the Order expiration date**

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 8, 2009.**

_____

Roger W. Briggs, Executive Officer

Table of Contents

I. Facility Information 4
II. Findings 4
III. Discharge Prohibitions 10
IV. Effluent Limitations and Discharge Specifications 10
A. Effluent Limitations – Discharge Point 001 10
B. Land Discharge Specifications 11
C. Reclamation Specifications– Discharge Point 002 11
V. Receiving Water Limitations 11
A. Surface Water Limitation 11
B. Groundwater Limitations 14
VI. Provisions 14
A. Standard Provisions 14
B. Monitoring and Reporting Program (MRP) Requirements 15
C. Special Provisions 15
1. Reopener Provisions 15
2. Special Studies, Technical Reports and Additional Monitoring Requirements 15
3. Best Management Practices and Pollution Prevention 15
4. Construction, Operation and Maintenance Specifications 15
5. Special Provisions for Municipal Facilities (POTWs Only) 15
6. Other Special Provisions 16
7. Compliance Schedules 16

List of Tables

Table 1. Discharger Information 1
Table 2. Discharge Location 1
Table 3. Administrative Information 1
Table 4. Facility Information 4
Table 5. Effluent Limitations – Discharge Point 001 10

List of Attachments

Attachment A – Definitions A-1
Attachment B – Site Map B-1
Attachment C – Flow Schematic C-1
Attachment D – Standard Provisions D-1
Attachment E – Monitoring and Reporting Program E-1
Attachment F – Fact Sheet F-1
Attachment G – Reclamation Requirements G-1
Attachment H – Reclamation Monitoring and Reporting Requirements F-1

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 San Juan Bautista
Name of Facility	City of San Juan Bautista Wastewater Treatment and Reclamation Plant
Facility Address	1120 Third Street
	San Juan Bautista, California 95045
	San Benito County
Facility Contact, Title, and Phone	Lloyd Bracewell (Bracewell Engineering, Inc., Operator) (510) 547-8205
Mailing Address	P.O. Box 1420, San Juan Bautista, California 95045
Type of Facility	Publicly Owned Treatment Works (POTW)
Facility Design Flow	0.27 million gallons per day (MGD)

II. FINDINGS

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

A. Background. The City of San Juan Bautista (hereinafter the Discharger) is currently discharging pursuant to Order No. R3-2003-0087 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047902. The Discharger submitted a Report of Waste Discharge, dated January 30, 2008, and applied to renew its NPDES permit to discharge up to 0.27 MGD of treated wastewater from the City of San Juan Bautista Wastewater Treatment. Regional Water Board staff deemed the application complete on April 4, 2008.

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. The Discharger owns and operates a wastewater collection, treatment, and reclamation facility, which currently serves a population of approximately 2,000 to 2,300 people. Treated wastewater is discharged at Discharge Point 001 to an unnamed, intermittently flowing drainage channel adjacent to the facility, which flows to San Juan Creek, a tributary of the San Benito River. The facility receives domestic wastewater from the City service area and some domestic wastewater from three vegetable processors located outside of the City. The exception is the City treatment plant received an average of 42,000 to 58,000 gallons per day (gpd) of process wash water during the Natural Selection Foods operating seasons in 2006 and 2007. The facility also receives up to 10,000 gallons a month from septage haulers.

The current treatment system includes:

- A comminutor and influent flow-metering;

- Pond 1, which includes eight aerators and two mixers and is operated as a sequencing batch reactor (SBR);
- Flow equalization using seven 10,000-gallon polyethylene tanks;
- Nitrification in Cell C of Pond 2;
- Sludge storage in Cells A and B of Pond 2;
- Coagulant addition;
- Pressure sand filtration;
- Ultraviolet light disinfection;
- Chlorine contact chamber;
- One 5,000-gallon Disinfected Tertiary Treated Water Storage Tank.

Attachment B provides a map of the area around the facility. Attachment C provides a flow schematic of the facility.

C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the 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 section 13260, and as reclamation requirements pursuant to CWC sections 13523 and 13523.1.

D. Background and Rationale for Requirements. The Regional 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 24, 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 and G through H are also incorporated into this Order.

E. California Environmental Quality Act (CEQA). Pursuant to Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of the CEQA, Public Resources Code sections 21100-21177.

The Discharger certified a final Environmental Impact Report in accordance with the California Environmental Quality Act (Public Resources Code, Section 621000 et seq.) and the California Code of Regulations on February 9, 1993, for the City of San Juan Bautista's Wastewater Reclamation Project (SCH91013076). The Discharger determined the reclamation project will have significant adverse environmental effects and that all potentially significant adverse effects can be avoided through implementation of mitigation

measures. Mitigation measures to prevent nuisance and ensure protection of beneficial uses of surface water and groundwater will be implemented through this Order.

F. Technology-Based Effluent Limitations. CWA Section 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. A detailed discussion of development of technology-based effluent limitations is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations. CWA Section 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 section 304 (a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed State criterion or policy interpreting the State's narrative criterion, supplemented with other relevant information, as provided at 40 CFR 122.44 (d)(1)(vi).

H. Water Quality Control Plans. The Regional 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.

In accordance with Chapter 2 of the Basin Plan, surface water bodies that do not have beneficial uses specifically identified by the Basin Plan, including the receiving stream for this discharge, are assigned the beneficial uses of:

- Municipal and domestic supply
- Protection of both recreation and aquatic life.

Requirements of this Order implement the Basin Plan.

I. 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 San Juan Bautista's wastewater treatment plant.

J. 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 Regional 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.

K. 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.

L. 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.

M. 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 (BOD_5), 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.

N. 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 detail 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.

O. Anti-Backsliding Requirements. CWA sections 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.

P. 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 the applicable Endangered Species Act.

Q. Monitoring and Reporting. NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 also authorize the Regional 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.

R. 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 Regional 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.

S. 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.

T. Notification of Interested Parties. The Regional 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.

U. Consideration of Public Comment. The Regional 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.

V. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (General WDRs). The General WDRs, Order No. 2006-0003-DWQ, adopted May 2, 2006, applies to publicly owned sanitary sewer systems (collection systems) that are one mile or greater in length. The General WDRs requires collection system entities to develop a Sanitary Sewer Management Plan (SSMP). SSMPs are required to include goals, organization, legal authority, operations and maintenance program, design and performance provisions, overflow emergency response plan, fats, oils, and greases control program, systems evaluations and capacity assurance program, monitoring, measures, and program modifications, and SSMP Program audit. Additionally, the General WDRs requires the collection system entities to report sanitary sewer overflows (SSOs). Collection system entities are required to report SSOs that are greater than 1,000 gallons. Furthermore, some entities must also report SSOs less than 1,000 gallons discharging to surface waters or storm drains or that threaten public health. Reporting provisions are set forth in the General WDRs. Reporting shall occur through the Statewide Online SSO database. Reporting times vary depending on discharge amount and destination.

The Discharger enrolled for General WDR coverage on October 11, 2006. The Discharger developed and implemented a sanitary sewer management program in 2004 as required by Order No. R3-2003-0087.

III. DISCHARGE PROHIBITIONS

A. Discharge of treated wastewater at a location or in a manner, other than as described by this Order, is prohibited.

B. The discharge of any waste not specifically regulated by this Permit is prohibited.

C. Creation of a condition of pollution, contamination, or nuisance, as defined by Section 13050 of the CWC, is prohibited.

D. The discharge of radioactive substances is prohibited.

E. 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.

F. Daily flow, averaged monthly from May through October, shall not exceed the facility's dry weather treatment capacity of 0.27 MGD. Daily flow, averaged monthly from November through April, shall not exceed the facility's wet weather treatment capacity of 0.50 MGD.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001, as described in the attached Monitoring and Reporting Program.

Table 5. Effluent Limitations – Discharge Point 001

Constituent	Units	Effluent Limits		
		Average Monthly	Average Weekly	Maximum Daily
BOD_5	mg/L	20	45	60
TSS	mg/L	20	45	60
Settleable Solids	ml/L/hr	0.1	---	0.3
Oil and Grease	mg/L	10	---	20
Un-ionized Ammonia	mg/L	---	---	.025
pH	s.u.	6.0 – 9.0 at all times		
Total Dissolved Solids (TDS)	mg/L	1400	---	---
Sodium	mg/L	250	---	---
Chloride	mg/L	200	---	---
Sulfate	mg/L	350	---	---
Chronic Toxicity	TUc	---	---	1.0

b. The average monthly percent removal of BOD_5 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 not less than five consecutive samples. In no more than 20 percent of samples within any 30-day period shall total coliform organisms exceed 2.2 MPN/100mL. The MPN of total coliform organisms shall not exceed 2300 MPN/100 mL in any single sample.

d. When continuously monitored, compliance determination for total chlorine residual shall be based on 99 percent compliance by satisfying the following conditions.

- Total chlorine residual shall not exceed 0.02 mg/L for more than 7 hours and 26 minutes (total) in any calendar month.
- The total chlorine residual shall not continuously exceed 0.02 mg/L for more than 30 minutes.
- Total chlorine residual shall not exceed 0.1 mg/L at any time.

When continuous monitoring is not being used, the total chlorine residual shall be less than 0.02 mg/L at all times.

B. Land Discharge Specifications

This section of the standardized permit template is not applicable.

C. Reclamation Specifications– Discharge Point 002

For discharges of reclaimed water from Discharge Point 002, the Discharger shall adhere to all provisions, time tables, limitations, and monitoring and reporting requirements contained in Attachments G and H of this Order.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

Receiving water limitations are based on water quality objectives contained in the Basin Plan, are consistent with the SIP, 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 cause 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. Increase in turbidity attributable to controllable water quality factors shall not exceed the following limits.

    a. Where natural turbidity is between 0 and 50 Jackson Turbidity Units (JTU), increases shall not exceed 20 percent.

    b. Where natural turbidity is between 50 and 100 JTU, increases shall not exceed 10 JTU.

    c. Where natural turbidity is greater than 100 JTU, increases shall not exceed 10 percent.

10. The pH value shall not be depressed below 7.0 nor raised above 8.5. 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 5.0 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 Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.

13. All waters shall be maintained free of toxic substances in concentrations 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 nondetectable or where beneficial uses would be impaired by concentrations in excess of nondetectable levels, total identifiable chlorinated hydrocarbon pesticides shall not be present at concentrations detectable within the accuracy of analytical methods as prescribed in *Standard Methods for the Examination of Water and Wastewater*, latest edition, or other equivalent methods approved by the Executive Officer.

16. Waters shall not contain organic substances in concentrations greater than the following.

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

17. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life; or result in the accumulation of radionuclides in the food web to an extent, 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, Division 4, Chapter 15, Article 5.

18. Receiving waters shall not contain concentrations of chemical constituents in excess of the primary maximum contaminant levels (MCLs) specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for Organic Chemicals) of Title 22 California Code of Regulations, Division 4, Chapter 15.

19. Fecal coliform concentration, based on a minimum of not 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. The following surface water quality objectives for the San Benito River shall not be exceeded.

TDS	Chloride	Sulfate	Boron	Sodium
1400 mg/L	200 mg/L	350 mg/L	1.0 mg/L	250 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

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

	Receiving Water Hardness	
Parameter	**> 100 mg/L $CaCO_3$**	**< 100 mg/L $CaCO_3$**
Cadmium	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 [3]	0.0002 mg/L	0.0002 mg/L
Nickel [4]	0.4 mg/L	0.1 mg/L
Zinc	0.2 mg/L	0.004 mg/L

B. Groundwater Limitations

Activities at the treatment facility shall not cause exceedance/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 groundwater, 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 maximum contaminant levels (MCLs) specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for Organic Chemicals) of Title 22 California Code of Regulations, Division 4, Chapter 15.

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 two feet of freeboard shall be maintained in treatment Ponds 1 and 2 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 U.S. EPA 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 groundwater 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.** This section of the standardized permit template is not applicable.

6. Other Special Provisions

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

b. 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. If applicable, the Discharger shall seek coverage under the General Permit and comply with its requirements.

7. Compliance Schedules

This section of the standardized permit template is not applicable.

III. 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

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:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n 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.

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

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

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

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

Detected, but Not Quantified (DNQ)
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 Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

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

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

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

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, 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 that 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 Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention
Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

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

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.

