CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO. 2
TO
ORDER NO. 2001-08
NPDES NO. CA0107611

WASTE DISCHARGE REQUIREMENTS
FOR THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
ORANGE COUNTY

DISCHARGE TO THE PACIFIC OCEAN
THROUGH THE ALISO CREEK OCEAN OUTFALL

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

1. On February 21, 2001, the Regional Board adopted Order No. 2001-08, NPDES No. CA0107611, Waste Discharge Requirements for the Aliso Water Management Agency (AWMA), Orange County, Discharge to the Pacific Ocean through the Aliso Water Management Agency Ocean Outfall. Order No. 2001-08 established requirements for the discharge of up to 27.0 million gallons per day (MGD) of treated wastewater to the Pacific Ocean via the AWMA Ocean Outfall.

2. On October 10, 2001, the Regional Board adopted Addendum No. 1 to Order No. 2001-08, Waste Discharge Requirements for the Aliso Water Management Agency (AWMA), Orange County. Addendum No. 1 to Order No. 2001-08 deleted the Aliso Water Management Agency as the agency responsible for compliance with Order No. 2001-08, and replaced it with the South Orange County Wastewater Authority. In addition, the Aliso Water Management Agency Ocean Outfall was renamed to the South Orange County Wastewater Authority Aliso Creek Ocean Outfall.

3. On October 9, 2001 the Regional Board became aware that Order No. 2001-08 contained incorrect values for TCDD equivalents effluent limitations. The incorrect values resulted from calculation errors in the drafting of the NPDES permit renewal. The purpose of this Addendum is to make appropriate corrections to Order No. 2001-08 consistent with effluent limitations properly derived from the State Water Resources Control Board's Water Quality Control Plan, Ocean Waters of California, 1997 (the Ocean Plan).

4. The issuance of this Addendum is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (Public

Resources Code, Division 13, Chapter 3, Section 21000 et seq.) in accordance with the California Water Code, Section 13389.

5. The Regional Board has notified SOCWA and all known interested parties of its intent to modify Order No. 2001-08.

6. The Regional Board, at a public meeting on February 13, 2002 has heard and considered all comments pertaining to the modification of Order No. 2001-08.

IT IS HEREBY ORDERED, that:

1. The TCDD equivalents effluent limitations contained in Section B. 1. d. (Discharge Specifications: Effluent Limitations for Toxic, Carcinogenic Materials for Protection of Human Health, using an initial dilution factor of 260) of Order No. 2001-08 shall be replaced with the following:

Constituent	Units of Measurement	Monthly Average (30-Day)
TCDD equivalents[17]	ug/L	0.000001
	lb/Day	0.00000023

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Addendum adopted by the California Regional Water Quality Control Board, San Diego Region, on February 13, 2002.

JOHN H. ROBERTUS
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO. 1
TO
ORDER NO. 2001-08

NPDES NO. CA0107611

WASTE DISCHARGE REQUIREMENTS
FOR THE
ALISO WATER MANAGEMENT AGENCY
ORANGE COUNTY

DISCHARGE TO THE PACIFIC OCEAN
THROUGH THE ALISO WATER MANAGEMENT AGENCY
OCEAN OUTFALL

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

1. On February 21, 2001, this Regional Board adopted Order No. 2001-08, NPDES No. CA0107611, Waste Discharge Requirements for the Aliso Water Management Agency, Orange County, Discharge to the Pacific Ocean through the Aliso Water Management Agency Ocean Outfall. Order No. 2001-08 established requirements for the discharge of up to 27.0 million gallons per day (MGD) of treated wastewater to the Pacific Ocean via the Aliso Water Management Agency Ocean Outfall.

2. On May 24, 2001, the Regional Board was notified that the Aliso Water Management Agency, South East Regional Reclamation Authority, and South Orange County Reclamation Authority will consolidate their operations, effective July 1, 2001, into a single new Joint Powers Authority, the South Orange County Wastewater Authority. As a result of this consolidation, the Aliso Water Management Agency Ocean Outfall will henceforth be referred to as the South Orange County Wastewater Authority Aliso Creek Ocean Outfall.

3. The issuance of this addendum is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (Public Resources Code, Division 13, Chapter 3, Section 21000 et seq.) in accordance with the California Water Code, Section 13389.

4. The Regional Board has notified the dischargers identified in Order No. 2001-08 and all known interested parties of its intent to amend Order No. 2001-08.

5. The Regional Board has, at a public meeting on October 10, 2001 held or provided an opportunity for a public hearing, and heard and considered all comments pertaining to the terms and conditions of this addendum.

File: 01-0117.02

IT IS HEREBY ORDERED, that:

1. All references to the Aliso Water Management Agency in Order No. 2001-08 and addenda thereto shall henceforth refer to the South Orange County Wastewater Authority as the entity subject to regulation under Order No. 2001-08.

2. All references to the Aliso Water Management Agency Ocean Outfall in Order No. 2001-08 and addenda thereto shall henceforth refer to the South Orange County Wastewater Authority Aliso Creek Ocean Outfall.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Addendum adopted by the California Regional Water Quality Control Board, San Diego Region, on October 10, 2001.

JOHN H. ROBERTUS
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 2001-08
NPDES NO. CA0107611

WASTE DISCHARGE REQUIREMENTS
FOR THE
ALISO WATER MANAGEMENT AGENCY
ORANGE COUNTY

DISCHARGE TO THE PACIFIC OCEAN
THROUGH THE ALISO WATER MANAGEMENT AGENCY
OCEAN OUTFALL

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 2001-08
NPDES NO. CA0107611

WASTE DISCHARGE REQUIREMENTS
FOR THE
ALISO WATER MANAGEMENT AGENCY
ORANGE COUNTY

DISCHARGE TO THE PACIFIC OCEAN
THROUGH THE ALISO WATER MANAGEMENT AGENCY
OCEAN OUTFALL

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

1. On December 14, 1995, this Regional Board adopted Order No. 95-107, NPDES No. CA0107611, Waste Discharge Requirements for the Aliso Water Management Agency, Orange County, Discharge to the Pacific Ocean Through the Aliso Water Management Agency Ocean Outfall. Order No. 95-107 established requirements for the discharge of up to 27 million gallons per day (MGD) of treated wastewater to the Pacific Ocean through the Aliso Water Management Agency (AWMA) Ocean Outfall. Order No. 95-107 contained an expiration date of December 14, 2000.

2. On September 17, 1997, this Regional Board adopted Addendum No. 1 to Order No. 95-107, An Addendum Allowing the Diversion of Summertime Flow from Aliso Creek to the AWMA Ocean Outfall. Addendum No. 1 made the following modifications to Order No. 95-107: 1) allowed a flow rate of 4.52 MGD from Aliso Creek to be diverted to the AWMA Ocean Outfall from May 1 through October 15, 2) included the diverted runoff as a component of the effluent limitations listed in Discharge Specifications B.12, and 3) changed the semiannual monitoring period to May-October and November-April to coincide with the period that flow was diverted from Aliso Creek to the AWMA Ocean Outfall.

3. On June 14, 2000, AWMA submitted an application for renewal of its NPDES permit pursuant to Provision D.21. of Order No. 95-107. This Order is a renewal of the NPDES permit and supersedes Order No. 95-107.

4. AWMA is a joint powers authority formed to operate regional sewage treatment and disposal facilities, including an ocean outfall, for the benefit of its member agencies, as shown in the table below. The AWMA service area is located in southern Orange County in southern California.

ALISO WATER MANAGEMENT AGENCY MEMBERS

Moulton Niguel Water District
Irvine Ranch Water District
El Toro Water District
South Coast Water District
City of Laguna Beach
Emerald Bay Services District

5. There are four wastewater treatment facilities operated within the jurisdiction of AWMA: the Los Alisos Water Reclamation Plant, the El Toro Water Recycling Plant, the AWMA Joint Regional Plant, and the AWMA Coastal Treatment Plant.

6. The Los Alisos Water Reclamation Plant (LAWRP) is owned and operated by the Irvine Ranch Water District and treats raw wastewater generated within the Irvine Ranch Water District service area. Wastewater treatment unit operations and processes are screening, and aerated lagoons. A portion of the secondary effluent is reclaimed for irrigation and receives tertiary treatment by chemical addition, flash mixing, coagulation, flocculation, sedimentation, filtration, and chlorine disinfection. The capacity of the existing tertiary treatment facility is 5.5 MGD. The Santa Ana Regional Water Quality Control Board's Order 94-03 establishes reclamation requirements for the reuse of effluent from the LAWRP in the Santa Ana Region. The San Diego Regional Water Quality Control Board's Order 97-52 establishes reclamation requirement for the reuse of effluent from the LAWRP in the San Diego Region.

   Dewatered biosolids are either trucked to a composting facility in Riverside County or sent to the Prima Deschecha landfill. Screenings from the plant influent are mixed with wood chips, composted and used on various Irvine Ranch Water District owned properties as a soil amendment.

   All effluent not reclaimed at the LAWRP is discharged to the Pacific Ocean through the AWMA Ocean Outfall. An average of 3.52 MGD of secondary treated wastewater is discharged to the AWMA Ocean Outfall.

7. The El Toro Water Recycling Plant (ETWRP) is owned by El Toro Water District and treats raw wastewater generated in the El Toro Water District service area. Wastewater treatment unit operations and processes are coarse screening, aerated grit removal, fine screening, activated sludge aeration, and secondary clarification. A portion of the secondary effluent is reclaimed for irrigation and receives filtering and chlorine disinfection. The Santa Ana Regional Water Quality Control Board Order No. 94-03 establishes reclamation requirements for the reuse of effluent from the ETWRP in the Santa Ana Region. The San Diego Regional Water Quality Control Board's Order 97-52 establishes reclamation requirement for the reuse of effluent from the ETWRP in the San Diego Region.

   All effluent not reclaimed at the ETWRP is discharged to the Pacific Ocean through the AWMA Ocean Outfall. An average of 4.79 MGD of secondary treated wastewater is discharged to the Outfall.

Waste activated sludge is thickened using dissolved air flotation and then trucked to the AWMA Joint Regional Plant for treatment and disposal. Screenings and grit are transported by a private contractor to a sanitary landfill in Simi Valley.

8. The AWMA Joint Regional Plant (JRP) is owned by AWMA and the Moulton Niguel Water District and treats raw wastewater generated in the Moulton Niguel Water District service area. Wastewater treatment unit operations and processes are screening, aerated grit removal, primary sedimentation, activated sludge aeration, and secondary sedimentation. A portion of the secondary effluent is reclaimed for irrigation and receives tertiary treatment by chemical addition, coagulation, filtration, and chlorine disinfection. The capacity of the existing tertiary treatment facility is 11.4 MGD. An average of 7.33 MGD of secondary treated wastewater is discharged to the AWMA Ocean Outfall. The San Diego Regional Water Quality Control Board's Order 97-52 establishes reclamation requirements for the reuse of effluent from the JRP in the San Diego Region.

   The AWMA JRP treats solids produced by JRP, raw solids trucked to the plant from the ETWRP, and raw solids transported by force main from the AWMA Coastal Treatment Plant. Solids treatment consists of dissolved air flotation thickening, anaerobic digestion, and centrifuge dewatering. Dewatered biosolids are removed from the facility by a private contractor and are either sent to a composting facility in Riverside County or applied on permitted land application sites in central and southern California. Screenings and grit are transported by a private contractor to a sanitary landfill in Simi Valley.

