



EDMUND G. BROWN JR.  
GOVERNOR

MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

**Central Coast Regional Water Quality Control Board**

**DRAFT ORDER NO. R3-2013-0001  
NPDES NO. CA0048828**

**WASTE DISCHARGE REQUIREMENTS  
FOR THE CITY OF SCOTTS VALLEY WASTEWATER TREATMENT FACILITY**

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

**Table 1. Discharger Information**

<b>Discharger</b>	<b>City of Scotts Valley</b>
<b>Name of Facility</b>	<b>City of Scotts Valley Wastewater Treatment Facility</b>
<b>Facility Address</b>	<b>700 Lundy Lane</b>
	<b>Scotts Valley, CA 95066</b>
	<b>Santa Cruz County</b>
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board classify this as a major discharge.	

Discharges by the City of Scott's Valley from the discharge point identified below are subject to waste discharge requirements as set forth in this Order.

**Table 2. Discharge Location**

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
001	Secondary Treated Wastewater	36 °, 56 ', 08 " N	122 °, 01 ', 08 " W	Pacific Ocean (Monterey Bay National Marine Sanctuary)

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Quality Control Board on:	<b>February 1, 2013</b>
This Order shall become effective on:	<b>March 27, 2013</b>
This Order shall expire on:	<b>February 1, 2018</b>
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:	<b>June 1, 2017</b>

I, Kenneth A. Harris Jr., Interim 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 February 1, 2013.

---

Kenneth A. Harris Jr., Interim Executive Officer

---

JEFFREY S. YOUNG, CHAIR | KENNETH A. HARRIS JR., INTERIM EXECUTIVE OFFICER

895 Aerovista Place, Suite 101, San Luis Obispo, CA 93401 | [www.waterboards.ca.gov/centralcoast](http://www.waterboards.ca.gov/centralcoast)

### Table of Contents

I.	Facility Information .....	4
II.	Findings .....	4
III.	Discharge Prohibitions .....	9
IV.	Effluent Limitations and Discharge Specifications .....	10
	A. Effluent Limitations – Discharge Point 001 .....	10
	B. Land Discharge Specifications – Not Applicable .....	12
	C. Reclamation Specifications .....	12
V.	Receiving Water Limitations .....	13
	A. Surface Water Limitations .....	13
	B. Groundwater Limitations .....	15
VI.	Provisions .....	15
	A. Standard Provisions .....	15
	B. Monitoring and Reporting Program (MRP) Requirements .....	15
	C. Special Provisions .....	15
	1. Reopener Provisions .....	16
	2. Special Studies, Technical Reports and Additional Monitoring Requirements .....	16
	3. Best Management Practices and Pollution Prevention .....	17
	4. Construction, Operation and Maintenance Specifications – Not Applicable .....	20
	5. Special Provisions for Municipal Facilities (POTWs Only) .....	20
	6. Compliance Schedules – Not Applicable .....	23
VII.	Compliance Determination .....	23

### 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.	Basin Plan Beneficial Uses for the Pacific Ocean .....	6
Table 6.	Ocean Plan Beneficial Uses .....	6
Table 7.	Effluent Limitations .....	10
Table 8.	Effluent Limitations for Total Chlorine Residual .....	11
Table 9.	Toxicity Reduction Evaluation—Schedule .....	17

### List of Attachments

Attachment A – Definitions .....	A-1
Attachment B – Map .....	B-1
Attachment C – Flow Schematic .....	C-1
Attachment D – Standard Provisions .....	D-1
Attachment E – Monitoring and Reporting Program (MRP) .....	E-1
Attachment F – Fact Sheet .....	F-1

**I. FACILITY INFORMATION**

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

**Table 4. Facility Information**

<b>Discharger</b>	City of Scotts Valley
<b>Name of Facility</b>	City of Scotts Valley Wastewater Treatment Facility
<b>Facility Address</b>	700 Lundy Lane
	Scotts Valley, CA 95076
	Santa Cruz County
<b>Facility Contact, Title, and Phone</b>	Scott Hamby, Manager, (831) 438-0739 <a href="mailto:shamby@scottsvally.org">shamby@scottsvally.org</a>
<b>Mailing Address</b>	One Civic Center Drive, Scotts Valley, CA 95066
<b>Type of Facility</b>	Publicly Owned Treatment Works (POTW)
<b>Facility Design Flow</b>	1.5 million gallons per day (MGD)

**II. FINDINGS**

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

**A. Background.** The Discharger currently discharges waste pursuant to Order No. R3-2007-0013 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0048828. The Discharger submitted a Report of Waste Discharge, dated February 15, 2012, and applied to renew its NPDES permit to discharge up to 1.5 MGD of treated wastewater from the City’s Wastewater Treatment Facility (Facility) to the Pacific Ocean and the Monterey Bay National Marine Sanctuary. Central Coast Water Board staff deemed the application complete on March 8, 2012.

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 trunk sewer line and a domestic wastewater treatment plant (WWTP). The City of Scotts Valley WWTF currently treats wastewater by screening, grit removal, flow equalization, aeration, clarification, and disinfection. Biosolids are aerobically digested, dewatered, and disposed of at the Monterey Regional Waste Management Landfill in Marina, California. The wastewater treatment facility effluent is discharged through a 12,250-foot outfall/diffuser system in approximately 110 feet of water to the Monterey Bay National Marine Sanctuary and the Pacific Ocean.

Attachment B provides a topographic map of the area around the Facility. Attachment C provides a flow diagram of the Facility.

**C. Legal Authorities.** This Order is issued pursuant to CWA §402 and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (CWC), commencing with §13370. It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC, commencing with §13260.

**D. Background and Rationale for Requirements.** The Central Coast Water Board developed this Order’s requirements based on information submitted in the application, through monitoring and

reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the Order's waste discharge requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E are also incorporated into this Order.

- E. California Environmental Quality Act (CEQA).** Pursuant to Water Code § 13389, this action to adopt an NPDES permit is exempt from the provisions of the CEQA, Public Resources Code sections 21100-21177.
- F. Technology-Based Effluent Limitations.** CWA §301 (b) and USEPA's NPDES regulations at 40 CFR 122.44 require that permits include, at a minimum, conditions meeting applicable technology-based requirements and any more stringent effluent limitations necessary to meet applicable water quality standards. Discharges authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards established at 40 CFR 133 and Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. The Fact Sheet (Attachment F) includes a detailed discussion of the development of technology-based effluent limitations.
- G. Water Quality-Based Effluent Limitations.** CWA §301 (b) and NPDES regulations at 40 CFR 122.44(d) require 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) require 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: either (1) USEPA criteria guidance under CWA §304 (a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided at 40 CFR 122.44 (d)(1)(vi).

- H. Water Quality Control Plans.** The Central Coast Water Board adopted the *Water Quality Control Plan for the Central Coastal Basin* (Basin Plan), which designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve those objectives for receiving waters within the Region. To address ocean waters, the Basin Plan incorporates by reference the *Water Quality Control Plan for Ocean Waters of California* (the Ocean Plan). The Ocean Plan is discussed in further detail in section II.I of this Order.

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 (MUN). Because TDS levels of marine waters exceed 3,000 mg/L, such waters are not considered suitable for municipal or domestic supply and therefore are an exception to Resolution No. 88-63. Table 5, below, provides beneficial uses established in the Basin Plan for the Pacific Ocean in the Monterey Bay National Marine Sanctuary.

**Table 5. Basin Plan Beneficial Uses for the Pacific Ocean**

Discharge Point	Receiving Water	Beneficial Use(s)
001	Pacific Ocean (Monterey Bay National Marine Sanctuary)	<ul style="list-style-type: none"> <li>• Water Contact and Non-Contact Recreation</li> <li>• Industrial Service Supply</li> <li>• Navigation</li> <li>• Shellfish Harvesting</li> <li>• Commercial and Sport Fishing</li> <li>• Marine Habitat</li> <li>• Rare, Threatened, or Endangered Species</li> <li>• Wildlife Habitat</li> </ul>

To protect the beneficial uses, the Basin Plan establishes water quality objectives and implementation programs. This Order's requirements implement the Basin Plan.

**I. California Ocean Plan**

The State Water Board adopted the *Water Quality Control Plan for the Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, and 2009. The State Water Board adopted the latest amendment on September 15, 2009, and it was approved by the Office of Administrative Law on March 10, 2010, and subsequently the USEPA. The Ocean Plan is applicable, in its entirety, to point source discharges to the Pacific Ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized in Table 6, below.

**Table 6. Ocean Plan Beneficial Uses**

Discharge Point	Receiving Water	Beneficial Uses
001	Pacific Ocean (Monterey Bay National Marine Sanctuary)	<ul style="list-style-type: none"> <li>• Industrial Water Supply</li> <li>• Water Contact and Non-Contact Recreation, including Aesthetic Enjoyment</li> <li>• Navigation</li> <li>• Commercial and Sport Fishing</li> <li>• Mariculture</li> <li>• Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS)</li> <li>• Rare and Endangered Species</li> <li>• Marine Habitat</li> <li>• Fish Migration</li> <li>• Fish Spawning and Shellfish Harvesting</li> </ul>

To protect the beneficial uses, the Ocean Plan establishes WQOs and a program of implementation. Requirements of this Order implement the Ocean Plan.

**J. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. [65 Fed. Reg. 24641 (April 27, 2000), codified at 40 CFR 131.21] Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

- K. Compliance Schedules and Interim Requirements.** The State Water Board adopted Resolution No. 2008-0025 on April 15, 2008, titled *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*. Under limited circumstances, this policy allows the Regional Water Board to grant a compliance schedule based on a discharger's request and demonstration that it is infeasible to comply immediately with certain effluent limits. This policy became effective on August 27, 2008, superseding the Basin Plan's compliance schedule policy. This Order does not contain a compliance schedule or any interim effluent limits.
- L. Recycled Water Policy.** The Strategic Plan Update 2008-2012 for the Water Boards includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and ensure adequate water flows for fish and wildlife habitat. The State Water Board adopted the Recycled Water Policy via Resolution No. 2009-0011 on February 3, 2009<sup>1</sup>. The Recycled Water Policy is intended to support the Strategic Plan priority to Promote Sustainable Local Water Supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change. The Recycled Water Policy is also intended to encourage beneficial use, rather than solely disposal, of recycled water.

The Recycled Water Policy calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. The State Water Board recognizes that, pursuant to the letter from statewide water and wastewater entities<sup>2</sup> dated December 19, 2008, and attached to Resolution No. 2009-0011 adopting the Policy, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Central Coast Water Board staff.

It is the intent of the Recycled Water Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The State Water Board finds that the appropriate way to address salt and nutrient issues is through the development of regional or sub regional salt and nutrient management plans rather than through imposing requirements solely on individual projects. The Central Coast Water Board finds that a combination of regional management plans and individual or programmatic project requirements may be necessary to protect beneficial uses.

One of the primary components of the required regional salt/nutrient management plans is the development and implementation of groundwater basin/sub-basin monitoring programs. As specified in the Recycled Water Policy, salt/nutrient contributing stakeholders will be responsible for conducting, compiling, and reporting the monitoring data once the regional groundwater monitoring programs are developed.

A large number of technical reports and data contained within Central Coast Water Board files document widespread and increasing salt and nutrient impacts within the groundwater basins throughout the Central Coast Region, including the Scotts Valley Groundwater Basin.

---

<sup>1</sup> [http://www.swrcb.ca.gov/board\\_decisions/adopted\\_orders/resolutions/2009/rs2009\\_0011.pdf](http://www.swrcb.ca.gov/board_decisions/adopted_orders/resolutions/2009/rs2009_0011.pdf)

<sup>2</sup> [http://www.waterboards.ca.gov/board\\_info/agendas/2009/feb/020309\\_7\\_%20rw\\_policy\\_funding\\_letter.pdf](http://www.waterboards.ca.gov/board_info/agendas/2009/feb/020309_7_%20rw_policy_funding_letter.pdf)

**K. Recycled Water.** The Discharger and the Scotts Valley Water District reuse recycled wastewater from the tertiary treatment plant, which treats Facility effluent to recycled water standards. State Department of Public Health (DPH) treatment standards for the use of recycled water are in CCR Title 22, Chapter 3. On July 13, 2001, the Central Coast Water Board adopted Master Water Recycling Requirements for the City of Scotts Valley Wastewater Treatment Plant, Santa Cruz County, and Master Water Recycling Requirements Order No. 01-067 for Scotts Valley Water District, Santa Cruz County. Orders Nos. 01-066 and 01-067 regulate the supply and distribution of tertiary-treated wastewater and were prepared in consultation with DPH. The Discharger indicated in the permit renewal application package that the recycled water flow totaled 47.92 million gallons (MG) in 2009, 49.35 MG in 2010, and 54.72 MG in 2011.

**L. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. As discussed in section IV. B of the Fact Sheet, the Order establishes technology-based effluent limitations for biochemical oxygen demand (BOD<sub>5</sub>), carbonaceous biochemical oxygen demand (CBOD), total suspended solids (TSS), settleable solids, oil and grease, turbidity, and pH for Discharge Point 001. These technology-based limitations implement the minimum applicable federal technology-based requirements. The Order also contains effluent limitations in addition to the minimum federal technology-based requirements necessary to meet applicable water quality standards. These limitations are not more stringent than required by the CWA.

WQBELs have been scientifically derived to implement WQOs that protect beneficial uses. The WQOs and beneficial uses implemented by this Order are contained in the Basin Plan and the 2009 Ocean Plan, which was approved by USEPA on September 15, 2009. These WQOs and beneficial uses are the applicable water quality standards pursuant to 40 CFR 131.21 (c)1) and have been approved pursuant to federal law. WQBELs for toxic pollutants are derived using procedures established by the Ocean Plan.

All beneficial uses and WQOs contained in the Basin Plan and Ocean Plan were approved under State law and submitted to and approved by USEPA prior to May 30, 2000. Any WQOs 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 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.

**M. Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Central Coast Water Board’s Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. As discussed in section IV.D.2 in 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.

**N. Anti-Backsliding Requirements.** CWA §402 (o)(2) and §303 (d)(4) and NPDES regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in section IV.D.1 of the Fact Sheet, effluent limitations and other requirements established by this Order satisfy applicable anti-backsliding provisions of the CWA and federal regulations.

- O. 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 §2050 to §2097) or the federal Endangered Species Act (16 U.S.C.A. §1531 to §1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Discharger is responsible for meeting all requirements of State and federal law regarding threatened and endangered species.
- P. Monitoring and Reporting.** NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code §13267 and §13383 authorize the Central Coast Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (Attachment E) establishes monitoring and reporting requirements to implement federal and State requirements.
- Q. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with NPDES regulations at 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 Central Coast Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the Fact Sheet (Attachment F).
- R. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, and V.B of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- S. Notification of Interested Parties.** The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet accompanying this Order.
- T. Consideration of Public Comment.** The Central Coast Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.
- U. Privilege to Discharge.** A permit and the privilege to discharge waste into waters of the State is conditional upon the discharge complying with provisions of Division 7 of the CWC and the CWA (as amended or supplemented by implementing guidelines and regulations); any with any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisances.

