

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
REGION 9, SAN DIEGO REGION**

**TENTATIVE ORDER NO. R9-2006-0055  
NPDES NO. CA0107611**

**WASTE DISCHARGE REQUIREMENTS  
FOR THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY  
DISCHARGE TO THE PACIFIC OCEAN VIA THE ALISO CREEK OCEAN OUTFALL**

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

**Table 1. Discharger Information**

Discharger	South Orange County Wastewater Authority
Name of Facility	Aliso Creek Ocean Outfall
Facility Address	34156 Del Obispo Street, Dana Point, CA 92629

The discharge by the South Orange County Wastewater Authority from the outfall identified below is subject to waste discharge requirements as set forth in this Order.

**Table 2. Outfall Location**

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
Outfall 001	Treated municipal wastewater, treated groundwater, and waste brine	33° 32' 34" N	117° 49' 02" W	Pacific Ocean

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Board on:	June 14, 2006
This Order shall become effective on:	August 1, 2006
This Order shall expire on:	August 1, 2011
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the Order expiration date as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that this Order supercedes Order No. 2001-08 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements herein.

I, John H. Robertus, 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, San Diego Region, on **June 14, 2006**.

\_\_\_\_\_TENTATIVE\_\_\_\_\_  
JOHN H. ROBERTUS  
Executive Officer

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## I. FACILITY INFORMATION

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

**Table 4. Facility Information**

Discharger	South Orange County Wastewater Authority
Name of Facility	Aliso Creek Ocean Outfall
Facility Address	34156 Del Obispo Street Dana Point, CA 92629 Orange County
Facility Contact, Title, and Phone	Tom Rosales, General Manager (949)234-5421
Mailing Address	34156 Del Obispo Street Dana Point, CA 92629
Type of Facility	Combined ocean outfall
Facility Design Flow	50 million gallons per day (MGD) (ocean outfall capacity)

## II. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Water Board), finds:

- A. **Background.** The South Orange County Wastewater Authority or SOCWA (hereinafter Discharger) is currently discharging pursuant to Order No. 2001-08 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107611 which was adopted on February 21, 2001. Three addenda to the Order were issued on October 10, 2001 (to change the name of the Discharger to SOCWA), February 13, 2002 (to correct effluent limitations for TCDD equivalents), and December 8, 2004 (to authorize the discharge of brine waste from the Irvine Desalter Project, authorize the discharge of treated groundwater from the Department of the Navy's shallow groundwater unit, and to apply secondary treatment standards to each of the contributing municipal wastewater treatment plants). The Discharger submitted a Report of Waste Discharge, dated August 9, 2005, to apply for a NPDES permit renewal to discharge treated municipal wastewater from several publicly owned treatment works (POTWs) and other miscellaneous wastewater flows (brine from desalination facilities and treated contaminated groundwater) through the Aliso Creek Ocean Outfall (Ocean Outfall) to the Pacific Ocean.
- B. **Facility Description.** SOCWA is a joint powers authority formed to reduce duplication and provide operational efficiency through consolidation. SOCWA is the legal successor to the Aliso Water Management Agency, the South East Regional Reclamation Authority, and the South Orange County Reclamation Authority. SOCWA is comprised of 10 member agencies including the City of Laguna Beach, the City of San Clemente, the City of San Juan Capistrano, El Toro Water District, Emerald Bay Service District, Irvine Ranch Water District, Moulton Niguel Water District (MNWD), Santa Margarita Water District (SMWD), South Coast Water District, and Trabuco Canyon Water District.

SOCWA operates the Ocean Outfall, which receives treated effluent from the following municipal wastewater treatment plants; the SOCWA Joint Regional Plant (JRP), the SOCWA Coastal Treatment Plant (TP), the Los Alisos Water Reclamation Plant (WRP), and the El Toro Water Recycling Plant (WRP). In addition, non-potable treated groundwater and brine discharges from the Irvine Desalter Project are also routed to the Ocean Outfall.

The SOCWA JRP is owned by SOCWA and the Moulton Niguel Water District and treats raw wastewater generated in the Moulton Niguel Water District service area. A portion of the secondary effluent is reclaimed for irrigation. The capacity of the existing tertiary treatment facility is 11.4 MGD. An average of 6.17 MGD of secondary treated wastewater is discharged to the Ocean Outfall. The Regional Water Board's Order No. 97-52 establishes reclamation requirements for the reuse of effluent from the JRP in the San Diego Region.

The SOCWA Coastal TP is owned and operated by SOCWA and Moulton Niguel Water District and treats raw wastewater generated in the South Coast Water District, the City of Laguna Beach, and the Emerald Bay Services District. From Memorial Day through the end of September the City of Laguna Beach diverts nuisance water from storm drains to the domestic sewer system, which is sent to the SOCWA Coastal TP. A portion of the secondary effluent is reclaimed for irrigation. The capacity of the existing tertiary treatment facility is 4.2 MGD. An average of 2.98 MGD of secondary treated wastewater is discharged to the Ocean Outfall. The Regional Water Board's Order No. 97-52 establishes reclamation requirements for the reuse of effluent from the SOCWA Coastal TP in the San Diego Region.

The Los Alisos WRP is owned and operated by the Irvine Ranch Water District (IRWD) and treats raw wastewater generated within the Irvine Ranch Water District service area. A portion of the secondary effluent is reclaimed for irrigation. The capacity of the existing tertiary treatment facility is 5.5 MGD. The Santa Ana Regional Water Quality Control Board's Order No. 94-03 establishes reclamation requirements for the reuse of effluent from the Los Alisos WRP in the Santa Ana Region. The Regional Water Board's Order No. 97-52 establishes reclamation requirements for the reuse of effluent from the Los Alisos WRP in the San Diego Region. All effluent not reclaimed at the Los Alisos WRP is discharged to the Pacific Ocean through the Ocean Outfall. An average of 2.45 MGD of secondary treated wastewater is discharged to the Ocean Outfall.

The El Toro WRP is owned by El Toro Water District and treats raw wastewater generated in the El Toro Water District service area. A portion of the secondary effluent is reclaimed for irrigation. The Santa Ana Regional Water Board Order No. 94-03 establishes reclamation requirements for the reuse of effluent from the El Toro WRP in the Santa Ana Region. The Regional Water Board's Order No. 97-52 establishes reclamation requirements for the reuse of effluent from the El Toro WRP in the San Diego Region. All effluent not reclaimed at the El Toro WRP is discharged to the Pacific Ocean through the Ocean Outfall. An average of 4.74 MGD of secondary treated wastewater is discharged to the outfall.

The Irvine Desalter Project (IDP) is operated by IRWD is scheduled to be operational in mid-2006 and will treat groundwater from wells located either within or near a plume of volatile organic compound (VOC) contaminated groundwater on or near the former Marine Corps Air Station (MCAS) El Toro. Approximately 400 gallons per minute (gpm) or 0.58 MGD of groundwater from extraction wells within the Department of the Navy's shallow groundwater unit (SGU) will be treated using air stripping and are disposed by injection within the Santa Ana Basin. If the injection well is out of service or the flowrate from SGU wells exceed the capacity of the injection well, the treated water will be directed to the Ocean Outfall. The IDP will also consist of a potable water treatment system using reverse osmosis (RO). Approximately 3,200 gpm (4.61 MGD) of groundwater from wells upgradient of the contaminated groundwater plume in Irvine, California will be treated and distributed as potable water. Approximately 457 gpm (0.66 MGD) of RO reject, or brine, will be directed for disposal through the Ocean Outfall.

The combined discharge from the Ocean Outfall enters the Pacific Ocean, a water of the United States, at Outfall 001 (see table on cover page). Attachment B provides a map of the area in the vicinity of the Ocean Outfall. Attachment C provides a flow schematic for each of the POTWs.

- C. **Legal Authorities.** This Order is issued pursuant to section 402 of the Federal CWA and implements regulations contained in the Code of Federal Regulations (CFR) adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges through the Ocean Outfall to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC.
- D. **Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available environmental data. The Fact Sheet, Attachment F, which contains background information and rationale for Order requirements and other provisions, is hereby incorporated into this Order and, thus, constitute part of the Findings for this Order.
- E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.
- F. **Technology-Based Effluent Limitations.** 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Secondary Treatment Standards at 40 CFR Part 133. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. **Water Quality-Based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality objectives to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter.
- H. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the San Diego Basin (hereinafter Basin Plan) on September 8, 1994. The Basin Plan was subsequently approved by the State Water Resources Control Board (State Water Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Water Board and approved by the State Water Board. The Basin Plan designates beneficial uses, establishes water quality

objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Beneficial uses applicable to the Pacific Ocean are as follows:

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

Discharge Point	Receiving Water Name	Beneficial Use
Outfall 001	Pacific Ocean	Industrial Service Supply; Navigation; Contact Water Recreation; Non-Contact Water Recreation; Commercial and Sport Fishing; Preservation of Biological Habitats of Special Significance; Wildlife Habitat; Rare, Threatened, or Endangered Species; Marine Habitat; Aquaculture; Migration of Aquatic Organisms; Spawning, Reproduction, and/or Early Development; Shellfish Harvesting

The Basin Plan relies primarily on the requirements of the *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan) for protection of the beneficial uses of the State ocean waters. The Basin Plan, however, may contain additional water quality objectives applicable to the Discharger.

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 temperature objectives for coastal waters.

Requirements of this Order specifically implement the applicable Water Quality Control Plans.

- I. **California Ocean Plan.** The State Water Board adopted the Ocean Plan in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and was approved by USEPA on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

**Table 6. Ocean Plan Beneficial Uses**

Discharge Point	Receiving Water	Beneficial Uses
Outfall 001	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance; rare and endangered species; marine habitat; fish spawning and shellfish harvesting



In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan.

- J. **Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required to implement the technology-based requirements based on the USEPA established standards of performance for POTW secondary treatment at 40 CFR Part 133 and on Table A of the California Ocean Plan and the water-quality based requirements necessary to implement the water quality objectives established in Table B of the California Ocean Plan.
- K. **Antidegradation Policy.** 40 CFR 131.12 requires 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 requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F), a discharge in compliance with this Order is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
- L. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal 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. Some effluent limitations in this Order are less stringent than those in the previous Order or have been removed. As discussed in detail in the Fact Sheet (Attachment F), the relaxation or removal of effluent limitations in this Order is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- M. **Monitoring and Reporting.** 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (Attachment E) establishes monitoring and reporting requirements to implement federal and State requirements.
- N. **Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).
- P. **Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste

discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.