9. The AWMA Coastal Treatment Plant (CTP) is owned and operated by AWMA 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 CTP. Other, similar nuisance water diversions are planned by the South Coast Water District and, possibly, by the City of Laguna Beach in the near future. Wastewater treatment and unit operations and processes are screening, aerated grit removal, primary clarification, activated sludge aeration, and secondary clarification. A portion of the secondary effluent is reclaimed for irrigation and receives tertiary treatment by chemical addition, coagulation, filtration, and chlorine disinfection.

   The capacity of the existing tertiary treatment facility is 4.2 MGD. An average of 3.21 MGD of secondary treated wastewater is discharged to the AWMA Ocean Outfall. The San Diego Regional Water Quality Control Board's Order 97-52 establishes reclamation requirements for the reuse of effluent from the CTP in the San Diego Region.

   Primary sludge and thickened waste activated sludge are combined and pumped through a force main to the AWMA JRP for treatment and disposal. Screenings and grit are transported by a private contractor to a sanitary landfill in Simi Valley.

10. The AWMA Ocean Outfall has been in use since 1979. The outfall extends 7,900 feet offshore in a southwesterly direction from the mouth of Aliso Creek. The inshore end of the diffuser is located approximately 6,700 feet offshore at a depth of approximately 170 feet. The diffuser, which is collinear with the rest of the outfall, is approximately 1,200 feet long and extends to a maximum

depth of 195 feet. The terminus of the diffuser is located at Latitude 33° 32' 34" N and Longitude 117° 49' 02" W. The design capacity of the AWMA Ocean Outfall is 50 MGD.

The following table identifies the treatment facilities that discharge to the AWMA Ocean Outfall, their current and projected capacities, and discharge rates.

AWMA Treatment Facility Capacities and Discharges

Treatment Facility	Existing Secondary Treatment Design Capacity* (MGD)	1999 Average Discharge to the AWMA Ocean Outfall* (MGD)	Projected 2005 Discharge to the AWMA Ocean Outfall (MGD)
AWMA Joint Regional Plant (JRP)	12	9.5	12
AWMA Coastal Treatment Plant (CTP)	6.7	3.2	5.5
Los Alisos Water Reclamation Plant (LAWRP)	7.5	3.5	4.0
El Toro Water Recycling Plant (ETWRP)	6.0	4.8	5.0
TOTAL	**32.2**	**21.0**	**26.5**

* Average dry-weather flowrate.

11. Secondary effluent from the four wastewater treatment plants is conveyed to the AWMA Ocean Outfall by the Effluent Transmission Main (ETM). The ETM consists of five Reaches (A through E) and the On-Shore Portion of the Ocean Outfall.

12. Reach A runs from the LAWRP southwesterly to the junction with the ETWRP. This land outfall is 11,904 feet long with a capacity of 7.5 MGD. Effluent from the LAWRP that is not reused enters this land outfall and is discharged to the Pacific Ocean via the AWMA Ocean Outfall.

13. Reaches B/C run from the ETWRP southeasterly toward Aliso Creek. Reach B terminates at the crest of the Moulton Parkway. This land outfall is 4,012 feet long with a capacity of 15 MGD. Reach C is the start of the gravity flow in the ETM, runs southeasterly along the Moulton Parkway, and ends where Aliso Creek passes under Moulton Parkway. This land outfall is 3,654 feet long with a capacity of 15 MGD. Effluent from the ETWRP that is not reused enters this land outfall and is discharged to the Pacific Ocean via the AWMA Ocean Outfall.

14. Reach D runs southerly along the Aliso Creek Valley. This land outfall is 18,305 feet long with a capacity of 15 MGD. At the junction of Reaches D and E, effluent from the JRP that is not reused enters the ETM via a land outfall. This land outfall is 6,860 feet long with a capacity of 20 MGD. This effluent is discharged to the Pacific Ocean via the AWMA Ocean Outfall.

15. Reach E runs in a southerly direction along the Aliso Creek Valley to the junction with the On-Shore portion of the AWMA Ocean Outfall. This land outfall is 17,210 feet long with a capacity of 32.2 MGD.

16. The On-Shore portion of the AWMA Ocean Outfall starts at the junction with Reach E and CTP and continues to the AWMA Ocean Outfall. This land outfall is 5,405 feet long with a capacity of 50 MGD. Effluent from the CTP that is not reused enters this land outfall and the combined effluent from the four wastewater treatment plants is discharged to the Pacific Ocean via the AWMA Ocean Outfall.

17. All effluent from the AWMA member agency plants that is not reclaimed for irrigation use is discharged to the Pacific Ocean through the AWMA Ocean Outfall, discharge serial number 001.

18. Staff of State Water Resources Control Board determined the minimum initial dilution for the AWMA Ocean Outfall to be 260, using the computer model UMERGE and the following characteristics of the ocean outfall diffuser system:

Outfall Characteristic	**Value**
Outfall flowrate	27.0 MGD
Diffuser length	1,200 feet
Number of ports	200
Port diameter	2.0 inches
Port spacing	12 feet
Port angle from horizontal (horizontal = 0° vertical = 90°)	-5° (5° below horizontal)

19. This Regional Board regulates the reuse of recycled wastewater from AWMA-member agency plants, by various orders that serve as State Waste Discharge Requirements.

    a. This Regional Board's Order No. 97-52, *Waste Discharge and Water Recycling Requirements for the Production and Purveyance of Recycled Water by Member Agencies of the South Orange County Reclamation Authority, Orange County*, prescribes recycled water production and purveyance requirements to the South Orange County Reclamation Authority (SOCRA) and its member agencies, listed in the table below:

SOCRA MEMBER AGENCIES

Capistrano Valley Water District
El Toro Water District
Irvine Ranch Water District
Moulton Niguel Water District
Santa Margarita Water District
South Coast Water District
Trabuco Canyon Water District

b. The City of San Clemente is not a member of SOCRA, however, the City of San Clemente may provide recycled water to SOCRA for distribution within the SOCRA service area. The City of San Clemente's Water Reclamation Plant is regulated under Order No. 91-50, *Waste Discharge Requirements for the City of San Clemente Water Reclamation Plant, Reclamation Projects, Orange County*.

20. In the permit renewal application, AWMA has reported on several seasonal nuisance water diversion discharges to the sewage collection systems within the AWMA Agency system. These nuisance flow projects would keep dry-weather low-volume stormwater flows in specific storm drains from crossing the beaches to the ocean by diverting the nuisance flows to the sewer systems. The purpose of these diversions is to mitigate the possible threat to public health caused by high bacteria levels and other contaminants associated with urban runoff.

The City of Laguna Beach diverts nuisance waters, seasonally, to the domestic sewer system and to the AWMA Coastal Treatment Plant. The South Coast Water District also plans to seasonally divert nuisance waters from two areas to the AWMA CTP for treatment. The amount of flow is expected to total approximately 50GPM (or 0.072 MGD). The City of Laguna Beach estimates of nuisance water diversion rates are listed in the table below:

Period	Summer Flowrate (MGD)
1999	0.050
2000	0.25
2001	0.30
2002	0.35
2003	0.35
2004	0.35

21. The SWRCB adopted a revised *Water Quality Control Plan for Ocean Waters of California* (California Ocean Plan) on July 23, 1997. The 1997 Ocean Plan identifies the following beneficial uses of state ocean waters to be protected:

a. Industrial water supply

b. Navigation

c. Water contact recreation

d. Non-contact water recreation

e. Ocean commercial and sport fishing

f. Preservation and enhancement of Areas of Special Biological Significance

g. Preservation of rare and endangered species

h. Marine habitat

i. Mariculture

j. Fish migration

k. Fish spawning

l. Shellfish harvesting

m. Aesthetic enjoyment

In order to protect these beneficial uses, the Ocean Plan establishes water quality objectives (for bacterial, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharge to the ocean, quality requirements for waste discharges (effluent water quality requirements), discharge prohibitions, and general provisions.

22. *The Comprehensive Water Quality Control Plan Report, San Diego Basin (9)*, (Basin Plan) was adopted by this Regional Board on March 17, 1975 and subsequently approved by the SWRCB. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the SWRCB.

23. The Basin Plan identifies the following beneficial uses of state ocean waters to be protected:

a. Industrial service supply

b. Navigation

c. Water contact recreation

d. Noncontact water recreation

e. Ocean commercial and sport fishing

f. Preservation of Areas of Special Biological Significance (ASBS)

g. Preservation of rare and endangered species

h. Marine habitat

i. Mariculture

j. Fish migration

k. Fish spawning

l. Shellfish harvesting

m. Wildlife habitat

The Basin Plan relies primarily on the requirements of the Ocean Plan for protection of these beneficial uses. However, the Basin Plan establishes additional water quality objectives for dissolved oxygen and pH.

24. State Board Resolution No. 74-28, *Areas of Special Biological Significance*, requires the Regional Boards to select areas in coastal waters which contain "biological communities of such extraordinary, even though unquantifiable, value that no acceptable risk of change in their environments as a result of man's activities can be entertained." Heisler Park Ecological Reserve, approximately three miles northwest of the AWMA Ocean Outfall, is the closest designated Area of Special Biological Significance to the AWMA Ocean Outfall.

    As stated in the Basin Plan, discharges of wastewater and/or heat must be sufficiently removed spatially from these areas to assure the maintenance of natural water quality in the area. Existing wastewater and/or heat discharges, which influence the natural water quality in the designated area, must be phased out as promptly as possible.

    Regional Board staff's review of the monitoring data submitted by the discharger in accordance with the Monitoring and Reporting Program of Order No. 95-107 have not revealed any impacts on the Heisler Park Ecological Reserve resulting from the AWMA discharge. No impacts to the reserve area are expected to occur in the future.

25. Federal regulations (40CFR Part 403) establish pretreatment program requirements for POTWs that receive pollutants from industries subject to pretreatment standards. This order contains industrial pretreatment program requirements pursuant to 40CFR Part 403.

26. In February 1983, AWMA was granted final Industrial Pretreatment Program approval by USEPA Region 9. AWMA conducts and is ultimately responsible for the pretreatment program in any portion of the area that is tributary to the AWMA Ocean Outfall with the exception of the El Toro Water District, which operates its own pretreatment program.

27. On November 16, 1990, the USEPA promulgated NPDES permit application requirements for storm water discharges (40CFR Parts 122, 123, and 124), which are applicable to wastewater treatment facilities tributary to the AWMA Ocean Outfall. On April 17, 1997, the State Water Resources Control Board adopted Water Quality Order No. 97-03-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities. Storm water discharges from wastewater treatment facilities, which

discharge through the AWMA Ocean Outfall, are subject to the terms and conditions of Water Quality Order No. 97-03-DWQ, as amended.

28. On February 19, 1993, the USEPA issued the final rule for the use and disposal of sewage sludge (40CFR Part 503). This regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. USEPA, not this Regional Board, will oversee compliance with 40CFR Part 503.