### III. DISCHARGE PROHIBITIONS

- A.** Discharge of treated wastewater to the Pacific Ocean at a location other than those listed below is prohibited.
1. City of Santa Cruz Ocean Outfall (36° 56' 08" N. Latitude, 122° 04' 08" W. Longitude), and
  2. Approved recycled water reuse sites authorized by Order Nos. 01-066 and 01-067.
- B.** Discharge of any waste in any manner other than as described by this Order, excluding storm water regulated by General Permit No. CAS000001 (Waste Discharge Requirements for

Discharges of Storm Water Associated with Industrial Activities), and excluding the reuse of treated wastewater in accordance with California Water Code sections 13500 – 13577 (Water Reclamation) and California Code of Regulations title 22, sections 60301 – 60357 (Water Recycling Criteria), is prohibited.

- C. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.
- D. Federal law prohibits the discharge of sludge by pipeline to the Ocean. The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, 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. The discharge shall not cause or contribute to adverse impacts to beneficial uses of water or to threatened or endangered species and their habitat.
- F. Creation of a condition of pollution, contamination, or nuisance, as defined by Section 13050 of the CWC, is prohibited.
- G. The discharge shall not cause or contribute to adverse impacts to beneficial uses of water or to threatened or endangered species and their habitat.

**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 (MRP) (Attachment E).

**Table 7. Effluent Limitations**

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
BOD <sub>5</sub>	mg/L	30	45	90	--
	lbs/day <sup>[1]</sup>	375	565	1,125	--
CBOD <sub>5</sub>	mg/L	25	40	85	--
	lbs/day <sup>[1]</sup>	310	500	1,060	--
TSS	mg/L	30	45	90	--
	lbs/day <sup>[1]</sup>	375	565	1,125	--
Oil & Grease	mg/L	25	40	75	--
	lbs/day <sup>[1]</sup>	310	500	940	--
Settleable Solids	mL/L/hr	1.0	1.5	--	3.0
Turbidity	NTUs	75	100	--	225
pH <sup>[2]</sup>	pH units	6.0 – 9.0 at all times			
Total Coliform Bacteria <sup>[3]</sup>	MPN/100 mL	--	--	--	100,000 <sup>[4]</sup>
Fecal Coliform Bacteria <sup>[3]</sup>	MPN/100 mL	--	--	--	20,000 <sup>[5]</sup>

Enterococcus Bacteria	MPN/100 mL	--	--	--	2,400 <sup>[6]</sup>
TCDD Equivalents <sup>[7]</sup>	µg/L	0.00000045	--	--	--
	lbs/day <sup>[1]</sup>	0.000000056	--	--	--
Acute Toxicity	TUa	--	--	3.7	--
Chronic Toxicity	TUc	--	--	115	--

<sup>[1]</sup> Mass limitations are applicable when flows are equal to or less than 1.5 MGD.

<sup>[2]</sup> Excursions from the effluent limit range are permitted subject to the following limitations (40 CFR 401.17):

- a. The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and
- b. No individual excursion from the range of pH values shall exceed 60 minutes.

Note: 40 CFR 401.17(2)(c) notes that, for the purposes of 40 CFR 401.17, "excursion" is defined as "an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the applicable effluent limitations guidelines." The State Board may adjust the requirements set forth in paragraph 40 CFR 401.17 (a) with respect to the length of individual excursions from the range of pH values, if a different period of time is appropriate based upon the treatment system, plant configuration, or other technical factors.

<sup>[3]</sup> Total and fecal coliform values are based on existing dilution ratio of 114:1 with a 12% factor of safety. The 12% factor of safety was applied during previous permit renewals to conform to the Anti-Backsliding provisions of 40 CFR 122.4(l), and is continued herein.

<sup>[4]</sup> No more than ten percent of the total samples collected in any 60-day period shall exceed 40,000 per 100 mL.

<sup>[5]</sup> The 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 20,000 per mL.

<sup>[6]</sup> The enterococcus concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2,400 per 100 mL for any 30-day period, or a log mean of 1,200 per 100 mL for any 6-month period.

<sup>[7]</sup> TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as listed in Appendix I of the 2009 Ocean Plan.

**b. Total Chlorine Residual.** The Discharger shall maintain compliance with the following effluent limitations for total chlorine residual at Discharge Point 001, with compliance measured at Monitoring Location EFF-001, as described in the attached MRP.

**Table 8. Effluent Limitations for Total Chlorine Residual**

Pollutant	Unit	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Residual Chlorine <sup>[1]</sup>	µg/L	0.23	0.92	6.9
	lb/day	2.9	12	86

\* See Attachment A for applicable definitions.

<sup>[1]</sup> Water quality objectives for total chlorine residual applying to intermittent discharges not exceeding two hours shall be determined using the following equation:

$\log_y = -0.43(\log_x) + 1.8$  where: y = the water quality objective (in µg/L) to apply when chlorine is being discharged; and

x = the duration of uninterrupted chlorine discharge in minutes.

The applicable effluent limitation must then be determined using Equation No. 1 from the Ocean Plan.

- c. **Percent Removal:** The average monthly percent removal of BOD<sub>5</sub>, CBOD<sub>5</sub> and TSS shall not be less than 85 percent.
- d. **Initial Dilution:** The minimum initial dilution of treated effluent at the point of discharge to Monterey Bay shall not be less than 114 to 1 (seawater to effluent) at any time.
- e. **Dry Weather Flow:** Effluent daily dry weather flow shall not exceed a monthly average of 1.5 MGD.

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

**B. Land Discharge Specifications – Not Applicable**

**C. Reclamation Specifications**

- 1. Reclamation use of tertiary treated wastewater shall comply with applicable state and local requirements regarding the production and use of reclaimed wastewater, including requirements of California Water Code (CWC) sections 13500-13577 (Water Reclamation) and Department of Health Services (DHS) regulations at Title 22, sections 60301-60357 of the California Code of Regulations (Water Recycling Criteria).
- 2. Wastewater shall be disinfected by either:
  - a. A chlorine disinfection process that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on the peak dry-weather design flow, or
  - b. A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus, or a virus that is at least as resistant to disinfection as the polio virus.
- 3. Wastewater to be reclaimed/recycled shall be filtered to meet the criteria of a or b:
  - a. Wastewater shall be coagulated and passed through natural undisturbed soils or a bed of filter media:
    - i. At a rate that does not exceed 5 gallons per minute (gpm) per square foot of surface area in mono, dual, or mixed media gravity, upflow, or pressure filtration systems, or does not exceed 2 gpm per square foot of surface area in traveling bridge automatic backwash filters; and
    - ii. Turbidity of the filtered wastewater shall not exceed any of the following:
      - 1) An average of 2 NTU within a 24-hour period;
      - 2) 5 NTU more than 5 percent of the time within a 24-hour period; and
      - 3) 10 NTU at any time.



1. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is farther from the shoreline, and in areas outside this zone designated for water contact recreation use by the Central Coast Water Board, but including all kelp beds, the following bacteriological objectives shall be maintained throughout the water column.

30-Day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each receiving water monitoring location.

- a. Total coliform density shall not exceed 1,000 per 100 mL;
- b. Fecal coliform density shall not exceed 200 per 100 mL; and
- c. Enterococcus density shall not exceed 35 per 100 mL.

Single Sample maximum;

- a. Total coliform density shall not exceed 10,000 per 100 mL;
- b. Fecal coliform density shall not exceed 400 per 100 mL; and
- c. Enterococcus density shall not exceed 104 per 100 mL.
- d. Total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform to total coliform ratio exceeds 0.1

2. At all areas where shellfish may be harvested for human consumption, as determined by the Central Coast Water Board, the following bacteriological objectives shall be maintained throughout the water column:

- a. The median total coliform density shall not exceed 70 organisms per 100 mLs, and in not more than 10 percent of samples shall coliform density exceed 230 organisms per 100 mLs.

3. Floating particulates and grease and oil shall not be visible.
4. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
5. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
6. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
7. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally as a result of the discharge of oxygen- demanding waste.
8. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
9. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
10. The concentration of substances set forth in Chapter IV, Table B of the Ocean Plan in marine sediments shall not be increased to levels that would degrade indigenous biota.

11. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
12. Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota.
13. Discharges shall not cause exceedances of water quality objectives for ocean waters of the State established in Table B of the Ocean Plan.
14. Marine communities, including vertebrate, invertebrate and plant species, shall not be degraded.
15. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
16. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
17. Discharge of radioactive waste shall not degrade marine life.

#### **B. Groundwater Limitations**

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

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.

### **VI. PROVISIONS**

#### **A. Standard Provisions**

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. **Regional Water Board Standard Provisions.** The Discharger shall comply with all Regional Water Board Standard Provisions included in Attachment D-1 of this Order. The Discharger shall comply with the following provisions:

Before changing the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of an inland watercourse, in any way, the Discharger shall file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Water Code section 1211.)

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

Pursuant to CWC sections 13267 and 13383, the Discharger shall comply with the Monitoring and Reporting Program (MRP), and future revisions thereto, in Attachment E of this Order, and all notification and general reporting requirements throughout this Order and Attachment D. Where notification or general reporting requirements conflict with those stated in the MRP (e.g., annual report due date), the Discharger shall comply with the MRP requirements. All monitoring shall be

conducted according to 40 CFR 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*.

The Discharger is required to provide these technical or monitoring reports because it is the owner and operator responsible for the waste discharge and compliance with this Order. The Central Coast Water Board needs the information to determine the Discharger's compliance with this Order, assess the need for further investigation and/or enforcement action, and to protect public health and safety and the environment.

## **C. Special Provisions**

### **1. Reopener Provisions**

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. Toxicity Reduction Requirements**

If the discharge consistently exceeds an effluent limitation for toxicity specified by Section IV of this Order, the Discharger shall conduct a Toxicity Reduction Evaluation (TRE) in accordance with the Discharger's TRE Workplan.

A TRE is a study conducted in a step-wise process designed to identify the causes 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. The TRE shall include all reasonable steps to identify the source of toxicity. The Discharger shall take all reasonable steps to reduce toxicity to the required level once the source of toxicity is identified.

The Discharger shall maintain a TRE Workplan, which describes steps that the Discharger intends to follow if a toxicity effluent limitation in this Order is exceeded. The workplan shall be prepared in accordance with current technical guidance and reference material, including EPA/600/2-88-070 (for industrial discharges) or EPA/600/2-88/062 (for municipal discharges), and shall describe, at least:

- i. Actions proposed to investigate/identify the causes/sources of toxicity,
- ii. Actions proposed to mitigate the discharge's adverse effects, to correct the non-compliance, and/or to prevent the recurrence of acute or chronic toxicity (this list of action steps may be expanded, if a TRE is undertaken), and
- iii. A schedule to implement these actions.

When monitoring detects effluent toxicity greater than a limitation in this Order, the Discharger shall resample immediately, if the discharge is continuing, and retest for whole effluent toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Executive Officer (EO) as soon as possible after receiving monitoring results. The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement a TRE, or to implement other measures. The Discharger shall conduct a TRE considering guidance provided by the USEPA’s Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3 (EPA document Nos. EPA 600/3-88/034, 600/3-88/035, and 600/3-88/036, respectively). A TRE, if necessary, shall be conducted in accordance with the following schedule.

**Table 9. Toxicity Reduction Evaluation—Schedule**

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

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

**a. Salt and Nutrient Management**

- i. The Discharger shall continue to update and implement an ongoing Salt Management Program, with the intent of reducing mass loading of salts in recycled water and attainment of applicable WQOs for salts in the Scotts Valley Groundwater Basin. Additionally, the Discharger shall develop and implement a Nutrient Management Program, with the intent of reducing mass loading of nutrients in treated effluent and attainment of applicable WQOs for nutrients in the same basin.
- ii. Salt reduction measures shall focus on all potential salt contributors to the collection system, including water supply, commercial, industrial, and residential dischargers.
- iii. Nutrient reduction measures shall focus on optimizing wastewater treatment processes for nitrification and denitrification, or other means of nitrogen removal. Reduction measures may also include source control (non-human waste from commercial and industrial sources) as appropriate.
- iv. As part of the salt/nutrient management program, the Discharger shall submit an annual report of salt and nutrient reduction efforts. This salt/nutrient management report shall be included as part of the annual report described in the MRP (Attachment E). The report shall be submitted by January 30<sup>th</sup>, and shall include (at a minimum):

**1) Salt Component**

- a) Calculations of annual salt mass discharged to (influent) and from (effluent)**

the wastewater treatment or recycling facility with a description of contributing sources;

- b) Analysis of wastewater evaporation/salt concentration effects;
- c) Analysis of groundwater monitoring results for salts constituents and associated trends;
- d) Analysis of potential impacts of salt loading on the groundwater basin (focusing on the relationship between salt concentration in the discharge and the Basin Plan water quality objectives);
- e) A summary of existing salt reduction measures;
- f) Recommendations and time schedules for implementation of any additional salt reduction measures; and
- g) Status of the implementation of the Salt Management items detailed in Section 4.3 of the Discharger's May 2009 Salt Management Study.

## 2) Nutrient Component

- a) Calculations of annual nitrogen mass (for all identified species) discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with a description of contributing sources;
  - b) Analysis of wastewater treatment facility ability to facilitate nitrification and denitrification, or other means of nitrogen removal;
  - c) Analysis of groundwater monitoring results for nitrogen constituents and trends;
  - d) Analysis of potential impacts of nitrogen loading on the groundwater basin (focusing on the relationship between salt concentration in the discharge and the Basin Plan water quality objectives);
  - e) A summary of existing nitrogen loading reduction measures; and
  - f) Recommendations and time schedules for implementation of any additional nitrogen loading reduction measures.
- v. As an alternative to the Salt and Nutrient Management Program requirements described above, upon Executive Officer approval, the Discharger may submit documentation and summary of participation in a regional salt/nutrient management plan implemented under the provisions of State Water Board Resolution No. 2009-0011 (Recycled Water Policy).

### **b. Pollutant Minimization Program**

The 2009 California Ocean Plan establishes guidelines for the Pollutant Minimization Program (PMP). At the time of the proposed adoption of this Order, no known evidence was available that would require the Discharger to immediately develop and conduct a PMP. The Central Coast Water Board will notify the Discharger in writing if such a

program becomes necessary. The 2009 Ocean Plan PMP language is included herein to provide guidance in the event that a PMP must be developed and implemented by the Discharger.

PMP Goal: The PMP goal is to reduce all potential pollutant sources through pollutant minimization (control) strategies, including pollution prevention measures, to maintain pollutant effluent concentrations at or below the effluent limitation.

Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence of impairment of beneficial uses. The completion and implementation of a Pollution Prevention Plan, required in accordance with California Water Code §13263.3 (d), will fulfill the PMP requirements.

Determining the Need for a PMP:

1. The Discharger must develop and conduct a PMP if all of the following conditions are true:
  - (a) The calculated effluent limitation is less than the reported Minimum Level.
  - (b) The concentration of the pollutant is reported as DNQ.
  - (c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.
  