- O. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

**THE DISCHARGER SHALL COMPLY WITH THE REQUIREMENTS AND PROVISIONS BELOW**, including attachments D and E, which are specifically referenced in the requirements and provisions.

### III. DISCHARGE PROHIBITIONS

- A. The discharge of waste from the SOCWA JRP, the SOCWA Coastal TP, the Los Alisos WRP, and the El Toro WRP not treated by a secondary treatment process and the discharge of waste from these facilities not in compliance with the effluent limitations specified in Section IV.B of this Order, and/or to a location other than the Aliso Creek Ocean Outfall, unless specifically regulated by this Order or separate waste discharge requirements, or except under recognized upset and bypass conditions set forth in Attachment D, is prohibited.

The discharges of waste from the IDP not in compliance with the effluent limitations specified in Section IV.B of this Order, and/or to a location other than the Aliso Creek Ocean Outfall, unless specifically regulated by this Order or separate waste discharge requirements, is prohibited.

- B. Waste discharge prohibitions of the Basin Plan:

1. The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination, or nuisance as defined in CWC Section 13050, is prohibited.
2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in CWC Section 13264 is prohibited.
3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by an NPDES permit or a dredge or fill material permit (subject to the exemption described in CWC Section 13376) is prohibited.
4. The discharge of treated or untreated waste to lakes or reservoirs used for municipal water supply, or to inland surface water tributaries thereto, is prohibited.
5. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the Discharger is prohibited unless the discharge is authorized by this Regional Water Board.

6. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner that may permit its being transported into the waters, is prohibited unless authorized by the Regional Water Board.
  7. Any discharge to a storm water conveyance system that is not composed entirely of "storm water" is prohibited unless authorized by this Regional Water Board. [Federal Regulations 40 CFR 122.26 (b) defines storm water as storm water runoff, snow melt runoff, and surface runoff and drainage.]
  8. The unauthorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.
  9. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the state is prohibited.
  10. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.
  11. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities that cause deleterious bottom deposits, turbidity or discoloration in waters of the state or that unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.
- C. The discharge of waste to Areas of Special Biological Significance, as designated by the State Water Board, is prohibited.
- D. The discharge of sludge to the ocean is prohibited; the discharge of municipal and 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 directly to the ocean or to a waste stream that discharges to the ocean without further treatment is prohibited.
- E. The bypassing of untreated wastes containing concentrations of pollutants in excess of those in Tables A or B of the Ocean Plan is prohibited, except under upset conditions, as described in Attachment D of this Order, Standard Provision I. H.
- F. Compliance with Discharge Prohibitions contained in Section III.H of the Ocean Plan is a requirement of this Order.

#### **IV. DISCHARGE SPECIFICATIONS AND EFFLUENT LIMITATIONS**

##### **A. Discharge Specifications**

The discharge of effluent through Outfall 001 shall comply with the following:

1. Waste management systems that discharge to the Pacific Ocean through Outfall 001 must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
2. Waste discharged to the Pacific Ocean through Outfall 001 must be essentially free of:
  - a. Material that is floatable or will become floatable upon discharge.
  - b. Settleable material or substances that may form sediments, which will degrade benthic communities or other aquatic life.
  - c. Substances, which will accumulate to toxic levels in marine waters, sediments, or biota.
  - d. Substances that significantly decrease the natural light to benthic communities and other marine life.
  - e. Materials that result in aesthetically undesirable discoloration of the ocean surface.
3. Waste effluents shall be discharged through Outfall 001 in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in treatment.
4. The location of waste discharges from the Discharger's Facilities shall assure that:
  - a. Pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body contact sports.
  - b. Natural water quality conditions are not altered in areas designated as being areas of special biological significance or areas that existing marine laboratories use as a source of seawater.
  - c. Maximum protection is provided to the marine environment.
5. Waste that contains pathogenic organisms or viruses shall be discharged from the Facility through Outfall 001 a sufficient distance from shellfishing and water contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area of use must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard shall be used.

- The calendar-monthly average of daily effluent discharge flow rates from the Discharger's Facilities through the Aliso Creek Ocean Outfall shall not exceed 32.86 MGD.

**B. Effluent Limitations and Performance Goals**

The discharge of effluent to Outfall 001 shall be measured at Monitoring Location M-001 as described in the Attachment E, Monitoring and Reporting Program, except as otherwise noted. Scientific notation, with some exceptions, is used to express the effluent limitations and performance goals to prevent ambiguity. The effluent limitations and performance goals below are enforceable to the number of significant digits given in the effluent limitation or performance goal.

- The discharge of effluent from the SOCWA JRP, the SOCWA Coastal TP, the Los Alisos WRP, and the El Toro WRP to the Ocean Outfall, as monitored at Monitoring Locations M-001A, M-001B, M-001C, and M-001D, respectively, shall maintain compliance with the following effluent limitations:

**Table 7. Effluent Limitations based on Secondary Treatment Standards and Table A of the 2005 California Ocean Plan**

Constituent	Units	Effluent Limitations					6 Month Median
		Max Daily	Average Monthly	Average Weekly	Instantaneous		
					Min	Max	
CBOD (5-day at 20°C)	mg/L		25	40			
	%	The average monthly percent removal shall not be less than 85 percent.					
Total Suspended Solids	mg/L		30	45			
	%	The average monthly percent removal shall not be less than 85 percent.					
pH	Standard units				6.0	9.0	
Oil and Grease	mg/l		25	40		75	
Settleable Solids	ml/l		1.0	1.5		3.0	
Turbidity	NTU		75	100		225	

- The discharge of effluent from the IDP brine discharge from the potable water treatment system and the non-potable treated groundwater from the IDP Shallow Groundwater Unit (SGU), as monitored at Monitoring Locations M-001E and M-001F, respectively, shall maintain compliance with the following effluent limitations:

**Table 8. Effluent Limitations based on Table A of the 2005 California Ocean Plan**

Constituent	Units	Effluent Limitations					6 Month Median
		Max Daily	Average Monthly	Average Weekly	Instantaneous		
					Min	Max	
Total Suspended Solids	mg/L		60				
pH	Standard units				6.0	9.0	

Constituent	Units	Effluent Limitations					
		Max Daily	Average Monthly	Average Weekly	Instantaneous		6 Month Median
					Min	Max	
Oil and Grease	mg/L		25	40		75	
Settleable Solids	ml/L		1.0	1.5		3.0	
Turbidity	NTU		75	100		225	

3. The discharge of effluent through Outfall 001 shall maintain compliance with the effluent limitations contained in the table below. Monitoring Location M-001 has been established to enable reporting compliance with effluent limitations for the combined discharges through Outfall 001. Because a representative sampling point does not exist for the final combined discharge, sampling will not physically occur at Monitoring Location M-001. Monitoring Location 001 represents a combined sample from all contributors to the Ocean Outfall. Samples shall be taken from Monitoring Locations M-001A, M-001B, M-001C, M-001D, M-001E, and M-001F as described in the Monitoring and Reporting Program (Attachment E).

**Table 9. Effluent Limitations based on the 2005 California Ocean Plan<sup>1</sup>**

Constituent	Units	Effluent Limitations					
		Max Daily	Average Monthly	Average Weekly	Instantaneous		6 Month Median
					Min	Max	
Chronic Toxicity <sup>2</sup>	TU <sub>c</sub>	261					
TCDD Equivalents <sup>3</sup>	µg/L		1.02E-06				
	lbs/day		2.79E-07				

<sup>1</sup> Scientific "E" notation is used to express certain values. In scientific "E" notation, the number following the "E" indicates the position of the decimal point in the value. Negative numbers after the "E" indicate that the value is less than 1, and positive numbers after the "E" indicate that the value is greater than 1. In this notation a value of 6.1 E-02 represents a value of 6.1 × 10<sup>-2</sup> or 0.061, 6.1E+2 represents 6.1 × 10<sup>2</sup> or 610, and 6.1E+00 represents 6.1 × 10<sup>0</sup> or 6.1.

<sup>2</sup> Chronic toxicity expressed as Chronic Toxicity Units (TU<sub>c</sub>) = 100 / NOEL, where NOEL (No Observed Effect Level) 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 critical life stage toxicity tests identified in Section V of Monitoring and Reporting Program No. R9-2006-0055.

<sup>3</sup> TCDD Equivalents shall mean the sum of 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 by 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 CDD	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

4. Constituents that do not have reasonable potential or had inconclusive reasonable potential analysis results are referred to as performance goal constituents and assigned the performance goals listed in the following table. Performance goal constituents shall also be monitored at M-001, but the results will be used for informational purposes only, not compliance determination. Monitoring Location M-001 has been established to enable reporting for the combined discharges through the Ocean Outfall. Because a representative sampling point does not exist for Outfall 001, sampling will not physically occur at Monitoring Location 001. Monitoring Location M-001 represents a combined sample from all contributors to the Ocean Outfall. Samples shall be taken from Monitoring Locations M-001A, M-001B, M-001C, M-001D, M-001E, and M-001F as described in the Monitoring and Reporting Program (Attachment E).