29. Section 301(b)(1)(B) of the Clean Water Act (CWA) requires POTWs to meet effluent limitations based on secondary treatment as defined by the USEPA Administrator. Secondary treatment is defined by the USEPA Administrator in the federal regulations (40CFR Part 133.100 to 40CFR Part 133.105) in terms of three parameters: 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. Federal regulations allow substitution of 5-day carbonaceous biochemical oxygen demand ($CBOD_5$) limitations for BOD_5 limitations. By letter dated March 7, 1985 AWMA requested that $CBOD_5$ limitations be incorporated in the AWMA permit renewal in lieu of BOD_5 requirements. In accordance with 40CFR 133, Order No. 85-33 established discharge specifications for $CBOD_5$, replacing the previous BOD limitations. Discharge Specification B.1.a. of this Order establishes effluent limitations for $CBOD_5$, TSS and pH in accordance with federal secondary treatment regulations. In addition, Discharge Specification B.1.a. of this Order establishes "Maximum at Any Time" limitation for CBOD5 and TSS based on best professional judgement. Mass emission rate (MER) limitations for $CBOD_5$ and TSS are based on a flowrate of 27.0 MGD.

30. Effluent limitations, industrial pretreatment standards, sludge use and disposal regulations, and ocean discharge criteria established under Sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, and 405 of the CWA, as amended (Title 33 United States Code (USC) 1251 et seq.), are applicable to the discharge.

31. On May 9, 1996, this Regional Board adopted Order No. 96-04, General Waste Discharge Requirements Prohibiting Sanitary Sewer Overflows by Sewage Collection Agencies, and addenda thereto, to regulate sewage discharges from publicly owned sewage collection systems in the San Diego Region. Order No. 96-04, serving as State Waste Discharge Requirements, prohibits the discharge of sewage from sanitary sewer systems at any point upstream of a sewage treatment plant. Order No. 96-04 requires the development of a Sanitary Sewer Overflow Prevention Plan and a Sanitary Sewer Overflow Response Plan for each collection system in the Region. In the event that a sewage discharge occurs within a collection system, Order No. 96-04 specifies procedures for reporting the discharge to the Regional Board. See Reporting Requirement G.5 for the requirements that apply to sewage spills occurring at wastewater treatment facilities.

32. Effluent concentration and mass emission rate (MER) limitations were calculated using the procedures outlined in the 1997 version of the Ocean Plan and background seawater concentrations from the 1997 version of the Ocean Plan, an initial dilution of 260, and a flowrate of 27.0 MGD. In addition, pursuant to 40CFR 131.12 and State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California (collectively "antidegradation policies") AWMA will be required to continue to comply with effluent concentration and MER limitations established in Order No. 95-107. In the case where there is a difference between the calculated and previously established effluent concentration and MER limitations, the more

stringent limit was used. Furthermore, in establishing the requirements contained herein, the Regional Board has determined that any reduction in water quality as a result of this discharge will not result in any long-term deleterious effects on water quality.

33. Monitoring and Reporting Program No. 2001-08 may be subject to changes during the 5-year period of this permit. The Southern California Coastal Water Research Project (SCCWRP) is currently investigating more effective techniques to monitor receiving waters of the Pacific Ocean. Once the SCCWRP study is complete, these methods may be incorporated into this Order's Monitoring and Reporting Program by amendment.

34. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:

    a. Beneficial uses to be protected and the water quality objectives reasonably required for that purpose;

    b. Other waste discharges;

    c. The need to prevent nuisance;

    d. Past, present, and probable future beneficial uses of water;

    e. Environmental characteristics of the receiving waters under consideration, including the quality of those receiving waters;

    f. Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area;

    g. Economic considerations;

    h. The need for developing housing within the region; and

    i. The need to develop and use recycled water.

35. The issuance of waste discharge requirements for this discharge is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (Public Resources Code, Division 13, Chapter 3, Section 21000 et seq.) in accordance with the California Water Code, Section 13389.

36. The Regional Board has notified AWMA and all known interested parties of its intent to reissue the NPDES permit for the discharge through the AWMA Ocean Outfall to the Pacific Ocean.

37. The Regional Board, in a public hearing on February 21, 2001, has heard and considered all comments pertaining to the discharge from the AWMA member-agency wastewater treatment facilities to the Pacific Ocean via the AWMA Ocean Outfall.

38. This Order shall serve as a NPDES Permit for the discharge from the Aliso Water Management Agency Ocean Outfall to the Pacific Ocean pursuant to Section 402 of the Clean Water Act, and amendments thereto.

IT IS HEREBY ORDERED that the Aliso Water Management Agency (hereinafter discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and the regulations adopted thereunder, shall comply with the following for the handling, treatment, and disposal of wastes through the Aliso Water Management Agency Ocean Outfall.

A. PROHIBITIONS

1. Discharges of wastes in a manner or to a location which have not been specifically authorized by this Order and for which valid waste discharge requirements are not in force are prohibited.

2. The discharge of any radiological, chemical, or biological warfare agent, or high level radiological waste to the ocean is prohibited.

3. The dumping or deposition, from shore or from vessels, of oil, garbage, trash or other solid municipal, industrial, or agricultural waste directly into waters subject to tidal action or adjacent to waters subject to tidal action in any manner which may permit it to be washed into waters subject to tidal action is prohibited.

4. Waste shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.

5. Pipeline discharge of sludge to the ocean is prohibited by federal law; the discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited.

6. The discharge of sludge digester supernatant directly to the ocean, or into a waste stream that discharges to the ocean, without further treatment is prohibited.

7. The bypassing of untreated wastes containing concentrations of pollutants in excess of those in Ocean Plan Table A or Table B or the effluent limitations of this Order to the ocean is prohibited, except as provided for in Provision F.36 of this Order. (Also see Attachment No. 1 to this Order, *1997 Ocean Plan Discharge Prohibitions*)

8. Discharge through the AWMA Ocean Outfall from any treatment facility at a 30-day average dry weather flowrate in excess of the secondary treatment design capacity of that treatment facility is prohibited. For the purposes of this Order, the secondary treatment design capacity of a treatment facility is the existing secondary treatment design capacity of that treatment facility identified in the findings of this Order unless the discharger obtains the Executive Officer's approval of a revised design capacity in accordance with Provision F.17.

9. Compliance with Discharge Prohibitions as stated in Chapter V of the 1997 Ocean Plan (Attachment No. 1) is required as a condition of this Order.

10. Compliance with the Waste Discharge Prohibitions contained in the 1994 Basin Plan (Attachment No. 2) is also required as a condition of this Order.

11. Discharge to the Pacific Ocean from the treatment facilities in the AWMA agency system via the AWMA Ocean Outfall in excess of 27.0 MGD average dry weather flow is prohibited unless the discharger obtains revised waste discharge requirements authorizing an increased flowrate. The summertime stream flows diverted from the Aliso Creek to the AWMA Ocean Outfall shall be included when calculating the average dry weather flowrate discharged through the AWMA Ocean Outfall. The summertime stream flow diversion from the Aliso Creek to the AWMA Ocean Outfall shall not exceed 4.52 MGD unless the discharger obtains revised waste discharge requirements authorizing an increased flowrate.

12. Diversion of Aliso Creek stream flows to the AWMA Ocean Outfall is prohibited between October 16 and April 30 each year.

B. DISCHARGE SPECIFICATIONS

1. The following effluent limitations, calculated using an initial dilution factor of 260, apply to the undiluted secondary effluent, with no brine waste, discharged from the AWMA member agency treatment plants via the AWMA Ocean Outfall.

a. Effluent Limitations for Major Constituents and Properties of Wastewater

Constituent	Units	Monthly Average (30 day)	Weekly Average (7 day)	Maximum at any time
$CBOD_5$[1]	mg/l lb/day	25 5,600	40 9,000	45 10,000
Total Suspended Solids[1,2]	mg/l lb/day	30 6,800	45 10,000	50 11,000
Oil & Grease[2]	mg/l lb/day	25 5,600	40 9,000	75 17,000
Settleable Solids[2]	ml/l	1.0	1.5	3.0
Turbidity[2]	NTU	75	100	225
PH[1,2]	pH units	Within limits of 6.0 - 9.0 at all times.		
Acute Toxicity[2]	TUa	1.5	2.0	2.5

b. Effluent Limitations on Toxic Materials for Protection of Marine Aquatic Life[3]

Constituent	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	ug/l lb/day	1,000 200	7,600 1,700	20,000 4,500
Cadmium	ug/l lb/day	260 70	1,000 200	2,600 590
Chromium (hexavalent)[4]	ug/l lb/day	500 100	2,000 500	5,200 1,200
Copper	ug/l lb/day	260 60	2,600 590	7,300 1,600
Lead	ug/l lb/day	500 100	2,000 470	5,200 1,200
Mercury	ug/l lb/day	10 2	42 9.4	100 20
Nickel	ug/l lb/day	1,000 200	5,200 1,200	13,000 2,900
Selenium	ug/l lb/day	3,900 880	16,000 3,500	39,000 8,800
Silver	ug/l lb/day	76 17	430 96	1,100 260
Zinc	ug/l lb/day	3,100 700	19,000 4,200	50,000 11,000
Cyanide[5]	ug/l lb/day	260 59	1,000 200	2,600 590
Total Chlorine Residual[6]	ug/l lb/day	500 100	2,000 470	16,000 3,600
Ammonia (as N)	ug/l lb/day	160,000 35,000	630,000 140,000	1,600,000 350,000
Chronic Toxicity	TUc	---	260	---
Phenolic Compounds (non-chlorinated)	ug/l lb/day	7,800 1,800	31,000 7,000	78,000 18,000

Constituent	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Chlorinated Phenolics	ug/l lb/day	260 59	1,000 200	2,600 590
Endosulfan[7]	ug/l lb/day	2.0 0.50	4.7 1.1	7.0 1.6
Endrin	ug/l lb/day	0.50 0.10	1.0 0.20	1.6 0.40
HCH[8]	ug/l lb/day	1.0 0.20	2.0 0.50	3.1 0.70
Radioactivity[9]	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subsection 4, Group 3, Article 1, Section 30253 of the California Code of Regulations.			

c. Effluent Limitations For Toxic, Noncarcinogenic Materials for Protection of Human Health

Constituent	Units	Monthly Average (30-day)
Acrolein	ug/l lb/day	57,000 13,000
Antimony	ug/l lb/day	310,000 70,000
Bis(2-chloroethoxy) methane	ug/l lb/day	1,100 250
Bis(2-chloroisopropyl) ether	ug/l lb/day	310,000 70,000
Chlorobenzene	ug/l lb/day	150,000 34,000
Chromium (III)[4]	ug/l lb/day	50,000,000 11,000,000
Di-n-butyl phthalate	ug/l lb/day	910,000 200,000
Dichlorobenzenes[10]	ug/l lb/day	1,300,000 290,000
1,1-dichloroethylene	ug/l lb/day	1,900,000 420,000
Diethyl Phthalate	ug/l lb/day	8,600,000 1,900,000
Dimethyl Phthalate	ug/l lb/day	210,000,000 47,000,000
4,6-dinitro-2-methylphenol	ug/l lb/day	57,000 13,000
2,4-dinitrophenol	ug/l lb/day	1,000 220
Ethylbenzene	ug/l lb/day	1,100,000 240,000
Fluoranthene	ug/l lb/day	3,900 880