2. Alternatively, the Discharger must develop and conduct a PMP if all of the following conditions are true:
  - (a) The calculated effluent limitation is less than the Method Detection Limit (MDL).
  - (b) The concentration of the pollutant is reported as ND.
  - (c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

Special Provision for Evidence of Pollutant Presence

Central Coast Water Boards may include special provisions in the discharge requirements to require the gathering of evidence to determine whether the pollutant is present in the effluent at levels above the calculated effluent limitation. Examples of evidence may include:

1. Health advisories for fish consumption;
2. Presence of whole effluent toxicity;
3. Results of benthic or aquatic organism tissue sampling;
4. Sample results from analytical methods more sensitive than methods included in the permit (in accordance with the 2009 Ocean Plan, Chapter III, Section C.4.b, *Deviations from Minimum Levels in Appendix II*; or
5. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL.

### Elements of a PMP

The Central Coast Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The program shall include actions and submittals acceptable to the Central Coast Water Board including, but not limited to, the following:

1. An annual review and semiannual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other bio-uptake sampling;
2. Quarterly monitoring for the reportable pollutant in the influent to the wastewater treatment system;
3. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant in the effluent at or below the calculated effluent limitation;
4. Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy; and,
5. An annual status report that shall be sent to the Central Coast Water Board including:
  - (a) All PMP monitoring results for the previous year;
  - (b) A list of potential sources of the reportable pollutant;
  - (c) A summary of all action taken in accordance with the control strategy; and,
  - (d) A description of actions to be taken in the following year.

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

The Facility shall be operated as specified under Standard Provision D of Attachment D.

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

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

- i.** Sludge and wastewater solids must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Parts 258 and 503 and Title 23, Chapter 15 of the CCR. If the Discharger desires to dispose of solids and/or sludge in a different manner, a request for permit modification must be submitted to the USEPA and to the Regional Water Board at least 180 days prior to beginning the alternative means of disposal.
- ii.** Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR Part 258 pertaining to providing information to the public. In the annual self-monitoring report, the Discharger shall include the amount of sludge placed in the landfill as well as the landfill to which it was sent.
- iii.** All requirements of 40 CFR Part 503 and 23 CCR Chapter 15 are enforceable whether or not the requirements of those regulations are stated in an NPDES permit or any other permit issued to the Discharger.
- iv.** The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.
- v.** 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.
- vi.** The solids and sludge treatment and storage site shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection, at the minimum, from a 100-year storm and protection from the highest possible tidal stage that may occur.
- vii.** The discharge of sewage sludge and solids shall not cause waste material to be in position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State.
- viii.** The Discharger shall submit an annual report to the USEPA and the Regional Water Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40 CFR Part 503. The Discharger shall also report the quantity of sludge removed from the Facility and the disposal method. This self-monitoring report shall be postmarked by February 1 of each year and report for the period of the previous calendar year.

- ix.** Sludge and wastewater solids must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Parts 258 and 503 and Title 23, Chapter 15 of the CCR. If the Discharger desires to dispose of solids and/or sludge in a different manner, a request for permit modification must be submitted to the USEPA and to the Regional Water Board at least 180 days prior to beginning the alternative means of disposal.
- x.** Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR Part 258 pertaining to providing information to the public. In the annual self-monitoring report, the Discharger shall include the amount of sludge placed in the landfill as well as the landfill to which it was sent.
- xi.** All requirements of 40 CFR Part 503 and 23 CCR Chapter 15 are enforceable whether or not the requirements of those regulations are stated in an NPDES permit or any other permit issued to the Discharger.
- xii.** The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.
- xiii.** 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.
- xiv.** The solids and sludge treatment and storage site shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection, at the minimum, from a 100-year storm and protection from the highest possible tidal stage that may occur.
- xv.** The discharge of sewage sludge and solids shall not cause waste material to be in position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State.
- xvi.** The Discharger shall submit an annual report to the USEPA and the Regional Water Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40 CFR Part 503. The Discharger shall also report the quantity of sludge removed from the Facility and the disposal method. This self-monitoring report shall be postmarked by February 1 of each year and report for the period of the previous calendar year.

**b. Pretreatment.**

- i.** The Discharger shall continue to implement standards and limits for industrial discharges to the sanitary sewer system, pursuant to Scotts Valley City Ordinance 79.18.
- ii.** The Discharger shall comply and ensure affected indirect dischargers comply with the Standard Provisions.
- iii.** With its annual report, the Discharger shall describe the Discharger's pretreatment activities over the previous calendar year. The report shall, at a minimum, include the following:

- (a) A discussion of upset, interference, or pass-through incidents, if any, at the POTW which the Discharger knows or suspects were caused by industrial users of the POTW system;
- (b) An updated list of the Discharger's industrial users, including their names and addresses;
- (c) A summary of inspection and sampling activities conducted by the Discharger during the previous calendar year to gather information and data regarding industrial users;
- (d) A summary of the Discharger's compliance and enforcement activities during the previous calendar year;
- (e) A description of any significant change in the Discharger's pretreatment program, including modifications or amendments to the City's Ordinance No. 79.18;
- (f) A summary of any public participation activities to involve and inform the public; and
- (g) A description of any changes in biosolids disposal methods.

## 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 Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS0000001, 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 Order, 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 Order is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and adverse effects of sanitary sewer overflows. The Discharger has obtained coverage under the General Order and must comply with its requirements.

## 6. Compliance Schedules – Not Applicable

## VII. COMPLIANCE DETERMINATION

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

### A. General.

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting

and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

**B. Multiple Sample Data.**

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

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

## ATTACHMENT A – DEFINITIONS

### Acute Toxicity:

- a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

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

- b. Lethal Concentration 50% (LC 50)

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

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

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

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

**Areas of Special Biological Significance (ASBS):** are those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

**Arithmetic Mean ( $\mu$ ),** also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

**Arithmetic mean =  $\mu = \Sigma x / n$**  where:  $\Sigma x$  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** pollutants are 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.

**Chlordane** shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

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

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$\text{TUc} = \frac{100}{\text{NOEL}}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix II.

**Carcinogenic** pollutants are substances that are known to cause cancer in living organisms.

**Coefficient of Variation (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.

**DDT** shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

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

**Detected, but Not Quantified (DNQ)** are those sample results less than the reported Minimum Level, but greater than or equal to the laboratory's MDL.

**Dichlorobenzenes** shall mean the sum of 1,2- and 1,3-dichlorobenzene.

**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.

**Downstream Ocean Waters** shall mean waters downstream with respect to ocean currents.

**Dredged Material:** Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil".

**Effluent Concentration Allowance (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** are 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 headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

**Endosulfan** shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

**Estimated Chemical Concentration** is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Estuaries and Coastal Lagoons** are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

**Halomethanes** shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

**HCH** shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

**Initial Dilution** is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

**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).

**Kelp Beds**, for purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocyctis and Nereocystis. Kelp beds include the total foliage canopy of Macrocyctis and Nereocystis plants throughout the water column.

**Mariculture** is the culture of plants and animals in marine waters independent of any pollution source.

**Material:** (a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

**Maximum Daily Effluent Limitation (MDEL):** the highest allowable daily discharge of a pollutant.

**MDL (Method Detection Limit)** is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136, Appendix B.

**Minimum Level (ML)** is the concentrations 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.

**Natural Light:** Reduction of natural light may be determined by the Central Coast Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Central Coast Water Board.

**Not Detected (ND)** are those sample results less than the laboratory's MDL.

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

**PAHs (polynuclear aromatic hydrocarbons)** shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene,

benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

**PCBs (polychlorinated biphenyls)** shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

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

**Pollutant Minimization Program (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 Ocean Plan Table B pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Central Coast Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

**Reporting Level (RL)** is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Central Coast Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. 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 reported ML.

**Sanitary Sewer Overflow** is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. Sanitary sewer overflows include: (1) overflows or releases of untreated or partially treated wastewater that reach waters of the United States; (2) overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and (3) wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publically owned portion of a sanitary sewer system.

**Satellite Collection System** is 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.

**Shellfish** are organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

**Significant Difference** is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

**Six-month Median Effluent Limitation:** the highest allowable moving median of all daily discharges for any 180-day period.

**Source of Drinking Water** is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

**Standard Deviation ( $\sigma$ )** is a measure of variability that is calculated as follows:

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

where:

x is the observed value;

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

n is the number of samples.

**State Water Quality Protection Areas (SWQPAs)** are non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

**TCDD Equivalents** shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

**Toxicity Reduction Evaluation (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.)

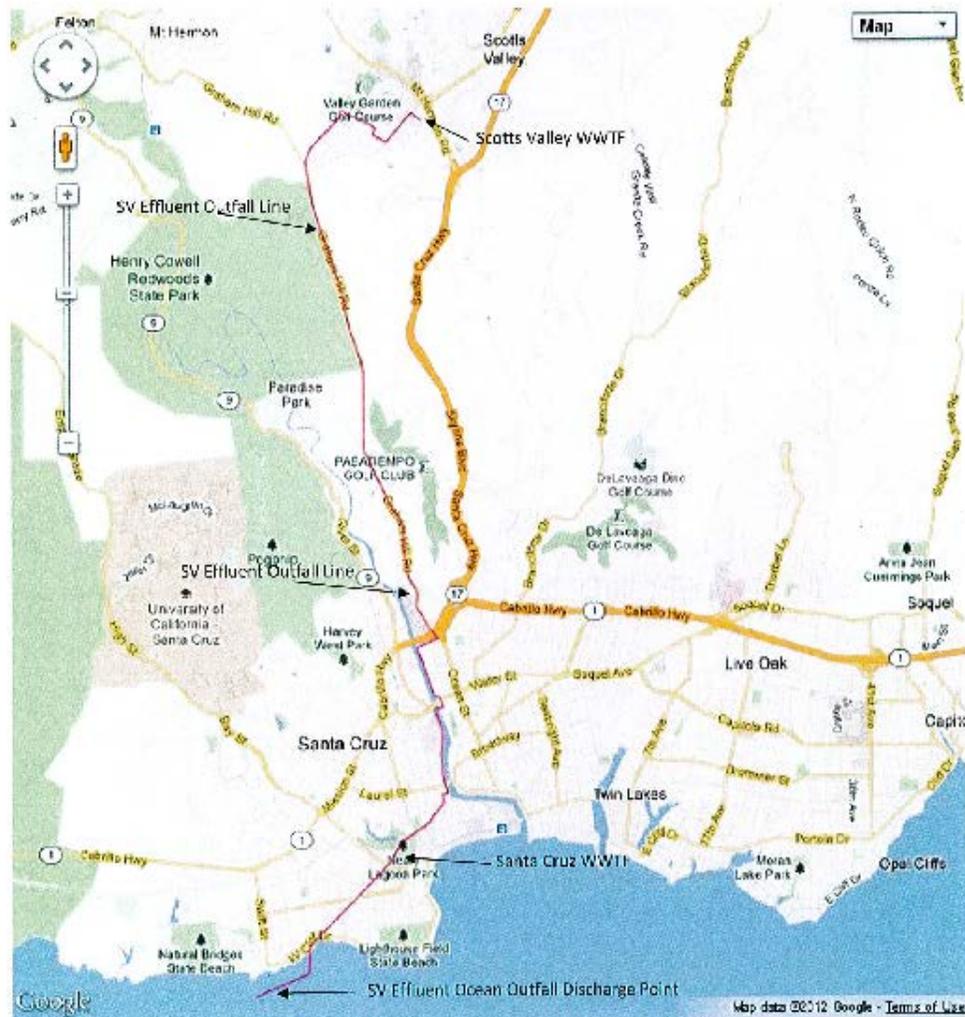
**Waste:** As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

**Water Reclamation:** The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

**ATTACHMENT B – MAP**

Attachment 4

**Scotts Valley Ocean Outfall Line**

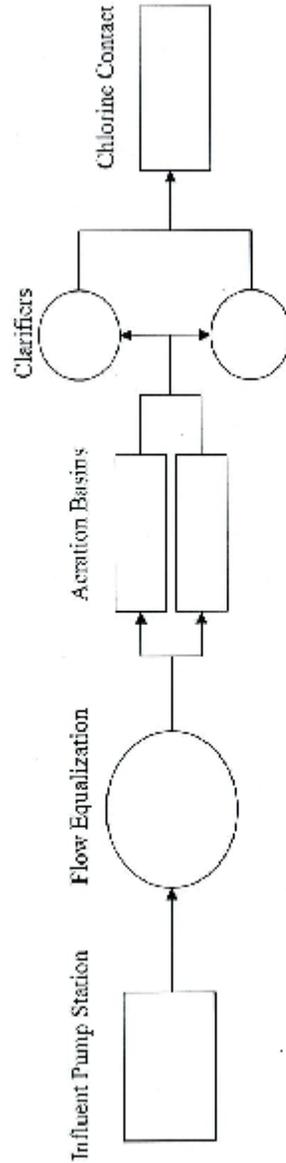


**ATTACHMENT C – FLOW SCHEMATIC**

**Attachment 2**

**CITY OF SCOTTS VALLEY  
 WASTEWATER TREATMENT FACILITY**

**WATER BALANCE**



1. Inflow Pump Station: Receives and discharges an average daily flow 0.90 MGD.
2. Flow Equalization Basin: Receives flow from inflow pump station (0.90 MGD), returned activated sludge (0.60 MGD), and re-circulated #3 process water (0.20 MGD). Total daily throughput approximately 1.65 MGD.
3. Aeration Basins: Receives 100% of flow from flow equalization basin. Total daily throughput approximately 1.65 MGD.
4. Secondary Clarifiers: Receive inflow of 1.65 MGD from aeration basins. Discharges 0.90 MGD of clarifier effluent to chlorine contact basin and 0.80 MGD to flow equalization basin as returned activated sludge.
5. Chlorine Contact Basin: Receives influent from secondary clarifiers and discharges to City's effluent force main to Santa Cruz for ocean discharge. Total daily throughput approximately 0.90 MGD.

## ATTACHMENT D –STANDARD PROVISIONS

### I. FEDERAL STANDARD PROVISIONS

#### A. Federal Standard Provisions – Permit Compliance

##### 1. Duty to Comply

- a. 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 (CWC) and is grounds for enforcement action, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [40 CFR §122.41(a)].
- b. 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 CFR §122.41(a)(1)].

2. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. [40 CFR §122.41(c)].

3. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. [40 CFR §122.41(d)]

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

##### 5. Property Rights

- a. This Order does not convey any property rights of any sort or any exclusive privileges [40 CFR §122.41(g)].
- b. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations [40 CFR §122.5(c)].

6. **Inspection and Entry.** The Discharger shall allow the Central Coast 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 CFR §122.41(i); Water Code §13383]:
- a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 CFR §122.41(i)(1)];
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 CFR §122.41(i)(2)];
  - c. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 CFR §122.41(i)(3)]; and
  - d. 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 CFR §122.41(i)(4)].