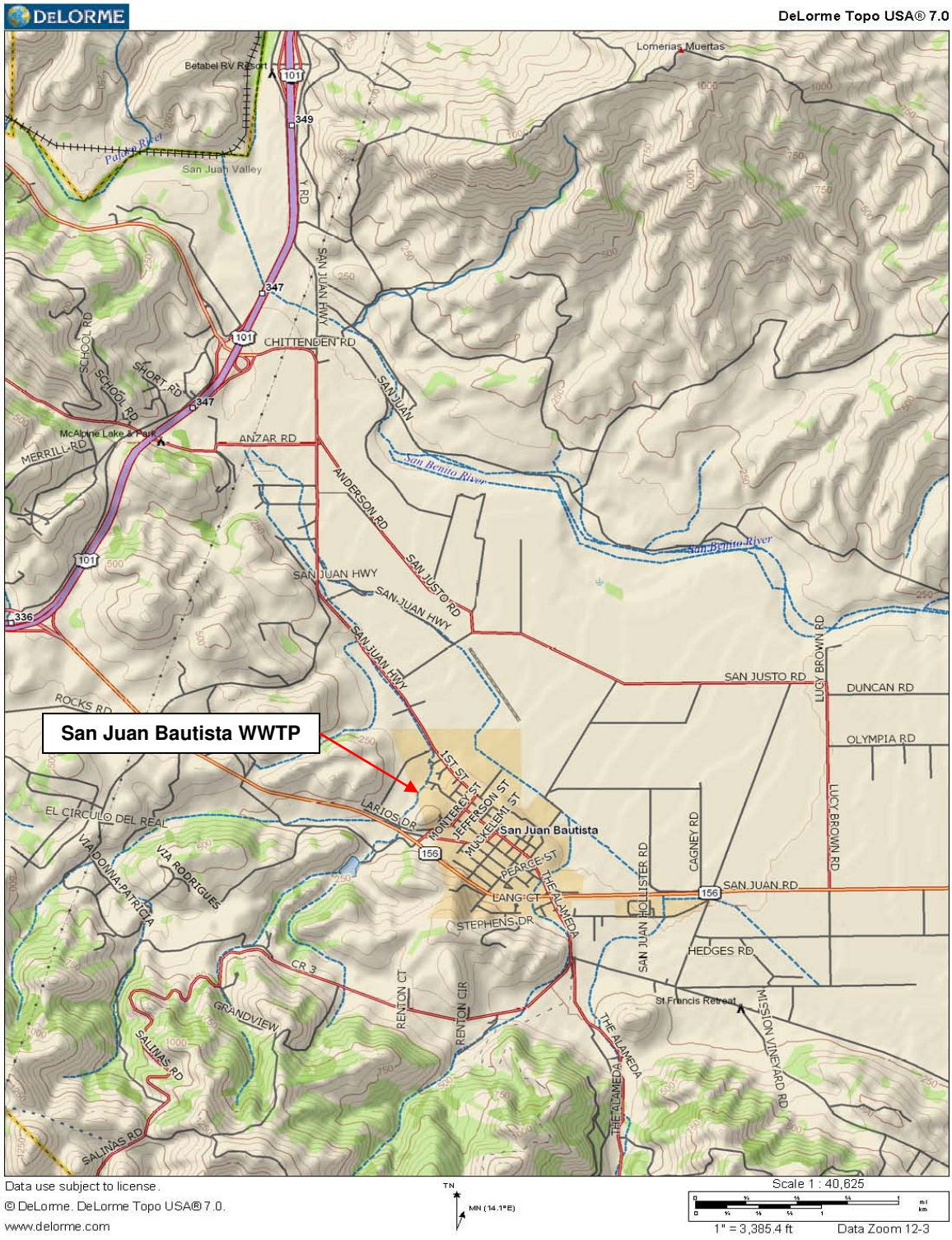
Standard Deviation (σ)
Standard Deviation is a measure of variability that is calculated as follows:

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

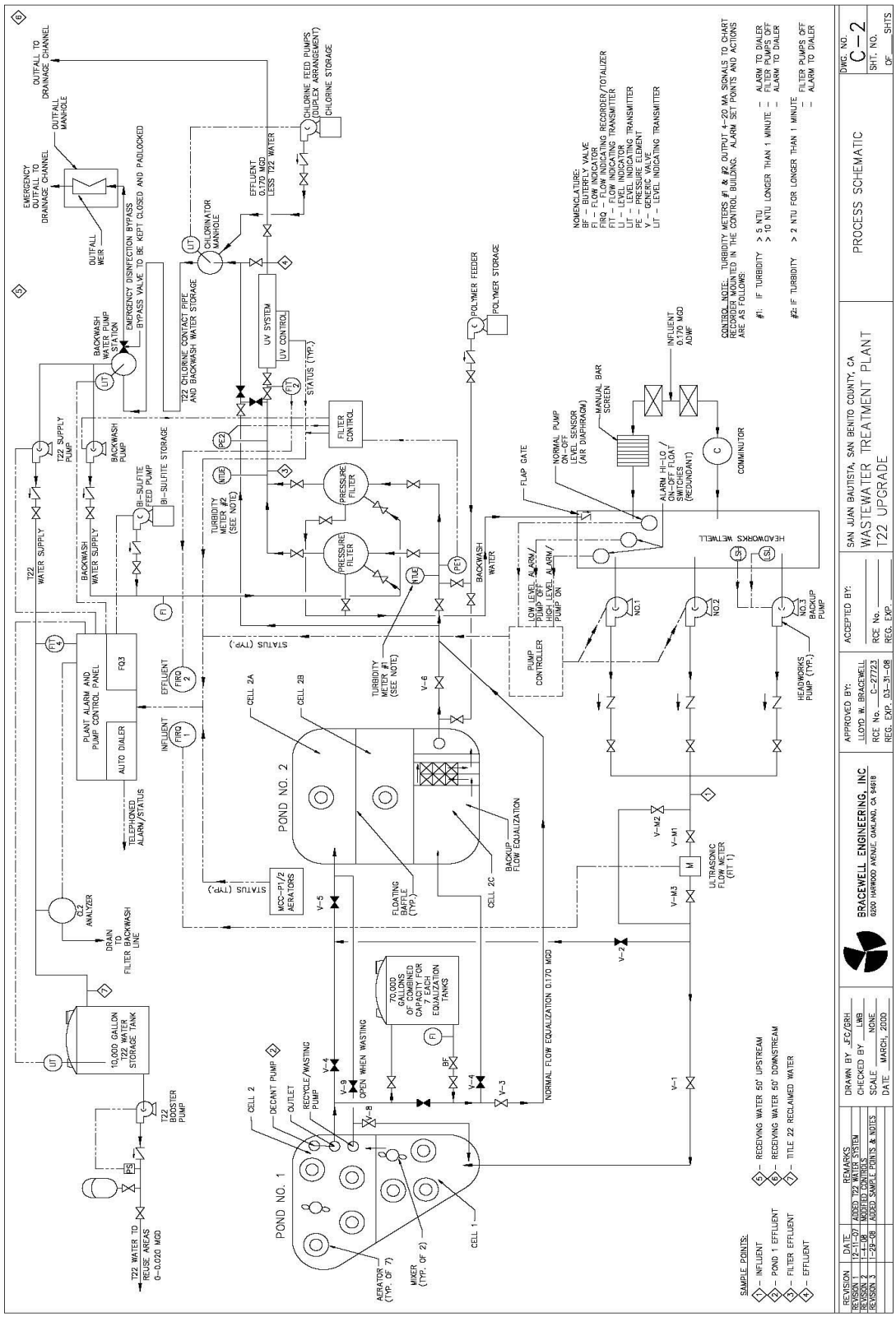
where:
x is the observed value;
μ is the arithmetic mean of the observed values; and
n is the number of samples.

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 Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

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

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions

a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)

b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was

caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. 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 C.F.R. § 122.41(f).)

B. Duty to Reapply

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

C. Transfers

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

III. FEDERAL STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures under 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 C.F.R. § 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 Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

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

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. FEDERAL STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional 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 Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)

2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).).

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard

Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 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 Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time

the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):

a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 C.F.R. § 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R.§ 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional 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 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

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

I. Other Information

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

VI. FEDERAL STANDARD PROVISIONS – ENFORCEMENT

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

VII. FEDERAL ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

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

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and

2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2).)

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

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 Section 307(a) of the Clean Water Act 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 Section 13050 of the California Water Code.

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 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 California Water Code. 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 Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved in either this Order or another order issued by this Board.

C. Central Coast Standard Provisions – General Monitoring Requirements

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

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

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services 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 marine monitoring surveys conducted to meet receiving water monitoring requirements of the Monitoring and Reporting Program shall include at least the following information:

   a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).

   b. A description of sampling stations, including differences unique to each station (e.g., station location, grain size, rocks, shell litter, calcareous worm tubes, evident life, etc.).

   c. A description of the sampling procedures and preservation sequence used in the survey.

   d. A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to Central Coast Standard Provisions – C.1 above, and Federal Standard Provision – Monitoring III.B. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.

   e. A brief discussion of the results of the survey. The discussion shall compare data from the control station with data from the outfall stations. All tabulations and computations shall be explained.

2. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the permit. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.

3. The "Discharger" shall file a report of waste discharge or secure a waiver from the Executive Officer at least 180 days before making any material change or proposed change in the character, location, or plume of the discharge.

4. Within 120 days after the discharger discovers, or is notified by the Central Coast Water Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four (4) years, the discharger shall file a written report with the Central Coast Water Board. The report shall include:

   a. the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity; and,

   b. a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

   In addition to complying with Federal Standard Provision – Reporting V.B., the required technical report shall be prepared with public participation and reviewed, approved and jointly submitted by all planning and building departments having jurisdiction in the area served by the waste collection, treatment, or disposal facilities.

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

   California Regional Water Quality Control Board
   Central Coast Region
   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

6. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Central Coast Water Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing "Discharger" and proposed "Discharger" containing specific date for transfer of responsibility, coverage, and liability between them. Whether a permit may be transferred without modification or revocation and reissuance is at the discretion of the Board. If permit modification or revocation and reissuance are necessary, transfer may be delayed 180 days after the Central Coast Water Board's receipt of a complete permit application. Please also see Federal Standard Provision – Permit Action II.C.

7. Except for data determined to be confidential under 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 EPA. Please also see Federal Standard Provision – Records IV.C.

8. 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 sewering entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger”, it refers to the discharger.)

4. “Duly Authorized Representative" is one where:

   a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision V.B.;

   b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,

   c. the written authorization was submitted to the Central Coast Water Board.

5. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples” shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in Central Coast Standard Provision – Provision G.2. and instantaneous maximum limits.

6. "Hazardous substance” means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.

7. "Incompatible wastes” are:

a. Wastes which create a fire or explosion hazard in the treatment works;

b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes;

c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;

d. Any waste, including oxygen demanding pollutants (BOD, 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:

$$\text{Log Mean} = (C1 \times C2 \times ... \times Cn)1/n,$$

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.

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

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

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial waste, or other waste.

16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.

17. "Pollutant-free wastewater" means inflow and infiltration, 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):

$$C_{Effluent} \text{ Removal Efficiency (\%)} = 100 \times (1 - C_{effluent} / C_{influent})$$

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 that 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

Table of Contents

I. General Monitoring Provisions E-2
II. Monitoring Locations E-3
III. Influent Monitoring Requirements E-4
A. Monitoring Location INF-001 ..... E-4
IV. Effluent Monitoring Requirements E-4
A. Monitoring Location EFF-001 ..... E-4
V. Whole Effluent Toxicity Testing Requirements E-6
A. Whole Effluent Acute Toxicity E-6
B. Whole Effluent Chronic Toxicity E-6
C. Quality Assurance E-8
D. Accelerated Monitoring Requirements E-8
E. Conducting Toxicity Identification Evaluations and Toxicity Reduction Evaluations E-8
VI. Land Discharge Monitoring Requirements E-9
VII. Reclamation Monitoring Requirements – REC-001 ..... E-10
VIII. Receiving Water Monitoring Requirements – Surface Water E-10
A. Monitoring Locations RSW-001 and RSW-002 ..... E-10
IX. Other Monitoring Requirements E-10
A. Biosolids Monitoring, Reporting, and Notification – BIO-001 ..... E-10
B. Water Supply Monitoring - SPL-001 ..... E-15
X. Reporting Requirements E-15
A. General Monitoring and Reporting Requirements E-15
B. Self Monitoring Reports (SMRs) E-15
C. Discharge Monitoring Reports (DMRs) E-18
D. Other Reports E-19

List of Tables

Table E-1. Monitoring Station Locations E-4
Table E-2. Influent Monitoring E-4
Table E-3. Effluent Monitoring E-5
Table E-4. Approved Test for Acute Toxicity E-6
Table E-5. Receiving Water Monitoring Requirements [1] E-10
Table E-6. Amount of Biosolids and Frequency for Analysis E-11
Table E-7. Biosolids Monitoring E-11
Table E-8. Monitoring Periods and Reporting Schedule E-16

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. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water 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 California Department of Public Health, in accordance with Water Code section 13176, and must include quality assurance/quality control data with their reports.

C. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall 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
001	EFF-001	Effluent wastewater at a point after all treatment and prior to contact with the receiving water
002	REC-001	Treated wastewater for reclamation use, at a point after chlorination and prior to distribution
---	SPL-001	The City's potable water supply collected at the Wastewater Treatment and Reclamation Plant
---	RSW-001	Receiving water representing background water quality conditions, collected in the unnamed drainage channel upstream of Discharge Point 001
---	RSW-002	Receiving water representing fully mixed (effluent and receiving water) conditions approximately 50 feet downstream of Discharge Point 001
---	BIO-001	Biosolids at the last point in the biosolids handling process where representative samples of residual solids from the treatment process can be obtained

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

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

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	Daily
Instantaneous Maximum Flow	MGD	Metered	Daily
Maximum Daily Flow	MGD	Metered	Monthly
Mean Daily Flow	MGD	Calculated	Monthly
TSS	mg/L	24-hr Composite	Every Two Weeks
BOD_5	mg/L	24-hr Composite	Every Two Weeks
TDS	mg/L	Grab	Monthly
Sodium	mg/L	Grab	Monthly
Chloride	mg/L	Grab	Monthly
Sulfate	mg/L	Grab	Monthly
Total Hardness	mg/L	Grab	Monthly

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Discharger shall monitor effluent at monitoring location EFF-001 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
Settleable Solids	ml/l	Grab	Weekly
pH [1]	s.u.	Grab	Weekly
Chlorine Used	lbs/day	Calculated	Continuous (when chlorinating)
Chlorine Residual	mg/L	Metered	Continuous (when chlorinating)
Dissolved Oxygen	mg/L	Grab	Weekly
BOD_5	mg/L	24-hr composite	Weekly
TSS	mg/L	24-hr composite	Weekly
TDS	mg/L	Grab	Weekly
Sodium	mg/L	Grab	Weekly
Chloride	mg/L	Grab	Weekly
Total Coliform Bacteria	MPN/100ml	Grab	2x/week
Temperature [1]	° F	Instantaneous	Monthly
Oil and Grease	mg/L	Grab	Monthly
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
Total Phosphorus	mg/L as P	Grab	Quarterly
Color	Color Units	Grab	Quarterly
Sulfate	mg/L	Grab	Quarterly
Total Hardness	mg/L	Grab	Quarterly
Acute Toxicity [2]	Pass or Fail	24-hr composite	Annually (June)
Chronic Toxicity [3]	TUc	24-hr composite	Annually (June)
CTR Pollutants [4] [5] [8]	µg/L	24-hr composite	1X / Permit Term
2,3,7,8-TCDD equivalent [5] [8]	µg/L	24-hr composite	1X / Permit Term
Title 22 Pollutants [6] [7] [8]	µg/L	24-hr composite	1X / Permit Term

[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 it 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, 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 Public Health has established Maximum Contaminant Levels (MCLs) at Title 22, Division 4, Chapter 15, sections 64431 (inorganic chemicals) and 64444 (organic chemicals) of the California Code of Regulations.

[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.

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 (*Pimephales promelas*)	Larval Survival and Growth	7	EPA/821-R-02-012 (Acute)
Water Flea (*Ceriodaphnia dubia*)	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 the compliance point station specified in a table above, for critical life stage toxicity testing as indicated below. For toxicity tests requiring renewals, 24-hour composite samples collected on consecutive days are required.