Constituent	Units	Monthly Average (30-day)
Hexachlorocyclopentadiene	ug/l lb/day	15,000 3,400
Isophorone	ug/l lb/day	39,000,000 8,800,000
Nitrobenzene	ug/l lb/day	1,300 290
Thallium	ug/l lb/day	3,600 820
Toluene	ug/l lb/day	22,000,000 5,000,000
1,1,2,2-tetrachloroethane	ug/l lb/day	310,000 70,000
Tributyltin	ug/l lb/day	0.37 0.080
1,1,1-trichloroethane	ug/l lb/day	140,000,000 32,000,000
1,1,2-trichloroethane	ug/l lb/day	11,000,000 2,500,000

d. Effluent Limitations for Toxic, Carcinogenic Materials for Protection of Human Health

Constituent	Units	Monthly Average (30-day)
Acrylonitrile	ug/l lb/day	26 5.9
Aldrin	ug/l lb/day	0.0057 0.0013
Benzene	ug/l lb/day	1,500 340
Benzidine	ug/l lb/day	0.018 0.0041
Beryllium	ug/l lb/day	8.6 1.9
Bis(2-chloroethyl)ether	ug/l lb/day	12 2.6
Bis(2-ethylhexyl)phthalate	ug/l lb/day	910 200
Carbon Tetrachloride	ug/l lb/day	230 52
Chlordane[11]	ug/l lb/day	0.0060 0.0014
Chloroform	ug/l lb/day	34,000 7,600
DDT[12]	ug/l lb/day	0.044 0.0099
1,4-dichlorobenzene	ug/l lb/day	4,700 1,100
3,3-dichlorobenzidine	ug/l lb/day	2.1 0.47
1,2-dichloroethane	ug/l lb/day	34,000 7,600

Constituent	Units	Monthly Average (30-day)
Dichloromethane	ug/l lb/day	120,000 26,000
1,3-dichloropropene	ug/l lb/day	2,300 520
Dieldrin	ug/l lb/day	0.010 0.0023
2,4-dinitrotoluene	ug/l lb/day	680 150
1,2-diphenylhydrazine	ug/l lb/day	42 9.5
Halomethanes[13]	ug/l lb/day	34,000 7,600
Heptachlor[14]	ug/l lb/day	0.19 0.042
Hexachlorobenzene	ug/l lb/day	0.055 0.012
Hexachlorobutadiene	ug/l lb/day	3,700 820
Hexachloroethane	ug/l lb/day	650 150
N-nitrosodimethylamine	ug/l lb/day	1,900 430
N-nitrosodiphenylamine	ug/l lb/day	650 150
PAHs[15]	ug/l lb/day	2.3 0.52
PCBs[16] Change units	ug/l lb/day	0.0050 0.0011
TCDD equivalents[17]	pg/l lb/day	0.0000010 0.00000023
Tetrachloroethylene	ug/l lb/day	26,000 5,800

Constituent	Units	Monthly Average (30-day)
Toxaphene	ug/l lb/day	0.055 0.012
Trichloroethylene	ug/l lb/day	7,000 1600
2,4,6-trichlorophenol	ug/l lb/day	76 17
Vinyl Chloride	ug/l lb/day	9,400 2,100

mg/l = milligrams per liter
ug/l = micrograms per liter
pg/l = picograms per liter
ml/l = milliliters per liter
NTU = Nephelometric Turbidity Units
TUa = toxic units acute
TUc = toxic units chronic
lb/day = pounds per day

2. Any significant change in waste flow shall be cause for reevaluating effluent quality requirements.

3. The 30-day average percent removal of $CBOD_5$ and the 30-day average percent removal of TSS shall each not be less than 85 percent.

4. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.

5. Waste discharged through the AWMA Ocean Outfall must be essentially free of:

   a. Material that is floatable or will become floatable upon discharge.

   b. Settleable material or substances that form sediments which 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.

6. Waste discharged through the AWMA Ocean Outfall shall be discharged in a manner that provides

sufficient initial dilution to minimize the concentrations of substances not removed in treatment.

7. Location of waste discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to 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 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.

    Waste that contains pathogenic organisms or viruses should be discharged 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.

8. 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.

9. All waste treatment, containment and disposal facilities shall be protected against erosion, overland runoff and other impacts resulting from a 100-year frequency 24-hour storm.

10. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Regional Board Executive Officer (hereinafter Executive Officer).

11. The discharge of substances for which effluent limitations are not established by this Order shall be prevented or, if the discharge cannot be prevented, minimized.

12. The stream flow diversion from Aliso creek to the AWMA Ocean Outfall shall be included as a component of the effluent limitations as listed in Discharge Specification B.1.

C. RECEIVING WATER LIMITATIONS

1. The discharge of waste through the AWMA Outfall shall not, by itself or jointly with any other discharge, cause violation of the following Ocean Plan ocean water quality objectives. Compliance with the water quality objectives shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

    a. <u>Bacterial Characteristics</u>

(1) Water-Contact Standards

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 Board, but including all kelp beds, the following bacterial objectives shall be maintained throughout the water column:

(a) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).

(b) The fecal coliform density based on a minimum of not less than five samples for any 30-day period, shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

The "Initial Dilution Zone" of wastewater outfalls 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. Kelp beds, for the purpose of the bacterial standards of this Order, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

(2) Shellfish Harvesting Standards

(a) At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

(b) The median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

b. Bacterial Assessment and Remedial Action Requirements

The requirements listed below shall be used to 1) determine the occurrence and extent of any impairment of a beneficial use due to bacterial contamination; 2) generate information which can be used in the development of an enterococcus standard; and 3) provide the basis for remedial actions necessary to minimize or eliminate any impairment of a beneficial use.

Measurement of enterococcus density shall be conducted at all stations where measurement of total and fecal coliforms is required. In addition to the requirements of Receiving Water Limitation C.1.a of this Order, if a shore station consistently exceeds a coliform objective

or exceeds a geometric mean enterococcus density of 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a six-month period, the Regional Board shall require the discharger to conduct or participate in a survey to determine the source of the contamination. The geometric mean shall be a moving average based on no less than five samples per month, spaced evenly over the time interval. When a sanitary survey identifies a controllable source of indicator organisms associated with a discharge of sewage, the Regional Board may require the discharger and any other responsible parties identified by the Regional Board to take action to control the source.

c. Physical Characteristics

(1) Floating particulates and grease and oil shall not be visible.

(2) The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

(3) Natural light shall not be significantly reduced at any point outside the initial dilution zone as a result of the discharge of waste.

(4) The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

d. Chemical Characteristics

(1) The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen-demanding waste 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 Receiving Water Limitation C.3 of this Order, in marine sediments shall not be increased to levels which 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.

e. 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.

f. Radioactivity

(1) Discharge of radioactive waste shall not degrade marine life.

2. The discharge of waste through the AWMA Ocean Outfall shall not, by itself or jointly with any other discharge, cause violation of the following Basin Plan ocean water quality objectives:

a. The mean annual dissolved oxygen concentration shall not be less than 7.0 mg/L nor shall the minimum dissolved oxygen concentration be reduced below 5.0 mg/L at any time.

b. The pH value shall not be depressed below 7.0 nor raised above 8.6.

3. Toxic Materials

The discharge through the AWMA Ocean Outfall shall not by itself or jointly with any other discharge, cause the following Ocean Plan water quality objectives to be exceeded in the receiving water upon completion of initial dilution, except that limitations indicated for radioactivity shall apply directly to the undiluted waste effluent.

a. Water Quality Objectives for the Protection of Marine Aquatic Life

Constituent	Units	6 Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	ug/L	8	32	80
Cadmium	ug/L	1	4	10
Chromium (hexavalent)	ug/L	2	8	20
Copper	ug/L	3	12	30
Lead	ug/L	2	8	20
Mercury	ug/L	0.04	0.16	0.4
Nickel	ug/L	5	20	50
Selenium	ug/L	15	60	150
Silver	ug/L	0.45	1.8	4.5
Zinc	ug/L	20	80	200
Cyanide	ug/L	1	4	10
Total Chlorine Residual	ug/L	2	8	60
Ammonia (as N)	ug/L	600	2,400	6,000
Chronic Toxicity	TUc	--	1	--
Phenolic Compounds (non-chlorinated)	ug/L	30	120	300
Chlorinated Phenolics	ug/L	1	4	10
Endosulfan[7]	ug/L	0.009	0.018	0.027
Endrin	ug/L	0.002	0.004	0.006
HCH[8]	ug/L	0.004	0.008	0.012
Radioactivity[9]	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subsection 4, Group 3, Article 1, Section 30253 of the California Code of Regulations.			

b. Water Quality Objectives for the Protection of Human Health -- Noncarcinogens

Chemical	Units	30-Day Average
Acrolein	ug/L	220
Antimony	ug/L	1,200
Bis(2-chloroethoxy)methane	ug/L	4.4
Bis(2-chloroisopropyl)ether	ug/L	1,200
Chlorobenzene	ug/L	570
Chromium (III)	ug/L	190,000
Di-n-butyl phthalate	ug/L	3,500
Dichlorobenzenes[10]	ug/L	5,100
1,1-dichloroethylene	ug/L	7,100
Diethyl phthalate	ug/L	33,000
Dimethyl phthalate	ug/L	820,000
4,6-dinitro-2-methylphenol	ug/L	220
2,4-dinitrophenol	ug/L	4.0
Ethylbenzene	ug/L	4,100
Fluoranthene	ug/L	15
Hexachlorocyclopentadiene	ug/L	58
Isophorone	ug/L	150,000
Nitrobenzene	ug/L	4.9
Thallium	ug/L	14
Toluene	ug/L	85,000
1,1,2,2-tetrachloroethane	ug/L	1,200
Tributyltin	ug/L	0.0014
1,1,1-trichloroethane	ug/L	540,000
1,1,2-trichloroethane	ug/L	43,000

c. Water Quality Objectives for the Protection of Human Health -- Carcinogens

Chemical	Units	30-Day Average
Acrylonitrile	ug/L	0.10
Aldrin	ug/L	0.000022
Benzene	ug/L	5.9
Benzidine	ug/L	0.000069
Beryllium	ug/L	0.033
Bis(2-chloroethyl)ether	ug/L	0.045
Bis(2-ethylhexyl)phthalate	ug/L	3.5
Carbon Tetrachloride	ug/L	0.90
Chlordane[11]	ug/L	0.000023
Chloroform	ug/L	130
DDT[12]	ug/L	0.00017
1,4-dichlorobenzene	ug/L	18
3,3-dichlorobenzidine	ug/L	0.0081
1,2-dichloroethane	ug/L	130
Dichloromethane	ug/L	450
1,3-dichloropropene	ug/L	8.9
Dieldrin	ug/L	0.00004
2,4-dinitrotoluene	ug/L	2.6
1,2-diphenylhydrazine	ug/L	0.16
Halomethanes[13]	ug/L	130
Heptachlor[14]	ug/L	0.00072
Hexachlorobenzene	ug/L	0.00021
Hexachlorobutadiene	ug/L	14
Hexachloroethane	ug/L	2.5
N-nitrosodimethylamine	ug/L	7.3
N-nitrosodiphenylamine	ug/L	2.5
PAHs[15]	ug/L	0.0088

Chemical	Units	30-Day Average
PCBs[16]	ug/L	0.000019
TCDD Equivalents[17]	pg/L	0.0039
Tetrachloroethylene	ug/L	99
Toxaphene	ug/L	0.00021
Trichloroethylene	ug/L	27
2,4,6-trichlorophenol	ug/L	0.29
Vinyl Chloride	ug/L	36

ug/l = micrograms per liter
pg/l = picograms per liter
TUc = toxic units chronic

D. PRETREATMENT REQUIREMENTS

1. The discharger shall be responsible and liable for the performance of all pretreatment requirements contained in 40CFR Part 403, including any subsequent revisions to 40CFR Part 403. Where 40CFR 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 six months of the issuance date of this Order, or the effective date of the 40CFR 403 revisions, whichever comes later. For violations of pretreatment requirements, the discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the USEPA, and/or the Regional Board, as provided in the CWA and/or the Porter-Cologne Water Quality Control Act (CWC).