**Table 10. Performance Goals based on the 2005 California Ocean Plan**

Constituent	Units	Performance Goals <sup>1</sup>					
		Max Daily	Average Monthly	Average Weekly	Instantaneous		6 Month Median
					Min	Max	
Arsenic	ug/L	7.57E+03				2.01E+04	1.31E+03
	lbs/day	2.08E+03				5.52E+03	3.59E+02
Cadmium	ug/L	1.04E+03				2.61E+03	2.61E+02
	lbs/day	2.86E+02				7.16E+02	7.16E+01
Chromium VI <sup>2</sup>	ug/L	2.09E+03				5.22E+03	5.22E+02
	lbs/day	5.73E+02				1.43E+03	1.43E+02
Copper	ug/L	2.61E+03				7.31E+03	2.63E+02
	lbs/day	7.17E+02				2.01E+03	7.22E+01
Lead	ug/L	2.09E+03				5.22E+03	5.22E+02
	lbs/day	5.73E+02				1.43E+03	1.43E+02
Mercury	ug/L	4.16E+01				1.04E+02	1.03E+01
	lbs/day	1.14E+01				2.86E+01	2.83E+00
Nickel	ug/L	5.22E+03				1.31E+04	1.31E+03
	lbs/day	1.43E+03				3.58E+03	3.58E+02
Selenium	ug/L	1.57E+04				3.92E+04	3.92E+03
	lbs/day	4.30E+03				1.07E+04	1.07E+03
Silver	ug/L	6.89E+02				1.79E+03	1.41E+02
	lbs/day	1.89E+02				4.90E+02	3.87E+01
Zinc	ug/L	1.88E+04				5.01E+04	3.14E+03
	lbs/day	5.16E+03				1.38E+04	8.62E+02
Cyanide <sup>3</sup>	ug/L	1.04E+03				2.61E+03	2.61E+02
	lbs/day	2.86E+02				7.16E+02	7.16E+01
Total Chlorine Residual <sup>4</sup>	ug/L	2.09E+03				1.57E+04	5.22E+02
	lbs/day	5.73E+02				4.30E+03	1.43E+02
Ammonia (expressed as nitrogen)	ug/L	6.26E+05				1.57E+06	1.57E+05
	lbs/day	1.72E+05				4.30E+05	4.30E+04
Acute Toxicity <sup>5</sup>	TU <sub>a</sub>	8.1				--	--
Phenolic Compounds (non-chlorinated) <sup>6</sup>	ug/L	3.13E+04				7.83E+04	7.83E+03
	lbs/day	8.59E+03				2.15E+04	2.15E+03
Phenolic Compounds (chlorinated) <sup>7</sup>	ug/L	1.04E+03				2.61E+03	2.61E+02
	lbs/day	2.86E+02				7.16E+02	7.16E+01
Endosulfan <sup>8</sup>	ug/L	4.70E+00				7.05E+00	2.35E+00
	lbs/day	1.29E+00				1.93E+00	6.45E-01

Constituent	Units	Performance Goals <sup>1</sup>					
		Max Daily	Average Monthly	Average Weekly	Instantaneous		6 Month Median
					Min	Max	
Endrin	ug/L	1.04E+00				1.57E+00	5.22E-01
	lbs/day	2.86E-01				4.30E-01	1.43E-01
HCH <sup>9</sup>	ug/L	2.09E+00				3.13E+00	1.04E+00
	lbs/day	5.73E-01				8.59E-01	2.86E-01
Radioactivity <sup>10</sup>		Not to exceed limits specified under Column 2 of Table 2 in Appendix B of Title 10 Code of Federal Regulations Part 20, Standards for Protection Against Radiation					
Acrolein	ug/L		5.74E+04				
	lbs/day		1.58E+04				
Antimony	ug/L		3.13E+05				
	lbs/day		8.59E+04				
Bis (2-chloroethoxy) Methane	ug/L		1.15E+03				
	lbs/day		3.15E+02				
Bis (2-chloroisopropyl) Ether	ug/L		3.13E+05				
	lbs/day		8.59E+04				
Chlorobenzene	ug/L		1.49E+05				
	lbs/day		4.08E+04				
Chromium (III)	ug/L		4.96E+07				
	lbs/day		1.36E+07				
Di-n-butyl Phthalate	ug/L		9.14E+05				
	lbs/day		2.51E+05				
Dichlorobenzenes <sup>11</sup>	ug/L		1.33E+06				
	lbs/day		3.65E+05				
Diethyl Phthalate	ug/L		8.61E+06				
	lbs/day		2.36E+06				
Dimethyl Phthalate	ug/L		2.14E+08				
	lbs/day		5.87E+07				
4,6-Dinitro-2-Methylphenol	ug/L		5.74E+04				
	lbs/day		1.58E+04				
2,4-Dinitrophenol	ug/L		1.04E+04				
	lbs/day		2.86E+03				
Ethylbenzene	ug/L		1.07E+06				
	lbs/day		2.94E+05				
Fluoranthene	ug/L		3.92E+03				
	lbs/day		1.07E+03				
Hexachlorocyclopentadiene	ug/L		1.51E+04				
	lbs/day		4.15E+03				
Nitrobenzene	ug/L		1.28E+03				
	lbs/day		3.51E+02				
Thallium	ug/L		5.22E+02				
	lbs/day		1.43E+02				
Toluene	ug/L		2.22E+07				
	lbs/day		6.09E+06				
Tributyltin	ug/L		3.65E-01				
	lbs/day		1.00E-01				
1,1,1-Trichloroethane	ug/L		1.41E+08				
	lbs/day		3.87E+07				
Acrylonitrile	ug/L		2.61E+01				
	lbs/day		7.16E+00				
Aldrin	ug/L		5.74E-03				



Constituent	Units	Performance Goals <sup>1</sup>					
		Max Daily	Average Monthly	Average Weekly	Instantaneous		6 Month Median
					Min	Max	
	lbs/day		1.58E-03				
Benzene	ug/L		1.54E+03				
	lbs/day		4.23E+02				
Benzidine	ug/L		1.80E-02				
	lbs/day		4.94E-03				
Beryllium	ug/L		8.61E+00				
	lbs/day		2.36E+00				
Bis (2-chloroethyl) Ether	ug/L		1.17E+01				
	lbs/day		3.22E+00				
Bis (2-ethylhexyl) Phthalate	ug/L		9.14E+02				
	lbs/day		2.51E+02				
Carbon Tetrachloride	ug/L		2.35E+02				
	lbs/day		6.45E+01				
Chlordane <sup>12</sup>	ug/L		6.00E-03				
	lbs/day		1.65E-03				
Chlorodibromo-methane	ug/L		2.24E+03				
	lbs/day		6.16E+02				
Chloroform	ug/L		3.39E+04				
	lbs/day		9.31E+03				
DDT <sup>13</sup>	ug/L		4.44E-02				
	lbs/day		1.22E-02				
1,4-Dichlorobenzene	ug/L		4.70E+03				
	lbs/day		1.29E+03				
3,3'-Dichlorobenzidine	ug/L		2.11E+00				
	lbs/day		5.80E-01				
1,2-Dichloroethane	ug/L		7.31E+03				
	lbs/day		2.01E+03				
1,1-Dichloroethylene	ug/L		2.35E+02				
	lbs/day		6.45E+01				
Dichlorobromo-methane	ug/L		1.62E+03				
	lbs/day		4.44E+02				
Dichloromethane	ug/L		1.17E+05				
	lbs/day		3.22E+04				
1,3-Dichloropropene	ug/L		2.32E+03				
	lbs/day		6.37E+02				
Dieldrin	ug/L		1.04E-02				
	lbs/day		2.86E-03				
2,4-Dinitrotoluene	ug/L		6.79E+02				
	lbs/day		1.86E+02				
1,2-Diphenylhydrazine	ug/L		4.18E+01				
	lbs/day		1.15E+01				
Halomethanes <sup>14</sup>	ug/L		3.39E+04				
	lbs/day		9.31E+03				
Heptachlor	ug/L		1.31E-02				
	lbs/day		3.58E-03				
Heptachlor Epoxide	ug/L		5.22E-03				
	lbs/day		1.43E-03				
Hexachlorobenzene	ug/L		5.48E-02				
	lbs/day		1.50E-02				
Hexachlorobutadiene	ug/L		3.65E+03				

Constituent	Units	Performance Goals <sup>1</sup>					
		Max Daily	Average Monthly	Average Weekly	Instantaneous		6 Month Median
					Min	Max	
	lbs/day		1.00E+03				
Hexachloroethane	ug/L		6.53E+02				
	lbs/day		1.79E+02				
Isophorone	ug/L		1.91E+05				
	lbs/day		5.23E+04				
N-Nitroso-dimethylamine	ug/L		1.91E+03				
	lbs/day		5.23E+02				
N-Nitrosodi-N-propylamine	ug/L		9.92E+01				
	lbs/day		2.72E+01				
N-Nitrosodiphenylamine	ug/L		6.53E+02				
	lbs/day		1.79E+02				
PAHs <sup>15</sup>	ug/L		2.30E+00				
	lbs/day		6.30E-01				
PCBs <sup>16</sup>	ug/L		4.96E-03				
	lbs/day		1.36E-03				
1,1,2,2-Tetrachloroethane	ug/L		6.00E+02				
	lbs/day		1.65E+02				
Tetrachloroethylene	ug/L		5.22E+02				
	lbs/day		1.43E+02				
Toxaphene	ug/L		5.48E-02				
	lbs/day		1.50E-02				
Trichloroethylene	ug/L		7.05E+03				
	lbs/day		1.93E+03				
1,1,2-Trichloroethane	ug/L		2.45E+03				
	lbs/day		6.73E+02				
2,4,6-Trichlorophenol	ug/L		7.57E+01				
	lbs/day		2.08E+01				
Vinyl Chloride	ug/L		9.40E+03				
	lbs/day		2.58E+03				

- <sup>1</sup> Scientific “E” notation is used to express certain values. In scientific “E” notation, the number following the “E” indicates the position of the decimal point in the value. Negative numbers after the “E” indicate that the value is less than 1, and positive numbers after the “E” indicate that the value is greater than 1. In this notation a value of 6.1 E-02 represents a value of 6.1 ×10<sup>-2</sup> or 0.061, 6.1E+2 represents 6.1 ×10<sup>2</sup> or 610, and 6.1E+00 represents 6.1 ×10<sup>0</sup> or 6.1.
- <sup>2</sup> Dischargers may, at their option, apply this performance goal as a total chromium performance goal.
- <sup>3</sup> If a Discharger can demonstrate to the satisfaction of the Regional Water Board (subject to USEPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, performance goals may be evaluated with the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR 136, as revised May 14, 1999.
- <sup>4</sup> The water quality objectives for total chlorine residual applicable to intermittent discharges not exceeding two hours, shall be determined through the use of the following equation:  $\log y = - 0.43 (\log x) + 1.8$ , where y = the water quality objective (in ug/L) to apply when chlorine is being discharged; x = the duration of uninterrupted chlorine discharge in minutes. Actual performance goals for total chlorine, when discharging intermittently, shall then be determined according to Implementation Procedures for Table B from the Ocean Plan, using a minimum probable initial dilution factor of 260 and a flow rate of 32.86 MGD.