   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 (±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 United States Environmental Protection Agency (USEPA), which include the following:

   a. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (USEPA, 1992a);

   b. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (USEPA, 1991a);

   c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (USEPA, 1993a); and

   d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993b).

3. As part of the TIE investigation, the Discharger shall be required to implement its TRE work plan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period shall result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE include the following:

   a. 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 – REC-001

For discharges of reclaimed water from Discharge Point 002, the Discharger shall adhere to all provisions, time tables, limitations, and monitoring and reporting requirements contained in Attachments G and H of this Order.

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Monitoring Locations RSW-001 and RSW-002

1. The Discharger shall monitor the unnamed drainage channel at RSW-001 and RSW-002 as follows:

Table E-5. Receiving Water Monitoring Requirements [1]

Parameter	Units	Sample Type	Minimum Sampling Frequency
Dissolved Oxygen	mg/L	Grab	Quarterly
Temperature	° F	Grab	Quarterly
pH	s.u.	Grab	Quarterly
Turbidity	NTU	Grab	Quarterly

[1] Samples should be collected only when there is a live stream in the drainage channel upstream of the discharge point. If there is no flow upstream of the discharge point, receiving water sampling is not required.

IX. OTHER MONITORING REQUIREMENTS

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

1. A representative sample of residual solids (biosolids) shall be obtained from the last point in the handling process (i.e., in the drying beds just prior to removal). All constituents shall be analyzed annually for total concentrations for comparison with 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. 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-6. 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 annually for the constituents in the following table.

Table E-7. Biosolids Monitoring

Constituent	Units	Type of Sample	Sampling/Analysis Frequency
Quantity Removed	Tons or yds^3	Measured	Continual
Location of Reuse/Disposal	General Public or Specific Site		
Moisture Content	%	Grab	Annually (August)
pH	Standard Units	Grab	Annually (August)
Total Kjedldahl Nitrogen	mg/kg (dry)[1]	Grab	Annually (August)
Ammonia(N)	mg/kg	Grab	Annually (August)
Nitrate(N)	mg/kg	Grab	Annually (August)
Total Phosphorus	mg/kg	Grab	Annually (August)
Grease and Oil	mg/kg	Grab	Annually (August)
Boron	mg/kg	Grab	Annually (August)
Cadmium	mg/kg	Grab	Annually (August)
Copper	mg/kg	Grab	Annually (August)
Chromium (total)	mg/kg	Grab	Annually (August)
Lead	mg/kg	Grab	Annually (August)
Mercury	mg/kg	Grab	Annually (August)
Nickel	mg/kg	Grab	Annually (August)
Silver	mg/kg	Grab	Annually (August)
Zinc	mg/kg	Grab	Annually (August)

[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 CFR 503.32 (unless transferred to another preparer who demonstrates pathogen reduction.) Prior to disposal in a surface disposal site, the Discharger shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day. If pathogen reduction is demonstrated

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

The following applies when biosolids from the Discharger are directly land applied as Class B, without further treatment by a second preparer. If the Discharger demonstrates pathogen reduction by direct testing for fecal coliforms and/or pathogens, samples must be drawn at the frequency in 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 CFR 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 Section 307(a) of the Clean Water Act (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 CA Title 22, division 5, chapter 11, article 3 shall be analyzed 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.

6. If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

7. Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (EPA Method 9095) at the frequency determined by Table E-8, or more often if necessary to demonstrate that there are no free liquids.

8. The Discharger, either directly or through contractual agreements with their biosolids management contractors, shall comply with the following notification requirements:

a. *Notification of non-compliance*. The Discharger shall notify EPA Region 9, the Central Coast Water Board, and the Regional Board located in the region where the biosolids are used or disposed, of any non-compliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Discharger shall notify EPA 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 EPA 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 EPA 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 EPA, 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 EPA, and determine the cumulative metals loading to that site to date, as required in 40 C.F.R. 503.12. The Discharger shall notify the applier of all the applier's requirements under 40 C.F.R. 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 EPA and the Central Coast Water Board. The notice shall include a description and a topographic map of the proposed site, depth to groundwater, 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 groundwater monitoring plan or description of why groundwater monitoring is not required.

9. The Discharger shall submit an annual biosolids report to the EPA Region 9 Biosolids Coordinator and Central Coast Water Board by February 19th of each year (per USEPA guidance and 40 C.F.R. 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 groundwater 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 C.F.R. 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 C.F.R. 503.17 and 503.27.

h. For all biosolids temporarily stored, the information required in 40 C.F.R. 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 Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

B. Water Supply Monitoring - SPL-001

To provide ongoing characterization of the City's municipal supply and to determine impacts of that water quality on the City's ability to meet discharge limitations and conditions established by this Order, the Discharger shall conduct monitoring of the municipal supply at Monitoring Location SPL-001 in accordance with the requirements of Attachment H of this Order.

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. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs. 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-8. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	May 9, 2009	All	May 1 August 1 November 1 February 1
Daily	May 9, 2009	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	May 1 August 1 November 1 February 1
2x/Week	Sunday following permit effective date	Two times per week separated by 24 hours.	May 1 August 1 November 1 February 1
Weekly	Sunday following permit effective date	Sunday through Saturday	May 1 August 1 November 1 February 1
Every Two Weeks	Sunday following permit effective date	14 day consecutive period	May 1 August 1 November 1 February 1
Monthly	First day of calendar month following permit effective date	1st day of calendar month through last day of calendar month	May 1 August 1 November 1 February 1
Quarterly	Closest of January 1, April 1, July 1, or October 1 following 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 permit effective date	January 1 through December 31	February 1
1x/permit term	Between 180 and 365 days prior to Order expiration date	Permit term	The earliest of May 1, Aug 1, Nov 1, or Feb 1 following the monitoring event

4. 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. The 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. 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:

California Regional Water Quality Control Board
Central Coast Region
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, 15th Floor Sacramento, CA 95814

3. All 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

Table of Contents

I. Permit Information F-3
II. Facility Description F-4
A. Description of Wastewater and Biosolids Treatment or Controls F-4
B. Discharge Points and Receiving Waters F-5
C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data F-5
D. Compliance Summary F-5
E. Planned Changes F-8
III. Applicable Plans, Policies, and Regulations F-8
A. Legal Authorities F-8
B. California Environmental Quality Act (CEQA) F-9
C. State and Federal Regulations, Policies, and Plans F-10
D. Impaired Water Bodies on CWA 303(d) List F-11
E. Other Plans, Polices and Regulations F-11
IV. Rationale For Effluent Limitations and Discharge Specifications F-12
A. Discharge Prohibitions F-12
B. Technology-Based Effluent Limitations F-13
1. Scope and Authority F-13
2. Applicable Technology-Based Effluent Limitations F-14
C. Water Quality-Based Effluent Limitations (WQBELs) F-14
1. Scope and Authority F-14
2. Applicable Beneficial Uses and Water Quality Criteria and Objectives F-15
3. Determining the Need for WQBELs F-15
4. WQBEL Calculations F-17
5. Whole Effluent Toxicity (WET) F-17
6. Total Dissolved Solids (TDS), Sodium, Chloride, and Sulfate F-18
7. Ammonia F-18
8. Chlorine F-18
9. Total Coliform Bacteria F-18
D. Final Effluent Limitations F-19
1. Satisfaction of Anti-Backsliding Requirements F-19
2. Satisfaction of Antidegradation Policy F-19
3. Stringency of Requirements for Individual Pollutants F-19
E. Interim Effluent Limitations F-19
F. Land Discharge Specifications F-20
G. Reclamation Specifications F-20
V. Rationale for Receiving Water Limitations F-20
A. Surface Water F-20
B. Groundwater F-20
VI. Rationale for Monitoring and Reporting Requirements F-20
A. Influent Monitoring F-20
B. Effluent Monitoring F-20
C. Whole Effluent Toxicity Testing Requirements F-21

D. Receiving Water Monitoring F-21
1. Surface Water F-21
2. Groundwater F-21
E. Other Monitoring Requirements F-21
VII. Rationale for Provisions F-21
A. Standard Provisions F-21
B. Special Provisions F-22
1. Reopener Provisions F-22
2. Special Studies and Additional Monitoring Requirements F-22
3. Best Management Practices and Pollution Prevention F-22
4. Construction, Operation, and Maintenance Specifications F-22
5. Special Provisions for Municipal Facilities (POTWs Only) F-22
6. Other Special Provisions F-23
7. Compliance Schedules F-23
VIII. Public Participation F-23
A. Notification of Interested Parties F-23
B. Written Comments F-24
C. Public Hearing F-24
D. Waste Discharge Requirements Petitions F-24
E. Information and Copying F-24
F. Register of Interested Persons F-25
G. Additional Information F-25

List of Tables

Table F-1. Facility Information F-3
Table F-2. Historic Effluent Limitations and Monitoring Data F-5
Table F-3. CDO Compliance Summary F-6
Table F-4. Secondary Treatment Requirements F-13
Table F-5. Summary of Technology-Based Effluent Limitations F-14
Table F-6. RPA Results F-17
Table F-7. WET Test Results F-18

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 351015001
Discharger	City of San Juan Bautista
Name of Facility	City of San Juan Bautista Wastewater Treatment and Reclamation Plant
Facility Address	1120 Third Street San Juan Bautista, California 95045 San Benito County
Facility Contact, Title and Phone	Lloyd Bracewell (Bracewell Engineering, Inc., Operator) (510) 547-8205
Authorized Person to Sign and Submit Reports	Lloyd Bracewell (Bracewell Engineering, Inc., Operator) (510) 547-8205
Mailing Address	P.O. Box 1420, San Juan Bautista, CA 95045
Billing Address	P.O. Box 1420, San Juan Bautista, CA 95045
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Pretreatment Program	No
Reclamation Requirements	Title 22, only when recycled water is being used
Facility Permitted Flow	0.27 million gallons per day (MGD) (dry weather treatment capacity) 0.50 MGD (wet weather treatment capacity)
Facility Design Flow	0.27 (MGD)
Watershed	Pajaro River Watershed
Receiving Water	Unnamed drainage channel tributary to the San Benito River
Receiving Water Type	Inland Surface Water

A. The City of San Juan Bautista (hereinafter Discharger) is the owner and Lloyd Bracewell of Bracewell Engineering, Inc. is the operator of the City of San Juan Bautista Wastewater Treatment and Reclamation 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 wastewater to an unnamed, intermittently flowing drainage channel, a water of the United States, and is currently regulated by Order No. R3-2003-0087, which was adopted on September 12, 2003, and expires on September 1, 2008. 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 January 30, 2008.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

The Discharger owns and operates a wastewater collection and treatment facility, which currently serves a population of approximately 2,000 to 2,300 people. The facility receives primarily domestic and commercial wastewater from the service area of the City of San Juan Bautista. The facility also receives domestic wastewater (no industrial process or rinse waters) from three vegetable processors outside of the City, and it receives up to 10,000 gallons per month from septage haulers.

The current treatment system includes:

- A comminutor and influent flow-metering;
- Pond 1 which includes 8 aerators and 2 mixers and is operated as a sequencing batch reactor (SBR);
- Flow equalization using seven 10,000-gallon polyethylene tanks;
- Nitrification in Cell C of Pond 2;
- Sludge storage in Cells A and B of Pond 2;
- Coagulant addition;
- Pressure sand filtration;
- Ultraviolet light disinfection;
- Chlorine contact chamber;
- One 5,000-gallon Disinfected Tertiary Treated Water Storage Tank.

The wastewater collection system is almost entirely within the municipal limits and includes two lift stations. The City's sewer use ordinance was updated in 2007 to add industrial pretreatment requirements and additional requirements for control of fats, oils, and grease.

B. Discharge Points and Receiving Waters

Treated wastewater is discharged at Discharge Point 001 to an unnamed, intermittently flowing drainage channel adjacent to the facility, which flows to San Juan Creek, a tributary of the San Benito River.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from January 2004 to December 2007 are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From January 2004 – December 2007		
		Average Monthly (30-Day Average)	Average Weekly (7-Day Average)	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Flow	mgd	---	---	0.5	0.238 [1]		
BOD_5	mg/L	20	45	60	---	9.0	19
TSS	mg/L	20	45	60	---	6.0	11
Settleable Solids	mLs/L/Hr	0.1	---	0.3	< 0.1		< 0.1
Oil and Grease	mg/L	10	---	20	< 3.0	---	< 3.0
Coliform	MPN/100 mL	---	---	---	---	---	30
Un-ionized Ammonia	mg/L-N	---	---	0.025	---	---	0.004
TDS	mg/L	1400	---	---	1131[2]	---	1245[3]
Sodium[4]	mg/L	250	---	---	224[2]	---	250 [3]
Chloride[4]	mg/L	200	---	---	300[2]	---	348 [3]
Sulfate	mg/L	350	---	---	152[2]	---	197 [3]
Copper	µg/L	22	---	44	---	---	21 [3]

[1] Average wet weather flow rates (November to April) collected from January 2004 – December 2007.
[2] Average concentrations collected quarterly.
[3] Maximum concentrations collected quarterly.
[4] Sodium and chloride final effluent limitations became effective on July 13, 2006. Interim limits were 350 mg/L for each pollutant.

D. Compliance Summary

Due to exceedances of effluent limitations for chloride, on July 13, 2001, the Regional Water Board adopted Cease and Desist Order No. 01-106 (CDO), requiring the Discharger to comply with final limitations for chloride before July 12, 2006, in accordance

with a specific compliance schedule. The CDO established an interim limitation for chloride of 350 mg/L and required the following steps towards compliance with the final effluent limitation of 200 mg/L before July 12, 2006. The following table also presents the Regional Water Board's summary of actions taken by the Discharger to meet the requirements of CDO No. 01-106.