2. The discharger shall implement and enforce its approved pretreatment program, and all subsequent revisions, which are hereby made an enforceable condition of this Order. The discharger shall enforce the requirements promulgated under 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 as required in 40CFR403 including, but not limited to:

    a. Implement the necessary legal authorities as provided in 40CFR403.8(f)(1);

    b. Enforce the pretreatment requirements under 40CFR403.5 and 403.6;

    c. Implement the programmatic functions as provided in 40CFR403.8(f)(2); and

d. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40CFR403.8(f)(3).

4. By March 1st of each year, the discharger shall submit an annual report to the Regional Board; the USEPA Region 9; the State Water Resources Control Board, Division of Water Quality, Regulations Unit; and the County of Orange Health Care Agency, Environmental Health Division, 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 shall 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(a) 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 stated in the Monitoring and Reporting Program of this Order. The discharger shall also provide influent and effluent monitoring data for nonpriority pollutants which the discharger believes may be causing or contributing to interference and/or pass through. The discharger is not required to sample and perform an analysis for asbestos. Sludge sampling and analysis is addressed in the sludge section of this Order. Wastewater sampling and analysis shall be performed in accordance with 40CFR Part 136.

   b. A discussion of upset, interference, or pass through, if any, at the POTW's 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 industrial user(s) responsible. 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 noncompliance with sludge disposal requirements.

   c. An updated list of the dischargers significant industrial users including their names and addresses, and showing a list of additions, deletions, or name changes keyed to the previous submitted list. The list shall identify the industrial users subject to federal categorical standards by specifying which standards are applicable. The list shall also indicate which significant (non-categorical) industrial users are subject to local limitations.

   d. The discharger shall characterize the compliance status of each significant industrial user (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 noncompliance (SNC) as defined at 40CFR Part 403.8(f)(2)(vii) at any time during the year;

(8) A summary of enforcement actions or any other actions taken against SIU(s) 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 an SIU into compliance; and

(9) The name(s) of any SIU(s) required to submit a baseline monitoring report (BMR), and any SIU's currently discharging under a BMR.

e. A brief description of any programs the discharger implements to reduce pollutants from industrial users not classified as SIU's;

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, and 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 under 40CFR403.8(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 semi-annual SIU compliance status report to the Regional Board, the State Water Resources Control Board, and the USEPA. The report shall cover the period of January 1 through June 30, and shall be submitted no later than September 1st. The report shall identify:

a. The names and addresses of all SIU's 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 noncompliance; and

d. The status of active enforcement actions, or other actions taken in response to SIU noncompliance identified in previous reports.

6. The discharger shall continue with its implementation of a Nonindustrial Source Control Program consisting of a public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into the sanitary sewer system. The Program shall be reviewed periodically and addressed in the annual report.

E. SLUDGE REQUIREMENTS

1. Management of all solids and sludge must comply with all requirements of CFR Parts 257, 258, 501, and 503, including all monitoring, record-keeping, and reporting requirements. Since the State of California, hence the Regional and State Boards, has not been delegated the authority by the USEPA to implement the sludge program, enforcement of sludge requirements of CFR Part 503 is under USEPA's jurisdiction.

2. All solids and sludge must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40CFR Parts 503 and 258, and Title 23 CCR Chapter 15. If the discharger desires to dispose of solids or sludge by a different method, a request for permit modification must be submitted to the USEPA and this Regional Board 180 days prior to the alternative disposal.

3. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40CFR 258. In the annual self-monitoring report, the discharger shall include the amount of sludge disposed of, and the landfill(s) to which it was sent.

4. The permittee shall ensure that all biosolids produced at its facility are used or disposed of in compliance with the applicable portions of:

   a. 40CFR 503: for biosolids which are land applied (placed on the land for the purpose of providing nutrients or conditioning the soil for crops or vegetation), placed in surface disposal sites (placed on the land for the purpose of disposal), stored, or incinerated;

   b. 40CFR 258: for biosolids disposed in a municipal solid waste landfill;

   c. 40CFR 257: for other disposal practices.

   The permittee is responsible for ensuring compliance with these regulations whether the permittee uses or disposes of the biosolids itself or contracts with another party for further treatment, use, or disposal. The permittee is responsible for informing subsequent preparers, appliers, and disposers of the requirements that they must meet under 40CFR 257, 258, and 503.

5. Notification of non-compliance: The permittee shall notify EPA Region 9, the San Diego Regional Board, and the Regional Board where the biosolids are used or disposed of any non-compliance

within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the permittee shall notify EPA Region 9 and the Regional Boards of the non-compliance in writing within 5 working days of becoming aware of the non-compliance. See Attachment No. 5 for contact information.

6. Inspection and Entry: The Regional Board, EPA, or an authorized representative, upon the presentation of credentials, shall be allowed by the permittee, directly or through contractual arrangements with the permittee's biosolids contractors, a) to enter upon all premises where biosolids produced by the permittee are treated, stored, used, or disposed, b) to have access to and copy any records that must be kept under the conditions of this permit or of 40CFR 503, and c) to inspect any facilities, equipment, or operations used by the permittee or its contractors in the production, treatment, storage, use, or disposal of the biosolids.

7. The permittee shall submit an annual biosolids report to the EPA Region 9 Biosolids Coordinator and the Regional Board by February 19 of each year for the period covering the previous calendar year, with the following:

   a. The amount of biosolids generated that year, reported in dry metric tons, and the amount accumulated from previous years;

   b. The results of all pollutant and pathogen monitoring (Results shall be reported on a 100% dry weight basis for comparison with 40CFR 503 limits. Any sample results reported on a wet weight basis must report the % solids of that sample.);

   c. Descriptions of methods used to achieve pathogen reduction and vector attraction reduction, including supporting time and temperature data, and certifications required in 40CFR 503.15, 503.17, and 503.27;

   d. Names and addresses of entities receiving biosolids for further treatment, use or disposal, and volumes of biosolids sent to each;

   e. For all biosolids used or disposed at the permittee's facilities, the site and management practice information and certification required in 40CFR 503.17 and 503.27; and

   f. For all biosolids temporarily stored, the information required in 40CFR 503.20 to demonstrate temporary storage.

   g. Reports shall be submitted to:

      (1) Regional Biosolids Coordinator
      US EPA (WTR-7)
      75 Hawthorne St.
      San Francisco, CA 94105-3901

      (2) Executive Officer
      California Regional Water Quality Control Board
      San Diego Region
      9771 Clairemont Mesa Boulevard, Suite A

San Diego, California 92124-1324
Phone - (858) 467-2952
Fax - (858) 571-6972

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

9. The discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.

10. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.

11. The solids and sludge treatment and storage site shall have facilities adequate 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 from at least a 100-year storm and protection from the highest possible tidal stage that may occur.

12. The discharge of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited in the waters of the state.

13. The discharger shall submit an annual report to the USEPA and this Regional Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40CFR 503. The discharger shall also report the quantity of sludge disposed and the disposal method. This self-monitoring report must be postmarked by February 1 of each year and report for the period covering the previous calendar year.

F. PROVISIONS

1. The discharger must comply with all conditions of this Order. Any permit noncompliance constitutes a violation of the CWA and the California Water Code, and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of an application for permit renewal, modification, or reissuance.

2. The discharger must comply with all standard provisions, where applicable, as stated in 40CFR 122.41 (see Attachment No. 4) and Additional Standard Provisions (Attachment No. 3).

3. Neither the treatment nor the discharge of waste shall create a pollution, contamination, or nuisance as defined by Section 13050 of the California Water Code.

4. The sections of 40CFR (see Attachment No. 4) are incorporated into this permit by reference, and the discharger must comply with these provisions.

5. This Order may be modified, revoked and reissued, or terminated for causes including, but not

limited to, the following:

a. Violation of any terms or conditions of this Order.

b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.

c. 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 modification, 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.

6. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Executive Officer may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.

7. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use and disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish those standards or prohibitions or standards for sewage sludge use or disposal, even if this Order has not yet been modified to incorporate the requirement.

8. The discharger shall comply with all existing federal and state laws and regulations that apply to its sewage sludge use and disposal practice(s), and with the CWA Section 405(d) and 40CFR Part 257.

9. The discharger shall allow the Regional Board, or any Regional Board authorized representative, or any authorized representative of the USEPA (including an authorized contractor acting as a representative of the Regional Board or USEPA), upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, including sludge use and disposal activities, or where records must be kept under the conditions of this Order;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this Order including sludge use and disposal sites; and

d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the CWA or California Water Code, any substances or parameters at any location.

10. This Order does not convey any property rights of any sort or any exclusive privilege. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from its liabilities under federal, state, or local laws, nor create a vested right for the discharger to continue its waste discharge.

11. It shall not be a defense for the 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. Upon reduction, loss, or failure of a treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control all discharges until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of a treatment facility fails, is reduced, or is lost.

12. Supervisors and operators of the discharger's wastewater treatment facilities shall possess a certificate of appropriate grade in accordance with Chapter 14 of Division 4 of Title 23 of the California Code of Regulations.

13. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control including sludge use and disposal facilities (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 back-up or auxiliary facilities or similar systems, which are installed by the discharger only when the operation is necessary to achieve compliance with the conditions of this Order.

14. The discharger's wastewater treatment facilities shall be operated and maintained in accordance with the operation and maintenance manual(s) prepared by the discharger through the Clean Water Grant Program.

15. A copy of this Order shall be posted at a prominent location at or near the treatment and disposal facilities, and shall be available to operating personnel at all times.

16. The discharger shall comply with any interim effluent limitations as established by an addendum, enforcement action or revised waste discharge requirements which have been or may be adopted by this Regional Board.

17. 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.

    a. 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;

(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 how the process and physical design of the facility will ensure compliance with this Order.

b. The signature and engineering license number of the engineer preparing the certification report shall be affixed to the report. The certification report, should, if possible, be submitted prior to beginning construction. The discharger shall not initiate a discharge from a new treatment facility or initiate a discharge from an existing treatment facility at a 30-day average dry weather flowrate 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 the completion of construction (new treatment facilities and expansions only);

(3) An inspection of the plant has been made by the Regional Board staff (new treatment facilities and expansions only); and

(4) The Executive Officer has provided the discharger with written authorization to discharge at a 30-day average dry weather flowrate not to exceed the revised design capacity.

18. The discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order, which has a reasonable likelihood of adversely affecting human health or the environment.

19. If only one sample is collected during the time period associated with the effluent limitations (e.g., 30-day average or 6-month median), the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.

20. All analytical data shall be reported uncensored with detection limits and quantitation limits identified. For any effluent limitation, compliance shall be determined using appropriate statistical methods to evaluate multiple samples. Sufficient sampling and analysis shall be conducted to determine compliance.