## 7. Bypass

- a. Definitions
  - i. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - ii. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
- b. 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 Federal Standard Provisions – Permit Compliance I.A.7.c, I.A.7.d, and I.A.7.e below [40 CFR §122.41(m)(2)].
- c. Prohibition of bypass. Bypass is prohibited, and the Central Coast Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(i)(A)];
  - ii. There were no feasible alternatives to the bypass, such as 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 CFR §122.41(m)(4)(i)(B)]; and

- iii. The Discharger submitted notice to the Central Coast Water Board as required under Federal Standard Provisions – Permit Compliance I.A.7.e below [40 CFR §122.41(m)(4)(i)(C)].
  - d. The Central Coast Water Board may approve an anticipated bypass, after considering its adverse effects, if the Central Coast Water Board determines that it will meet the three conditions listed in Federal Standard Provisions – Permit Compliance I.A.7.c above [40 CFR §122.41(m)(4)(ii)].
  - e. Notice
    - i. 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 CFR §122.41(m)(3)(i)].
    - ii. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Federal Standard Provisions - Reporting I.E.5 below (24-hour notice) [40 CFR §122.41(m)(3)(ii)].
8. **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 CFR §122.41(n)(1)].
- a. 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 Federal Standard Provisions – Permit Compliance I.A.8.b 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 CFR §122.41(n)(2)].
  - b. 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 CFR §122.41(n)(3)]:
    - i. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
    - ii. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(ii)];
    - iii. The Discharger submitted notice of the upset as required in Federal Standard Provisions – Reporting I.E.5.b.ii below (24-hour notice) [40 CFR §122.41(n)(3)(iii)]; and
    - iv. The Discharger complied with any remedial measures required under Federal Standard Provisions – Permit Compliance I.A.3 above [40 CFR §122.41(n)(3)(iv)].

- c. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR §122.41(n)(4)].

## **B. Federal Standard Provisions – Permit Action**

1. **General.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [40 CFR §122.41(f)].
2. **Duty to Reapply.** If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [40 CFR §122.41(b)].
3. **Transfers.** This Order is not transferable to any person except after notice to the Central Coast Water Board. The Central Coast Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code [40 CFR §122.41(l)(3); §122.61].

## **C. Federal Standard Provisions – Monitoring**

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

## **D. Federal Standard Provisions – Records**

1. **Records Retention.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Central Coast Water Board Executive Officer at any time. (40 CFR §122.41(j)(2).)
2. **Records of monitoring information shall include:**
  - a. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];
  - b. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
  - c. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];

- d. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
- e. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
- f. The results of such analyses [40 CFR §122.41(j)(3)(vi)].

**3. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:**

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

**E. Federal Standard Provisions – Reporting**

**1. Duty to Provide Information.** The Discharger shall furnish to the Central Coast Water Board, State Water Board, or USEPA within a reasonable time, any information which the Central Coast Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Central Coast Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [40 CFR §122.41(h); Water Code §13267].

**2. Signatory and Certification Requirements**

- a. All applications, reports, or information submitted to the Central Coast Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Federal Standard Provisions – Reporting I.E.2.b, I.E.2.c, I.E.2.d and I.E.2.e below [40 CFR §122.41(k)].
- b. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [40 CFR §122.22(a)(1)].
- c. All reports required by this Order and other information requested by the Central Coast Water Board, State Water Board, or USEPA shall be signed by a person described in Federal Standard Provisions – Reporting I.E.2.b above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - i. The authorization is made in writing by a person described in Federal Standard Provisions – Reporting I.E.2.b above [40 CFR §122.22(b)(1)];

- ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [40 CFR §122.22(b)(2)]; and
- iii. The written authorization is submitted to the Central Coast Water Board and State Water Board [40 CFR §122.22(b)(3)].
- d. If an authorization under Federal Standard Provisions – Reporting I.E.2.c above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Central Coast Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].
- e. Any person signing a document under Federal Standard Provisions – Reporting I.E.2.b or I.E.2.c above shall make the following certification:

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

### 3. Monitoring Reports

- a. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [40 CFR §122.41(l)(4)].
- b. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Central Coast Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
- c. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR 136 or, in the case of sludge use or disposal, approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Central Coast Water Board [40 CFR §122.41(l)(4)(ii)].
- d. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [40 CFR §122.41(l)(4)(iii)].

4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [40 CFR §122.41(l)(5)].

5. **Twenty-Four Hour Reporting**

- a. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
- b. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
- i. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
- ii. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].
- c. The Central Coast Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR §122.41(l)(6)(iii)].
6. **Planned Changes.** The Discharger shall give notice to the Central Coast Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR §122.41(l)(1)]:
- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in §122.29(b) [40 CFR §122.41(l)(1)(i)]; or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order [40 CFR §122.41(l)(1)(ii)].
- c. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 CFR §122.41(l)(1)(iii)].

7. **Anticipated Noncompliance.** The Discharger shall give advance notice to the Central Coast Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. [40 CFR §122.41(l)(2)].

8. **Other Noncompliance.** The Discharger shall report all instances of noncompliance not reported under Federal Standard Provisions – Reporting I.E.3, I.E.4, and I.E.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Federal Standard Provisions – Reporting I.E.5 above. [40 CFR §122.41(l)(7)].
9. **Other Information.** When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Central Coast Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR §122.41(l)(8)].

#### **F. Federal Standard Provisions – Enforcement**

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

#### **G. Additional Federal Provisions – Notification Levels**

1. **Non-Municipal Facilities.** Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Central Coast Water Board as soon as they know or have reason to believe [40 CFR §122.42(a)]:
  - a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(1)]:
    - i. 100 micrograms per liter ( $\mu\text{g/L}$ ) [40 CFR §122.42(a)(1)(i)];
    - ii. 200  $\mu\text{g/L}$  for acrolein and acrylonitrile; 500  $\mu\text{g/L}$  for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(1)(ii)];
    - iii. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(1)(iii)]; or
    - iv. The level established by the Central Coast Water Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(1)(iv)].
  - b. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(2)]:
    - i. 500 micrograms per liter ( $\mu\text{g/L}$ ) [40 CFR §122.42(a)(2)(i)];
    - ii. 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(2)(ii)];
    - iii. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(2)(iii)]; or

- iv. The level established by the Central Coast Water Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(2)(iv)].
2. **Publicly-Owned Treatment Works (POTWs).** All POTWs shall provide adequate notice to the Central Coast Water Board of the following [40 CFR §122.42(b)]:
- a. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants [40 CFR §122.42(b)(1)]; and
  - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. [40 CFR §122.42(b)(2)]
  - c. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. [40 CFR §122.42(b)(3)]

## II. CENTRAL COAST REGION'S STANDARD PROVISIONS (DECEMBER 2012)

### 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 §307(a) of the Clean Water Act (CWA) is prohibited.
- 4. Discharge of sludge, sludge digester or thickener supernatant, and sludge drying bed leachate to drainageways, surface waters, or the ocean is prohibited.
- 5. Introduction of pollutants into the collection, treatment, or disposal system by 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 California Water Code (CWC) §13050.
- 2. All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood.

3. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.
4. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner approved by the Executive Officer.
5. Publicly owned wastewater treatment 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 ensure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the effect of accidental discharges shall:
  - a. identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.)
  - b. evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.

10. Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.
11. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with the conditions of this order. Electrical and mechanical equipment shall be maintained in accordance with appropriate practices and standards, such as NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance*; NFPA 70E, *Standard for Electrical Safety in the Workplace*; ANSI/NETA MTS *Standard for Maintenance: Testing Specifications for Electrical Power Equipment and Systems*, or procedures established by insurance companies or other industry resources.
12. If the discharger's facilities are equipped with SCADA or other systems that implement wireless, remote operation, the discharger should implement appropriate safeguards against unauthorized access to the wireless systems. Standards such as NIST SP 800-53, *Recommended Security Controls for Federal Information Systems*, can provide guidance.
13. Production and use of reclaimed water is subject to the approval of the Central Coast Board. Production and use of reclaimed water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Administrative Code and Chapter 7, Division 7, of the CWC. An engineering report pursuant to section 60323, Title 22, of the California Administrative Code is required and a waiver or water reclamation requirements from the Central Coast Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved either in this Order or another order issued by this Board.

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

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

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

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services (DHS) for the constituent(s) being analyzed. Bioassay(s) performed in order to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board (State Water Board) and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the DHS or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory

certification program, the discharger shall be considered in compliance with this provision provided:

- a. Data results remain consistent with results of samples analyzed by the Central Coast Water Board;
  - b. A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Central Coast Water Board; and,
  - c. Certification is pursued in good faith and obtained as soon as possible after the program is reinstated.
3. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit and tributary flow and upstream of any mixing with receiving waters.
  4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

#### **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 electronically to the:

California Regional Water Quality Control Board  
Central Coast Region  
[centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)  
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  
USEPA, 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 is necessary, transfer may be delayed 180 days after the Central Coast Water Board's receipt of a complete permit application. Please also see Federal Standard Provision – Permit Action II.C.
7. Except for data determined to be confidential under CWA §308 (excludes effluent data and permit applications), all reports prepared in accordance with this permit shall be available for

public inspection at the office of the Central Coast Water Board or Regional Administrator of USEPA. Please also see Federal Standard Provision – Records IV.C.

8. By January 30 of each year, the discharger shall submit an annual report to the Central Coast Water Board. The report shall contain the following:
  - a) Both tabular and graphical summaries of the monitoring data obtained during the previous year.
  - b) A discussion of the previous year's compliance record and corrective actions taken, or which may be needed, to bring the discharger into full compliance.
  - c) An evaluation of wastewater flows with projected flow rate increases over time and the estimated date when flows will reach facility capacity.
  - d) A discussion of operator certification and a list of current operating personnel and their grades of certification.
  - e) The date of the facility's Operation and Maintenance Manual (including contingency plans as described in Provision B.9), the date the manual was last reviewed, and whether the manual is complete and valid for the current facility.
  - f) A discussion of the laboratories used by the discharger to monitor compliance with effluent limits and a summary of performance relative to Section C, General Monitoring Requirements.
  - g) 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.
  - h) If appropriate, the report shall also evaluate the effectiveness of the local source control or pretreatment program using the State Water Resources Control Board's "Guidelines for Determining the Effectiveness of Local Pretreatment Program."

#### **F. Central Coast Standard Provisions – General Pretreatment Provisions**

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

#### **G. Central Coast Standard Provisions – Enforcement**

1. Any person failing to file a report of waste discharge or other report as required by this permit shall be subject to a civil penalty not to exceed \$5,000 per day.
2. Upon reduction, loss, or failure of the treatment facility, the "Discharger" shall, to the extent necessary to maintain compliance with this permit, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided.

## H. Central Coast Standard Provisions – Definitions

### (Not otherwise included in Attachment A to this Order)

1. A "composite sample" is a combination of no fewer than eight (8) individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at the time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.
2. "Daily Maximum" limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. It is normally compared with results based on "composite samples" except for ammonia, total chlorine, phenolic compounds, and toxicity concentration. For all exceptions, comparisons will be made with results from a "grab sample".
3. "Discharger", as used herein, means, as appropriate: (1) the Discharger, (2) the local sewerage entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger", it refers to the discharger.)
4. "Duly Authorized Representative" is one where:
  - a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision V.B.;
  - b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,
  - c. the written authorization was submitted to the Central Coast Water Board.
5. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in Central Coast Standard Provision – Provision G.2. and instantaneous maximum limits.
6. "Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to 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:

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

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

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

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

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

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

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

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

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

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial waste, or other waste.
16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.
17. "Pollutant-free wastewater" means inflow and infiltration, stormwaters, and cooling waters and condensates which are essentially free of pollutants.
18. "Primary Industry Category" means any industry category listed in 40 CFR Part 122, Appendix A.
19. "Removal Efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using "Monthly averages" of pollutant concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):

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

20. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass". It does not mean economic loss caused by delays in production.
21. "Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.
22. To "significantly contribute" to a permit violation means an "indirect discharger" must:
  - a. Discharge a daily pollutant loading in excess of that allowed by contract with the "Discharger" or by Federal, State, or Local law;
  - b. Discharge wastewater which substantially differs in nature or constituents from its average discharge;
  - c. Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a permit violation or prevents sewage sludge use or disposal; or
  - d. Discharge pollutants, either alone or in conjunction with pollutants from other sources that increase the magnitude or duration of permit violations.
23. "Toxic Pollutant" means any pollutant listed as toxic under Section 307 (a) (1) of the Clean Water Act or under 40 CFR Part 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Federal Standard Provisions V.E.).
24. "Zone of Initial Dilution" means the region surrounding or adjacent to the end of an outfall pipe or diffuser ports whose boundaries are defined through calculation of a plume model verified by the State Water Board.

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM

### Table of Contents

Attachment E – Monitoring and Reporting Program (MRP) .....	E-2
I. General Monitoring Provisions .....	E-2
II. Monitoring Locations .....	E-3
III. Influent Monitoring Requirements.....	E-3
A. Monitoring Location INF - 001 .....	E-3
IV. Effluent Monitoring Requirements .....	E-3
A. Monitoring Location EFF - 001 .....	E-3
V. Whole Effluent Toxicity Testing Requirements .....	E-5
VI. Land Discharge Monitoring Requirements – Not Applicable .....	E-8
VII. Reclamation Monitoring Requirements.....	E-8
VIII. Receiving Water Monitoring Requirements – Surface Water .....	E-8
IX. Other Monitoring Requirements .....	E-8
A. Solids/Biosolids Monitoring, Notification, and Reporting.....	E-8
X. Reporting Requirements .....	E-12
A. General Monitoring and Reporting Requirements .....	E-12
B. Self Monitoring Reports (SMRs).....	E-12
C. Discharge Monitoring Reports (DMRs).....	E-14
D. Other Reports .....	E-14

### List of Tables

Table E-1. Monitoring Station Locations .....	E-3
Table E-2. Influent Monitoring at INF-001 .....	E-3
Table E-3. Effluent Monitoring at EFF - 001 .....	E-4
Table E-4. Approved Test - Acute Toxicity (TUa).....	E-5
Table E-5. Approved Tests—Chronic Toxicity.....	E-6
Table E-6. Monitoring Periods and Reporting Schedule.....	E-12

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

The Code of Federal Regulations (CFR) §122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code §13267 and §13383 also authorize the Central Coast 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. Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health, in accordance with Water Code §13176, and must include quality assurance/quality control data with their reports.
- B. 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 Central Coast Water Board.
- C. 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.)
- D. 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.

- E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- F. 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). Analyses for toxics listed in Table B of the California Ocean Plan (2009) shall adhere to guidance and requirements contained in that document.

**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	Monitoring Location Name	Monitoring Location Description
---	INF-001	Influent wastewater prior to treatment and following all significant inputs to the collection system or to the headworks of untreated wastewater where representative samples of wastewater influent can be obtained.
001	EFF-001	Location where representative effluent sample can be collected after treatment.