Table F-3. CDO Compliance Summary

Compliance Activity	Compliance Date	Regional Water Board Comments
a. Distribute public education and outreach materials regarding efficient use of water softeners.	August 13, 2001	• Jan. 26, 2001 - Letter received from Bracewell Engineering Inc. (BEI) that indicated high chloride concentrations due to use of water softeners. Stated no firm date for surface water plant but possibly in next 2 years. • Feb. 2, 2001 - Letter received from BEI indicates the City of San Juan Bautista (SJB) is working with SBCWD in reclamation project and water treatment project. SBCWD hired MWH to perform study. City requests extension of Reclamation Report due Feb 5, 2001, to June 5, 2001, because it will take time and money due to the extent of the project. • Feb 23, 2001 - Regional Water Board accepts extension request, contingent on April 20, 2001 progress report. • May 16, 2001 - Regional Water Board suggests issuance of a CDO, which would require SJB to submit a timetable for correcting the chloride violations by July 13, 2001, in order to avoid MMPs. • June 5, 2001 - SJB submits Reclamation Report to the Regional Water Board. • June 8, 2001 - BEI submits corrective actions for chloride violations, with a timetable for actions. Project completion date set for 2003. • June 18, 2001- SJB submits fax to Regional Water Board indicating completion of construction and start-up on April 15, 2004. • July 26, 2001 - Regional Water Board requests quarterly updates from SJB for reclamation project efforts. • July 31, 2001 - Regional Water Board issues CDO No. 01-106.
b. Investigate programs to replace self-regenerating water softeners with off-	September 17, 2001	• November 15, 2004 - SJB submits a Salt Reduction Project Report to the Regional Water Board as part of a Supplemental

Compliance Activity	Compliance Date	Regional Water Board Comments
site regenerated units. Provide results to Regional Board.		Environmental Project per Mandatory Minimum Penalty Order No. R3-2003-0141,
c. Submit Preliminary Design of the Infrastructure Program for construction of a surface water treatment plant.	August 13, 2001	• Feb 1, 2002 - MWH sends design drawings for SJB Infrastructure Improvements Program.
d. Submit 90 Percent Design for construction of a surface water treatment plant.	December 31, 2001	• Aug 12, 2003 - SJB states in letter that Dec 01 MWH completed 95% design. • Sep. 11, 2003 - Larry Cain, SJB City Manager, faxes transmittal letter dated Jan. 11, 2002, from MWH indicating delivery of 90% drawing sets. • Sep. 25, 2003 – Regional Water Board receives 90% design drawings from MWH for the surface water treatment plant and reservoir and transmission lines.
e. Submit evidence of approved bid for construction of a surface water treatment plant.	June 1, 2002	SJB eliminated plans for construction of a new water treatment plant in 2008.
f. Initiation of use of surface water treatment plant and demonstration of compliance with chloride effluent limitation.	July 12, 2006	SJB eliminated plans for construction of a new water treatment plant in 2008.

On September 7, 2006, the Regional Water Board issued a notice of violation (NOV) to the Discharger for accepting industrial wastewater from Natural Selection Foods, Inc. (dba Earthbound Farm) in violation of its waste discharge requirements, which stated that there were no discharges of industrial wastewater to the collection and treatment system, and which required notice to the Regional Water Board of such a material change in the nature of wastewater accepted by the Discharger. In the NOV, the Regional Water Board noted elevated concentrations of chloride and sodium in wastewater from Earthbound Farm and stated that, "we believe that acceptance of industrial wastewater discharge from Earthbound Farm may make it difficult for the City to meet its final sodium (250 mg/L) and chloride (200 mg/L) discharge effluent limits …." The NOV required submittal, before November 2006, of a comprehensive plan for managing wastewaters from Earthbound Farm to ensure that those wastewaters do not contribute to violations of final effluent limitations for sodium and chloride.

Due to chronic violations of final effluent limitations for chloride and failure to comply with requirements of CDO No. 01-106, on July 2, 2007, the Regional Water Board issued an NOV to the City requiring the following actions before August 3, 2007:

- Submittal of a historical timeline that describes reasons for delays in meeting the requirements of CDO no. 01-106,
- Submittal of a time schedule describing the City's progress towards meeting requirements of CDO No. 01-106 not yet completed, and
- Submittal of a time schedule describing activities planned for purposes of meeting final effluent limitations for chloride.

E. Planned Changes

In December 2007, the Discharger submitted an Engineering Report to the Department of Public Health (DPH) and the Regional Water Board describing the City's intent to reclaim treated wastewater for irrigation use in accordance with applicable requirements of California Water Code (CWC) sections 13500 – 13577 (Water Reclamation) and of California Code of Regulations (CCR) title 22, sections 60301 – 60357 (Water Recycling Criteria). The City intends to provide a portion of its treated for irrigation use at the City cemetery, adjacent to wastewater treatment facility, and for landscaped areas of the Creekbridge Development.

Although the Engineering Report does not provide a schedule for initiation of reclamation uses of treated wastewater, it states that approximately 20,000 gpd, on an annual basis, of treated wastewater will be used for irrigation on the nine-acre cemetery site and on the common areas of the Creekbridge Development. The treatment plant will be upgraded with chlorination capability to provide "disinfected tertiary recycled water," as defined at title 22 CCR 60301.230. A 10,000-gallon storage tank will be placed adjacent to existing filters at the treatment facility for storage of reclaimed wastewater prior to distribution.

Attachments G and H of this Order include requirements for reclamation uses of treated wastewater.

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 (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, division 7 of the Water Code, commencing with section 13260, and as water reclamation requirements pursuant to Water Code section 13523.

B. California Environmental Quality Act (CEQA)

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

The Discharger certified a final Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code, Section 621000 et seq.) and the California Code of Regulations on February 9, 1993, for the City of San Juan Bautista's Wastewater Reclamation Project (SCH91013076). The Discharger determined the reclamation project will have significant adverse environmental effects and that all potentially significant adverse effects can be avoided through implementation of mitigation measures.

The Regional Water Board is a responsible agency for purposes of CEQA and is required to make findings pursuant to California Code of Regulations, Title 14, section 15091 because the Discharger has identified a significant environmental effect that is within the jurisdiction of the Regional Water Board.

The EIR states that the recycled water project may result in salt concentrations in groundwater that could impact the beneficial uses and identifies the use of blending with higher quality water to mitigate the impacts of salt. The Regional Water Board may not specify the manner of compliance but it may establish requirements to protect the beneficial uses of waters of the state. This Order requires the Discharger to prepare and implement a Long Term Salinity Management Plan (SMP) for the application of recycled water to protect the beneficial uses of groundwater and preserve irrigated lands. The SMP shall document salt loading to the application areas and evaluate and implement measures for the reduction of salt loading as the result of the application of recycled water. The SMP shall ensure that the total salt loading applied does not adversely affect soil permeability and drainage and groundwater beneficial uses. See Attachment G Section D.22 of this Order. This Order prohibits the discharge of waste, including salt constituents, that exceed applicable water quality objectives set forth in the Basin Plan. See Attachment G Section D.28 of this Order. Blending as identified in the EIR is one method of complying with this prohibition. This Order requires the recycled water to be treated and applied in compliance with applicable state regulations governing use of recycled water. See Attachment G Section B of this Order.

This Order includes mitigation measures that avoid or substantially lessen the significant environmental effect identified in the EIR. Mitigation measures to prevent nuisance and ensure protection of beneficial uses of surface water and groundwater will be implemented through this Order. This Order requires monitoring and reporting to ensure compliance with the mitigation measures. See Attachment H – Reclamation Monitoring and Reporting Requirements Order No. R3-2009-0019. The terms of this Order, including the monitoring and reporting program, are fully enforceable pursuant to the California Water Code Division 7.

The EIR identified potentially significant impacts and mitigation measures with respect to matters outside the jurisdiction of the Regional Water Board that have been or should be addressed by another agency.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional 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 all waters addressed through the Plan. In addition, the Basin Plan implements 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.

   In accordance with Chapter 2 of the Basin Plan, surface water bodies that do not have beneficial uses specifically identified by the Basin Plan, including the receiving stream for this discharge, are assigned the beneficial uses of:

   - Municipal and domestic supply
   - Protection of both recreation and aquatic life.

   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 facility.

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 Regional 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 unnamed drainage channel tributary to the San Benito 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 C.F.R. 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 Regional Water Board's Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. As discussed in detail in Section IV.D.2 of this Fact Sheet, 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 Sections 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. As discussed in Section IV.D.1 of 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 section 303 (d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology based limitations on point sources. For all 303 (d) listed water bodies, the Regional Water Board must develop and implement TMDLs (total maximum daily loads) that specify WLAs (waste load allocations) for point sources and load allocations for non-point sources.

The State's 2006 303 (d) list of impaired water bodies, which was approved by USEPA in June 2008 does not identify the unnamed drainage, which is the immediate receiving water for this discharge, or San Juan Creek as being impaired.

E. Other Plans, Polices 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. If applicable, the Discharger must seek coverage under the General Permit and comply with its requirements.

2. **Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, 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 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*.

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 they discharge 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 to protect the beneficial uses of the receiving water. When numeric water quality objectives 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 U.S. EPA criteria guidance published under CWA Section 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 a single, specific point of discharge to surface waters, and the limitations and conditions established by the Order are based on specific information provided by the Discharger and gained by the Regional Water Board through site visits, monitoring reports, and other information. Discharges to surface waters at locations not contemplated by this Order or discharges of a character not contemplated by this Order are therefore viewed as inconsistent with CWA section 402's prohibition against discharges of pollutants except in compliance with the Act's permit requirements, effluent limitations, and other enumerated provisions. This prohibition is retained from the previous permit.

2. **Discharge Prohibition III. B** (The discharge of any waste not specifically regulated by this Permit is prohibited). Because limitations and conditions of the Order have been prepared based on specific information provided by the Discharger and specific wastes described by the Discharger, the limitations and conditions of the

Order do not adequately address waste streams not contemplated during drafting of the Order. To prevent the discharge of such waste streams that may be inadequately regulated, the Order prohibits the discharge of any waste that was not described by to the Regional Water Board during the process of permit reissuance.

3. **Discharge Prohibition III. C** (Creation of a condition of pollution, contamination, or nuisance, as defined by Section 13050 of the CWC, is prohibited). This prohibition is retained from the previous permit.

4. **Discharge Prohibition III. D** (The discharge of radioactive substances is prohibited). This prohibition is retained from the previous permit.

5. **Discharge Prohibition III. E** (Overflows and bypasses prohibited). The discharge of untreated or partially treated wastewater from the Discharger's collection, treatment, or disposal facilities represents an unauthorized bypass pursuant to 40 CFR 122.41 (m) or an unauthorized discharge, which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by the Order.

6. **Discharge Prohibition III. F** (Dry and wet weather daily flows, averaged monthly, shall not exceed 0.27 and 0.50 MGD, respectively). This prohibition is retained from the previous permit, where it was expressed as an effluent limitation. The purpose of the prohibition is to ensure that influent flows do not exceed the treatment plant's design capacities, and thereby, to ensure efficient treatment of wastewater.

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 Section 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-4. Secondary Treatment Requirements.

	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	

[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-5. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations, Discharge Point 001		
		Average Monthly	Average Weekly	Maximum Daily
BOD_5 [1]	mg/L	20	45	60
TSS [1]	mg/L	20	45	60
Settleable Solids	mL/L/hr	0.1	---	0.3
Oil and Grease	mg/L	10	---	20
pH	s.u.	6.0 – 9.0		

[1] The average monthly, percent removal of BOD_5 and TSS, as measured at Monitoring Location EFF-001, shall not be less than 85 percent.

All technology-based effluent limitations are retained from the previous permit, and a limitation for pH is added to the permit, reflecting requirements of the Secondary Treatment Regulations. Although the Secondary Treatment Regulations at 40 CFR 133 require average monthly BOD_5 and TSS limitations of 30 mg/L, the more stringent average monthly limitations of 20 mg/L are retained from the previous permit, as the treatment facility has consistently achieved this level of performance. Limitations for settleable solids and oil and grease reflect pollutant removals attainable by secondary treatment.

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 section 304 (a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed State criterion or

policy interpreting the State's narrative criterion, supplemented with other relevant information.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

In accordance with Chapter 2 of the Basin Plan, surface water bodies that do not have beneficial uses specifically identified by the Basin Plan, like the receiving water for this discharge, are assigned the beneficial uses of municipal and domestic supply and protection of both recreation and aquatic life. 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. Here, on August 28, 2007, the Discharger has collected a single set of effluent data for the toxic pollutant with applicable water quality criteria established by the CTR, NTR, and Basin Plan.

Some freshwater water quality criteria for metals are hardness dependent; i.e., as hardness decreases, the toxicity of certain metals increases and the applicable water quality criteria become correspondingly more stringent. Because the receiving water for this discharge is effluent dominated, Regional Water Board staff used the following effluent data for hardness from three sampling events.

Date	**Dec 17, 2007**	**Mar 17, 2008**	**Jun 12, 2008**
Effluent Hardness (mg/L $CaCO_3$)	424	436	440

In accordance with the CTR at 40 CFR 131.38.(c) (4), for waters with hardness concentrations above 400 mg/L $CaCO_3$, a hardness value of 400 mg/L $CaCO_3$ must be used to determine applicable hardness dependent water quality criteria for metals.

To conduct the reasonable potential analysis, the Regional Water Board identified the maximum observed effluent (MEC) and background (B) concentrations for each

priority, toxic pollutant from receiving water and effluent data provided by the Discharger and compared this data to the most stringent applicable water quality criterion (C) for each pollutant from the NTR, CTR, and the Basin Plan. Section 1.3 of the SIP establishes three triggers for a finding of reasonable potential.

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 Regional Water Board, using methods presented in the SIP, finds that the discharge does not show reasonable potential to cause or contribute to in-stream excursions above applicable water quality criteria for the priority toxic pollutants.

The following table summarizes the RPA for each priority, toxic pollutant, or Title 22 pollutant that was measured in effluent during the monitoring event of August 28, 2007. 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-6. RPA Results

Pollutant	C	MEC	B	RPA Result
Arsenic	50 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	1 µg/L	No Data Available	No
Chromium (III)	644 µg/L, freshwater aquatic life chronic criterion from the CTR	4 µg/L		No
Copper	30 µg/L, freshwater aquatic life chronic criterion from the CTR	21 µg/L		No
Zinc	200 µg/L, freshwater aquatic life criterion from the Basin Plan	40 µg/L		No
Cyanide	5.2 µg/L, freshwater aquatic life chronic criterion from the CTR	4.3 µg/L		No
Chloroform	No Criteria	17 µg/L		No
Aluminum	1000 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	12 µg/L		No
Barium	1000 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	46 µg/L		No
Fluoride	2000 µg/L, human health criterion from the Basin Plan (Title 22 MCL)	330 µg/L		No
Tributyltin	No Criteria	12 µg/L		No
Total PAHs	No Criteria	46 µg/L		No

4. WQBEL Calculations

Not Applicable.