- 5 Acute toxicity expressed as Acute Toxicity Units ( $TU_a$ ) =  $100 / LC50$ , where LC50 (Lethal Concentration 50%) is expressed as the percent waste giving 50% survival of test organism, as determined by the result of toxicity tests identified in Section V of Monitoring and Reporting Program No. R9-2006-0055
- 6 Non-chlorinated phenolic compounds shall mean the sum of 2-nitrophenol, 4-nitrophenol, and phenol.
- 7 Chlorinated phenolic compounds shall mean the sum of 2-chlorophenol, 2,4-dichlorophenol, 3-methyl-4-chlorophenol, and pentachlorophenol.
- 8 Endosulfan shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.
- 9 HCH shall mean the sum of the alpha, beta, gamma (lindane), and delta isomers of hexachlorocyclohexane.
- 10 Radioactivity performance goals are as specified in Title 17 California Code of Regulations, Section 30253, Standards for Protection Against Radiation. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.
- 11 Dichlorobenzenes shall mean the sum of 1,2-dichlorobenzene and 1,3-dichlorobenzene.
- 12 Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.
- 13 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.
- 14 Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).
- 15 PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthalene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorine, indeno[1,2,3-cd]pyrene, phenanthrene, and pyrene.
- 16 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.

## V. RECEIVING WATER LIMITATIONS

Unless specifically excepted by this Order, the discharge shall not cause violation of the following water quality objectives. Compliance with these objectives shall be determined by samples collected at stations representative of the area within the waste field where initial dilution is completed.

### A. Bacterial Characteristics

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 further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Water Board, but including all kelp beds, the following bacterial objectives shall be maintained throughout the water column.
  - a. 30-day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each site:
    - i. Total coliform density shall not exceed 1,000 per 100 ml;
    - ii. Fecal coliform density shall not exceed 200 per 100 ml; and
    - iii. Enterococcus density shall not exceed 35 per 100 ml.

- b. Sample Maximum:
  - i. Total coliform density shall not exceed 10,000 per 100 ml;
  - ii. Fecal coliform density shall not exceed 400 per 100 ml; and
  - iii. Enterococcus density shall not exceed 104 per 100 ml.
2. The Initial Dilution Zone for any wastewater outfall shall be excluded from designation as kelp beds for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards.
3. At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70 per 100 ml throughout the water column, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

## **B. Chemical Characteristics**

1. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.
2. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
3. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
4. The concentration of substances set forth in Chapter II, Table B of the Ocean Plan, shall not be increased in marine sediments to levels that would degrade indigenous biota.
5. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
6. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

## **C. Biological Characteristics**

1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
2. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

3. 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.

#### **D. Radioactivity**

Discharge of radioactive waste shall not degrade marine life.

### **VI. PROVISIONS**

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

1. **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 the following provisions:
  - a. The Discharger shall comply with all requirements and conditions of this Order. Any permit non-compliance constitutes a violation of the CWA and/or the CWC and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of an application for permit renewal, modification, or reissuance.
  - b. The Discharger shall comply with all applicable federal, state, and local laws and regulations that pertain to sewage sludge [biosolids] handling, treatment, use, and disposal, including CWA Section 405 and USEPA regulations at 40 CFR Part 257.
  - c. All wastewater treatment facilities shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23, Division 3, Chapter 26 of the CCR.
  - d. All proposed new treatment facilities and expansions of existing treatment facilities shall be completely constructed and operable prior to initiation of the discharge from the new or expanded facilities. The Discharger shall submit a certification report for each new treatment facility, expansion of an existing treatment facility, and re-rating of an existing treatment facility. For new treatment facilities and expansions, the certification report shall be prepared by the design engineer. For re-ratings, the certification report shall be prepared by the engineer who evaluated the treatment facility capacity. The certification report shall:
    - 1) Identify the design capacity of the treatment facility, including the daily and 30-day design capacity,

- 2) Certify the adequacy of each component of the treatment facility, and
- 3) Contain a requirement-by-requirement analysis, based on acceptable engineering practices, of the process and physical design of the facility to ensure compliance with this Order.

The signature and engineering license number of the engineer preparing the certification report shall be affixed to the report. If reasonable, the certification report shall be submitted prior to beginning construction. The Discharger shall not initiate a discharge from an existing treatment facility at a daily flow rate in excess of its previously approved design capacity until:

- 1) The certification report is received by the Executive Officer,
  - 2) The Executive Officer has received written notification of completion of construction (new treatment facilities and expansions only),
  - 3) An inspection of the facility has been made by staff of the Regional Water Board (new treatment facilities and expansions only), and
  - 4) The Executive Officer has provided the Discharger with written authorization to discharge at a daily flow rate in excess of its previously approved design capacity.
- e. All waste treatment, containment, and disposal facilities shall be protected against 100-year peak stream flows as defined by the Orange County flood control agency.
  - f. All waste treatment, containment, and disposal facilities shall be protected against erosion, overland runoff and other impacts resulting from a 100-year, 24-hour storm event.
  - g. This Order expires on **August 1, 2011**, after which, the terms and conditions of this permit are automatically continued pending issuance of a new permit, provided that all requirements of USEPA's NPDES regulations at 40 CFR 122.6 and the State's regulations at CCR Title 23, Section 2235.4 regarding the continuation of expired permits and waste discharge requirements are met.
  - h. All wastewater treatment facilities shall be operated and maintained in accordance with the operations and maintenance manual prepared pursuant to the Clean Water Grant Program.
  - i. A copy of this Order shall be posted at a prominent location at or near all treatment and disposal facilities and shall be available to operating personnel at all times.

## **B. Monitoring and Reporting Program Requirements**

The Discharger shall comply with the Monitoring and Reporting Program (Attachment E) of this Order.

## **C. Special Provisions**

### **1. Reopener Provisions**

a. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- 1) Violation of any terms or conditions of this Order.
- 2) Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.
- 3) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Discharger for modifications, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order.

- b. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.
- c. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new Minimum Levels (ML).
- d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, or the adoption of a total maximum daily load allocation (TMDL) for the receiving water.
- e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by this Regional Water Board, to provide for alternate dilution credits or mixing zone requirements, as may be appropriate.
- f. This Order may be reopened and modified to revise the toxicity language once that language becomes standardized.
- g. This Order may be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64,

125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity.

- h. This Order may be reopened for modification to include effluent limitations if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above water quality objectives.

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

### a. Treatment Plant Capacity

Each POTW (SOCWA JRP, the SOCWA Coastal TP, the Los Alisos WRP, and the El Toro WRP) shall submit a written report to the Executive Officer within 90 days after the monthly average influent flow rate equals or exceeds 75 percent of the design secondary treatment capacity of their wastewater treatment and/or disposal facilities. Each POTW's senior administrative officer shall sign a letter in accordance with Standard Provision V.B.2.a (Attachment D) which transmits that report and certifies that the policy-making body is adequately informed of the influent flow rate relative to the POTW's design capacity. The report shall include the following:

- 1) Average influent daily flow for the calendar month; the date on which the maximum daily flow occurred; and the rate of that maximum flow.
- 2) The POTW's best estimate of when the average daily influent flow for a calendar month will equal or exceed the design capacity of the facilities.
- 3) The POTW's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities, and/or control the flow rate before the waste flow exceeds the capacity of present units.

### b Spill Reporting Requirements

For purposes of this section, a spill is a discharge of treated or untreated wastewater that occurs at or downstream of the SOCWA JRP, the SOCWA Coastal TP, the Los Alisos WRP, and the El Toro WRP headworks, in violation of the discharge prohibition Section at III.A of this Order, or a discharge of other materials related to treatment and operations of the SOCWA JRP, the SOCWA Coastal TP, the Los Alisos WRP, and the El Toro WRP that occurs anywhere throughout the collection and treatment system owned and/or operated by each of the contributing POTW's. This section does not include sanitary sewer overflows reportable under separate waste discharge requirements. Each



POTW (SOCWA JRP, the SOCWA Coastal TP, the Los Alisos WRP, and the El Toro WRP) shall report spills in accordance with the following procedures:

- 1) If a spill results in a discharge of treated or untreated wastewater that is 1,000 gallons or more or results in a discharge of any volume that reaches surface waters, the POTW shall:
  - a) Report the spill to the Regional Water Board by telephone, by voice mail, or by FAX within 24 hours from the time the Discharger becomes aware of the spill. The POTW shall inform the Regional Water Board of the date of the spill, spill location and its final destination, time the spill began and ended, estimated total spill volume, and type of spill material.
  - b) Submit a written report, as well as any additional pertinent information, to the Regional Water Board no later than five days following the starting date of the spill event. The POTW shall submit the written report using the Sanitary Sewer Overflow Report Form (June 13, 2001) provided under Regional Water Board Order No. 96-04.
- 2) If a spill results in a discharge of treated or untreated wastewater under 1,000 gallons that reaches surface waters:
  - a) Report the spill to the Regional Water Board by telephone, by voice mail, or by FAX within 24 hours from the time the Discharger becomes aware of the spill. The POTW shall inform the Regional Water Board of the date of the spill, spill location and its final destination, time the spill began and ended, estimated total spill volume, and type of spill material.
  - b) Submit a written report, as well as any additional pertinent information, to the Regional Water Board no later than five days following the starting date of the spill event. The POTW shall submit the written report using the Sanitary Sewer Overflow Report Form (June 13, 2001) provided under Regional Water Board Order No. 96-04.
- 3) If a spill results in a discharge of treated or untreated wastewater under 1,000 gallons and the discharge does not reach surface waters:
  - a) The POTW is not required to notify the Regional Water Board within 24 hours.
  - b) The POTW shall submit a written report, as well as any additional pertinent information, in the monthly self-monitoring report for the month in which the spill occurred. The POTW shall submit the written report using the Sanitary Sewer Overflow Report Form (June 13, 2001) provided under Regional Water Board Order No. 96-04.