**III. INFLUENT MONITORING REQUIREMENTS**

**A. Monitoring Location INF - 001**

1. The Discharger shall monitor the untreated wastewater at Monitoring Location INF – 001 as follows:

**Table E-2. Influent Monitoring at INF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	Daily
Maximum Daily Flow	MGD	Metered	Daily
Mean Daily Flow	MGD	Calculated	Monthly
BOD <sub>5</sub>	mg/L	24-hr Composite	Weekly
TSS	mg/L	24-hr Composite	Weekly

**IV. EFFLUENT MONITORING REQUIREMENTS**

**A. Monitoring Location EFF - 001**

1. The Discharger shall monitor effluent discharged at Discharge Point 001 at Monitoring Location EFF – 001 as follows:

**Table E-3. Effluent Monitoring at EFF - 001**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	Daily
Maximum Daily Flow	MGD	Metered	Daily
Mean Daily Flow	MGD	Calculated	Monthly
pH	pH units	Metered	Weekly
Total & Fecal Coliform Bacteria <sup>[1]</sup>	MPN/100mL	Grab	Weekly <sup>[2]</sup>
Enterococci Bacteria <sup>[3]</sup>	MPN/100mL	Grab	Weekly <sup>[2]</sup>
CBOD <sub>5</sub>	mg/L	24-hr Composite	Weekly
TSS	mg/L	24-hr Composite	Weekly
Settleable Solids	mL/L/hr	Grab	Weekly
Chlorine Residual <sup>[4]</sup>	mg/L	Continuous	Daily
Turbidity	NTUs	Grab	Monthly
Oil and Grease	mg/L	Grab	Monthly
Acute Toxicity <sup>[5]</sup>	TUa	24-hr composite	Quarterly (Jan, Apr, Jul, Oct)
Chronic Toxicity <sup>[5]</sup>	TUc	24-hr composite	Quarterly (Jan, Apr, Jul, Oct)
Ocean Plan Table B Metals <sup>[6], [7]</sup>	µg/L	HVWS <sup>[8]</sup>	Once per permit term
Ocean Plan Table B pollutants <sup>[9], [7]</sup>	µg/L	HVWS <sup>[8]</sup>	Once per permit term

<sup>[1]</sup> Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR Part 136 (revised edition of May 14, 1999), unless alternate methods have been approved in advance by USEPA pursuant to 40 CFR Part 136.

<sup>[2]</sup> Bacteria monitoring of effluent samples is required if the Executive Officer concludes from receiving water monitoring that the discharge consistently exceeds the receiving water limitation established in section V.A.1 of the Order.

<sup>[3]</sup> Detection methods used for enterococcus shall be those presented in USEPA publication EPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure, or any improved method determined by the Central Coast Water Board to be appropriate.

<sup>[4]</sup> The Discharger shall monitor effluent continuously for chlorine residual at any point after dechlorination and before the discharge combines with the City of Santa Cruz's discharge. The Discharger shall review the continuous monitoring strip charts and submit a summary of the daily range and daily average concentrations to the Executive Officer with monthly monitoring reports.

<sup>[5]</sup> Whole effluent, acute and chronic toxicity monitoring shall be conducted according to the requirements established in section V. of this Monitoring and Reporting Program.

<sup>[6]</sup> Those twelve metals (Sb, As, Cd, Cr<sup>+3</sup>, Cr<sup>+6</sup>, Cu, Pb, Hg, Ni, Se, Ag, and Zn) with applicable water quality objectives established by Table B of the Ocean Plan. Analysis shall be for total recoverable metals.

<sup>[7]</sup> Procedures, calibration techniques, and instrument/reagent specifications shall conform to 40 CFR 136 and applicable provisions of the Ocean Plan, including the Standard Monitoring Procedures presented in Appendix III of the Ocean Plan. The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix II of the Ocean Plan are the lowest calibration standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of Table B; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML. In addition, data must comply with QA/QC requirements of 40 CFR 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR 136.

<sup>[8]</sup> HVWS = High-volume water sampling

<sup>[9]</sup> Those pollutants in 2009 Ocean Plan Table B. Analyses, compliance determination, and reporting shall adhere to applicable provisions of the Ocean Plan, including the Standard Monitoring Procedures presented in Appendix III. The Discharger shall ensure its analytical laboratory uses the Minimum Levels (MLs) presented in Ocean Plan Appendix II as the lowest calibration standards. The Discharger shall select the

lowest ML necessary to demonstrate compliance with effluent limitations. If effluent limitations are less than the lowest MLD, then the Discharger shall use the lowest ML.

**V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS**

**A. Acute Toxicity**

Compliance with acute toxicity objective shall be determined using a U.S. EPA approved protocol as provided in 40 CFR 136 (*Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, U.S. EPA Office of Water, EPA-821-R-02-012 or the latest edition).

Acute Toxicity (TUa) = 100/96-hr LC 50.

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by 96-hour static or continuous flow bioassay techniques using standard marine test species as specified in EPA-821-R-02-012 and as noted in the following table.

**Table E-4. Approved Test - Acute Toxicity (TUa)**

Species	Scientific Name	Effect	Test Duration
shrimp	<i>Holmesimysis costata</i>	survival	48 or 96 hours
shrimp	<i>Mysidopsis bahia</i>	survival	48 or 96 hours
silversides	<i>Menidia beryllina</i>	survival	48 or 96 hours
sheepshead minnow	<i>Cyprinodon variegatus</i>	survival	48 or 96 hours

If the effluent is to be discharged to a marine or estuarine system (e.g., salinity values in excess of 1,000 mg/L) and originates from a freshwater supply, salinity of the effluent must be increased with dry ocean salts (e.g., FORTY FATHOMS®) to match salinity of the receiving water. This modified effluent shall then be tested using marine species.

Reference toxicant test results shall be submitted with the effluent sample test results. Both tests must satisfy the test acceptability criteria specified in EPA-821-R-02-012. If the test acceptability criteria are not achieved or if toxicity is detected, the sample shall be retaken and retested within 5 days of the failed sampling event. The retest results shall be reported in accordance with EPA-821-R-02-012 (chapter on report preparation) and the results shall be attached to the next monitoring report.

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

$$TUa = [\log(100 - S)]/1.7$$

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

When toxicity monitoring finds acute toxicity in the effluent above the effluent limitation established by the Order, the Discharger shall immediately resample the effluent, if the discharge is continuing, and retest for acute toxicity. Results of the initial failed test and any toxicity monitoring results subsequent to the failed test shall be reported as soon as reasonable to the Executive Officer (EO). The EO will determine whether to initiate enforcement action,

whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements (section VI.C.2.a of the Order), or to implement other measures.

**B. Chronic Toxicity**

The presence of chronic toxicity shall be estimated as specified in *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, EPA-821/600/R-95/136; *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA-600-4-91-003; *Procedures Manual for Conducting Toxicity Tests developed by the Marine Bioassay Project*, SWRCB 1996, 96-1WQ; and/or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA/600/4-87-028 or subsequent editions.

Chronic toxicity measures a sublethal effect (e.g., reduced growth or reproduction) to experimental test organisms exposed to an effluent compared to that of the control organisms.

Chronic Toxicity (TUc) = 100/NOEL.

The no observed effect level (NOEL) is the maximum tested concentration in a medium which does not cause known adverse effects upon chronic exposure in the species in question (i.e., the highest effluent concentration to which organisms are exposed in a chronic test that causes no observable adverse effects on the test organisms; e.g., the highest concentration of a toxicant to which the values for the observed responses are not statistically significantly different from the controls). Examples of chronic toxicity include but are not limited to measurements of toxicant effects on reproduction, growth, and sublethal effects that can include behavioral, physiological, and biochemical effects.

In accordance with the 2009 Ocean Plan, Appendix III, *Standard Monitoring Procedures*, the Discharger shall use the critical life stage toxicity tests specified in the table below to measure TUc. Other species or protocols will be added to the list after State Water Resources Control Board review and approval.

A minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity limitation. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period of no fewer than three sampling events, monitoring can be reduced to the most sensitive species. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

**Table E-5. Approved Tests—Chronic Toxicity**

Species	Test	Tier <sup>[1]</sup>	Reference <sup>[2]</sup>
Giant kelp, <i>Macrocystis pyrifera</i>	percent germination; germ tube length	1	a, c
Red abalone, <i>Haliotis rufescens</i>	abnormal shell development	1	a, c
Oyster, <i>Crassostrea gigas</i> ; mussels, <i>Mytilus spp.</i>	abnormal shell development; percent survival	1	a, c
Urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	percent normal development	1	a, c
Urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	percent fertilization	1	a, c
Shrimp, <i>Homesimysis costata</i>	percent survival; growth	1	a, c

Shrimp, <i>Mysidopsis bahia</i>	percent survival; fecundity	2	b, d
Topsmelt, <i>Atherinops affinis</i>	larval growth rate; percent survival	1	a, c
Silverside, <i>Menidia beryllina</i>	larval growth rate; percent survival	2	b, d

<sup>[1]</sup> First tier methods are preferred for compliance monitoring. If first tier organisms are not available, the Discharger can use a second tier test method following approval by the Central Coast Water Board.

<sup>[2]</sup> Protocol References:

- a. Chapman, G.A., D.L. Denton, and J.M. Lazorchak. 1995. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms. U.S. EPA Report No. EPA/600/R-95/136.
- b. Klemm, D.J., G.E. Morrison, T.J. Norberg-King, W.J. Peltier, and M.A. Heber. 1994. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms. U.S. EPA Report No. EPA-600-4-91-003.
- c. SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. 96-1WQ.
- d. Weber, C.I., W.B. Horning, I.I., D.J. Klemm, T.W. Nieheisel, P.A. Lewis, E.L. Robinson, J. Menkedick and F. Kessler (eds). 1998. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA/600/4-87/028. National Information Service, Springfield, VA.

Dilution and control waters shall be obtained from an area of the receiving waters, typically upstream, which is unaffected by the discharge. Standard dilution water can be used, if the receiving water itself exhibits toxicity or if approved by the Central Coast Water Board. If the dilution water used in testing is different from the water in which the test organisms were cultured, a second control sample using culture water shall be tested.

If the effluent is to be discharged to a marine or estuarine system (e.g., salinity values in excess of 1,000 mg/L) originates from a freshwater supply, salinity of the effluent must be increased with dry ocean salts (e.g., FORTY FATHOMS<sup>®</sup>) to match salinity of the receiving water. This modified effluent shall then be tested using marine species.

If chronic toxicity is measured in the effluent above 115 TUc, the Discharger shall re-sample and submit the results to the Central Coast Water Board as described in section VI.C.2.a of this Order.

### C. Toxicity Reporting

1. The Discharger shall include a full report of toxicity test results with the regular monthly monitoring report and include the following information.
  - a. Toxicity test results,
  - b. Dates of sample collection and initiation of each toxicity test, and
  - c. Acute and/or chronic toxicity discharge limitations (or value).
2. Toxicity test results shall be reported according to the appropriate guidance - *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, U.S. EPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition, or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, EPA-821-R-02-012 (2002) or subsequent editions.

3. If the initial investigation TRE workplan is used to determine that additional (accelerated) toxicity testing is unnecessary, these results shall be submitted with the monitoring report for the month in which investigations conducted under the TRE workplan occurred.
4. Within 30 days of receipt of test results exceeding an acute or chronic toxicity discharge limitation, the Discharger shall provide written notification to the Executive Officer of:
  - a. Findings of the TRE or other investigation to identify the cause(s) of toxicity, and
  - b. Actions the Discharger has taken/will take, to mitigate the impact of the discharge and to prevent the recurrence of toxicity.

When corrective actions, including a TRE, have not been completed, a schedule under which corrective actions will be implemented, or the reason for not taking corrective action, if no action has been taken.

**VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE**

**VII. RECLAMATION MONITORING REQUIREMENTS**

The Discharger shall comply with applicable state and local requirements regarding the production and use of reclaimed wastewater, including requirements of California Water Code (CWC) sections 13500 – 13577 (Water Reclamation) and Department of Public Health regulations at title 22, sections 60301 – 60357 of the California Code of Regulations (Water Recycling Criteria).

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

In accordance with WDRs Order No. R3-2010-0043 (NPDES No. CA0048194), the City of Santa Cruz monitors the effects of its discharge combined with the Discharger’s into the Pacific Ocean and the Monterey Bay National Marine Sanctuary.

**IX. OTHER MONITORING REQUIREMENTS**

**A. Solids/Biosolids Monitoring, Notification, and Reporting**

1. Biosolids Monitoring

- a. Biosolids shall be tested for the metals required in 40 CFR 503.16 (for land application) or Section 503.26 (for surface disposal), using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), as required in 503.8(b)(4), at the following minimum frequencies:

<b>Volume (dry metric tons) <sup>[1]</sup></b>	<b>Sampling and Analysis Frequency <sup>[2]</sup></b>
0-290	Once per year
290-1500	Once per quarter
1500-15000	Once per 60 days
> 15000	Once per month

<sup>[1]</sup> For accumulated, previously untested biosolids, the Permittee shall develop a representative sampling plan, including number and location of sampling points, and collect representative samples.

<sup>[2]</sup> Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis. Biosolids to be land applied shall be tested for organic-N, ammonium-N, and nitrate-N at the frequencies required above.

- b. Prior to land application, the Permittee 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. Prior to disposal in a surface disposal site, the Permittee 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", the Permittee shall maintain daily records of the operating parameters used to achieve this reduction. If pathogen reduction is demonstrated by testing for fecal coliforms and/or pathogens, samples must be drawn at the frequency in 1(a) above. For fecal coliform, at least seven grab samples must be drawn during each monitoring event and a geometric mean calculated from these seven samples.
- c. For biosolids that are land applied or placed in a surface disposal site, the Permittee shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 40 CFR 503.33(b).
- d. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 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 POTW's with pretreatment programs). Class 1 facilities and Federal facilities greater than five MGD shall test dioxins/dibenzofurans using a detection limit of less than one pg/g at the time of their next priority pollutant scan if they have not done so within the past five years, and once per five years thereafter.
- e. The biosolids shall be tested annually, or more frequently if necessary, to determine hazardousness in accordance 40 CFR 261.
- f. 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.
- g. Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (EPA Method 9095) at the frequency in 11 (a) above or more often if necessary to demonstrate that there are no free liquids.

## 2. Solids/Biosolids Monitoring

The Permittee, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following notification requirements:

- a. Notification of non-compliance: The Permittee shall notify USEPA Region 9, the State Water Board, and the Regional Board located in the region where the biosolids are used or disposed, of any non-compliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Permittee shall notify USEPA Region 9 and the affected Regional Boards of the non-compliance in writing within five working days of becoming aware of the non-compliance. The Permittee shall require their biosolids management contractors to notify USEPA Region 9 and the affected Regional Boards of any non-compliance within the same timeframes. See Attachment C for Regional Board contact information.

- b. If biosolids are shipped to another State or to Indian Lands, the Permittee must send 60 days prior notice of the shipment to the permitting authorities in the receiving State or Indian Land (the USEPA Regional Office for that area and the State/Indian authorities).
- c. For land application: Prior to reuse of any biosolids from this facility to a new or previously unreported site, the Permittee shall notify USEPA and Regional Board. The notification shall include a description and topographic map of the proposed site(s), names and addresses of the applier, and site owner and a listing of any state or local permits which must be obtained. The plan shall include a 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 concentration limits, the Permittee (or its contractor) must pre-notify USEPA, and determine the cumulative metals loading at that site to date, as required in Section 503.12.
- d. The Permittee shall notify the applier of all the applier's requirements under 40 CFR 503, including the requirement that the applier certify that the management practices, site restrictions, and any applicable vector attraction reduction requirements have been met. The Permittee 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.
- e. For surface disposal: Prior to disposal to a new or previously unreported site, the Permittee shall notify USEPA and the Regional Board. The notice shall include description and 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.

### 3. Biosolids Reporting

The Permittee shall submit an annual biosolids report to the USEPA Region 9 Biosolids Coordinator and Regional Board by February 19 of each year for the period covering the previous calendar year. The report shall include:

- a. The amount of biosolids generated during the reporting period, in dry metric tons, and the amount accumulated from previous years;
- b. Results of all pollutant and pathogen monitoring required in Item 12 above and the Monitoring and Reporting Program of this Order. Results must be reported on a 100% dry weight basis for comparison with 40 CFR 503 limits;
- c. Descriptions of pathogen reduction methods and vector attraction reduction methods, including supporting time and temperature data, and certifications, as required in 40 CFR 503.17 and 503.27;
- d. Names, mailing addresses, 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 volumes delivered to each.