21. Compliance based on a single sample analysis shall be determined where appropriate as described below.

a. When a calculated effluent limitation is greater than or equal to the PQL (defined below), compliance shall be determined based on the calculated effluent limitation and either single or multiple sample analyses.

b. When the calculated effluent limitation is below the PQL, compliance determinations based on analysis of a single sample shall only be undertaken if the concentration of the constituent of concern in the sample is greater than or equal to the PQL.

c. When the calculated effluent limitation is below the PQL and recurrent analytical responses between the PQL and the calculated limit occur, compliance shall be determined by statistical analysis of multiple samples.

22. Published values for MDLs (defined below) and PQLs should be used except where revised MDLs and PQLs are available from recent laboratory performance evaluations, in which case the revised MDLs and PQLs should be used. Where published values are not available, the Executive Officer will determine appropriate values based on available information, including information submitted by the discharger upon request of the Executive Officer.

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

    b. The Practical Quantitation Level (PQL) is the lowest concentration of a substance which can be consistently determined within +/-20% of the true concentration by 75% of the labs tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL for carcinogens is the MDL x 5, and for noncarcinogens is the MDL x 10.

23. When determining compliance based on a single sample, with a single effluent limitation which applies to a group of chemicals (e.g., PCBs) concentrations of individual members of the group may be considered to be zero if the analytical response for individual chemicals falls below the MDL for that parameter.

24. The 6-month median effluent concentration limitation shall apply as a moving median of daily values for any 180-day period in which daily values represent flow-weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. The 6-month median receiving water limitation shall apply as a moving median of all values collected for any 180-day period.

25. The 30-day average effluent limitation shall be the moving arithmetic mean of daily concentrations over the specified 30-day period.

26. The 7-day average shall be the moving arithmetic mean of daily concentrations over the specified 7-day period.

27. The daily maximum effluent limitation shall apply to flow-weighted 24-hour composite samples. The daily maximum receiving water limitation shall apply to grab sample determinations.

28. The instantaneous maximum effluent limitation shall apply to grab sample determinations. The instantaneous maximum receiving water limitation shall apply to grab sample determinations.

29. 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 with units of [lb/MGD] / [mg/L]. 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.

30. Compliance with the Acute Toxicity limitation in Discharge Specification B.1.a. of this Order 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 (TUa) shall be expressed in Toxic Units Acute (TUa), where:

$$TUa = \frac{100}{\text{96-hour } LC_{50}}$$

Where LC_{50} (Lethal Concentration 50%) is the percent waste giving 50% survival of test organisms. LC_{50} 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 LC_{50} may be determined after the test samples are adjusted to remove the influence of those substances.

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

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

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

31. Compliance with the Chronic Toxicity effluent limitation established in Discharge Specification No. B.1.b of this Order shall be determined using critical life stage toxicity tests. Chronic Toxicity (TUc) shall be expressed as Toxic Units Chronic (TUc), where:

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

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

A minimum of three test species with approved test protocols shall be used to measure compliance with the chronic toxicity objective. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, monitoring may be reduced to the most sensitive

species. Dilution and control water should be obtained from an unaffected area of the receiving waters. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

The tests specified in the July 1997 Ocean Plan shall be used to measure TUc. Other tests may be added to the list when approved by the SWRCB.

32. If toxicity test results show a violation of any acute or chronic toxicity limitation identified in Discharge Specification B.1 of this Order, the discharger shall:

    a. Take all reasonable measures necessary to immediately minimize toxicity; and

    b. Increase the frequency of the toxicity test(s) that showed a violation to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.

    If the Executive Officer determines that toxicity testing shows consistent violation of any acute or chronic toxicity limitation identified in Discharge Specification B.1. of this Order, the discharger shall conduct a Toxicity Reduction Evaluation (TRE) which includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the discharger shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations identified in Discharge Specification B.1 of this Order.

    Within fourteen days of completion of the TRE, the discharger shall submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with all the toxicity limitations of this Order and prevent recurrence of violations of those limitations, 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.

33. 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 Board (and approved by USEPA) to be appropriate. Detection methods used for enterococcus shall be those presented in USEPA publication USEPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure* or any improved method determined by the Regional Board to be appropriate.

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

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

    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.

35. As used in this Order, waste includes a discharger's total discharge, of whatever origin (i.e. gross,

not net, discharge).

36. Bypass of Treatment Facilities

a. Definitions

(1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(2) "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 which 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.

b. Bypass not Exceeding Limitations

The discharger may allow any bypass to occur which does not cause effluent limitations of this Order or the concentrations of pollutants set forth in Ocean Plan Table A or Table B to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this provision.

c. Notice

(1) Anticipated bypass. If the discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.

(2) Unanticipated bypass. The discharger shall submit notice of an unanticipated bypass as required in Reporting Requirement G.11 of this Order.

d. Prohibition of Bypass

(1) Bypass is prohibited and the Regional Board may take enforcement action against the discharger for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(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 which occurred during normal periods of equipment downtime or preventive maintenance; and

(c) The discharger submitted notices as required under paragraph c. of this provision.

(2) The Executive Officer may approve an anticipated bypass, after considering its adverse

effect, if the Executive Officer determines that it will meet the three conditions listed in paragraph d.(1) of this provision.

37. Upset

a. Definition

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. 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 c. of this provision 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.

c. 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:

(1) An upset occurred and that the discharger can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The discharger submitted notice of the upset as required in Reporting Requirement G.11 of this Order; and

(4) The discharger complied with any remedial measures required under Provision F.18 of this Order.

d. Burden of Proof

In any enforcement proceeding the discharger seeking to establish the occurrence of an upset has the burden of proof.

38. The discharger shall maintain a Sewer Overflow Prevention Plan (SOPP) in an up-to-date condition and shall amend the SOPP whenever there is a change (e.g. in the design, construction, operation, or maintenance of the sewerage system or sewerage facilities) which materially affects the potential for sewer overflows. The discharger shall review and amend the SOPP as appropriate after each sewer overflow from the AWMA Ocean Outfall and the area tributary to the AWMA Ocean Outfall. The SOPP and any amendments thereto, shall be subject to the approval of the Executive Officer and shall be modified as directed by the Executive Officer. The discharger shall

submit the SOPP and any amendments thereto to the Executive Officer upon request of the Executive Officer. The discharger shall ensure that the up-to-date SOPP is readily available to sewerage system personnel at all times and that sewerage system personnel are familiar with it.

39. The discharger shall maintain a Sewer Overflow Response Plan (SORP) for the AWMA Ocean Outfall and the area tributary to the AWMA Ocean Outfall. The SORP shall establish procedures for responding to sewer overflows from the AWMA Ocean Outfall and the area tributary to the AWMA Ocean Outfall so as to (a) minimize the sewer overflow volume which enters surface waters, and (b) minimize the adverse effects of sewer overflows on water quality and beneficial uses. The discharger shall maintain the SORP in an up-to-date condition and shall amend the SORP as necessary to accomplish these objectives. The discharger shall review and amend the SORP as appropriate after each sewer overflow from the AWMA Ocean Outfall and the area tributary to the AWMA Ocean Outfall. The SORP, and any amendments thereto, shall be subject to the approval of the Executive Officer and shall be modified as directed by the Executive Officer. The discharger shall submit the SORP and any amendments thereto to the Executive Officer upon request of the Executive Officer. The discharger shall ensure that the up-to-date SORP is readily available to sewerage system personnel at all times and that sewerage system personnel are familiar with it.

40. No later than 6 months after the adoption of this Order, the discharger shall submit a written report to the Executive Officer, addressing the following:

    a. Most current information on the capacity of the AWMA Ocean Outfall.

    b. The dischargers' best estimate of when the average daily dry-weather flow will equal or exceed the AWMA Ocean Outfall capacity.

    c. The dischargers' intended schedule for studies, design, and other steps needed to provide additional capacity for the AWMA Ocean Outfall and/or to control the flowrate before the flowrate is equal to the current outfall capacity.

    d. The report must be signed and agreed upon by each of the parties discharging to the AWMA Ocean Outfall.

G. REPORTING REQUIREMENTS

1. The discharger must comply with standard monitoring and reporting requirements, where applicable, as stated in 40CFR 122.41 (see Attachment No. 4) and Additional Standard Provisions (Attachment No. 3).

2. This Order expires February 21, 2006. 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 new waste discharge requirements. The discharger must submit a full and complete Report of Waste Discharge in accordance with Title 23 of the California Code of Regulations, to the Executive Officer, not later than 180 days in advance of the expiration date of this Order, as application for issuance of new waste discharge requirements. Not less than 180 days prior to any material change in the character, location, volume, or amount of waste discharge, the Discharger shall submit a

technical report describing such changes. Such changes include but are not limited to the following:

a. Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste;

b. Significant change in disposal method (e.g., change from land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste);

c. Significant change in the disposal area (e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems);

d. Increase in flow beyond that specified in the waste discharge requirements;

e. Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements [CWC 13372, 13376, 13264, 23 CCR 2210];

f. Any substantial change in the amount or characteristics of pollutants used, handled, stored, or generated;

g. Any new discharge of pollutants or new potential pollutant source; and/or

h. Other circumstances that could result in a material change in the character, amount, or location of discharges. [CWC 13372, 13264,23 CCR 2210]

3. All applications, reports, or information submitted to the Executive Officer of this Regional Board shall be signed and certified.

a. All Reports of Waste Discharge shall be signed by either a principal executive officer or ranking elected official.

b. All reports required by this Order and other information requested by the Executive Officer shall be signed by a person described in paragraph a. of this reporting requirement, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph a. of this reporting requirement;

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

(3) The written authorization is submitted to the Executive Officer.

c. If an authorization under paragraph b. of this reporting requirement 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 b. of this reporting requirement must be submitted to the Executive Officer prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Any person signing a document under paragraph a. or b. of this reporting requirement 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."

4. Pursuant to State Board Order No. WQ 84-7, the discharger shall submit with its Report of Waste Discharge for reissuance of its NPDES permit, sufficient information to justify why any effluent proposed to be discharged to the ocean is not being reclaimed for beneficial use.

5. The discharger shall report sewer overflow events in accordance with the following procedures:

a. Definition

For purposes of this Reporting Requirement, a sewer overflow event is a discharge of treated or untreated wastewater at a location not authorized by waste discharge requirements and/or NPDES permit which results from a pump station failure, sewer line break, obstruction, surcharge, or any other operational dysfunction. This Reporting Requirement applies to all sewer overflow events other than those events subject to regulation under this Regional Board's Order No. 96-04, *General Waste Discharge Requirements Prohibiting Sanitary Sewer Overflows by Sewage Collection Agencies*.

b. 24-Hour Reporting to the Regional Board

If a sewer overflow event results in a discharge of 1,000 gallons or more, or results in a discharge to surface waters (any volume), the discharger shall:

Report the sewer overflow event to the Regional Board by any available means, including telephone, voice mail, or FAX, within 24 hours from the time that 1) discharger has knowledge of the sewer overflow, 2) notification is possible, and 3) notification can be provided without substantially impeding cleanup or other emergency measures. Notification may be made after normal business hours by leaving a message for the

Regional Board on voice mail or FAX.