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 effluent limitations for whole effluent toxicity, but it required monitoring for whole effluent chronic toxicity, including accelerated monitoring when chronic toxicity was measured greater than 1.0 TUc. Results of

this monitoring is presented in the following table and shows that, from 2004 through 2007, that chronic toxicity levels commonly exceeded the 1.0 TUc threshold, which the Regional Water Board views as protective of the narrative water quality objective for toxicity established by the Basin Plan.

Table F-7. WET Test Results

	Fathead Minnow Larval Survival	Fathead Minnow Larval Growth	Water Flea Survival	Water Flea Reproduction	Green Algae Growth
July 2007	1.0 TUc	1.0 TUc	1.0 TUc	> 1.0 TUc	> 1.0 TUc
June 2007	1.0 TUc	1.0 TUc	1.0 TUc	> 1.0 TUc	> 1.0 TUc
June 2006	> 1.0 TUc	> 1.0 TUc	1.0 TUc	1.0 TUc	1.0 TUc
June 2005	1.0 TUc	1.0 TUc	1.0 TUc	> 1.0 TUc	1.0 TUc
June 2004	1.0 TUc	1.0 TUc	1.0 TUc	1.0 TUc	1.0 TUc

Based on results of WET monitoring during the previous permit term, The regional Water Board has determined that the discharge from the City's wastewater treatment facility 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), with this Order is establishing an effluent limitation for whole effluent chronic toxicity of 1.0 TUc.

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

This Order retains effluent limitations for TDS, sodium, chloride, and sulfate from the previous permit. These limitations reflect water quality objectives established by the Basin Plan for the San Benito River sub-area of the Pajaro River drainage basin, applied as end-of-pipe effluent limitations.

7. Ammonia

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

8. Chlorine

Water quality based effluent limitations from the previous permit for chlorine are retained by this Order.

9. Total Coliform Bacteria

Water quality based effluent limitations from the previous permit for coliform bacteria are retained by this Order.

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 anti-backsliding provisions of the Clean Water Act, as all limitations and requirements of the Order are at least as stringent as those of the previous permit, with the exception of copper.

Effluent limitations for copper are not retained, as this pollutant no longer demonstrates 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 for copper generated during the term of the previous permit indicates that copper is not discharged at concentrations that may cause or contribute to exceedances of applicable water quality criteria.

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. 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, BOD_5, 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

California Water Code section 13523 provides authority for the Regional Water Quality Board to prescribe water reclamation requirements for a facility producing reclaimed water, the user, or both. This Order includes, as Attachments G and H, reclamation requirements and monitoring and reporting requirements to comply with applicable State and local requirements regarding the production and use of reclaimed wastewater, including those requirements established by the Department of Health Services at CCR title 22, sections 60301 - 60357 (Water Recycling Criteria).

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 for Central Coast Region.

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. Water Code sections 13267 and 13383 also authorize the Regional 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 there is no longer an effluent limitation for copper, routine monitoring for this pollutant is no longer required.

- 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 Title 22 pollutants – those pollutants with primary maximum contaminant levels (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 chronic and acute toxicity monitoring requirements for Discharge Point 001 from the previous permit.

D. Receiving Water Monitoring

1. Surface Water

Surface water receiving water monitoring requirements are unchanged and are retained from the previous Order.

2. Groundwater

Groundwater monitoring requirements are not established by the Order. The Regional Water Board has required groundwater monitoring, however, in some circumstances where treated wastewater is applied to land, particularly in circumstances where wastewater may be applied at rates greater than suitable for existing soil and plant conditions.

E. Other Monitoring Requirements

The previous Order included a provision, which required the Discharger to maintain freeboard of at least two feet in the treatment ponds at all times. This Order retains this requirement.

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

CFR123.25, 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 Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387 (e).

B. Special Provisions

1. Reopener Provisions

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

2. Special Studies and Additional Monitoring Requirements

The Order retains the requirement to conduct accelerated whole effluent toxicity monitoring upon the detection of 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 activity 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 Regional Water Board, will oversee compliance with 40 CFR Part 503.

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*.

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 Order requires the Discharger to seek coverage under the General Permit, if applicable, and comply with its requirements.

7. Compliance Schedules

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

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Central Coast Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the City of San Juan Bautista Wastewater Treatment and Reclamation Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed draft WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional 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 are invited to submit written comments concerning these draft WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on **March 13, 2009**.

C. Public Hearing

The Regional Water Board will hold a public hearing on the draft WDRs during its regular Board meeting on the following date and time and at the following location:

Date: **May 8, 2009**
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 are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/centralcoast/ where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any person aggrieved by an action of the Central Coast Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the order, except that if the thirtieth day following the date of the order falls on a Saturday, Sunday, or state holiday, the petition must be received by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

E. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative 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 Regional 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 Regional 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 **Ms. Cecile DeMartini at (805) 542-4782 or at cdemartinin@waterboards.ca.gov** or Chris Rose at (805) 542-4770.

ATTACHMENT G - RECLAMATION REQUIREMENTS

I. IMPORTANCE OF RECYCLED WATER

1. California Water Code Section 13510 states that the people of the State have a primary interest in the development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the state.

2. California Water Code Section 13512 states that it is the intention of the legislature that the State undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water demands of the State.

II. FACILITY DESCRIPTION

1. The City of San Juan Bautista (hereinafter "Discharger," "Supplier," "Distributor," or "Supplier and Distributor") owns and operates the wastewater collection, treatment, and disposal services for the service area including the City of San Juan Bautista and three vegetable processing plants outside of the City. The Discharger submitted a Report of Waste Discharge (ROWD) dated January 30, 2008. The ROWD proposes modification of the existing wastewater treatment to treat a portion of the effluent to reclaimed water standards for local reuse. The Discharger submitted an *Engineering Report on the Production, Distribution, and Use of Recycled Water for the City of San Juan Bautista* to the Regional Water Board in December 2007, which described the proposed modifications.

   Influent flows by gravity through a comminutor and into the influent lift station, where it is pumped to the pond sequence batch reactor (SBR). The pond SBR is utilized to oxidize organic matter and to provide nitrogen removal. Biosolids generated in the SBR are wasted to Pond 2, which acts to stabilize and store sludge. The secondary effluent is decanted to seven 10,000-gallon storage tanks for flow equalization and gravity flows to monomedia (sand) filters. A coagulant is added to the secondary effluent prior to filtration to aid in particulate removal, and filtration is set at less than five gallons per minute per square foot of filter area, with one unit out of service at any time. The filtered effluent is UV disinfected, and when reclaimed water meeting Title 22 CCR, Division 4, Chapter 3, Water Reclamation Criteria (T22) is being produced, the filtered and UV disinfected effluent is chlorinated with sodium hypochlorite with a total of 110 minutes of contact time. Reclaimed effluent is stored in a 5,000-gallon storage tank and discharged for reclaimed use at Discharge Point 002 (Monitoring Location REC-001, as described in Attachment E, Monitoring and Reporting Program.) Initial use of reclaimed effluent is proposed as landscape irrigation in a nearby residential development and as irrigation in a neighboring cemetery, with future use as possible irrigation of non-restricted landscape areas within the City.

   Potential causes of terminating reclaimed water production include:

- Failure of the sodium hypochlorite disinfection system or a low chlorine residual reading,
- Filter controller failure,
- High turbidity reading for the sand filter influent or effluent, or
- Wet weather resulting in influent flows to the plant exceeding wet weather capacity.

If reclaimed water production is terminated, the filters will stop filtering secondary effluent and the secondary effluent will overflow into Pond 2. If the problem is not resolved while Pond 2 is filling, the valve to the chlorine contact pipe system will be manually closed and the filtration of secondary effluent will be restarted. This filtered effluent will be UV disinfected and discharged to the treatment plant outfall until reclaimed water production can resume.

III. RATIONALE FOR REQUIREMENTS

California Water Code Section 13523 provides that the Regional Water Board may prescribe water reclamation requirements for water, which is used or proposed to be used as reclaimed water. The Regional Water Board has consulted with the State of California Department of Public Health (DPH) and has incorporated the recommendations from the DPH regarding the regulation of discharging reclaimed water. The requirements of this attachment conform with and implement the water reclamation criteria of the DPH and California Code of Regulations, Title 22, Chapter 3 to protect the public health, safety, and welfare.

Footnotes are listed throughout these requirements to indicate the source of requirements specified. Numbered footnotes generally reference code sections for direct citations. Footnote acronyms are as follows:

BPJ	Best Professional Judgment of Regional Water Quality Control Board Staff
ROWD	City of San Juan Bautista Report of Waste Discharge, January 2008
40CFR	Title 40 Code of Federal Regulations
BP	Central Coast Regional Water Quality Control Plan
DPH	California Department of Public Health
T22	Title 22 CCR, Division 4, Chapter 3, Water Reclamation Criteria
CWC	Porter-Cologne Water Quality Control Act (California Water Code)

IT IS HEREBY ORDERED, pursuant to authority in Sections 13263, 13523, and 13523.1 of the California Water Code, that the City of San Juan Bautista, its agents, successors, and assigns, may produce, store and distribute reclaimed wastewater provided it complies with the following:[1]

The Discharger shall comply with all Prohibitions, Specification, and Provisions as applicable, and shall ensure that indirect Users also comply with these requirements. The Supplier and Distributor shall comply with the specific Supplier Requirements and Distributor/User Requirements, respectively. The Distributer shall ensure that indirect Users also comply with applicable Distributor/User Requirements.

A. Prohibitions

1. Discharge of treated wastewater to areas other than disposal areas, or areas of authorized storage and use, is prohibited. *ROWD, BPJ*

2. Discharge of untreated or partially treated wastes to areas other than to waste disposal, including overflows, bypasses, seepages, and spills, is prohibited. *BPJ,* PC

3. Discharge of treated wastewater within 50-feet of all active or inactive water supply wells is prohibited. *DPH*

4. The treatment, storage, distribution, or reuse of recycled water shall not create a nuisance as defined in section 13050(m) of the California Water Code. *CWC*

5. Daily average flow rates through the facility's treatment system surpassing the capacity of the pressure sand filters or the chlorine contact basin is prohibited.

6. Recycled water used for irrigation is prohibited during periods of rainfall or when soils are saturated such that ponding or runoff occurs. *BPJ*

7. Recycled water applied at a rate or volume that will exceed vegetative demand or soil moisture conditions is prohibited. *DPH*

8. Recycled water shall not be discharged from the treatment facilities, storage ponds, or other containment, other than for designated irrigation or other approved reuse applications in accordance with this Order, to the "extent practical." *BPJ*

9. There shall be no cross-connections between the potable water supply and pipes containing recycled water. Supplementing recycled water with water used for domestic supply shall not be allowed except through an air-gap separation that complies with the requirements of Section 7602(a) and 7603(b) of Title 17, California Code of Regulations (CCR).*DPH*

[1] General permit conditions, definitions and the method of determining compliance are contained in Attachment D, included as part of this Order.

10. In accordance with CCR Title 17, Section 7605, a reduced pressure principle backflow device shall be provided at premises where recycled water is used and there is no interconnection with the potable water system.[2] *BPJ, T22, DPH*

11. Transportation of undisinfected recycled water within a pipeline used to transport Title 22 compliant recycled water is prohibited. *DPH*

12. Use of disinfected recycled water for direct human consumption or for processing of food or drink intended for human consumption is prohibited. *DPH*

B. Limitations

Flow and General Limitations

1. Daily average influent wastewater flow to the chlorine contact chamber shall not exceed 0.14 MGD, which is the chlorine contact chamber treatment daily capacity.

2. The effluent pH shall not be less than 6.5 or greater than 8.4. *BP*

Disinfected Tertiary Recycled Water Limitations

3. The Supplier shall ensure that treated effluent put to use for disinfected tertiary recycled water applications shall be an adequately oxidized, filtered, and disinfected water, as defined in CCR Title 22, Division 4, Chapter 3, Sections 60301-60335, or alternatively defined and approved by DPH.

4. The turbidity of the disinfected tertiary recycled water shall not exceed any of the following:[3, 4, 5]

   a. An average of 2 NTU within a 24-hour period;

   b. 5 NTU more than 5 percent of the time within a 24-hour period; and,

   c. 10 NTU at any time.

5. Disinfected tertiary recycled water shall not contain total coliform concentrations exceeding the following limits:[6]

---

[2] This requirement does not apply to individual residences using recycled water for landscape irrigation as part of an approved dual plumbed use area as defined in CCR Title 17, Table 1 Section (c)(3).
[3] CCR Title 22, Div. 4, Chap.3, Section 60301.320
[4] Pursuant to CCR Title 22, Div. 4, Chap.3, Section 60301.320(a) coagulation need not be used as part of the treatment process provided that the filter effluent turbidity does not exceed 2 NTU, the turbidity of the influent to the filters is continuously measured, the influent turbidity does not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU, and that there is the capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 NTU for more than 15 minutes.
[5] Pursuant to CCR Title 22, Div. 4, Chap.3, Section 60301.320(b) for filtration via microfiltration, ultrafiltration, nanofiltration, or reverse osmosis the effluent turbidity shall not exceed 0.2 NTU more than 5 percent of the time within a 24-hour period, and 0.5 NTU at any time.
[6] CCR Title 22, Div. 4, Chap.3, Section 60301.230

a. the seven-day median concentration must not exceed an Most Probable Number (MPN) of 2.2 per 100 milliliters (ml); and

b. concentrations must not exceed an MPN of 23 per 100 ml in more than one sample taken over a 30-day period;

c. concentrations must be less than an MPN of 240 per 100 ml at all times.

6. The chlorine residual within the disinfection process following filtration shall provide a CT value[7] of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow.