- 4) For spills of material other than treated or untreated wastewater that cause, may cause, or are caused by significant operational failure, or endangers or may endanger human health or the environment, the POTW shall notify the Regional Water Board by telephone, by voice mail, or by FAX within 24 hours from the time the POTW becomes aware of the spill. The POTW shall inform the Regional Water Board of the date of the spill, spill location and its final destination, time the spill began and ended, estimated total spill volume, and type of spill material.
- 5) For all spills, the POTW shall submit an annual summary containing the following information for each spill: date of spill, location of spill and its final destination, time the spill began and ended, estimated total spill volume, and type of spill material.
- 6) The spill reporting requirements contained in this Order do not relieve the POTW of responsibilities to report to other agencies, such as the Office of Emergency Services (OES) and the Orange County Health Care Agency, Environmental Health.

c. Sludge [Biosolids] Disposal Requirements

The requirements contained in this section apply to each POTW that discharges treated municipal wastewater to the Ocean Outfall (SOCWA JRP, the SOCWA Coastal TP, the Los Alisos WRP, and the El Toro WRP).

- 1) The handling, treatment, use, management, and disposal of sludge [biosolids] and solids derived from wastewater treatment must comply with applicable provisions of CWA section 405 and USEPA regulations at 40 CFR Parts 257, 258, 501, and 503, including all monitoring, record keeping, and reporting requirements.
- 2) Sludge [biosolids] and wastewater solids must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge [biosolids]-only landfill in accordance with 40 CFR Parts 258 and 503 and Title 23, Chapter 15 of the CCR. If the POTW desires to dispose of solids and/or sludge [biosolids] in a different manner, a request for permit modification must be submitted to the USEPA and to this Regional Water Board at least 180 days prior to beginning the alternative means of disposal.
- 3) Sludge [biosolids] that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR 25 pertaining to providing information to the public. In the annual self-monitoring report, the POTW shall include the amount of sludge [biosolids] placed in the landfill as well as the landfill to which it was sent.

- 4) All requirements of 40 CFR 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 POTW.
- 5) The POTW shall take all reasonable steps to prevent and minimize any sludge [biosolids] use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.
- 6) Solids and sludge [biosolids] treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in ground water contamination.
- 7) The solids and sludge [biosolids] 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.
- 8) The discharge of sewage sludge [biosolids] and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State.
- 9) The POTW 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 503. The POTW shall also report the quantity of sludge [biosolids] removed from the Facilities and the disposal method. This self-monitoring report shall be postmarked by February 19 of each year and report for the period of the previous calendar year.

d. Pretreatment Program

- 1) The Discharger shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR Part 403, including any subsequent revisions to that part. Where 40 CFR Part 403 or subsequent revisions place mandatory actions upon the Discharger but do not specify a timetable for completion, the Discharger shall complete the mandatory actions within 6 months of the issuance date of this Order, or the effective date of the revisions to 40 CFR Part 403, whichever is later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies imposed by the USEPA and/or the Regional Water Board, as provided in the CWA and/or the CWC.

- 2) The Discharger shall implement and enforce its approved pretreatment program, and all subsequent revisions, which are hereby made enforceable conditions of this Order. The Discharger shall enforce the requirements promulgated pursuant to Sections 307 (b), 307 (c), 307 (d), and 402 (b) of the CWA with timely, appropriate, and effective enforcement actions. The Discharger shall cause industrial users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements, or in the case of a new industrial user, upon commencement of the discharge.
- 3) The Discharger shall perform the pretreatment functions required by 40 CFR 403, including, but not limited to:
  - a) Implement the necessary legal authorities as required by 40 CFR 403.8 (f) (1)
  - b) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
  - c) Implement the programmatic functions as required by 40 CFR 403.8 (f) (2); and
  - d) Provide the requisite funding and personnel to implement the pretreatment program, as required by 40 CFR 403.8 (f) (3).
- 4) By March 1 of each year, the Discharger shall submit an annual report to the Regional Water Board; USEPA Region 9; the State Water Board, Division of Water Quality, Regulations Unit; and the Orange County Health Care Agency, Environmental Health, Hazardous Materials Division, describing its pretreatment activities over the previous calendar year. In the event the Discharger is not in compliance with any condition or requirement of this Order, or any pretreatment compliance inspection/audit requirements, the Discharger shall include the reasons for noncompliance and state how and when it will comply with such conditions and requirements. The annual report shall contain, but not be limited to, the following information:
  - a) A summary of analytical results from representative flow-proportioned 24-hour composite sampling of the Discharger's influent and effluent for those pollutants known or suspected to be discharged by industrial users that the USEPA has identified under Section 307 (d) of the CWA, which are known or suspected to be discharged by industrial users. This will consist of an annual full priority pollutant scan. Wastewater sampling and analysis shall be performed in accordance with the minimum frequency of analysis required by the Monitoring and Reporting program of this Order (Attachment E). The Discharger shall also provide influent and effluent monitoring data for non-priority pollutants, which the Discharger believes may be causing or contributing to interference or pass through. The Discharger is not required to sample and analyze for asbestos. Sludge

sampling and analysis is addressed in Section VI.C.2.d of this Order and Section IX.A of the Monitoring and Reporting Program of this Order (Attachment E). Wastewater sampling and analysis shall be performed in accordance with 40 CFR Part 136.

- b) A discussion of upset, interference, or pass through, if any, at the Facilities, which the Discharger knows or suspects were caused by industrial users. The discussion shall include the reasons why the incidents occurred, any corrective actions taken, and, if known, the name and address of the responsible industrial user(s). The discussion shall also include a review of the applicable local pollutant limitations to determine whether any additional limitations or changes to existing limitations, are necessary to prevent pass-through, interference, or non-compliance with sludge disposal requirements.
- c) An updated list of the Discharger's significant industrial users (SIUs) including their names and addresses, and a list of deletions, additions and SIU name changes keyed to the previously submitted list. The Discharger shall provide a brief explanation for each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations;
- d) The Discharger shall characterize the compliance status of each SIU by providing a list or table for the following:
  - (1) Name of SIU and category, if subject to categorical standards;
  - (2) Type of wastewater treatment or control processes in place;
  - (3) Number of samples taken by SIU during the year;
  - (4) Number of samples and inspections by Discharger during the year;
  - (5) For an SIU subject to discharge requirements for total toxic organics (TTO), whether all required certifications were provided;
  - (6) A list of pretreatment standards (categorical or local) violated during the year, or any other violations;
  - (7) Industries in significant non-compliance as defined at 40 CFR 403.12 (f) (2) (vii), at any time during the year;
  - (8) A summary of enforcement actions or any other actions taken against SIUs during the year. Describe the type of action, final compliance date, and the amount of fines and/or penalties collected, if any. Describe any proposed actions for bringing SIUs into compliance; and

- (9) The name(s) of any SIU(s) required to submit a baseline monitoring report and any SIUs currently discharging under a baseline monitoring report.
  - e) A brief description of any programs the Discharger implements to reduce pollutants from industrial users not classified as SIUs.
  - f) A brief description of any significant changes in operating the pretreatment program which differ from the previous year, including, but not limited to, changes in the program's administrative structure, local limits, monitoring program, legal authority, enforcement policy, funding, and staffing levels;
  - g) A summary of the annual pretreatment program budget, including the cost of pretreatment program functions and equipment purchases;
  - h) A summary of activities to involve and inform the public of the pretreatment program, including a copy of the newspaper notice, if any, required by 40 CFR 403.8 (f) (2) (vii);
  - i) A description of any changes in sludge disposal methods; and
  - j) A discussion of any concerns not described elsewhere in the annual report.
- 5) The Discharger shall submit a semiannual SIU compliance status report to the Regional Water Board, the State Water Board, and USEPA Region 9. The report shall cover the period of January 1 through June 30 and shall be submitted no later than September 1. The report shall identify:
- a) The names and addresses of all SIUs which violated any discharge or reporting requirements during the semi-annual reporting period;
  - b) A description of the violations, including whether the discharge violations were for categorical standards or local limits;
  - c) A description of the enforcement actions or other actions taken to remedy the non-compliance; and
  - d) The status of enforcement actions or other actions taken in response to SIU non-compliance identified in previous reports.
- 6) The Discharger shall continue with its implementation of a Non-Industrial Source Control Program, consisting of a public education program designed to minimize the entrance of non-industrial toxic pollutants and pesticides into the sanitary sewer system. The Program shall be reviewed periodically and addressed in the annual report.

- 7) The Discharger shall re-evaluate its local limits with respect to the effluent limitations and reporting requirements included in this Order as well as all other applicable regulations. The Regional Water Board recommends that the Discharger use the USEPA *Local Limits Guidance Manual*, July 2004 in the re-evaluation effort.
  - a) The Discharger shall submit a local limits re-evaluation plan within 6 weeks after adoption of this permit.
  - b) The Discharger shall submit a status report on the re-evaluation 4 months after adoption of this permit.
  - c) The Discharger shall submit a final re-evaluation report to the Regional Water Board 9 months after adoption of this permit.
- e. Toxicity Reduction Evaluation (TRE)
  - 1) The Discharger shall develop a TRE workplan in accordance with the TRE procedures established by the USEPA in the following guidance manuals:
    - a) *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070).
    - b) *Toxicity Identification Evaluation, Phase I* (EPA/600/6-91/005F).
    - c) *Methods for Aquatic Toxicity Identification Evaluations, Phase II* (EPA/600/R-92/080).
    - d) *Methods for Aquatic Toxicity Identification Evaluations, Phase III* (EPA/600/R-92/081).
  - 2) The Discharger shall submit the TRE workplan to the Regional Water Board within 180 days of the adoption of this Order. The TRE workplan shall be subject to the approval of the Regional Water Board and shall be modified as directed by the Regional Water Board.
  - 3) If the toxicity effluent limitations or performance goal identified in Section IV.B of this Order are exceeded, then within 15 days of the exceedance, the Discharger shall begin conducting six additional toxicity tests over a 6-month (at least one sample per calendar month, for a total of two samples per calendar month) period and provide the results to the Regional Water Board. The additional monthly toxicity tests will be incorporated into the semiannual discharge monitoring reports submitted pursuant to MRP No. R9-2006-0055.
  - 4) If the additional monthly tests indicate that toxicity effluent limitations are being consistently exceeded (at least three exceedances out of the six tests), the Regional Water Board may recommend that the Discharger conduct a TRE and a Toxic Identification Evaluation (TIE), as identified in the approved TRE workplan.