- e. For land application sites, the following information must be submitted by the Permittee, unless the Permittee requires its biosolids management contractors to report this information directly to the USEPA Region 9 Biosolids Coordinator:
  - 1) Locations of land application sites (with field names and numbers) used that calendar year, size of each field applied to, applier, and site owner.
  - 2) Volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, calculated plant available nitrogen;
  - 3) Crop planted, dates of planting and harvesting;
  - 4) For any biosolids exceeding 40 CFR 503.13 Table 3 metals concentrations: the locations of sites where applied and cumulative metals loading at that site to date;
  - 5) Certifications of management practices in Section 503.14; and
  - 6) Certifications of site restrictions in Section 503(b)(5).
  
- f. For surface disposal sites:
  - 1) Locations of sites, site operator, site owner, size of parcel on which disposed;
  - 2) Results of any required groundwater monitoring;
  - 3) Certifications of management practices in Section 503.24; and
  - 4) For closed sites, date of site closure and certifications of management practices for the three years following site closure.
  
- g. For all biosolids used or disposed at the Permittee's facilities, the site and management practice information and certification required in Sections 503.17 and 503.27; and
  
- h. For all biosolids temporarily stored, the information required in Section 503.20 required to demonstrate temporary storage.

Reports shall be submitted to:

Regional Biosolids Coordinator  
USEPA (WTR-7)  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Executive Officer  
Central Coast Water Board  
[centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)

- i. All the requirements of 40 CFR 503 and 23 CCR 15 are enforceable by the USEPA and this Regional Board whether or not the requirements are stated in an NPDES permit or any other permit issued to the discharger.

## X. REPORTING REQUIREMENTS

### A. General Monitoring and Reporting Requirements

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

### B. Self Monitoring Reports (SMRs)

1. The Discharger must 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>). 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 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-6. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On ...	Monitoring Period	SMR Due Date
Continuous	February 1, 2013	All	Submit with monthly SMR
Daily	February 1, 2013	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	Submit with monthly SMR
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 <sup>st</sup> day of calendar month through last day of calendar month	Submit with monthly SMR
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	Submit with next monthly SMR
Semiannually	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	Submit with next monthly SMR
Annually	January 1 following (or on) permit effective date	January 1 through December 31	Submit with Annual Report
Once during permit term	February 1, 2013	February 1, 2013 through June 1, 2017	Submit within 180 days before the permit expiration date

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 40 CFR 136.

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

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

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be 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 ( $\pm$  a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
  - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.
5. The Discharger shall submit SMRs in accordance with the following requirements:
    - a. 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. If 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. In the SMR, the Discharger shall clearly identify violations of the WDRs and 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. An Annual SMR shall be due on February 1 following each calendar year and shall include:
      - All data required by this MRP for the corresponding monitoring period, including appropriate calculations to verify compliance with effluent limitations.
      - A discussion of any incident of non-compliance and corrective actions taken.

**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 Central Coast 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 Discharge shall submit the original DMR and one copy of the DMR to the address listed below.

<b>Standard Mail</b>	<b>Fedex/UPS/Other Private Carriers</b>
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 <sup>th</sup> 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 or modified cannot be accepted.

**D. Other Reports**

1. Unless otherwise noted, with the next SMR, 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.

**ATTACHMENT F – FACT SHEET**

**Table of Contents**

Attachment F – Fact Sheet ..... F-3

I. Permit Information..... F-3

II. Facility Description ..... F-4

    A. Wastewater and Biosolids Treatment..... F-4

    B. Discharge Points and Receiving Waters ..... F-4

    C. Summary of Existing Requirements and Effluent Characterization..... F-4

    D. Compliance Summary..... F-5

    E. Planned Changes – Not Applicable..... F-6

III. Applicable Plans, Policies, and Regulations ..... F-6

    A. Legal Authorities ..... F-6

    B. California Environmental Quality Act (CEQA)..... F-6

    C. State and Federal Regulations, Policies, and Plans ..... F-6

    D. Impaired Water Bodies on CWA 303 (d) List..... F-7

    E. Other Plans, Policies and Regulations ..... F-7

IV. Rationale For Effluent Limitations and Discharge Specifications ..... F-8

    A. Discharge Prohibitions ..... F-8

    B. Technology-Based Effluent Limitations ..... F-9

        1. Scope and Authority ..... F-9

        2. Applicable Technology-Based Effluent Limitations..... F-9

    C. Water Quality-Based Effluent Limitations (WQBELs) ..... F-10

        1. Scope and Authority ..... F-10

        2. Applicable Beneficial Uses and Water Quality Criteria and Objectives..... F-11

        3. Determining the Need for WQBELs ..... F-11

        4. WQBEL Calculations ..... F-16

        5. Whole Effluent Toxicity (WET) ..... F-20

    D. Final Effluent Limitations ..... F-20

    E. Interim Effluent Limitations ..... F-21

    F. Land Discharge Specifications – Not Applicable ..... F-21

    G. Reclamation Specifications – Not Applicable ..... F-21

V. Rationale for Receiving Water Limitations ..... F-21

    A. Surface Water ..... F-21

    B. Groundwater ..... F-21

VI. Rationale for Monitoring and Reporting Requirements ..... F-22

    A. Influent Monitoring ..... F-22

    B. Effluent Monitoring ..... F-22

    C. Whole Effluent Toxicity Testing Requirements ..... F-22

    D. Receiving Water Monitoring ..... F-22

        1. Surface Water Monitoring ..... F-22

        2. Groundwater ..... F-22

    E. Other Monitoring Requirements ..... F-22

VII. Rationale for Provisions ..... F-22

    A. Standard Provisions ..... **Error! Bookmark not defined.**

    B. Special Provisions..... F-23

        1. Reopener Provisions ..... F-23

        2. Special Studies and Additional Monitoring Requirements ..... F-23

        3. Best Management Practices and Pollution Prevention ..... F-23

        4. Construction, Operation, and Maintenance Specifications – Not Applicable ..... F-23

5. Special Provisions for Municipal Facilities (POTWs Only).....	F-23
6. Other Special Provisions .....	F-24
7. Compliance Schedules .....	F-24
VIII. Public Participation.....	F-24
A. Notification of Interested Parties .....	F-25
B. Written Comments .....	F-25
C. Public Hearing .....	F-25
D. Waste Discharge Requirements Petitions .....	F-25
E. Information and Copying.....	F-25
F. Register of Interested Persons.....	F-26
G. Additional Information .....	F-26

**List of Tables**

Table F-1. Facility Information.....	F-3
Table F-2. Historic Effluent Limitations, Discharge Point 001 .....	F-4
Table F-3. Effluent Characterization – 2009 through 2011 .....	F-5
Table F-4. Secondary Treatment Requirements .....	F-9
Table F-5. Summary of Technology-Based Effluent Limitations .....	F-10
Table F-6. RPA Results for Discharges of Secondary Effluent.....	F-13
Table F-7. Background Concentrations (Cs) - Ocean Plan (Table C).....	F-17
Table F-8. Water Quality Objectives (Co)–Ocean Plan (Table B).....	F-17
Table F-9. Summary of Water Quality-Based Effluent Limitations.....	F-20

**ATTACHMENT F – FACT SHEET**

As described in section II of the 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**

<b>WDID</b>	3 440103001
<b>Discharger</b>	City of Scotts Valley
<b>Name of Facility</b>	City of Scotts Valley Wastewater Treatment Facility
<b>Facility Address</b>	700 Lundy Lane
	Scotts Valley, CA 95066
	Santa Cruz County
<b>Facility Contact, Title and Phone</b>	Scott Hamby, Wastewater and Environmental Program Manager, (831) 438-0732
<b>Authorized Person to Sign and Submit Reports</b>	Scott Hamby, Wastewater and Environmental Program Manager, (831) 438-0732
<b>Mailing Address</b>	One Civic Center Drive, Scotts Valley, CA 95066
<b>Billing Address</b>	One Civic Center Drive, Scotts Valley, CA 95066
<b>Type of Facility</b>	POTW
<b>Major or Minor Facility</b>	Major
<b>Threat to Water Quality</b>	2
<b>Complexity</b>	A
<b>Pretreatment Program</b>	Yes
<b>Reclamation Requirements</b>	Producer, WDRs Order No. 01-066
<b>Facility Permitted Flow</b>	1.5 million gallons per day (MGD)
<b>Facility Design Flow</b>	1.5 MGD
<b>Watershed</b>	Big Basin Hydrologic Unit (304)
<b>Receiving Waters</b>	Pacific Ocean (Monterey Bay National Marine Sanctuary)
<b>Receiving Water Type</b>	Ocean Water

- A.** The City of Scotts Valley (hereinafter, the Discharger) is the owner and operator of a wastewater treatment facility (hereinafter, Facility), a Publicly Owned Treatment Works (POTW).

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

- B.** The Facility discharges wastewater to the Pacific Ocean (into the Monterey Bay National Marine Sanctuary), a water of the United States, and is currently regulated by Order R3-2007-0013, which was adopted on September 7, 2007, and expired on October 27, 2012. The terms and conditions

of the current Order was automatically continued and remain in effect until new waste discharge requirements and a National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.

- C. The Discharger filed a Report of Waste Discharge and submitted an application for renewal of its waste discharge requirements (WDRs) and NPDES permit on February 15, 2012. A site visit was conducted on May 7, 2012, to observe operations and collect additional data to develop permit limitations and conditions.

## II. FACILITY DESCRIPTION

### A. Wastewater and Biosolids Treatment

The City of Scotts Valley owns and operates the wastewater treatment facility. Treatment facilities consist of screening, grit removal, flow equalization, aeration, clarification, and disinfection. Biosolids (sewage sludge or solid wastes) are anaerobically digested, dewatered, and disposed of at the Monterey Regional Waste Management Landfill in Marina, California.

### B. Discharge Points and Receiving Waters

The Discharger's wastewater is combined with the effluent from the City of Santa Cruz's Wastewater Treatment Facility and discharged to the Pacific Ocean and the Monterey Bay National Marine Sanctuary through a 12,250 foot-long outfall/diffuser system in approximately 410 feet of water at 36° 56' 08" N. Latitude, 122° 04' 08" W. Longitude (Discharge Point 001).

Discharges through Discharge Point 001 consist of secondary treated wastewater as described above. The minimum initial dilution provided by the outfall/diffuser system is 114:1 (parts seawater: parts effluent), a figure that has been used by Central Coast Water Board staff to determine the need for water quality-based effluent limitations, and, if necessary, to calculate those limitations. This Order retains the dilution ratio of 114:1 from the previous permit. At their discretion, the Discharger can apply to the Central Coast Water Board for approval of a different dilution ratio that is protected of water quality in all discharge scenarios.

### C. Summary of Existing Requirements and Effluent Characterization

Effluent limitations contained in the previous Order for discharges from Discharge Point 001 and representative monitoring data for Monitoring Location EFF-001, for the last three years of the permit term (i.e., 2009 through 2011) are presented in the following tables.

**Table F-2. Historic Effluent Limitations, Discharge Point 001**

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Daily Maximum	Instantaneous Maximum
BOD <sub>5</sub>	mg/L	30	45	90	--
	lb/day <sup>[1]</sup>	375	565	1,125	--
CBOD <sub>5</sub>	mg/L	25	40	85	--
	lb/day <sup>[1]</sup>	310	500	1,060	--
TSS	mg/L	30	45	90	--
	lb/day <sup>[1]</sup>	375	565	1,125	--
CBOD <sub>5</sub> , BOD <sub>5</sub> , and TSS	%	Removal by treatment shall not be less than 85 percent			
Oil & Grease	mg/L	25	40	75	--

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Daily Maximum	Instantaneous Maximum
	lb/day	310	500	940	--
Settleable Solids	mL/L/hr	1.0	1.5	--	3.0
Turbidity	NTU	75	100	--	225
Total coliform	MPN/100 mL				100,000
Fecal coliform	MPN/100 mL				20,000 <sup>[2], [3]</sup>
Enterococcus	MPN/100 mL				2,400 <sup>[4]</sup>
Acute Toxicity	TUa			3.7	
Chronic Toxicity	TUc			115	
pH	pH Units	6.0 – 9.0			
Total Chlorine Residual	mg/L	0.23 <sup>[5]</sup>		0.93	6.9
	lb/day	2.9		12	86

<sup>[1]</sup> For flows less than 1.5 MGD, mass emission rates shall not exceed the “Maximum Allowable Mass Emissions Rate.”

<sup>[2]</sup> Not more than ten percent of the total samples collected in any 60-day period shall exceed 40,000 per 100 mL.

<sup>[3]</sup> The 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 20,000 per 100 mL.

<sup>[4]</sup> The enterococcus concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2,400 per 100 mL for any 30-day period, or a log mean of 1,200 per 100 mL for any 6-month period.

<sup>[5]</sup> This value is expressed as a 6-month median effluent limitation.

**Table F-3. Effluent Characterization – 2009 through 2011**

	Units	Monthly Minimum	Monthly Maximum	Monthly Average
Effluent Flow	MGD	0.450	1.092	0.721
BOD <sub>5</sub>	mg/L	2	5	4
BOD <sub>5</sub> Removal	%	98.0	99.2	98.7
CBOD <sub>5</sub>	mg/L	2	5	3
CBOD <sub>5</sub> Removal	%	98.0	99.2	98.7
TSS	mg/L	5	10	7.33
TSS Removal	%	97.0	98.1	97.2
Oil & Grease	mg/L	< 5	18	< 5
pH	pH units	7.0	7.4	--
Turbidity	NTUs	1.6	8.7	4.5
Settleable Solids	mLs/L/Hr	< 0.1	< 0.1	< 0.1
Total Chlorine Residual	mg/L	< 0.01	0.06	< 0.01
Total coliform	MPN/100 mL	680	18,720	2,111.3
Fecal coliform	MPN/100 mL	141	15,317	382.7
Enterococcus	MPN/100 mL	10	204	83.3

Source: City of Scotts Valley Wastewater Treatment Facility, permit renewal application, February 15, 2012.

**D. Compliance Summary**

Based on review of self-monitoring data for the period from 2009 through 2011 submitted with the permit renewal application package, there were no violations of effluent limitations.

## E. Planned Changes – Not Applicable

### 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 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 Water Code (commencing with section 13260).

#### 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.

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

- 1. Water Quality Control Plans.** The Central Coast Water Board has adopted a *Water Quality Control Plan for the Central Coastal Basin* (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. To address ocean waters, the Basin Plan incorporates by reference the *Water Quality Control Plan for Ocean Waters of California* (the Ocean Plan), which was adopted in 1972 and amended in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The most recent amendment to the Ocean Plan was adopted by the State Water Resources Control Board (the State Water Board) on April 21, 2005 and became effective on February 14, 2006.