C. Supplier and Distributor Requirements

1. The Supplier and Distributor must submit to, and obtain approval from, the DPH and the Regional Water Board a plan for the recycled water distribution system from the facility to the use areas prior to initial delivery of recycled water. The plan should show drawing and maps of the locations of the potable water, sewer, and recycled water pipelines. The drawings should indicate adequate separation between the recycled water and potable domestic water lines as required by California Waterworks Standards sections 64572(c) and (d). The recycled water and potable domestic water lines should be marked clearly or labeled using separate colors for identification. The Discharger must prepare as-built drawings and keep them on file once construction is completed.

2. The DPH, accompanied by Regional Water Board staff, will conduct a site visit at the facility, to inspect, evaluate and verify the operation of all alarms, set-points, and failsafe procedures associated with the tertiary recycled water treatment facilities prior to start-up.

3. Reclamation facilities shall be operated in conformance with the American Water Works Association, California-Nevada Section's *Guidelines for the Distribution of Non-potable Water,* with the Distributor's approved reclaimed water use rules and regulations (which may clarify and/or modify the above guidelines), and with the appropriate local administrative procedures.

4. Personnel involved in producing, transporting, or using recycled water shall be informed of possible health hazards that may result from contact and use of recycled water. *T22, BPJ*

5. Personnel involved in inspecting, maintaining or operating any distribution system equipment for recycled water shall be informed of the possible health hazards that may result from contact and use of recycled water. *T22, BPJ*

6. Delivery of recycled water shall cease during any period in which the Discharger fails to produce "disinfected tertiary recycled water" meeting CCR Title 22 criteria. The

[7] The product of total chlorine residual and modal contact time measured at the same point.

delivery of recycled water shall not be resumed until all conditions that caused the limits to be violated have been corrected and recycled effluent in the storage tank is suitable for disinfected tertiary recycled water applications. *BPJ*

7. Signage (in English and Spanish) shall be posted in the recycled effluent storage tank area and all use areas with public access to warn the public that recycled wastewater is being stored or used. *BPJ*

8. Recycled water systems shall be properly labeled and regularly inspected to ensure proper operation, absence of leaks, and absence of illegal connections. *BPJ, T22*

9. The Supplier and Distributor shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the Supplier, Distributor or Users to achieve compliance with this Order.

10. The Supplier and Distributor shall implement, and ensure that Users implement, annual employee training to ensure proper operation of reclamation facilities, worker protection, and compliance with this Order.

11. The Supplier and Distributor shall ensure that all above-ground equipment, including pumps, piping, storage reservoir, and valves, etc., under their respective control that may at any time contain reclaimed water shall be adequately and clearly identified with warning signs. The Supplier and Distributor shall make all necessary provisions to inform the public that the water being stored or distributed is reclaimed municipal wastewater and is unfit for human consumption. The Supplier and Distributor shall ensure that each User complies with these requirements for all above-ground equipment under a User's control.

12. The facility shall be managed to minimize mosquito-breeding habitat. BPJ

Alarms [8]

13. Alarm devices required for various unit processes as specified in other sections of these Reclamation Requirements shall be installed to provide warning of:

    a. Loss of power from the normal power supply.

    b. Failure of a biological treatment process.

    c. Failure of a disinfection process.

    d. Failure of a filtration process.

    e. Any other specific process failure for which warning is required by DPH or the Regional Water Board.

All required alarm devices shall be independent of the normal power supply of the facility.

[8] CCR Title 22, Div. 4, Chap. 3, Section 60335

14. The person to be warned shall be the plant operator, superintendent, or any other responsible person designated by the management of the reclamation plant and capable of taking prompt corrective action.

15. Individual alarm devices may be connected to a master alarm to sound at a location where it can be conveniently observed by the attendant. In case the reclamation plant is not attended full time, a 24-hour autodialer notifying operation staff of any alarm shall be installed or other alarm(s) shall be connected to sound at a police station, fire station or other full-time service unit with which arrangements have been made to alert the person in charge at times that the reclamation plant is unattended.

Power Supply [9]

16. The power supply shall be provided with one of the following reliability features:

    a. Alarm and standby power source.

    b. Alarm and automatically actuated short-term retention or disposal provisions as specified in Title 22 Section 60341.

    c. Automatically actuated long-term storage or disposal provisions as specified in Title 22 Section 60341.

Flexibility of Design [10]

17. The design of process piping, equipment arrangement, and unit structures in the reclamation plant must allow for efficiency and convenience in operation and maintenance and provide flexibility of operation to permit the highest possible degree of treatment to be obtained under varying circumstances.

Personnel [11]

18. Each reclamation plant shall be provided with a sufficient number of qualified personnel to operate the facility effectively to achieve the required level of treatment at all times.

19. Qualified personnel shall be those meeting requirements established pursuant to Chapter 9 (commencing with Section 13625) of the Water Code.

Maintenance [12]

20. A preventive maintenance program shall be provided at each reclamation plant to ensure that all equipment is kept in a reliable operating condition.

[9] CCR Title 22, Div. 4, Chap. 3, Section 60337
[10] CCR Title 22, Div. 4, Chap. 3, Section 60333
[11] CCR Title 22, Div. 4, Chap. 3, Section 60325
[12] CCR Title 22, Div. 4, Chap. 3, Section 60327

21. Flow meters and other process instrumentation will be calibrated in accordance with manufacturers' recommendations and best management practices for the industry.

Operating Records and Reports [13]

22. Operating records shall be maintained at the reclamation plant or a central depository within the operating agency. These shall include all analyses specified in the reclamation criteria; records of operational problems, plant and equipment breakdowns, and diversions to emergency storage or disposal; all corrective or preventive action taken.

23. Process or equipment failures triggering an alarm shall be recorded and maintained as a separate record file. The recorded information shall include the time and cause of failure and corrective action taken.

24. A monthly summary of operating records as specified in Reclamation Monitoring and Reporting Requirements (Attachment H) shall be filed monthly with the Regional Water Board. [14]

25. Any discharge of untreated or partially treated wastewater to the use area shall be reported immediately by telephone to Regional Water Board staff, the DPH, and the local environmental health officer at the numbers provided in the Reclamation Monitoring and Reporting Requirements (Attachment H).

Bypass [15]

26. There shall be no bypass of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the point of use.

Contingency Plan

27. In the event that effluent discharged does not meet the criteria for disinfected recycled water, the Supplier shall implement the measures described in the Contingency Plan. [16]

28. The Contingency Plan shall be reviewed and updated annually as necessary. A copy of the revised Off-Specification Contingency Plan or statement indicating the Plan has been reviewed, but not updated, shall be submitted to the Regional Water Board as part of the annual monitoring report. *BPJ*

29. Alternative reuse methods for off-specification effluent may be implemented on an as-needed basis if they meet the criteria for the "Uses of Recycled Water" contained

[13] CCR Title 22, Div. 4, Chap. 3, Section 60329
[14] Per CCR Title 22 Div. 4, Chap. 3, Section 60301.740. "Regulatory agency" means the California Regional Water Quality Control Board(s) that have jurisdiction over the recycling plant and use areas.
[15] CCR Title 22, Div. 4, Chap. 3, Section 60331
[16] December 2007, Bracewell Engineering, *Engineering Report on the Production, Distribution, and Use of Recycled Water for the City of San Juan Bautista*

in CCR Title 22, Division. 4, Chapter 3, Article 3 (Sections 60303-60309) and prior approval is given by the Regional Water Board and DPH. *BPJ*

Sludge and Solid Waste

(Sludge in this document means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screening material generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment. Biosolids refers to sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agriculture, silviculture, horticulture, or land reclamation activities.)

30. Sludge and solid waste shall be removed from treatment facilities as needed to ensure optimal facility operation.

31. Treatment and storage of sludge shall be confined on-site and conducted in a manner that precludes infiltration of waste constituents into soils in a mass or concentration that will violate Groundwater Limitations (see below).

32. Any storage of residual sludge and solid waste shall be temporary and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate Groundwater Limitations.

33. Sludge and solid waste shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27. Removal for further treatment, disposal, or reuse at sites (i.e., landfill, composting sites, soil amendment sites) operated in accordance with valid waste discharge requirements issued by the Regional Water Board will satisfy this specification.

34. Use of biosolids as a soil amendment shall comply with valid waste discharge requirements issued by the Regional Water Board. In most cases, this will mean the General Biosolids Order (SWRCB Water Quality Order No. 2004-0012-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities). For a biosolids use project to be covered by the General Biosolids Order, the Discharger must file a complete Notice of Intent and receive a Notice of Applicability for each project.

35. Use and disposal of biosolids should comply with the self-implementing federal regulations of Title 40, Code of Federal Regulations (CFR), Part 503, which are subject to enforcement by the U.S. Environmental Protection Agency not the Regional Water Board. If during the life of this Order the State accepts primacy for implementation of 40 CFR 503, the Regional Water Board may also initiate enforcement where appropriate.

General Requirements

36. Best management practices shall be implemented to minimize the inflow and infiltration of storm water and/or unauthorized wastewater into the facility. *BPJ*

37. All storm water contacting raw domestic wastewater or disinfected tertiary recycled water shall be contained and managed as raw domestic wastewater. *BPJ*

38. The Supplier shall provide quarterly irrigation reports to the Distributor and Users documenting facility influent flows, User irrigation flows (including facility irrigation flows reported separately), and the amount of recycled effluent in storage and remaining storage capacity. *BPJ*

39. Prior to use of the recycled water supply on a site, the Distributor and Supplier should ensure that the use area is inspected and tested for possible cross connections with the potable water system. The inspections and testing should be performed by a cross connection control specialist certified by the California-Nevada section of the American Water Works Association or an organization with equivalent certification requirements. A written report documenting the result of the inspection or testing for the prior year should be submitted to DPH and Water Board within 30 days following completion of the inspection or testing.

D. User Requirements[17]

1. The application of disinfected tertiary recycled water is limited to the following areas pursuant to Title 22, Division 4, Chapter 3, Section 60304 of the California Code of Regulations:

   Surface irrigation:

   a. Food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop,
   b. Parks and playgrounds,
   c. School yards,
   d. Residential landscaping,
   e. Unrestricted access golf courses,[18]
   f. Cemeteries
   g. Freeway landscaping
   h. Ornamental nursery stock, Christmas tree farms, and sod farms,
   i. Fodder, fiber and pasture for animals producing milk for human consumption,
   j. Orchards and vineyards, and;
   k. Seed crops not eaten by humans.

   Other uses:
   a) Impoundments,

[17] CCR Title 22, Div. 4, Chap. 3, Section 60310
[18] For golf course use, the scorecards must clearly state that reclaimed water is used for irrigation. *BPJ*

b) Industrial or commercial cooling or air conditioning that involves the use of a cooling tower, evaporative condenser, spraying or any mechanism that may create a mist,
c) Industrial boiler feed,
d) Flushing toilets and urinals,
e) Priming drain traps,
f) Industrial process water,
g) Structural and nonstructural fire fighting,
h) Mixing concrete,
i) Decorative fountains,
j) Commercial laundries,
k) Construction water for backfill consolidation, soil compaction, mixing concrete and dust control at construction sites,
l) Commercial car washes, including hand washes if the recycled water is not heated, where the general public is excluded from the washing process, and
m) Cleaning roads, sidewalks, and outdoor work areas.

2. The Supplier and Distributor shall not add additional use areas or users other than those specified in User Requirement item D.1 above, unless the proposed use is submitted to and approved by DPH and the Executive Officer.

3. No irrigation with disinfected tertiary recycled water shall take place within 50 feet of any domestic water supply well unless all of the following conditions have been met:

   a. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface.

   b. The well contains an annular seal that extends from the surface into the aquitard.

   c. The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.

   d. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well.

   e. The owner of the well approves of the elimination of the buffer zone requirement.

4. No impoundment of disinfected tertiary recycled water shall occur within 100 feet of any domestic water supply well.

5. Any use of recycled water shall comply with the following:

   a. Any irrigation runoff shall be confined to the recycled water use area, unless the runoff does not pose a public health threat and is authorized by the Regional Water Board.

   b. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.

6. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.

7. Spray irrigation of recycled water shall be accomplished at a time and in a manner to minimize ponding and the possibility of public contact with sprayed materials. *BPJ*

8. No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.

9. All use areas where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "RECYCLED WATER - DO NOT DRINK." Each sign shall display an international symbol similar to that shown in figure 60310-A of CCR Title 22, Section 60310. The Regional Water Board may accept alternative signage and wording, or an educational program, provided the applicant demonstrates to the Regional Water Board that the alternative approach will ensure an equivalent degree of public notification.

10. Except as allowed under section 7604 of title 17, California Code of Regulations, no physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water.

11. The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access.

12. The Distributor shall ensure that backflow prevention devices are in proper working order by testing initially and annually thereafter, in accordance with CCR Title 18, Section 7605. Reports of testing and maintenance shall be maintained by the Distributor.

Design Requirements

13. The public water supply shall not be used as a backup or supplemental source of water for a dual-plumbed recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of sections 7602(a) and 7603(a) of title 17, California Code of Regulations, and the approval of the public water system has been obtained.[19]

14. All pipes installed above or below the ground, on and after June 1, 1993, that are designed to carry recycled water, shall be colored purple or distinctively wrapped with purple tape. [20]

[19] CCR Title 22, Div. 4, Chap. 3, Section 60315
[20] California Health & Safety Code Section 116815

15. The City of San Juan Bautista has a Cross Connection Control Ordinance that will be used to prevent cross connection between the recycled water system and potable water system. [21]

Nutrient Management Plan

16. Hydraulic and nutrient loading rates for the application of disinfected tertiary recycled water shall be based on food crop, vegetation or landscaping consumption and tolerance and shall not exceed what is reasonable for production of the food crops, vegetation or landscaping (i.e., recycled water shall be applied in an amount that will not cause nitrogen within the root zone to exceed the agronomic demand for nitrogen and result in the leaching of nitrate to groundwater). *BPJ*

17. The Supplier and Distributor shall prepare and implement a Nutrient Management Plan (NMP) for the application of recycled water to protect the beneficial uses of groundwater. The NMP shall account for all nutrient loading to the application areas and ensure that the total amount of nitrogen applied does not exceed the amount of nitrogen required by the food crops, vegetation or landscaping being irrigated.