- 5) Within 30 days of completion of the TRE/TIE, the Discharger shall submit the results of the TRE/TIE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with the toxicity effluent limitation of this Order or conformance with the toxicity performance goal of this Order and prevent recurrence of exceedances of the limitation or performance goal, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the Executive Officer.

## VII. COMPLIANCE DETERMINATION AND ENFORCEMENT PROVISIONS

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

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

The discharger shall determine the average monthly effluent value (AMEV) for a given parameter by calculating the arithmetic average of all effluent values (DEVs) for each parameter within each calendar month. The AMEV calculation for a given calendar month shall not include DEVs from any other month. If only a single DEV is obtained for a parameter during a calendar month, that DEV shall be considered the AMEV for that parameter for that calendar month. The AMEV shall be attributed to each day of the calendar month for determinations of compliance with the Average Monthly Effluent Limitation (AMEL) for a given parameter for that given calendar month. For any calendar month during which no DEV is obtained, the AMEV cannot be determined for that calendar month.

### B. **Average Weekly Effluent Limitation (AWEL).**

The discharger shall determine the average weekly effluent value (AWEV) for a given parameter by calculating the arithmetic average of all daily effluent values (DEVs) for each parameter within each calendar week (Sunday through Saturday). The AWEV calculations for a given calendar week shall not include DEVs from any other calendar week. If only a single DEV is obtained for a parameter during a calendar week, that DEV shall be considered the AWEV for that parameter for that calendar week. The AWEV shall be attributed to each day of the calendar week for determination of compliance with the Average Weekly Effluent Limitation (AWEL) for a given parameter for that given calendar week. For any calendar week during which no DEV is obtained, the AWEV cannot be determined for that calendar week.

### C. **Maximum Daily Effluent Limitation (MDEL).**

The discharger shall determine the daily effluent value (DEV) for a given parameter from the results of a flow-weighted 24-hour composite sample collected during a calendar day (12:00 am through 11:59 pm) or any continuous 24-hour period that ends on and reasonably represents a given calendar day for purposes of sampling. Upon approval by the Regional Water Board, the discharger may also determine the DEV for a given parameter from the arithmetic mean of results from one or more



flow-weighted grab samples taken over the course of one calendar day or a 24-hour period that reasonably represents the calendar day. The DEV shall not include results from any sample outside of the 24-hour period that represents the calendar day. The DEV shall be used for determination of compliance with the Maximum Daily Effluent Limit (MDEL) for a given parameter for that given calendar day. A DEV cannot be determined for any calendar day during which a 24-hour flow-weighted composite sample, or flow-weighted grab samples in lieu of a 24-hour composite sample, is not obtained.

**D. Instantaneous Minimum Effluent Limitation.**

The discharger shall determine the instantaneous effluent value (IEV) for a given parameter from the results of any grab sample. The IEV for a given grab sample shall not include IEVs from any other grab sample. The IEV shall be used for determination of compliance with the Instantaneous Minimum Effluent Limitation for a given parameter for each grab sample.

**E. Instantaneous Maximum Effluent Limitation.**

The discharger shall determine the instantaneous effluent value (IEV) for a given parameter from the results of any grab sample. The IEV for a given grab sample shall not include IEVs from any other grab sample. The IEV shall be used for determination of compliance with the Instantaneous Maximum Effluent Limitation for a given parameter for each grab sample.

**F. Six-month Median Effluent Limitation.**

The discharger shall determine the six-month median effluent value (SMEV) for a given parameter by calculating the statistical median of all daily effluent values (DEVs) for each parameter within each six-month calendar period (January-June and July-December). The SMEV determination for a given six-month calendar period shall not include DEVs from any other six-month calendar period. If only a single DEV is obtained for a parameter during a six-month calendar period, that DEV shall be considered the SMEV for that parameter for that given six-month calendar period. The SMEV shall be attributed to each day of the six-month calendar period for determination of compliance with the six-month median effluent limitation (SMEL) for a given parameter for each day of that given six-month calendar period. The SMEV cannot be determined for any six-month calendar period during which no DEV is obtained.

**G. Mass Emission Rate.**

1. When applicable, the mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

$$\text{Mass Emission Rate (lb/Day)} = 8.34 \times Q \times C$$

in which Q and C are the flow rate in MGD and the constituent concentration in mg/L, respectively, and 8.34 is a conversion factor. If a composite sample is

taken, then C is the concentration measured in the composite sample and Q is the average flow rate occurring during the period over which the samples are composited.

2. When the concentration of a constituent in an effluent sample is determined to be "ND" or "DNQ", the corresponding MER determined from that sample concentration shall also be reported as "ND" or "DNQ."

#### H. **Percent Removal.**

Compliance with the secondary treatment standard for monthly average percent removal of biochemical oxygen demand, carbonaceous biochemical oxygen demand, and total suspended solids pursuant to 40 CFR Part 133 shall be determined separately for each wastewater treatment facility discharging through an outfall. For each wastewater treatment facility, the monthly average percent removal is the average of the calculated daily discharge percent removals only for days on which the constituent concentration is monitored in both the influent and effluent of the wastewater treatment facility at locations specified in the Monitoring and Reporting Program (Attachment E) within a calendar month.

The percent removal for each day shall be calculated according to the following equation:

$$\text{Daily discharge percent removal} = \frac{\text{Influent concentration} - \text{Effluent concentration}}{\text{Influent concentration}} \times 100$$

#### I. **Ocean Plan Provisions for Table B Constituents.**

##### 1. Compliance Determination

Sufficient sampling and analysis shall be required to determine compliance with the effluent limitation.

##### a. Compliance with Single-Constituent Effluent Limitations

The Discharger shall be deemed out of compliance with an effluent limitation or discharge specification if the concentration of the constituent in the monitoring sample is greater than the effluent limitation or discharge specification and greater than or equal to the ML.

##### b. Compliance with Effluent Limitations expressed as a Sum of Several Constituents

Dischargers are out of compliance with an effluent limitation that applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual

pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

c. Multiple Sample Data Reduction

The concentration of the pollutant in the effluent may be estimated from the result of a single sample analysis or by a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses when all sample results are quantifiable (i.e., greater than or equal to the reported ML). When one or more sample results are reported as ND or DNQ, the central tendency concentration of the pollutant shall be the median (middle) value of the multiple samples. If, in an even number of samples, one or both of the middle values is ND or DNQ, the median will be the lower of the two middle values.

2. Pollutant Minimization Program

a. Pollutant Minimization Program Goal

The goal of the Pollutant Minimization Program is to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures, in order to maintain the effluent concentration at or below the 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 completion and implementation of a Pollution Prevention Plan, required in accordance with CWC Section 13263.3 (d) will fulfill the Pollution Minimization Program requirements in this section.

b. Determining the need for a Pollutant Minimization Program

i. The Discharger must develop and conduct a Pollutant Minimization Program if all of the following conditions are true:

a) The calculated effluent limitation is less than the reported ML.

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.

ii. Alternatively, the Discharger must develop and conduct a Pollutant Minimization Program if all of the following conditions are true:

- a) The calculated effluent limitation is less than the Method Detection Limit.
  - 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.
- c. Regional Water Board 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:
- i. Health advisories for fish consumption,
  - ii. Presence of whole effluent toxicity,
  - iii. Results of benthic or aquatic organism tissue sampling,
  - iv. Sample results from analytical methods more sensitive than methods included in the permit,
  - v. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL.
- d. Elements of a Pollutant Minimization Program

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

- i. An annual review and semi-annual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other biouptake sampling;
- ii. Quarterly monitoring for the reportable pollutant in the influent to the wastewater treatment system;
- iii. 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;
- iv. Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy; and,

- v. An annual status report that shall be sent to the Regional Water Board including:
  - a) All Pollutant Minimization Program 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.

**J. Acute Toxicity.**

1. Conformance with the Acute Toxicity performance goal in Section IV.B of this Order for Outfall 001 shall be determined using an established protocol, e.g., American Society for Testing Materials (ASTM), USEPA, American Public Health Association, or State Board. Acute toxicity shall be expressed in Toxic Units Acute ( $TU_a$ ), where:

$$TU_a = 100 / 96\text{-hr LC50}$$

Where LC50 is the Lethal Concentration 50%, and the percent waste giving 50% survival of test organisms. LC50 shall be determined by static or continuous flow bioassay techniques using standard test species. 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 LC50 may be determined after the test samples are adjusted to remove the influence of those substances.

2. When it is not possible to measure the 96-hour LC50 due to greater than 50% survival of the test species in 100% waste, the toxicity concentration shall be calculated by the following:

$$TU_a = \log (100-S) / 1.7$$

where S is the percentage survival in 100% waste. If  $S > 99$ ,  $TU_a$  shall be reported as zero.

3. In addition, when there is greater than 50% survival of the test species in 100% waste, the percentage survival in 100% waste sample shall be statistically compared to the percentage survival in the test control sample, and the acute toxicity result shall also be reported as follows:

- a. "Pass" when the percentage survival in 100% waste is not statistically different (based on a 0.05 significance level) from the percentage survival in the test control sample.
- b. "Fail" when the percentage survival in 100% waste is less than and statistically different (based on a 0.05 significance level) from the percentage survival in the test control sample.

**K. Chronic Toxicity.**

Chronic toxicity is used to measure the acceptability of waters for supporting a healthy marine biota until approved methods are developed to evaluate biological response. Compliance with the Chronic Toxicity effluent limitation established in Section IV.B of this Order for Outfall 001 shall be determined using critical life stage toxicity tests in accordance with procedures prescribed by the Ocean Plan and restated in MRP R9-2006-0055. Chronic toxicity shall be expressed as Toxic Units Chronic ( $TU_c$ ), where:

$$TU_c = 100 / NOEL$$

where NOEL is the No Observed Effect Level and is expressed as the maximum percent of effluent that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test

**L. Bacterial Standards and Analysis.**

1. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

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

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL) found on each day of sampling.

2. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 MPN (most probable number). The detection methods used for each analysis shall be reported with the results of the analysis. Detection methods used for coliforms (total and fecal) shall be those presented in the most recent edition of Standard Methods for the Examination of Water and Wastewater or any improved method determined by the Regional Water Board (and approved by USEPA) to be appropriate. Detection methods used for enterococcus shall be those presented in USEPA publication EPA 600/4-85/076, 40 CFR 136, and any other approved method approved by the Regional Water Board. Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure or any improved method determined by the Regional Water Board to be appropriate.

**M. Single Operational Upset.**

A single operational upset (SOU) that leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation and limits the Discharger's liability in accordance with the following conditions:

1. A single operational upset is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.
2. A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in Attachment D Standard Provisions – Reporting V.E.2.b.
3. For purposes outside of CWC Section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with the USEPA Memorandum "Issuance of Guidance Interpreting Single Operational Upset" (September 27, 1989).
4. For purposes of CWC Section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with CWC Section 13385 (f)(2).
5. For purposes of CWC Section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with CWC Section 13385 (f)(2).

## ATTACHMENT A – DEFINITIONS

**Anti-Backsliding.** Provisions in the CWA and USEPA regulations [CWA 303 (d) (4); CWA 402 (o); CFR 122.44 (l)] that require a reissued permit to be as stringent as the previous permit with some exceptions.

**Antidegradation.** Policies which ensure protection of water quality for a particular water body where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation plans are adopted by the State to minimize adverse effects on water.

**Applicable Standards and Limitations** means all State, interstate, and federal standards and limitations to which a discharge, a sewage sludge [biosolids] use or disposal practice, or a related activity is subject under the CWA, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, best management practices, pretreatment standards, and standards for sewage sludge [biosolids] use or disposal under sections 301, 302, 303, 304, 306, 307, 308, 403 and 405 of CWA.

**Areas of Special Biological Significance (ASBS)** are those areas designated by the State Water Board as requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable.

**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.

**Beneficial Uses** of the waters of the State that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

**Best Management Practices (BMPs)** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge [biosolids] or waste disposal, or drainage from raw material storage.



**Best Professional Judgment (BPJ).** The method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data.

**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.

**Bioassay.** A test used to evaluate the relative potency of a chemical or a mixture of chemicals by comparing its effect on a living organism with the effect of a standard preparation on the same type of organism.

**Biochemical Oxygen Demand (BOD).** A measurement of the amount of oxygen utilized by the decomposition of organic material, over a specified time period (usually 5 days) in a wastewater sample; it is used as a measurement of the readily decomposable organic content of a wastewater.

**Biosolids.** Sewage sludge that is used or disposed through land application, surface disposal, incineration, or disposal in a municipal solid waste landfill. Sewage sludge is defined as solid, semi-solid, or liquid untreated residue generated during the treatment of domestic sewage in a treatment facility.

**Bypass.** The intentional diversion of wastestreams from any portion of a treatment (or pretreatment) facility.

**Carbonaceous Biochemical Oxygen Demand (CBOD).** The measurement of oxygen required for carbonaceous oxidation of a nonspecific mixture of organic compounds. Interference caused by nitrifying bacteria in the standard 5-day BOD test is eliminated by suppressing the nitrification reaction.

**Composite Sample.** Sample composed of two or more discrete samples of at least 100 milliliters collected at periodic intervals during the operating hours of a facility over a 24-hour period. The aggregate sample will reflect the average water quality covering the compositing or sample period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

**Conventional Pollutants.** Pollutants typical of municipal sewage, and for which municipal secondary treatment plants are typically designed; defined at 40 CFR 401.16 as BOD<sub>5</sub>, TSS, fecal coliform bacteria, oil and grease, and pH.

**Degrade (Degradation).** 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.

**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.

**Dilution Ratio** is the critical low flow of the upstream receiving water divided by the flow of the effluent discharged.

**Discharge** when used without qualification means the discharge of a pollutant. Discharge of a pollutant means:

1. Any addition of any pollutant or combination of pollutants to waters of the United States from any point source, or
2. Any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft that is being used as a means of transportation.

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works. This term does not include an addition of pollutants by any indirect Discharger.

**Discharge Monitoring Report (DMR)** means the USEPA uniform form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by approved states as well as by USEPA. The USEPA will supply DMRs to any approved state upon request. The USEPA national forms may be modified to substitute the state agency name, address, logo, and other similar information, as appropriate, in place of USEPA's.

**Effluent Limitation** means any restriction imposed by an Order on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.

**Grab Sample.** An individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes. The sample is taken from a waste stream on a one-time basis without consideration of the flow rate of the waste stream and without consideration of time of day.

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

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

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

**Method Detection Limit (MDL)** is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero.

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

**Sanitary Sewer.** A pipe or conduit (sewer) intended to carry wastewater or water-borne wastes from homes, businesses, and industries to the POTW.

**Sanitary Sewer Overflows (SSO).** Untreated or partially treated sewage overflows from a sanitary sewer collection system.

**Secondary Treatment Standards.** Technology-based requirements for direct discharging municipal sewage treatment facilities. Standards are based on a combination of physical and biological processes typical for the treatment of pollutants in municipal sewage. Standards are expressed as a minimum level of effluent quality in terms of: BOD, total suspended solids (TSS), and pH (except as provided for special considerations and treatment equivalent to secondary treatment).

**Self-Monitoring Report (SMR).** Any of the periodic monitoring reports required to be submitted by the Discharger to the Regional Water Board to report the results of monitoring conducted by the Discharger as required in Attachment E – Monitoring and Reporting Program.

**Six-month Median Effluent Limitation:** the highest allowable median of all daily discharges, based on 24-hour flow-weighted composite samples, for any 180-day period.

**Surface Waters** include navigable waters, rivers, streams (including ephemeral streams), lakes, playa lakes, natural ponds, bays, the Pacific Ocean, lagoons, estuaries, man-made canals, ditches, dry arroyos, mudflats, sandflats, wet meadows, wetlands, swamps, marshes, sloughs and water courses, and storm drains tributary to surface waters. Surface Waters include waters of the United States as used in the federal CWA (see 40 CFR 122.2).

**Technology-Based Effluent Limit.** A permit limit for a pollutant that is based on the capability of a treatment method to reduce the pollutant to a certain concentration.

**Toxic Pollutant.** Pollutants or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Administrator of USEPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring. Toxic pollutants also include those pollutants listed by the Administrator under CWA Section 307 (a) (1) or any pollutant listed under Section 405 (d) which relates to sludge [biosolids] management.

**Toxicity Reduction Evaluation (TRE).** A site-specific study conducted in a stepwise process designed to identify the causative agent(s) of effluent toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity.

**Upset** is defined as (a) An unusual event that temporarily disrupts the usually satisfactory operation of a system. This definition constitutes the plain meaning or broad definition of the term “upset.” (b) An event more narrowly defined at 40 CFR 122.41 (n)(1) and which belongs to a subset of events that fit the definition of the term “upset” provided in (a).

**Water Quality Control Plan** consists of a designation or establishment for the waters within a specified area of all of the following:

1. Beneficial uses to be protected.
2. Water quality objectives.
3. A program of implementation needed for achieving water quality objectives.

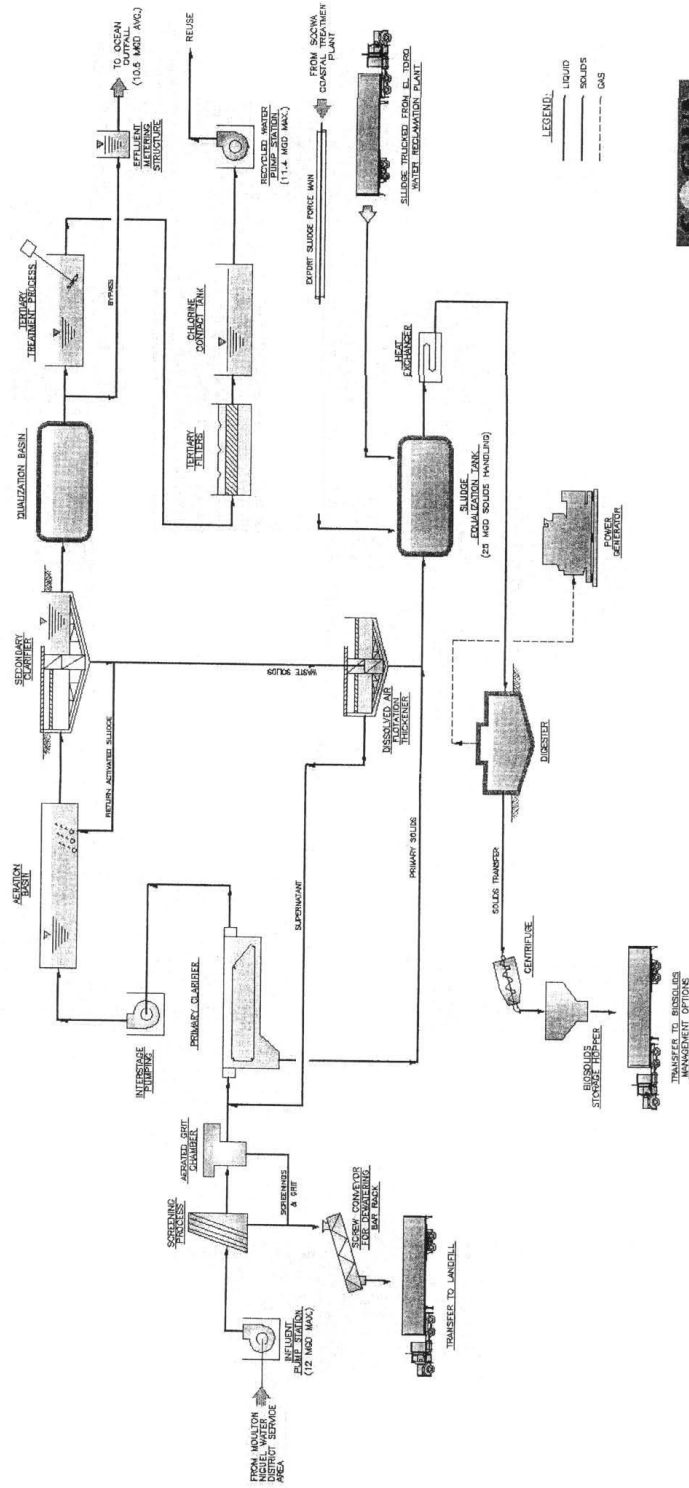
**Water Quality Objectives** means the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