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 (MUN). Because of very high levels of total dissolved solids (TDS) in the Pacific Ocean, including the Monterey Bay National Marine Sanctuary, the receiving waters for discharges from the City of Scotts Valley Wastewater Treatment Facility meet an exception to Resolution No. 88-63, which precludes waters with TDS levels greater than 3,000 mg/L from the MUN designation. Beneficial uses established by the Basin Plan and the Ocean Plan for the Pacific Ocean, including Monterey Bay National Marine Sanctuary, are described in section II. H and I of the Order.

Requirements of this Order implement the Basin Plan and Ocean Plan.

- 2. Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains the following temperature objective for existing discharges to enclosed bays and coastal waters of California.

*Elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses.*

The Ocean Plan defines elevated temperature wastes as:

*Liquid, solid, or gaseous material discharged at a temperature higher than the natural temperature of receiving water.*

3. **California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, and 2009. The State Water Board adopted the latest amendment on September 15, 2009, and was approved by the Office of Administrative Law on March 10, 2010, and subsequently the USEPA. The Ocean Plan is applicable, in its entirety, to point source discharges to the Pacific Ocean and the Monterey Bay National Marine Sanctuary.
4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. [65 Fed. Reg. 24641 (April 27, 2000), codified at 40 CFR 131.21] Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
5. **Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Central Coast Water Board's Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. The permitted discharge must be 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.

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

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

The State's 2008-2010 303 (d) list of impaired water bodies, which was approved by USEPA on November 12, 2011, identifies Monterey Harbor as impaired by metals and unknown toxicity. The main body of Monterey Bay is not identified as 303 (d)-impaired.

#### **E. Other Plans, Policies and Regulations**

1. **Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, the Order requires, if applicable, 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*.

2. **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.

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

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. NPDES regulations establish two principal bases for effluent limitations. At 40 CFR 122.44 (a) permits are required to include applicable technology-based limitations and standards; and at 40 CFR 122.44 (d) permits are required to include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria 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 to Monterey Bay at a location other than as described by the Order). The Order authorizes a single, specific point of discharge to Monterey Bay; and this prohibition reflects 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 also retained from the previous permit.
2. Discharge Prohibition III. B (Discharges in a manner, except as described by the Order are 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 Central Coast Water Board during the process of permit reissuance.
3. Discharge Prohibition III. C (Discharges of radiological, chemical, or biological warfare agent or high level radioactive waste to the Ocean is prohibited). This prohibition restates a discharge prohibition established in section III. H of the Ocean Plan.

4. Discharge Prohibition III. D (Federal law prohibits the discharge of sludge by pipeline the Ocean. The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, is prohibited.) This prohibition reflects the prohibition in Chapter III. H of the Ocean Plan.
5. Discharge Prohibition III. 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). 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.

**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.

This Order includes limitations based on the minimum level of effluent quality attainable by secondary treatment, as established at 40 CFR 133. The Secondary Treatment Regulation includes the following limitations applicable to all publicly owned treatment works (POTWs).

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

Parameter	Effluent Limitation		
	30-Day Avg	7-Day Avg	Percent Removal <sup>[1]</sup>
BOD <sub>5</sub>	30 mg/L	45 mg/L	85
CBOD <sub>5</sub> <sup>[2]</sup>	25 mg/L	40 mg/L	85
TSS	30 mg/L	45 mg/L	85
pH	6.0 – 9.0		---

<sup>[1]</sup> 30-day average

<sup>[2]</sup> At the option of the permitting authority, effluent limitations for CBOD<sub>5</sub> may be substituted for those limitations specified for BOD<sub>5</sub>.

In addition, the State Water Board, in Table A of the Ocean Plan, has established technology-based requirements, applicable to all POTWs, for oil and grease, suspended and settleable solids, turbidity, and pH.

**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			
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
BOD <sub>5</sub> <sup>[1],[2]</sup>	mg/L	30	45	90	--
	lbs/day	375	565	1,125	--
CBOD <sub>5</sub> <sup>[1],[2]</sup>	mg/L	25	40	85	--
	lbs/day	310	500	1,060	--
TSS <sup>[2]</sup>	mg/L	30	45	90	--
	lbs/day	375	565	1,125	--
Oil & Grease	mg/L	25	40	75	--
	lbs/day	310	500	940	--
Settleable Solids	mL/L/hr	1.0	1.5	--	3.0
Turbidity	NTUs	75	100	--	225
pH	pH units	6.0 – 9.0 at all times			

<sup>[1]</sup> Following approval by the Executive Officer, the CBOD<sub>5</sub> effluent limit may be substituted for the BOD<sub>5</sub> effluent limit.

<sup>[2]</sup> 30-day average percent removal shall not be less than 85%.

All technology-based limitations are retained from the previous permit and are required by NPDES regulations at 40 CFR 133 and/or Table A of the Basin Plan. Mass-based limitations for CBOD<sub>5</sub>, TSS, and oil and grease are based on a discharge rate of 1.5 MGD, the design treatment capacity of the City of Scotts Valley Wastewater Treatment Facility.

**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 the reasonable potential for a pollutant to violate water quality standards and calculating WQBELs, when necessary, is intended to protect the designated uses of receiving waters as specified in the Basin and Ocean Plans, 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 Ocean Plan.

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

Beneficial uses for ocean waters of the Central Coast Region are established by the Basin Plan and Ocean Plan and are described by Findings H and I, respectively, of Section II of the Order.

Water quality criteria applicable to ocean waters of the Region are established by the Ocean Plan, which includes water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. The water quality objectives from the Ocean Plan are incorporated as receiving water limitations into this Order. In addition, Table B of the Ocean Plan contains numeric water quality objectives for 83 toxic pollutants for the protection of marine aquatic life and human health. Pursuant to NPDES regulations at 40 CFR 122.44 (d) (1), and in accordance with procedures established by the Ocean Plan (2005), the Central Coast Water Board has performed a reasonable potential analysis (RPA) to determine the need for effluent limitations for the Table B toxic pollutants.

## 3. Determining the Need for WQBELs

Procedures for performing a reasonable potential analysis (RPA) for ocean dischargers are described in Section III.C and Appendix VI of the Ocean Plan. The procedure is a statistical method that projects an effluent data set while taking into account the averaging period of WQOs, the long term variability of pollutants in the effluent, limitations associated with sparse data sets, and uncertainty associated with censored data sets. The procedure assumes a lognormal distribution of the effluent data set, and compares the 95<sup>th</sup> percentile concentration at 95 percent confidence of each Table B pollutant, accounting for dilution, to the applicable water quality criterion. The RPA results in one of three following endpoints.

- Endpoint 1 – There is “reasonable potential.” An effluent limitation must be developed for the pollutant. Effluent monitoring for the pollutant, consistent with the monitoring frequency in Appendix III (Ocean Plan), is required.
- Endpoint 2 - There is no “reasonable potential.” An effluent limitation is not required for the pollutant. Appendix III (Ocean Plan) effluent monitoring is not required for the pollutant; the Regional Board, however, may require occasional monitoring for the pollutant or for whole effluent toxicity as appropriate.
- Endpoint 3 - The RPA is inconclusive. Monitoring for the pollutant or whole effluent toxicity testing, consistent with the monitoring frequency in Appendix III (Ocean Plan), is required. An existing effluent limitation for the pollutant shall remain in the permit, otherwise the permit shall include a reopener clause to allow for subsequent modification of the permit to include an effluent limitation if the monitoring establishes that the discharge causes, has the reasonable potential to cause, or contribute to an excursion above a Table B water quality objective.

The State Water Board has developed a reasonable potential calculator (RPcalc 2.0), which is available at: <http://www.waterboards.ca.gov/plnspols/docs/oplans/rpcalc.zip>

RPcalc 2.0 was used in the development of this Order and considers several pathways in the determination of reasonable potential.

a. First Path

If available information about the receiving water or the discharge supports a finding of reasonable potential without analysis of effluent data, the Central Coast Water Board may decide that WQBELs are necessary after a review of such information. Such information may include: the facility or discharge type, solids loading, lack of dilution, history of compliance problems, potential toxic effects, fish tissue data, 303 (d) status of the receiving water, or the presence of threatened or endangered species or their critical habitat, or other information.

b. Second Path

If any pollutant concentration, adjusted to account for dilution, is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

c. Third Path

If the effluent data contains 3 or more detected and quantified values (i.e., values that are at or above the ML), and all values in the data set are at or above the ML, a parametric RPA is conducted to project the range of possible effluent values. The 95<sup>th</sup> percentile concentration is determined at 95 percent confidence for each pollutant, and compared to the most stringent applicable water quality objective to determine reasonable potential. A parametric analysis assumes that the range of possible effluent values is distributed lognormally. If the 95<sup>th</sup> percentile value is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

d. Fourth Path

If the effluent data contains 3 or more detected and quantified values (i.e., values that are at or above the ML), but at least one value in the data set is less than the ML, a parametric RPA is conducted according to the following steps.

- (1) If the number of censored values (those expressed as a “less than” value) account for less than 80 percent of the total number of effluent values, calculate the  $M_L$  (the mean of the natural log of transformed data) and  $S_L$  (the standard deviation of the natural log of transformed data) and conduct a parametric RPA, as described above for the Third Path.
- (2) If the number of censored values account for 80 percent or more of the total number of effluent values, conduct a non-parametric RPA, as described below for the Fifth Path. (A non-parametric analysis becomes necessary when the effluent data is limited, and no assumptions can be made regarding its possible distribution.)

e. Fifth Path

A non-parametric RPA is conducted when the effluent data set contains less than 3 detected and quantified values, or when the effluent data set contains 3 or more

detected and quantified values but the number of censored values accounts for 80 percent or more of the total number of effluent values. A non-parametric analysis is conducted by ordering the data, comparing each result to the applicable water quality objective, and accounting for ties. The sample number is reduced by one for each tie, when the dilution-adjusted method detection limit (MDL) is greater than the water quality objective. If the adjusted sample number, after accounting for ties, is greater than 15, the pollutant has no reasonable potential to exceed the water quality objective. If the sample number is 15 or less, the RPA is inconclusive, monitoring is required, and any existing effluent limits in the expiring permit are retained.

An RPA was conducted using effluent data reported from annual monitoring events from July 2003 until July 2008 for most Ocean Plan pollutants. TCDD Equivalents data collected from September 2008 to August 2011 were obtained from SMR data posted to CIWQS. The following table presents results of the RPA, performed in accordance with procedures described by the Ocean Plan for the Scotts Valley Wastewater Treatment Facility. The maximum effluent concentration adjusted for **complete mixing**, the applicable WQO, and the RPA endpoint for each Table B pollutant is identified. As shown in the following tables, the RPA commonly lead to Endpoint 3, meaning that the RPA is inconclusive, when a majority of the effluent data is reported as ND (not detected). In these circumstances, the Regional Water Board concludes that additional monitoring will be required for those pollutants during the term of the reissued permit and existing effluent limits will be retained.

**Table F-6. RPA Results for Discharges of Secondary Effluent**

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
Objectives for Protection of Marine Aquatic Life					
Ammonia (as N)	600	2	0	10	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Arsenic	8	2	1	3.0	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Cadmium	1	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorinated Phenolics	1	2	1	0.0058	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chromium (VI)	2	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Copper	3	2	0	2.0	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Cyanide	1	2	1	0.0096	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Endosulfan (total)	0.009	2	1	0.000019	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Endrin	0.002	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
HCH	0.004	2	1	0.0007	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Lead	2	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Mercury	0.04	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Nickel	5	2	0	0.02	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
Non-chlorinated Phenolics	30	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Selenium	15	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Silver	0.7	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Total Residual Chlorine	2	241	182	70	<b>Endpoint 2 – Effluent limitation not required.</b>
Zinc	20	2	0	65	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
<b>Objectives for Protection of Human Health - Noncarcinogens</b>					
1,1,1-Trichloroethane	540000	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4-Dinitrophenol	4.0	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2-Methyl-4,6-Dinitrophenol	220	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Acrolein	220	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Antimony	1200	2	1	0.0030	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroethoxy)Methane	4.4	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroisopropyl)Ether	1200	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorobenzene	570	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chromium (III)	190000	2	1	0.0013	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dichlorobenzenes	5100	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Diethyl Phthalate	33000	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dimethyl Phthalate	820000	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Di-n-Butyl Phthalate	3500	2	1	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Ethylbenzene	4100	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Fluoranthene	15	2	1	0.0000044	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorocyclopentadiene	58	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Nitrobenzene	4.9	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Thallium	2	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Toluene	85000	3	2	0.017	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Tributyltin	0.0014	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
<b>Objectives for Protection of Human Health - Carcinogens</b>					
1,1,2,2-Tetrachloroethane	2.3	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
1,1,2-Trichloroethane	9.4	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,1-Dichloroethylene	0.9	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,2-Dichloroethane	28	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,2-Diphenylhydrazine	0.16	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,3-Dichloropropylene	8.9	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,4-Dichlorobenzene	18	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
TCDD Equivalents	$3.9 \times 10^{-9}$	6	1	$3.4 \times 10^{-8}$	<b>Endpoint 1 – Effluent limitation is necessary.</b>
2,4,6-Trichlorophenol	0.29	4	2	0.0058	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4-Dinitrotoluene	2.6	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
3,3'-Dichlorobenzidine	0.0081	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Acrylonitrile	0.10	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Aldrin	$2.2 \times 10^{-5}$	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Benzene	5.9	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Benzidine	$6.9 \times 10^{-5}$	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Beryllium	0.033	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroethyl)Ether	0.045	2	2	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Ethylhexyl)Phthalate	3.5	5	4	0.17	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Carbon Tetrachloride	0.90	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlordane	$2.3 \times 10^{-5}$	4	3	$1.3 \times 10^{-7}$	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorodibromomethane	8.6	4	1	0.087	<b>Endpoint 2 – Effluent limitation not required.</b>
Chloroform	130	4	0	0.16	<b>Endpoint 2 – Effluent limitation not required.</b>
DDT (total)	0.00017	4	3	$4.7 \times 10^{-6}$	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dichlorobromomethane	6.2	4	0	0.17	<b>Endpoint 2 – Effluent limitation not required.</b>
Dieldrin	0.00004	4	3	$4.1 \times 10^{-7}$	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Halomethanes	130	4	1	0.43	<b>Endpoint 2 – Effluent limitation not required.</b>
Heptachlor	$5.0 \times 10^{-5}$	4	3	$1.5 \times 10^{-8}$	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Heptachlor Epoxide	0.00002	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
Hexachlorobenzene	2.1x10 <sup>-4</sup>	4	3	4.5x10 <sup>-8</sup>	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorobutadiene	14	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachloroethane	2.5	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Isophorone	730	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Methylene Chloride	450	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodimethylamine	7.3	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodi-n-Propylamine	0.38	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodiphenylamine	2.5	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
PAHs (total)	8.8x10 <sup>-3</sup>	4	3	1.5x10 <sup>-5</sup>	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
PCBs	1.9x10 <sup>-5</sup>	4	3	7.4x10 <sup>-7</sup>	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Tetrachloroethylene	2.0	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Toxaphene	0.00021	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Trichloroethylene	27	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Vinyl Chloride	36	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

NA indicates that effluent data is not available.

ND indicates that the pollutant was not detected.

Minimum probable initial dilution for this Discharger is 114:1.

Effluent data used for this RPA were collected from July 2003 to July 2008.

All units are µg/L.