18. As part of the NMP, the Supplier and Distributor shall submit an annual report documenting allowable and actual nitrogen loading to the recycled water application areas. The report shall include, at a minimum:

    a. Analysis of the contributing sources of nutrients being applied to the recycled water application areas;

    b. Analysis of annual nitrogen loading to the basin and individual application areas from each contributing source;

    c. Analysis of the allowable nutrient and hydraulic loading (based on limiting nitrogen loading) of recycled water based on characteristic effluent data for nitrogen, other contributing nitrogen sources, and the nutritive requirements of the application areas;

    d. Comparison of the actual and allowable annual nitrogen loading rates;

    e. Analysis of groundwater monitoring data for nitrogen constituents;

    f. Evaluation of potential impacts of nutrient loading on the groundwater basin;

    g. Evaluation of potential nutrient reduction measures; and,

    h. Recommendations and time schedules for the implementation of measures addressing excessive nitrogen loading (i.e. actual loading greater than allowable loading) as applicable.

[21] December 2007, Bracewell Engineering, *Engineering Report on the Production, Distribution, and Use of Recycled Water for San Juan Bautista.*

19. **Annual NMP reports are due January 31st of each year** and may be included as part of the annual monitoring report. **The first annual NMP report is due January 31, 2010**. The NMP shall be reviewed and updated annually thereafter as necessary. A copy of the revised NMP or statement indicating the NMP has been reviewed, but not updated shall be submitted to the Regional Water Board as part of the annual monitoring reports.

20. Additional annual NMP reports will not be required upon request by the Supplier and Distributor and approval by the Executive Officer given the following conditions are met:

    a. The initial nitrogen loading evaluation indicates the application of recycled water at appropriate hydraulic rates along with other nitrogen sources will not exceed the nutritive requirements of the food crops, vegetation or landscaping being irrigated;

    b. Recycled water is not over applied in an effort to increase disposal that may result in significant soil flushing and runoff;

    c. A NMP is implemented for the controlled application of fertilizers by landscaping contractors maintaining the application areas; and,

    d. Effluent nitrogen concentrations from the facility regularly meet or are less than the effluent limitations of this Order and are stable.

    (Approval of this variance is contingent on reasonable and scientifically defensible assumptions being applied to the loading evaluation.)

21. Discharges that exceed the hydraulic loading rate based on the nutritive requirements of the receiving vegetation may be allowable on a case-by-case basis upon request by the Distributor and approval by the Executive Officer given the following conditions are met:

    a. The nitrogen loading evaluation indicates the land application of wastewater at appropriate hydraulic rates (based on soil permeability) will not exceed the nutritive requirements of the vegetation being irrigated by more than a total nitrogen concentration as determined by the following equation[22]:

    $$\Delta N=(TOC-5)/2$$

    TOC = effluent Total Organic Carbon

    b. Wastewater is not over applied in an effort to increase disposal that may result in significant soil flushing and runoff;

[22] Maximum of nitrogen that can be effectively denitrified during rapid infiltration under optimum operating conditions; Metcalf and Eddy, Third Ed., 1991, page 972.

c. Effluent nitrogen concentrations from the facility regularly meet or are less than the effluent limitations of this Order and are stable; and,

d. The Discharger provides an assimilative capacity analysis and nitrogen balance showing that the additional nutrient loading to the groundwater basin will not cause or contribute to exceedances of water quality objectives for nitrate in groundwater

(Approval of this variance is contingent on reasonable and scientifically defensible assumptions being applied to the assimilative capacity analysis and nitrogen balance.)

Long Term Salinity Management Program

22. The Supplier and Distributor shall prepare and implement a Long Term Salinity Management Plan (SMP) for the application of recycled water to protect the beneficial uses of groundwater and preserve irrigated lands. The SMP shall document salt loading to the application areas and evaluate and implement measures for the reduction of salt loading as the result of the application of recycled water. The SMP shall ensure that the total salt loading applied does not adversely affect soil permeability and drainage and groundwater beneficial uses.

23. Hydraulic and salt loading rates of disinfected tertiary recycled water shall not cause severe soil permeability conditions based on the sodium adsorption ratio (SAR) for irrigated land permeability as noted in Table 3-3 of the BP. The SAR shall not exceed what is reasonable for production of the food crops, vegetation or landscaping (i.e., recycled water shall be applied in an amount that will not cause salt accumulation in the surface soils and result in the leaching of salts to groundwater). [BPJ]

24. The Supplier and Distributor shall implement the SMP to document salt loading and evaluate and implement measures for the reduction of salt loading as the result of the application of recycled water. Salt reduction measures shall focus on all potential salt contributions from the water supply, and residential, commercial and industrial uses as applicable prior to disposal. The Supplier and Distributor shall evaluate limiting or prohibiting domestic water softeners and conditioners under California Health and Safety Code Section 116786 and shall adopt an ordinance under Section 116786 as appropriate and feasible to reduce salt loading from the domestic use of water softeners.

25. As part of the SMP, the Supplier and Distributor shall submit an annual report documenting salt loading and salt reduction efforts. This report shall include, at a minimum:

a. Analysis of annual salt (TDS, sodium, chloride, sulfate, and boron) loading and individual application areas;

b. Analysis of the contributing sources of salt mass in the recycled water (including the evaporative concentration of salts within the wastewater treatment and storage ponds);

c. Analysis of any available groundwater monitoring data for salt constituents;

d. Evaluation of potential impacts of salt loading on the groundwater basin;

e. Evaluation of potential salt reduction measures including a water softener ordinance;

f. Summary of existing salt reduction measures and their impact; and,

g. Recommendations and time schedules for implementation of proposed salt reduction measures.

Annual SMP reports are due January 31st of each year and may be included as part of the annual monitoring report. **The first annual SMP report is due January 31, 2010.**

Groundwater Limitations

26. The discharge shall not cause the pH of underlying groundwater to exceed 8.3 or recede below 6.5. *BP*

27. The use or disposal of treated wastewater shall not cause the median concentration of coliform organisms in groundwater over any seven-day period to be more than 2.2 MPN per 100 ml. *BP, BPJ*

28. The use or disposal of treated wastewater shall not cause a statistically significant increase of mineral or organic constituent concentrations in underlying groundwater as determined by statistical analysis of samples collected from wells near the disposal area. *BP BPJ*

29. The use or disposal of treated wastewater shall not cause nitrate concentrations in affected groundwater to exceed 8 mg/L (as N) and shall not cause a statistically significant increase of nitrate concentrations in underlying groundwater.[23] *BPJ, BP*

30. The use or disposal of treated wastewater shall not cause groundwater to contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses. *BP*

31. To protect the municipal and domestic supply beneficial uses of groundwater underlying the use or disposal areas, the application of treated wastewater shall not cause groundwater to: BP, BPJ, T22

[23] The evaluation of this requirement will consider pre-existing conditions based on available characteristic groundwater quality data in the vicinity of the use areas.

a. Exceed the Primary Maximum Contaminant Levels for organic chemicals set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5.5, Section 64444.

b. Exceed the Primary Maximum Contaminant Levels for inorganic chemicals set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431.

c. Exceed the levels for radionuclides set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5, Section 64443.

32. The use or disposal of treated wastewater shall not cause radionuclides to be present in groundwater 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. BP

33. The Supplier and Distributor shall develop a Groundwater Monitoring Plan capable of determining the impact of treated wastewater and recycled water upon underlying groundwaters**. The Groundwater Monitoring Plan shall be submitted to the DPH and Water Board by January 31, 2010, for review and approval**.

Individual Recycled Water Use Permits

34. The Supplier and Distributor shall enforce rules and regulations (i.e., Reclaimed Water Use Ordinance) for recycled water users governing the design, construction, and maintenance of recycled water use facilities and the use of recycled water, in accordance with the uniform statewide reclamation criteria established pursuant to California Water Code Section 13521.[24] The Supplier and Distributor shall also develop administrative procedures specifying how the recycled water rules and regulations and permit-based system for regulating users will be implemented. **The rules, regulations, and implementation procedures shall be submitted to the Department of Public Health and Central Coast Water Board by November 30, 2009, for review and approval.** The rules and regulations shall be reviewed and updated annually thereafter as necessary. A copy of the revised rules and regulations or statement indicating they have been reviewed, but not updated shall be submitted to the Regional Water Board as part of the annual monitoring reports.

35. The Supplier and Distributor shall require each User to (i) designate a Reclaimed Water Site Supervisor responsible for compliance with permit conditions and answerable to the Supplier and Distributor[25], and (ii) immediately notify the Supplier and Distributor of changes in the Reclaimed Water Site Supervisor and provide documentation that the new supervisor has received training.

[24] CWC Section 13523.1(b)(3)
[25] CCR Title 17, Division 1, Chapter 5, Group 4, Article 1, Section 7586

36. Recycled Water Use permits, issued by the Supplier and Distributor in accordance with the approved rules and regulations, form the basis of permitted recycled water use by specific Users. Recycled Water Use permits shall specify self-monitoring and reporting requirements for each User, and require compliance with all applicable requirements of this Order. The Distributor must provide a copy of the Recycled Water Use permit and this Order to the Users. Recycled Water Use permits shall require Users to have these available at all times for inspection by Regional Water Board staff, the Distributor, or State/County Health Officers.

37. If someone other than the User is responsible for applying the recycled water (i.e. secondary distributor like a truck hauler) then the Supplier and Distributor shall inform the secondary distributor of these requirements in a written permit or other suitable manner. In addition, the secondary distributor shall fill out a Recycled Water Release Form when receiving reclaimed water from the Supplier and Distributor. The secondary distributors must carry the Recycled Water Release Form at all times.

Dual-Plumbed Recycled Water System

38. The potable water supply shall not be used as a backup or supplemental source of water for a dual-plumbed recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of Section 7602 (a) and 7603 (a) of Title 17, CCR, and that such connection has been approved by DPH.

39. The Distributor shall not deliver recycled water to a facility using a dual-plumbed system unless the report required pursuant to Section 13522.5 of the California Water Code, and which meets the requirements set forth in requirement D.37 of this Order, has been submitted and approved by DPH. The Water Board shall be furnished with a copy of the DPH approval together with the aforementioned report within 30 days following the approval.

40. The report pursuant to Section 13522.5 of the California Water Code shall contain the following information for dual-plumbed systems, in addition to the information required by Section 60323 of Title 22, CCR (Engineering Report):

a. A detailed description of the intended use site identifying the following:

   i) The number, location, and type of facilities within the use area proposing to use dual-plumbed systems;

   ii) The average number of persons estimated to be served by each facility on a daily basis;

   iii) The specific boundaries of the proposed use site including a map showing the location of each facility to be served;

iv) The person or persons responsible for operation of the dual-plumbed system at each facility; and

v) The specific use to be made of the recycled water at each facility.

b. Plans and specifications describing the following:

i) Proposed piping system to be used;

ii) Pipe locations of both the recycled and potable systems;

iii) Type and location of the outlets and plumbing fixtures that will be accessible to the public; and

iv) The methods and devices to be used to prevent backflow of recycled water into the public water system.

c. The methods to be used by the Producer to ensure that the installation and operation of the dual-plumbed system will not result in cross connections between the recycled water piping system and the potable water piping system. These shall include a description of pressure, dye or other test methods to be used to test the system every four years.

41. Prior to the initial operation of the dual-plumbed recycled water system and annually thereafter, the dual-plumbed system within each facility and use site shall be inspected for possible cross connections with the potable water system. The recycled water system shall also be tested for possible cross connections at least once every four years. The testing shall be conducted in accordance with the method described in requirement 3(c), above, of this Order. The inspections and the testing shall be performed by a cross connection control specialist certified by the California-Nevada section of the American Water Works Association or an organization with equivalent certification requirements. A written report documenting the result of the inspection and testing for the prior year shall be submitted to DPH within 30 days following completion of the inspection or testing.

42. The Producer shall notify DPH of any incidence of backflow from the dual-plumbed recycled water system into the potable water system within 24 hours of discovery of the incident.

E. Provisions

1. The Supplier and Distributor shall comply with all applicable requirements of Reclamation Monitoring and Reporting Requirements (Attachment H) as adopted by the Regional Water Board and as may be amended by the Executive Officer. The Supplier and Distributor shall be responsible for collecting necessary data and reports from the Users. The Supplier and Distributor shall require Users to appoint and train a Reclaimed Water Supervisor and to submit on-site observation reports and use data to the Supplier and Distributor, who will compile and file self-monitoring

reports with the Regional Water Board. The Supplier and Distributor, at its discretion, may appoint and train the Users' Reclaimed Water Supervisors and collect on-site observation reports and use data.

2. The Producer shall conduct a tracer study under four different flow rates (the maximum, the minimum, and two points in between) to determine the respective modal contact times for the chlorine contact basin. A final report of the tracer study will be submitted to the DPH and Water Board within 30 days after the completion of the studies and prior to the initial delivery of recycled water to each use site.

3. The Supplier shall be responsible for ensuring and documenting that reclaimed water meets the quality standards of this Order. The Distributor shall be responsible for regulating the design, construction, maintenance and operation of recycled water transport facilities, application areas and associated appurtenances owned and operated by the Users and for ensuring that Users meet all water application, operations and maintenance requirements of this Order. The Distributor shall conduct periodic inspections of User facilities and conduct monitoring and reporting to document compliance with the conditions of the Users' permits and this Order.

4. The Supplier shall develop a Contingency Plan. The Contingency Plan must be submitted to the Water Board and DPH for approval prior to distribution of reclaimed wastewater.

5. The Supplier, Distributor, and Users shall permit the Regional Water Board staff or its authorized representative in accordance with California Water code section 13267(c):

   - Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of the Order,

   - Access to and copy of any records that must be kept under conditions of this Order,

   - Inspection of any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order,

   - To photograph, sample, and monitor for the purpose of assuring compliance with this Order.

6. Prior to the initial delivery of recycled water to each use site, the Producer shall submit piping plans for that site to DPH for approval.

7. For any extension or expansion of the recycled water system or use areas not covered by the Title 22 report, the Producer shall submit to DPH an addendum to the Title 22 report for approval.

8. Upon Executive Officer approval, additional flow may be allowed at the facility.

9. Pursuant to CCR Title 23, Division 3, Chapter 9, the Discharger must submit a written report to the Executive Officer not later than **January 31, 2013**, addressing:

    a. Whether there will be changes in the continuity, character, location, or volume of the discharge; and,

    b. Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision.