(1) For the purpose of this Reporting Requirement, 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. The term includes waters of the United States as used in the federal Clean Water Act (see 40 CFR 122.2)

(2) The information reported to the Regional Board in the initial report shall include the name and phone number of the person reporting the sanitary sewer overflow, the responsible sanitary sewer system agency, the estimated total sewer overflow volume, the location, the receiving waters, whether or not the sewer overflow is still occurring at the time of the report, and confirmation that the local health services agency was or will be notified as required under the reporting requirements of the local health services agency.

c. Five-Day Reporting to the Regional Board

If the sewer overflow event results in a discharge of 1,000 gallons or more, or results in a discharge to surface waters (any volume), the discharger shall:

Complete a copy of the Sanitary Sewer Overflow Form attached to Monitoring and Reporting Program No. 96-04, and submit the completed Sanitary Sewer Overflow Report form, along with any additional correspondence, to the Regional Board no later than 5 days following the starting date of the sanitary sewer overflow. Additional correspondence and follow-up reports should be submitted to the Regional Board, as necessary, to supplement the Sanitary Sewer Overflow Report Form to provide detailed information on cause, response, adverse effects, corrective actions, preventative measures, or other information.

d. Quarterly Reporting to the Regional Board

The discharger shall report all sewer overflows, regardless of volume or final destination, in the next quarterly self-monitoring report, in accordance with the format described in Order No. 96-04.

6. The discharger shall provide adequate notice to the Executive Officer of the following:

a. Any new introduction of pollutants into the discharger's treatment works from an indirect discharger which would be subject to Section 301 or 306 of the CWA if it were directly discharging those pollutants;

b. Any substantial change in the volume or character of pollutants being introduced into the discharger's treatment works by a source introducing pollutants into the treatment works at the time of issuance of this Order; and

c. For purposes of this paragraph, adequate notice shall include information on:

(1) The quality and quantity of effluent introduced into the POTW, and

(2) Any anticipated impact of the change on the quantity or quality of effluent and/or sludge to be discharged from the POTW.

7. The discharger shall give notice to the Executive Officer as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40CFR Part 122.29(b);

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this Order; or

   c. The alteration or addition results in a significant change in the discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of conditions in this Order that are different from or absent in the existing Order, 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.

8. The discharger shall give advance notice to the Executive Officer of any planned changes in the permitted facility or activity, which may result in noncompliance with the requirements of this Order.

9. This Order is not transferable to any person except after notice to the Executive Officer. The Executive Officer may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the CWA or the California Water Code in accordance with the following:

   a. Transfers by Modification

      Except as provided in paragraph b. of this reporting requirement, this Order may be transferred by the discharger to a new owner or operator only if this Order has been modified or revoked and reissued, or a minor modification made to identify the new discharger and incorporate such other requirements as may be necessary under the CWA or California Water Code.

   b. Automatic Transfers

      As an alternative to transfers under paragraph a. of this reporting requirement, any NPDES permit may be automatically transferred to a new discharger if:

      (1) The current discharger notifies the Executive Officer at least 30 days in advance of the proposed transfer date in paragraph b.(2) of this reporting requirement;

      (2) The notice includes a written agreement between the existing and new dischargers containing a specific date for transfer of permit responsibility, coverage, and liability

between them; and

(3) The Executive Officer does not notify the existing discharger and the proposed new discharger of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40CFR Part 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph b.(2) of this reporting requirement.

10. The discharger shall conduct monitoring and submit reports in accordance with Monitoring and Reporting Program (MRP) No. 2001-08. Monitoring results shall be reported at the intervals specified in MRP No. 2001-08.

11. The discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the discharger becomes aware of the circumstances. A 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 recurrence of the noncompliance. The Executive Officer, or an authorized representative may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following shall be included as information which must be reported within 24 hours under this reporting requirement:

a. Any unanticipated bypass which exceeds any effluent limitation in this Order;

b. Any upset which exceeds any effluent limitation in this Order;

c. Violation of a daily maximum effluent limitation as specified in this Order for the following pollutants:

(1) Chronic Toxicity

(2) Arsenic

(3) Cadmium

(4) Chromium (Hexavalent)

(5) Copper

(6) Lead

(7) Mercury

(8) Nickel

(9) Selenium

(10) Silver

(11) Zinc

(12) Cyanide

(13) Total Chlorine Residual

(14) Ammonia

(15) Phenolic Compounds (non-chlorinated)

(16) Chlorinated Phenolics

(17) Endosulfan

(18) Endrin

(19) HCH

d. Any violation of effluent limitations for acute toxicity as specified in this Order;

e. Any violation of the prohibitions of this Order; and

f. Any finding of levels of bacteria in a receiving water sample which exceeds bacterial water quality objectives specified in Receiving Water Limitation C.1.a.(1) of this Order.

12. The discharger shall furnish to the Executive Officer, SWRCB Executive Director, or USEPA, within a reasonable time, any information which the Executive Officer, SWRCB Executive Director, 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. The discharger shall also furnish to the Executive Officer, SWRCB Executive Director, or USEPA, upon request, copies of records required to be kept by this Order.

13. The discharger shall report all instances of noncompliance not reported under Reporting Requirements G.10, G.11, and G.16 of this Order, at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement G.11 of this Order.

14. Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge, or submitted incorrect information in a Report of Waste Discharge, or in any report to the Regional Board, it shall promptly submit such facts or information.

15. Whenever a receiving water sample is found to contain levels of bacteria which exceed bacterial water quality objectives specified in Receiving Water Limitation C.1.a.(1) of this Order, the discharger shall immediately notify the County of Orange Health Care Agency, Environmental Health Division and post signs prohibiting body contact with the water in all areas affected by the contamination.

16. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

17. The discharger shall submit a written report to the Executive Officer within 90 days after the average dry weather influent flowrate for any 30-day period equals or exceeds 75 percent of the design capacity of the waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter, which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

    a. Average daily flow for the 30-day period, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day;

    b. The discharger's best estimate of when the average daily dry-weather flowrate will equal or exceed the design capacity of the facilities; and

    c. The discharger'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 flowrate before the waste flowrate equals the capacity of present units.

18. Except for data determined to be confidential under 40CFR Part 2, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the California Regional Water Quality Control Board, San Diego Region. As required by the CWA, Reports of Waste Discharge, this Order, and effluent data shall not be considered confidential.

19. The discharger shall submit reports and provide notifications to the Regional Board and other agencies as specified in this Order. These other agencies include USEPA and the County of Orange Health Care Agency, Environmental Health Division. Reports shall be submitted and notifications shall be made to:

    a. Executive Officer
    California Regional Water Quality Control Board
    San Diego Region
    9771 Clairemont Mesa Boulevard, Suite A
    San Diego, California 92124-1324
    Phone - (858) 467-2952
    Fax - (858) 571-6972

    b. Regional Administrator
    U.S. Environmental Protection Agency
    Region 9
    75 Hawthorne Street
    San Francisco, California 94105

    c. County of Orange Health Care Agency
    Environmental Health Division
    County of Orange

2009 East Edinger Avenue
Santa Ana, CA 92705
Phone (714) 667-3600
Fax (714) 972-0749

d. Regulatory Unit
Division of Water Quality
State Water Resources Control Board
P.O. Box 944213
Sacramento, CA 94244-2130

e. Office of Emergency Services (OES)
Phone - (916) 262-1621 or 1- (800) 852-7550
Fax - (916) 262-1677

H. NOTIFICATIONS

1. California Water Code Section 13263(g) states:

   No discharge of waste into the waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. *All discharges of waste into waters of the state are privileges, not rights.*

2. The discharger is held accountable for responsibilities, liabilities, legal actions, and penalties as stated in Attachment No. 3 and Attachment No. 4 of this Order.

3. This Order shall become effective 10 days after the date of its adoption provided the Regional Administrator, USEPA, has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.

4. This Order supersedes Order No. 95-107 when this Order becomes effective.

I, John H. Robertus, Executive Officer of the San Diego Regional Water Quality Control Board, do hereby certify the foregoing is a full, true, and correct copy of Order No. 2001-08 adopted by the California Regional Water Quality Control Board, San Diego Region, on February 21, 2001.

JOHN H. ROBERTUS
Executive Officer

ORDER NO. 2001-08 ENDNOTES[1]

1. Secondary treatment is defined by the USEPA Administrator in the Federal Regulations (40CFR Part 133.100 to 40CFR Part 133.105) in terms of three parameters: 5-day biochemical oxygen demand (BOD), total suspended solids (TSS), and pH. Federal regulations allow substitution of 5-day carbonaceous biological demand (CBOD) limitations for BOD limitations.

2. Effluent concentration limitations are specified in the 1997 Ocean Plan, Table A. Mass emission rate (MER) limitations, where applicable, were determined using procedures outlined in the Ocean Plan, equation 2, and a flowrate of 27.0 MGD.

3. Effluent limitations were determined using the procedures outlined in the 1997 Ocean Plan, and an initial dilution of 260 in the case of no brine discharge. Mass emission rate (MER) limitations were determined using procedures outlined in the Ocean Plan, Equation 2, and a flowrate of 27.0 MGD.

4. The discharger may, at its option, meet this limitation as a total chromium limitation.

5. If the discharger can demonstrate to the satisfaction of the Regional Board (subject to EPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by 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 Standard Methods 412 F, G, and H (*Standard Methods for the Examination of Water and Wastewater*, Joint Editorial Board, American Public Health Association, American Water Works Association, and Water Pollution control Federation, most recent edition.)

6. The effluent concentration and mass emission rate limitations for total chlorine residual are based on a continuous discharge of chlorine. Effluent concentration limitations for total chlorine residual, which are applicable to intermittent discharges not exceeding 2 hours, shall be determined through the use of the following equations:

$$\log Co = -0.43 (\log x) + 1.8$$
$$Ce = Co + Dm(Co - Cs)$$

where:

Co	=	the concentration (in ug/L) to be met at the completion of initial dilution
x	=	the duration of uninterrupted chlorine discharge in minutes
Ce	=	the effluent concentration limitation ug/L to apply when chlorine is being intermittently discharged
Dm	=	the minimum probable initial dilution
Cs	=	the background seawater concentration = 0

7. Endosulfan shall mean the sum of Endosulfan-alpha and –beta and Endosulfan sulfate.

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

9. The 1997 Ocean Plan refers to limits specified in Title 17, Division 5, Chapter 4, Group 3, Article 3, Section 32069 of the California code of Regulations. This section has been repealed, and substituted with limitations set forth in this Order.

10. Dichlorobenxenes shall mean the sum of 1,2- and 1,3-dichlorobenzene.

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

12. 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.

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

14. Heptachlor shall mean the sum of heptachlor and heptachlor epoxide.

15. PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, 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.

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

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa 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

ATTACHMENT NO. 1

1997 CALIFORNIA OCEAN PLAN
CHAPTER V
DISCHARGE PROHIBITIONS

A. Hazardous Substances

The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste* into the ocean* is prohibited.

B. Areas of Special Biological Significance

Waste* shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.

C. Sludge

Pipeline discharge of sludge to the ocean* is prohibited by federal law; the discharge of municipal and industrial waste* sludge directly to the ocean*, or into a waste* stream that discharges to the ocean*, is prohibited by this Plan. 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.

It is the policy of the SWRCB that the treatment, use and disposal of sewage sludge shall be carried out in the manner found to have the least adverse impact on the total natural and human environment. Therefore, if federal law is amended to permit such discharge, which could affect California waters, the SWRCB may consider requests for exceptions to this section under Chapter VI, F. of this Plan, provided further that an Environmental Impact Report on the proposed project shows clearly that any available alternative disposal method will have a greater adverse environmental impact than the proposed project.