#### 4. WQBEL Calculations

Based on results of the RPA, performed in accordance with methods of the Ocean Plan for discharges to the Pacific Ocean, the Water Board is establishing WQBELs for TCDD Equivalents based on a conclusion of Endpoint 1. An Endpoint 2 was concluded for total residual chlorine, chlorodibromomethane, chloroform, dichlorobromomethane, and halomethanes. The previous permit included limits for total residual chlorine, and based on a conclusion of Endpoint 2, the limit is not required; however, the Central Coast Water Board retains the effluent limitation for total residual chlorine because the facility uses chlorine to disinfect secondary effluent from the treatment plant and therefore reasonable potential exists based on this information. The Water Board is also establishing WQBELs for whole effluent, acute and chronic toxicity, which are also pollutants or pollutant parameters identified by Table B of the Ocean Plan.

As described by Section III. C of the Ocean Plan, effluent limits for Table B pollutants are calculated according to the following equation.

$$C_e = C_o + D_m (C_o - C_s)$$

Where ...

Ce = the effluent limitation (µg/L)

Co = the concentration (the water quality objective) to be met at the completion of initial dilution (µg/L).

Cs = background seawater concentration (µg/L)

Dm = minimum probable initial dilution expressed as parts seawater per part wastewater (here, Dm = 114)

For the City of Scotts Valley Wastewater Treatment Facility, the Dm of 114 is unchanged from Order No. R3-2007-0013. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. As site-specific water quality data is not available, in accordance with Table B implementing procedures, Cs equals zero for all pollutants, except the following.

**Table F-7. Background Concentrations (Cs) - Ocean Plan (Table C)**

Pollutant	Background Seawater Concentration
Arsenic	3 µg/L
Copper	2 µg/L
Mercury	0.0005 µg/L
Silver	0.16 µg/L
Zinc	8 µg/L

For all other Table B parameters, Cs=0

Applicable water quality objectives from Table B of the Ocean Plan are as follows.

**Table F-8. Water Quality Objectives (Co)–Ocean Plan (Table B)  
Objectives for Protection of Marine Aquatic Life**

Pollutant	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	µg/L	8	32	80
Cadmium	µg/L	1	4	10
Chromium (VI)	µg/L	2	8	20
Copper	µg/L	3	12	30
Lead	µg/L	2	8	20
Mercury	µg/L	0.04	0.16	0.4
Nickel	µg/L	5	20	50
Selenium	µg/L	15	60	150
Silver	µg/L	0.7	2.8	7
Zinc	µg/L	20	80	200
Cyanide	µg/L	1	4	10
Total Chlorine Residual	µg/L	2	8	60
Ammonia		600	2400	6000
Acute Toxicity	TUa	-----	0.3	-----
Chronic Toxicity	TUc	-----	1	-----
Non-chlorinated Phenolics	µg/L	30	120	300
Chlorinated Phenolics	µg/L	1	4	10

Pollutant	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Endosulfan (total)	µg/L	0.009	0.018	0.027
Endrin	µg/L	0.002	0.004	0.006
HCH	µg/L	0.004	0.008	0.012
Radioactivity		-----	-----	-----

**Objectives for Protection of Human Health - (Non-Carcinogens)**

Pollutant	Units	30-day Average
Acrolein	µg/L	220
Antimony	µg/L	1200
Bis(2-Chloroethoxy)Methane	µg/L	4.4
Bis(2-Chloroisopropyl)Ether	µg/L	1200
Chlorobenzene	µg/L	570
Chromium (III)	µg/L	190,000
Di-n-Butyl Phthalate	µg/L	3500
Dichlorobenzenes	µg/L	5100
Diethyl Phthalate	µg/L	33000
Dimethyl Phthalate	µg/L	820,000
2-Methyl-4,6-Dinitrophenol	µg/L	220
2,4-Dinitrophenol	µg/L	4
Ethylbenzene	µg/L	4100
Fluoranthene	µg/L	15
Hexachlorocyclopentadiene	µg/L	58
Nitrobenzene	µg/L	4.9
Thallium	µg/L	2
Toluene	µg/L	85,000
Tributyltin	µg/L	0.0014
1,1,1-Trichloroethane	µg/L	540,000

**Objectives for Protection of Human Health - (Carcinogens)**

Pollutant	Units	30-day Average
Acrylonitrile	µg/L	0.1
Aldrin	µg/L	0.000022
Benzene	µg/L	5.9
Benzidine	µg/L	0.000069
Beryllium	µg/L	0.033
Bis(2-Chloroethyl)Ether	µg/L	0.045
Bis(2-Ethylhexyl)Phthalate	µg/L	3.5
Carbon Tetrachloride	µg/L	0.9
Chlordane	µg/L	0.000023
Chlorodibromomethane	µg/L	8.6
Chloroform	µg/L	130
DDT (total)	µg/L	0.00017
1,4 Dichlorobenzene	µg/L	18
3,3'-Dichlorobenzidine	µg/L	0.0081
1,2-Dichloroethane	µg/L	28
1,1-Dichloroethylene	µg/L	0.9
Dichlorobromomethane	µg/L	6.2
Methylene Chloride	µg/L	450

Pollutant	Units	30-day Average
1,3-Dichloropropylene	µg/L	8.9
Dieldrin	µg/L	0.00004
2,4-Dinitrotoluene	µg/L	2.6
1,2-Diphenylhydrazine	µg/L	0.16
Halomethanes	µg/L	130
Heptachlor	µg/L	0.00005
Heptachlor Epoxide	µg/L	0.00002
Hexachlorobenzene	µg/L	0.00021
Hexachlorobutadiene	µg/L	14
Hexachloroethane	µg/L	2.5
Isophorone	µg/L	730
N-Nitrosodimethylamine	µg/L	7.3
N-Nitrosodi-n-Propylamine	µg/L	0.38
N-Nitrosodiphenylamine	µg/L	2.5
PAHs (total)	µg/L	0.0088
PCBs	µg/L	0.000019
TCDD Equivalents	µg/L	0.0000000039
1,1,2,2-Tetrachloroethane	µg/L	2.3
Tetrachloroethylene	µg/L	2
Toxaphene	µg/L	0.00021
Trichloroethylene	µg/L	27
1,1,2-Trichloroethane	µg/L	9.4
2,4,6-Trichlorophenol	µg/L	0.29
Vinyl Chloride	µg/L	36

Using the equation  $C_e = C_o + D_m (C_o - C_s)$ , effluent limitations are calculated as follows for TCDD Equivalents and chronic toxicity.

Total Residual Chlorine

$$C_e = 2 + 114 (2 - 0) = 230 \text{ µg/L (6-Month Median)}$$

$$C_e = 8 + 114 (8 - 0) = 920 \text{ µg/L (Daily Maximum)}$$

$$C_e = 60 + 114 (60 - 0) = 6,900 \text{ µg/L (Instantaneous Maximum)}$$

TCDD Equivalents

$$C_e = 3.9E-09 + 114 (3.9E-09 - 0) = 4.5E-07 \text{ µg/L (30-Day Average)}$$

Chronic Toxicity

$$C_e = 1 + 114 (1 - 0) = 115 \text{ TUc (Daily Maximum)}$$

Acute Toxicity

To determine an effluent limitation for acute toxicity, the Ocean Plan allows a mixing zone that is ten percent of the distance from the edge of the outfall structure to the edge of the chronic mixing zone (the zone of initial dilution); and therefore, the effluent limitation for acute toxicity is determined by the following equation:

$$C_e = C_o + (0.1) D_m (C_o)$$

Where Dm equals 114, the effluent limitation for acute toxicity is 3.75 TUa.

**Mass Based Effluent Limitations**

Implementing provisions at Section III. C of the Ocean Plan require that, in addition to concentration-based limits, effluent limitations for Table B pollutants be expressed in terms of mass. Therefore, the Order includes mass-based limits based on a flow rate of 1.5 MGD.

**Table F-9. Summary of Water Quality-Based Effluent Limitations**

Parameter	Units	Effluent Limitations			
		6-Month Median	30-Day Average	Daily Maximum	Instantaneous Maximum
Total Residual Chlorine	mg/L	0.23	--	0.92	6.9
TCDD Equivalents <sup>[1]</sup>	µg/L	--	0.00000045	--	--
Acute Toxicity	TUa	--	--	3.7	--
Chronic Toxicity	TUc	--	--	115	--

<sup>[1]</sup> TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as listed in Appendix I of the 2009 Ocean Plan.

**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.

Central Coast Water Board staff have retained acute and chronic toxicity limitations from the previous permit. Further, the effluent limitations have been calculated based on a minimum probable initial dilution of 114 to 1.

The Discharger must also maintain a Toxicity Reduction Evaluation (TRE) Workplan, which describes steps that the Discharger intends to follow in the event that acute and/or chronic toxicity limitations are exceeded. When monitoring measures WET in the effluent above the limitations established by the Order, the Discharger must resample, if the discharge is continuing, and retest. The Executive Officer will then determine whether to initiate enforcement action, whether to require the Discharger to implement a Toxicity Reduction Evaluation, or to implement other measures.

**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 retains effluent limitations established by the previous permit for BOD<sub>5</sub>, CBOD<sub>5</sub>, TSS, oil and grease, settleable solids, turbidity, pH, total coliform, fecal coliform, enterococcus bacteria, total residual chlorine, acute toxicity and chronic toxicity.

Consequently, the Order does not contain effluent limitations or prohibitions that are less stringent than the previous permit and is consistent with the anti-backsliding requirements.

## **2. Satisfaction of Antidegradation Policy**

The Order does not authorize increases in discharge rates or pollutant loadings, and its limitations and conditions otherwise assure maintenance of the existing quality of receiving waters. Therefore, 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.

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

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD<sub>5</sub>; CBOD<sub>5</sub>; TSS; settleable solids; turbidity; 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 limitations. Interim limitations are authorized only in certain circumstances, when immediate compliance with newly established final water quality based limitations is not feasible.

## **F. Land Discharge Specifications – Not Applicable**

## **G. Reclamation Specifications – Not Applicable**

# **V. RATIONALE FOR RECEIVING WATER LIMITATIONS**

## **A. Surface Water**

Receiving water quality is a result of many factors, some unrelated to the discharge. This Order considers these factors and is designed to minimize the influence of the discharge on the receiving water. Receiving water limitations within the proposed Order include the receiving water limitations of the previous Order.

## **B. Groundwater**

Groundwater limitations established by the Order include general objectives for groundwater established by the Basin Plan for the 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 Central Coast Water Board to require technical and monitoring reports. Rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program (MRP), which is presented as Attachment E of this Order, is presented below.

### **A. Influent Monitoring**

In addition to influent flow monitoring, influent monitoring for BOD<sub>5</sub> and TSS is required to determine compliance with the Order's 85 percent removal requirement for those pollutants.

### **B. Effluent Monitoring**

Effluent monitoring requirements of the previous permit for Discharge Point 001 (the Ocean outfall) are retained in this Order, except that monitoring for the Ocean Plan Table B pollutants, except TCDD equivalents which will be monitored annually, is required once per permit term. The Central Coast Water Board granted a revision to the monitoring frequency for the Ocean Plan Table B pollutants on January 6, 2010.

### **C. Whole Effluent Toxicity Testing Requirements**

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. This Order retains acute and chronic WET limitations and monitoring requirements from the previous permit for Discharge Point 001.

### **D. Receiving Water Monitoring**

#### **1. Surface Water Monitoring**

The Order retains the surface water receiving water monitoring from the previous permit.

#### **2. Groundwater**

Groundwater monitoring requirements are not established by the Order.

### **E. Other Monitoring Requirements**

#### **1. Biosolids/Sludge Monitoring.**

Biosolids monitoring requirements are retained from the previous Order.

## **VII. RATIONALE FOR PROVISIONS**

### **A. Standard Provisions**

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

NPDES regulations at 40 CFR 122.41(a)(1) and (b - n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR 123.25(a)(12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41(j)(5) and (k)(2), because the enforcement authority under the 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**

#### **a. Toxicity Reduction Requirements**

The requirement to maintain a Toxicity Reduction Work Plan is retained from Order No. R3-2007-0013. When toxicity monitoring measures acute or chronic toxicity in the effluent above the limitation established by the Order, the Discharger is required to resample and retest, if the discharge is continuing. When all monitoring results are available, the Executive Officer can determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements, or whether other measures are warranted.

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

#### **a. Pollutant Minimization Program**

The 2009 California Ocean Plan establishes guidelines for the Pollutant Minimization Program (PMP). At the time of the proposed adoption of this Order no known evidence was available that would require the Discharger to immediately develop and conduct a PMP. The Central Coast Water Board will notify the Discharger in writing if such a program becomes necessary.

### **4. Construction, Operation, and Maintenance Specifications – Not Applicable**

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

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

40 CFR 503.4 (Relationship to other regulations) states that the disposal of sewage sludge in a municipal solid waste landfill unit, as defined in 40 CFR 258.2, that complies with the requirements in 40 CFR 258 constitutes compliance with section 405 (d) of the CWA. Any person who prepares sewage sludge that is disposed in a municipal solid waste landfill unit must ensure that the sewage sludge meets the applicable requirements of 40 CFR 503.

## **6. Other Special Provisions**

### **a. Discharges of 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. Sanitary Sewer System Requirements**

The Order requires coverage by and compliance with applicable provisions of 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.

## **7. Compliance Schedules**

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

## **VIII. PUBLIC PARTICIPATION**

The Central Coast 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 Scotts Valley Wastewater Treatment Facility. As a step in the WDR adoption process, the Central Coast Water Board staff has developed tentative WDRs. The Central Coast Water Board encourages public participation in the WDR adoption process.

## A. Notification of Interested Parties

The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following: **the Scotts Valley Press Banner, a newspaper with regional circulation, beginning on October 26, 2012.**

## B. Written Comments

Central Coast Water Board staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted to the Executive Officer in person, via email ([centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)), or by mail at the address above on the cover page of this Order.

To receive a full response from the Central Coast Water Board staff and to be considered by the Central Coast Water Board, all written comments should be received at the Central Coast Water Board offices by 5:00 p.m. on **November 30, 2012**. Central Coast Water Board staff received no comments by the November 30, 2012 deadline.

## C. Public Hearing

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

Date: **January 31-February 1, 2013**  
Time: **8:30 a.m.**  
Location: **Central Coast Water Board Offices**  
**895 Aerovista Place, Suite 101**  
**San Luis Obispo, CA 93401**

Interested persons are invited to attend.

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 aggrieved person may petition the State Water Resources Control Board to review the decision of the Central Coast Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Central Coast Water Board's action to the following address:

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

## E. Information and Copying

The Report of Waste Discharge (RWD), 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 Central Coast Water Board by calling (805) 549-3147.

#### **F. Register of Interested Persons**

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

#### **G. Additional Information**

Requests for additional information or questions regarding this Order should be directed to Michael Higgins at (805) 542-4649 ([MHiggins@waterboards.ca.gov](mailto:MHiggins@waterboards.ca.gov)) or Sheila Soderberg at (805) 549-3592.

S:\NPDES\NPDES Facilities\Santa Cruz Co\City of Scotts Valley WWTP\R3-2013-0001\public draft\CA0048828 Scotts Valley\_NPDES Permit Renewal\_Draft.doc