**Whole Effluent Toxicity (WET).** The total toxic effect of an effluent measured directly with a toxicity test.

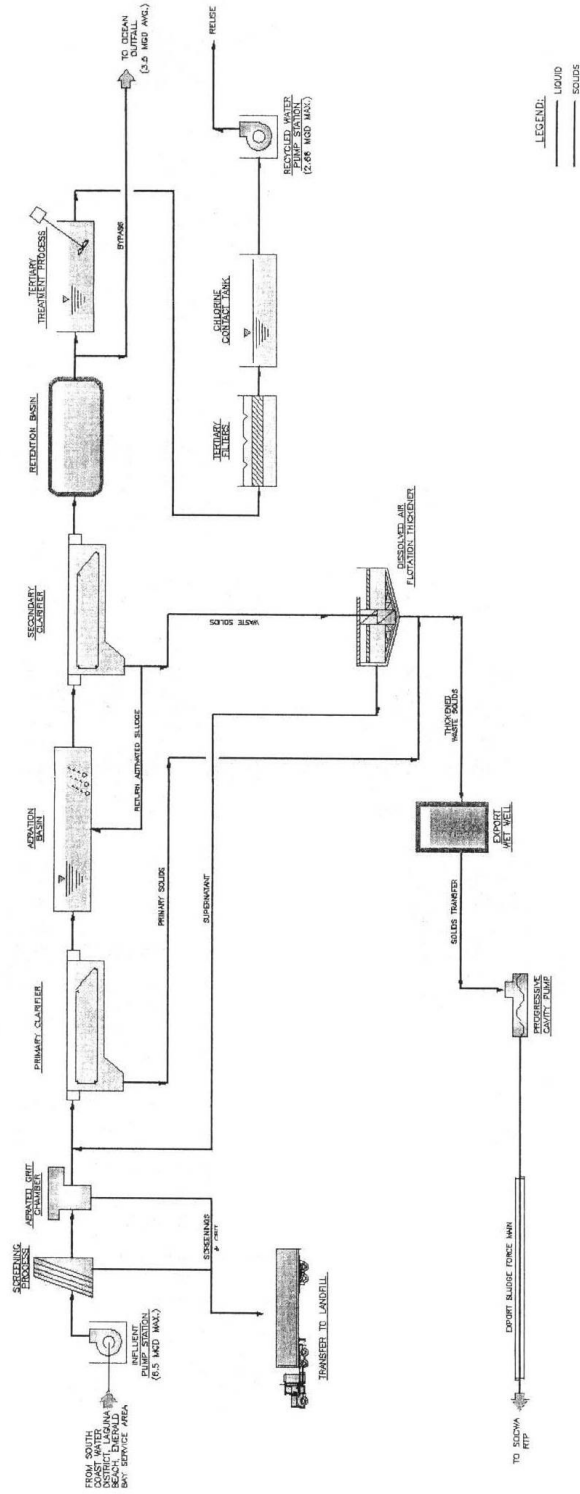
## **ATTACHMENT C – FLOW SCHEMATIC**

The following pages provide the process flow schematics for the SOCWA JRP, the SOCWA Coastal TP, the Los Alisos WRP, and the El Toro WRP.

# SOCWA REGIONAL TREATMENT PLANT TREATMENT PROCESS SCHEMATIC



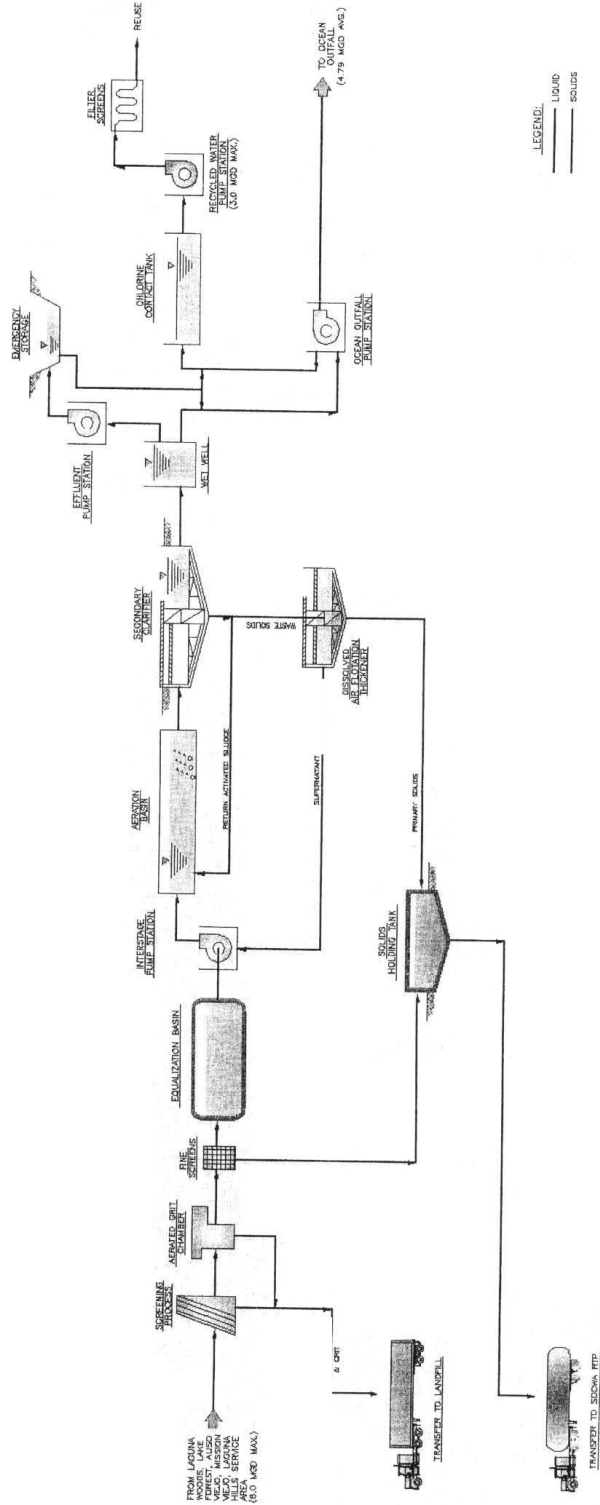
# SOCWA COASTAL TREATMENT PLANT TREATMENT PROCESS SCHEMATIC







# EL TORO WATER DISTRICT WATER RECYCLING PLANT TREATMENT PROCESS SCHEMATIC



## **ATTACHMENT D – FEDERAL STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [40 CFR §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act 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 been modified to incorporate the requirement [40 CFR §122.41(a)(1)].

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

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

#### **C. Duty to Mitigate**

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

#### **D. Proper Operation and Maintenance**

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

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 CFR §122.41(g)].

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

## **F. Inspection and Entry**

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

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

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [40 CFR §122.41(m)(2)].

3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below [40 CFR §122.41(m)(3)(ii)].

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. 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)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph H.2 of this section 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)].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR §122.41(n)(3)]:
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
  - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [40 CFR §122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR §122.41(n)(4)].

## II. STANDARD PROVISIONS – PERMIT ACTION

### A. General

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

### B. Duty to Reapply

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

### C. Transfers

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

### III. STANDARD PROVISIONS – MONITORING

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

### IV. STANDARD PROVISIONS – RECORDS

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

## V. STANDARD PROVISIONS – REPORTING

### A. Duty to Provide Information

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

### B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with paragraph (2.) and (3.) of this provision [40 CFR §122.41(k)].
2. All permit applications shall be signed as follows:
  - a. For a corporation: 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)];
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 CFR §122.22(a)(2)]; or
  - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the

overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR §122.22(a)(3)].

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in paragraph (b) of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in paragraph (2.) of this provision [40 CFR §122.22(b)(1)];
  - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [40 CFR §122.22(b)(2)]; and
  - c. The written authorization is submitted to the Regional Water Board, State Water Board, or USEPA [40 CFR §122.22(b)(3)].
4. If an authorization under paragraph (3.) of this provision 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 paragraph (3.) of this provision must be submitted to the Regional Water Board, State Water Board or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].
5. Any person signing a document under paragraph (2.) or (3.) of this provision shall make the following certification:

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

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in this Order [40 CFR §122.41(l)(4)].



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

#### **D. Compliance Schedules**

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

#### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].
  - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [40 CFR §122.41(l)(6)(ii)(C)].

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

## **F. Planned Changes**

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

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

## **G. Anticipated Noncompliance**

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

## **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 CFR §122.41(l)(7)].

## **I. Other Information**

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

## VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Clean Water Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [*40 CFR §122.41(a)(2)*] [*CWC 13385 and 13387*].
- B.** Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [*40 CFR §122.41(a)(3)*].
- C.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by

imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR §122.41(j)(5)].

- D.** The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR §122.41(k)(2)].

## **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

### **A. Non-Municipal Facilities**

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe [40 CFR §122.42(a)]:

1. 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)]:
  - a. 100 micrograms per liter ( $\mu\text{g/L}$ ) [40 CFR §122.42(a)(1)(i)];
  - b. 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)];
  - c. 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
  - d. The level established by the Regional Water Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(1)(iv)].
2. 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)]:
  - a. 500 micrograms per liter ( $\mu\text{g/L}$ ) [40 CFR §122.42(a)(2)(i)];
  - b. 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(2)(ii)];

- c. 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
- d. The level established by the Regional Water Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(2)(iv)].

**B. Publicly-Owned Treatment Works (POTWs)**

All POTWs shall provide adequate notice to the Regional Water Board of the following [40 CFR §122.42(b)]:

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

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)].