ATTACHMENT H - RECLAMATION MONITORING AND REPORTING REQUIREMENTS

The following monitoring and reporting requirements are issued pursuant to California Water Code section 13267 and supplement the Order as referenced in Section VII and Section IX. B of Attachment E.

I. SUPPLIER REQUIREMENTS

A. Water Supply Monitoring - SPL-001

1. Representative samples of water supplies affecting the City's wastewater treatment facilities, measured at Monitoring Location SPL-001, as described in Attachment E, shall be collected and analyzed for the constituents and at the frequency specified below:

Table H-1. Water Supply Monitoring Requirements

Parameter/Constituent[1][2][3]	Units	Sample Type	Minimum Sampling and Analyzing Frequency
General Minerals[4]	mg/L	Grab	Annually (September)

Notes:
[1] Sampling results for the California Department of Public Health (DPH) may be submitted to satisfy these requirements.
[2] Data shall be reported as individual concentrations and calculated as flow weighted averages to represent as delivered water supply quality.
[3] Sampling for specific analytes may be reduced or discontinued upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
[4] General Mineral analysis shall include the following constituents: Calcium, Magnesium, Sodium, Sulfate, Carbonate, Bi-Carbonate, Chloride, Total Hardness, Total Alkalinity, Total Dissolved Solids, pH, Electrical Conductivity, Boron, Iron, and Nitrate (as N).

B. Effluent Monitoring – REC-001

1. Representative samples of treatment facility effluent, measured at Monitoring Location REC-001, as described in Attachment E, shall be collected and analyzed for the constituents/parameters and at the frequency specified below:

Table H-2. Reclaimed Water Effluent Monitoring

Constituent/Parameter[1]	Units	Sample Type[2]	Sampling Frequency
Minimum Daily Flow	gal/day	Metered	Continuous
Maximum Daily Flow	gal/day	Metered	Continuous
Average Daily Flow	gal/day	Calculated	Daily
Turbidity	NTU	Metered	Continuous
Total Chlorine Residual[3]	mg/L	Metered	Continuous
Total Coliform Bacteria	MPN/100 ml	Grab	Daily
BOD_5	mg/L	24-hour composite[4]	Weekly[5]
TSS	mg/L	24-hour composite[4]	Weekly[5]
pH	Units	Grab	Weekly[5]
Ammonia (as N)	mg/L	Grab	Weekly[5]
Nitrate (as N)	mg/L	Grab	Weekly[5]
Total Dissolved Solids	mg/L	Grab	Monthly[6]

Constituent/Parameter[1]	Units	Sample Type[2]	Sampling Frequency
Sodium	mg/L	Grab	Monthly[6]
Chloride	mg/L	Grab	Monthly[6]
Sulfate	mg/L	Grab	Monthly[6]
Boron	mg/L	Grab	Monthly[6]
Total Nitrogen (as N)	mg/L	Grab	Quarterly[7]
Nitrite (as N)	mg/L	Grab	Quarterly[7]
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly[7]
Aluminum	mg/L	Grab	Annually[8]
Antimony	mg/L	Grab	Annually[8]
Arsenic	mg/L	Grab	Annually[8]
Barium	mg/L	Grab	Annually[8]
Beryllium	mg/L	Grab	Annually[8]
Cadmium	mg/L	Grab	Annually[8]
Chromium	mg/L	Grab	Annually[8]
Copper	mg/L	Grab	Annually[8]
Cyanide	mg/L	Grab	Annually[8]
Fluoride	mg/L	Grab	Annually[8]
Lead	mg/L	Grab	Annually[8]
Mercury	mg/L	Grab	Annually[8]
Nickel	mg/L	Grab	Annually[8]
Selenium	mg/L	Grab	Annually[8]
Thallium	mg/L	Grab	Annually[8]
Zinc	mg/L	Grab	Annually[8]
VOCs[9]	mg/L	Grab	Once/5 Years[10]
PCBs[11]	mg/L	Grab	Once/5 Years[10]
Pesticides[12]	mg/L	Grab	Once/5 Years[10]

Notes:
[1] Sampling for specific analytes may be reduced or discontinued after one year upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
[2] Sampling shall occur immediately following the final treatment process (i.e., disinfection or dechlorination as applicable) unless noted otherwise.
[3] Shall be compared to the chlorine residual required to achieve a minimum CT value of 450 milligram-minutes per liter.
[4] Composite samples shall be flow weighted. 24-hour composite samples shall be collected on a Monday through Sunday rotating schedule.
[5] Weekly samples shall be collected on a Monday through Sunday rotating schedule.
[6] Monthly sampling events shall be separated by at least 16 days and no greater than 45 days.
[7] Quarterly monitoring shall be conducted in January, April, July, and October
[8] Annual monitoring shall be conducted in July
[9] USEPA Method 8260B
[10] Once/5 Years monitoring shall commence in July 2009
[11] USEPA Method 8082
[12] USEPA Method 8081

C. Recycled Water Storage Facility Monitoring

The recycled water storage tank shall be inspected daily. Weekly visual inspections will be allowable for reclaimed water storage tanks fitted with reliable electronic remote depth gauging systems. Notes shall be kept of observations and shall be summarized in annual monitoring reports. In the event of tank overflow or backflow into the treatment plant, the

Distributor (and Users as appropriate), Executive Officer, and the DPH shall be notified immediately.

Representative sampling measurements shall be taken in the reclaimed water storage tank for the parameters/constituents and at the frequency specified below:

Table H-3. Reclaimed Water Storage Reservoir Monitoring

Parameter/Constituent	Units	Sample Type[a]	Minimum Sampling and Analyzing Frequency
pH[1]	-	Grab	Weekly
Dissolved Oxygen (DO)[1]	mg/l	Grab	Weekly

Notes:
[1] Grab sample for pH and DO shall be collected at one-foot depth from the top of the storage tank.

D. Equipment Calibration

Calibration records of flow meters and other process instrumentation performed in accordance with manufactures' recommendations and best management practices for the industry will be kept on site and made available to Regional Water Board and DPH staff upon request.

II. DISTRIBUTOR REQUIREMENTS

A. Recycled Water Use Area Monitoring

1. The quantity of reclaimed water distributed to each reuse site shall be recorded on a weekly basis. Total flows shall be metered or estimated based on irrigation run times and distribution system design flow rates. Total as applied flows shall be compared to Supplier effluent flow rates.

2. During periods of recycled water application the Distributor or Users, as applicable, shall inspect the irrigation use areas no less frequently than weekly to verify and document compliance with Order No R3-2009-0019. The visual inspections shall be noted in a bound inspection logbook(s) and at a minimum shall document proper sprinkler operation, runoff, erosion, saturated surface conditions, and odors. The logbook(s) shall be made available to the Regional Water Board and DPH upon request. A summary of observations made during water recycling area inspections and a brief discussion of any corrective actions taken or planned shall be included with each annual monitoring report.

3. The Distributor and Users shall coordinate with the DPH to ensure and document that backflow devices are present, tested annually by a certified individual, and repaired or replaced if found defective.

4. The Distributor shall inspect and document the operation of the reuse site irrigation systems at least quarterly to verify that the Users are operating the reuse sites in compliance with the uniform statewide reclamation criteria established pursuant to California Water Code Section 13521 and Order No. R3-2009-0019.

5. The Distributor in coordination with the Users, water purveyor, and DPH shall perform and document a cross-connection test by an appropriately certified individual on an annual basis at each reuse site where both recycled water and potable water piping systems are utilized for irrigation or are otherwise present in proximity to each other.[1]

6. Each individual User Reclaimed Water Site Supervisor shall provide quarterly updates to the Distributor regarding irrigation frequency and flow rates, proposed system modifications, system peculiarities, and to verify employee training. The Distributor shall keep a record of all system modifications and document that all work is conducted in accordance with the Cross Connection Control Plan and applicable regulations.

7. The Distributor shall compile and conduct quarterly reviews of the applied recycled water flows to identify unusual usage behavior or significant changes. The Distributor shall conduct and document follow-up investigations if patterns change dramatically.

8. Representative samples of groundwater shall be collected from shallow wells[2] upgradient and downgradient of disposal areas. To ascertain compliance with Order No. R3-2009-0019 in establishing new, or verifying existing upgradient and downgradient monitoring wells, the monitoring network shall be supported by sufficient, as determined by the Executive Officer, geologic and hydrogeologic documentation. Samples of groundwater shall be collected and analyzed for the constituents and at the frequencies specified in the following table:

Table H-4. Groundwater Monitoring

Constituent/Parameter[a]	Units	Sample Type	Sampling Frequency[c]
Depth to Water	Ft.-BGS and Ft.-Above MSL[b]	Measured	Quarterly
Total Nitrogen (as N)	mg/L	Grab	Quarterly
Total Kjeldahl Nitrogen (as N)	mg/L	Grab	Quarterly
Nitrate (as N)	mg/L	Grab	Quarterly
Nitrite (as N)	mg/L	Grab	Quarterly
pH	Standard Units	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Sulfate	mg/L	Grab	Quarterly
Boron	mg/L	Grab	Quarterly
Perchlorate	mg/L	Grab	Quarterly
Total Trihalomethanes[d]	mg/L	Grab	Quarterly
Total Trihaloacetic Acid[e]	mg/L	Grab	Quarterly

[1] Cross-connection tests will not be required for portions of the distribution system or reuse site areas for which no distribution system or potable water system maintenance, modifications, or additions have occurred since the last cross-connection test. The Distributor shall provide a certified statement as such for portions of the distribution system or reuse sites not tested for potential cross-connection.

[2] Provide well construction details for each monitoring well indicating total well depth and screen interval in depth below ground surface and elevations referenced to MSL along with the top of well casing elevation.

Notes:

a) Sampling for specific analytes or from specific monitoring wells may be reduced or discontinued after one year upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
b) Ft.-BGS = Feet Below Grade Surface, Ft.-Above MSL = Feet Above Mean Sea Level
c) Quarterly monitoring shall be conducted in January, April, July, and October
d) Includes the following: chloroform, bromodichloromethane, dibromochloromethane, and bromoform.
e) Includes the following: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

The Executive Officer may request geologic and hydrogeologic documentation to ascertain whether the existing monitoring well network is sufficient to verify compliance with Order No. R3-2009-0019 and whether additional monitoring wells are required based on review of available groundwater data.

III. SUPPLIER AND DISTRIBUTOR REQUIREMENTS

A. Reporting

1. The Supplier and Distributor shall submit **Quarterly** self monitoring reports to the Regional Water Board summarizing reclaimed water supplied and used at each reuse site. The quarterly self monitoring reports shall include:

   a. Monitoring data results for the reporting period as required by this Reclamation MRP;

   b. A list of the reuse sites with the name, location and brief description of each reuse site;

   c. The total amount of reclaimed water supplied to each reuse site; and

   d. The name of the hydrologic areas underlying each use site [Required pursuant to California Water Code Section 13523.1(b)(5)].

   The Quarterly monitoring reports shall be submitted as follows:

Monitoring Period	Report Due Date
January 1 – March 31	May 1st
April 1 – June 30	August 1st
July 1 – September 30	November 1st
October 1 – December 31	February 1st

2. The Supplier and Distributor shall submit **Annual** self monitoring reports to the Regional Water Board by February 1st of each year summarizing reclaimed water use, including the total volume of reclaimed water supplied, and the total number of reclaimed use sites and their locations. Reports shall include records of the

Distributor's or User's reuse site inspections and results of the annual cross-connection tests. Annual self monitoring reports shall contain at a minimum:

a. Documentation of the use area and groundwater monitoring requirements listed above.

b. A list of Users accompanied by a scaled map showing the recycled water use areas.

c. A table summarizing monthly recycled water application rates in acre-feet and gallons for each recycled water use.

d. The Nutrient Management Plan report as specified in Distributor/User Requirements.

e. The Long Term Salinity Management Program report as specified in Distributor/User Requirements, and

f. An up-to-date copy of the Rules and Regulations for Recycled Water Users and a standard copy of the Recycled Water Use Permit issued to the Users as specified in Individual Recycled Water Use Permits.

2. The annual monitoring reports shall contain all data collected or calculated over the previous annual monitoring period. All monitoring data shall be tabulated in a logical and coherent format and be accompanied by copies of laboratory analytical data sheets as applicable. The data shall be summarized in a manner that clearly illustrates compliance with the Order. The User list, use area map, and recycled water application summary table shall be cross-referenced for easy evaluation.

3. The Distributor shall report any adverse conditions or non-compliance with Order No. R3-2009-0019 potentially endangering public health or the environment to the:

   a. Water Board (805/549-3147),

   b. California Department of Public Health (831/655-6939),

   c. San Benito County Environmental Health (831/636-4035), and,

   d. any other agencies as appropriate.

   Notice will occur within 24-hours of knowing of such conditions. A summary record of all adverse conditions or non-compliance along with corrective actions taken shall be included in each annual monitoring report.

Depending on the severity of the adverse condition or non-compliance being reported, a written report may also be required by the Water Board. The written report shall be required within five days of the initial informal reporting date and shall contain (1) a description of the non-compliance and its cause; (2) the period of non-compliance, including dates and times, and if the non-compliance has not been corrected, the

anticipated time it is expected to continue; and (3) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.

B. Provisions

1. All quarterly monitoring shall be performed in January, April, July, and October during the monitoring quarter (calendar quarter). Monthly sampling shall be conducted at regularly scheduled times during each month and consecutive events should be approximately four weeks apart and no less than two weeks apart. 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.

2. All monitoring must be conducted according to test procedures established by 40 Code of Federal Regulations Part 136, entitled, "Guidelines Establishing Test Procedures for Analysis of Pollutants." All sampling analyses shall be conducted at the lowest practical quantitation limits achievable under U.S. EPA specified methodology. Constituents not detected at the analytical method detection limit will be considered in compliance with effluent limitations in cases where effluent limits are set below the analytical method detection limit.

3. All samples collected shall be tracked and submitted under chain of custody and analyzed by a laboratory certified by DPH for the specified analysis.

4. This Monitoring and Reporting Program may be revised at any time during the Permit term, as necessary, under the authority of the Executive Officer.

5. The Supplier and Distributor shall submit monitoring data and the monitoring reports electronically. The documents shall be in a searchable PDF format (less than 10 MG in size) and emailed to centralcoast@waterboards.ca.gov. PDF documents that exceed 10MB should be transferred to a disk and mailed to the Water Board at:

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