D. By-Passing

The by-passing of untreated wastes* containing concentrations of pollutants in excess of those of Table A or Table B to the ocean* is prohibited.

Please refer to the 1997 California Ocean Plan, as revised, for further information.

ATTACHMENT NO. 2

1994 WATER QUALITY CONTROL PLAN FOR THE SAN DIEGO BASIN (BASIN PLAN) WASTE DISCHARGE PROHIBITIONS

California Water Code Section 13243 provides that a Regional Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste, or certain types of waste is not permitted. The following discharge prohibitions are applicable to any person as defined by Section 13050(c) of the California Water Code and to any person who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

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 California Water Code Section 13050, is prohibited.

2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code 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 dredged or fill material permit (subject to the exemption described in California Water Code §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 to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the Regional Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.

6. 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 the Regional Board.

7. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board.

8. Any discharge to a storm water conveyance system that is not composed entirely of storm water is prohibited unless authorized by the Regional Board. (The federal regulations,

40CFR 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40CFR 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharge resulting from fire fighting activities.) (§122.26 amended at 56 FR 56553, November 5, 1991 57 FR 11412, April 2, 1992).

9. The authorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.

10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in California Water Code Section 13264, is prohibited.

11. The discharge of radioactive waste amenable to alternative methods of disposal into the waters of the state is prohibited.

12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.

13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the Regional Board.

14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.

16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.

17. The discharge of treated sewage from vessels to portion of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.

18. The discharge of treated sewage from vessels, which do not have a properly functioning US Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep a mean lower low water (MLLW) is prohibited.

ATTACHMENT NO. 3

ADDITIONAL STANDARD PROVISIONS

1. *Review and revision of permit*: Upon application by any affected person, or on its own motion, the SDRWQCB may review and revise this permit. All requirements shall be reviewed periodically. [CWC 13263(e)]

2. *Termination or modification of permit*: This permit may be terminated or modified for causes, including, but not limited to, all of the following:

   (a) Violation of any condition contained in this permit.

   (b) Obtaining this permit by misrepresentation, or failure to disclose fully all relevant facts.

   (c) A change in any condition that requires either a temporary of permanent reduction or elimination of the permitted discharge. [CWC 13381]

3. *Material change*: Not less than 180 days prior to any material change in the character, location, volume, or amount of waste discharge, the Discharger shall submit a technical report describing such changes. Such changes include but are not limited to the following:

   (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.

   (b) Significant change in disposal method, e.g., change from land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.

   (c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.

   (d) Increase in flow beyond that specified in the waste discharge requirements.

   (e) Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CWC 13376, 13264, 23 CCR 2210]

   (f) Any substantial change in the amount or characteristics of pollutants used, handled, stored, or generated.

   (g) Any new discharge of pollutants or new potential pollutant source.

(h) Other circumstances which could result in a material change in the character, amount, or location of discharges. [CWC 13264, 23 CCR 2210]

4. *Transfers*: When this permit is transferred to a new owner or operator, such requirements as may be necessary under the California Water Code may be incorporated into this permit.

5. *Conditions not stayed*: The filing of a request by the Discharger for modification, 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.

6. *Monitoring and Reporting Program*: The Discharger shall conduct monitoring and submit reports at the intervals specified in accordance with the Monitoring and Reporting Program (MRP) attached to the Order. [CWC 13267 & 13383, 23 CCR 2230, 40CFR 122.43(a), 122.44(i), 122.48]

7. *Availability*: A copy of this Order shall be kept at a readily accessible location and shall be available to on-site personnel at all times.

8. *Duty to minimize or correct adverse impacts*: The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

9. *Responsibilities, liabilities, legal action, penalties*: The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the Clean Water Act. [CWC 13385, 13387]

   Nothing in this Order shall be construed to protect the Discharger from its liabilities under federal, state, or local laws.

   Except as provided for in 40CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the Discharger from civil or criminal penalties for noncompliance.

   Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities, or penalties to which the Discharger is or may be subject to under Section 311 of the CWA.

   Nothing in this Order shall be construed to preclude institution of any legal action or relieve the Discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.

10. *Noncompliance*: Any noncompliance with this permit constitutes violation of the California Water Code and is grounds for denial of an application for permit modification. (Also, see 40CFR 122.41 (a))

11. *Discharge is a privilege*: No discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to

continue the discharge. All discharges of waste into waters of the state are privileges, not rights. {CWC 13263(g))

12. *Permittee*: For the purposes of this permit, the term "permittee" used in parts of 40CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "Discharger" used elsewhere in this permit.

13. *Director*: For the purposes of this permit, the term "Director" used in parts of 40CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "SDRWQCB" used elsewhere in this permit, except that in 40CFR 122.41(h) & (I), "Director" shall mean "SDRWQCB, SWRCB, and USEPA."

14. *Effective date*: This Order shall become effective ten days after the date of its adoption provided the USEPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.

15. *Continuation of expired permit*: After this permit expires, the terms and conditions of this permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits are complied with. [40CFR 122.6, 23 CCR 2235.4]

16. *Applications*: Any application submitted by the Discharger for reissuance or modification of this permit shall satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the California Water Code and the California Code of Regulations.

17. *Confidentiality*: Except as provided for in 40CFR 122.7, no information or documents submitter in accordance with or in application for this permit will be considered confidential, and all such information and documents shall be available for review by the public at the offices of the SDRWQCB.

18. *Severability*: The provisions of this order are severable, and if any provision of this order, or the application of any provisions of this order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this order shall not be affected thereby.

19. *Discharge Monitoring Quality Assurance (DMQA) Program*: The Discharger shall conduct appropriate analyses on any sample provided by EPA as part of the DMQA program. The results of such analyses shall be submitted to EPA's DMQA manager. [SWRCB/USEPA 106 MOA]

20. *Pollution, Contamination, Nuisance*: The handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner which causes or threatens to cause a condition of pollution, contamination, or nuisance, as those terms are defined in CWC 13050, is prohibited.

21. *Report Submittal*: Reports and other documents required under this Order shall be submitted to:

California Regional Water Quality Control Board
San Diego Region
Watershed Branch
9771 Clairemont Mesa Boulevard, Suite A
San Diego, California 92124-1324
Telephone: (858)467-2969
Fax: (858)571-6972

ATTACHMENT NO. 4

40CFR STANDARD PROVISION REFERENCES

40CFR 122.1 Purpose and scope

40CFR 122.1(a) and (b).

40CFR 122.2 Definitions

40CFR 122.2(all).

40CFR 122.3 Exclusions

40CFR 122.3(a) through (g).

40CFR 122.4 Prohibitions (applicable to State programs, see Section 123.25).

40CFR 122.4(a) through (i).

40CFR 122.5 Effect of a permit (applicable to State programs, see Section 123.25).

40CFR 122.5(a) through (c).

40CFR 122.6 Continuation of expiring permits

40CFR 122.6(b) through (d).

40CFR 122.7 Confidentiality of information (applicable to State programs, see Section 123.25).

40CFR 122.7 (a) through (c).

40CFR 122.21 Application for a Permit (applicable to State programs, see Section 123.25).

40CFR 122.21(a) through (p).

40CFR 122.22 Signatories to permit applications and reports (applicable to State programs, see Section 123.25).

(a) Applications. All applications shall be signed as follows:

(1) 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, 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.

NOTE: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in Section 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under §122.22(a)(1)(ii) rather than to specific individuals.

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, 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 EPA).

(b) All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this section;

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

(3) The written authorization is submitted to the Director.

(c) Changes to authorization. If an authorization under paragraph (b) of this section 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 (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) Certification. Any person signing a document under paragraph (a) or (b) of this section 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."

40CFR 122.23 Concentrated animal feeding operations (applicable to State programs, see Section 123.25).

40CFR 122.23(a) through (c).

40CFR 122.24 Concentrated aquatic animal production facilities (applicable to State programs, see Section 123.25).

40CFR 122.24(a) through (c).

40CFR 122.25 Aquaculture projects (applicable to State programs, see Section 123.25).

40CFR 122.25(a) and (b).

40CFR 122.26 Storm water discharges (applicable to State programs, see Section 123.25).

40CFR 122.26(a) through (g).

40CFR 122.27 Silvicultural activities (applicable to State programs, see Section 123.25).

40CFR 122.27(a) and (b).

40CFR 122.28 General permits (applicable to State programs, see Section 123.25).

40CFR 122.28(a) and (b).

40CFR 122.29 New sources and new dischargers.

40CFR 122.29(a) through (d).

40CFR 122.30 through 122.37 (Various sections on regulation of small MS4's).

40CFR 122.41 Conditions applicable to all permits (applicable to State programs, see Section 123.25).

The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in Section 122.42. All conditions applicable to NPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit.

(a) Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

(1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act 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 or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

(2) The Clean Water Act 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 Clean Water Act provides that any person who negligently violates section 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 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 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 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 6 years, or both. Any person who knowingly violates section 301, 302, 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 CWA, 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.

(3) Any person may be assessed an administrative penalty by the Administrator 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.

(b) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

(c) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee 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 permit.

(d) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(e) Proper operation and maintenance. The permittee 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 permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

(f) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(g) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

(h) Duty to provide information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

(i) Inspection and entry. The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

(j) Monitoring and records.

(1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40CFR part 503), the permittee 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 permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

(3) Records of monitoring information shall include:

i) The date, exact place, and time of sampling or measurements;

ii) The individual(s) who performed the sampling or measurements;

iii) The date(s) analyses were performed;

iv) The individual(s) who performed the analyses;

v) The analytical techniques or methods used; and

vi) The results of such analyses.

(4) Monitoring results must be conducted according to test procedures approved under 40CFR part 136 or, in the case of sludge use or disposal, approved under 40CFR part 136 unless otherwise specified in 40CFR part 503, unless other test procedures have been specified in the permit.

(5) The Clean Water Act 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.

(k) Signatory requirement.

(1) All applications, reports, or information submitted to the Director shall be signed and certified. (See 40CFR 122.22)

(2) 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 permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(l) Reporting requirements.

(1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in §122.29(b); or

ii) 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 the permit, nor to notification requirements under §122.42(a)(1).

iii) The alteration or addition results in a significant change in the permittee'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;

(2) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

(3) Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See §122.61; in some cases, modification or revocation and reissuance is mandatory.)

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40CFR part 136 or, in the case of sludge use or disposal, approved under 40CFR part 136 unless otherwise specified in 40CFR part 503, or as specified in the permit, 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 Director.

iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

(5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(6) Twenty-four hour reporting.

i) The permittee shall report any noncompliance, which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee 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.

ii) The following shall be included as information, which must be reported within 24 hours under this paragraph.

A. Any unanticipated bypass which exceeds any effluent limitation in the Permit (See 40CFR 122.41(g)).

B. Any upset which exceeds any effluent limitation in the permit.

C. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40CFR 122.44(g)).

iii) The Director may waive the written report on a case-by-case basis for reports under paragraph (l)(6)(ii) of this section if the oral report has been received within 24 hours.

(7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.

(8) Other information. Where the permittee 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 Director, it shall promptly submit such facts or information.

(m) <u>Bypass</u>.

(1) Definitions.

i) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or

substantial and permanent loss of natural resources which 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.

(2) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (m)(3) and (m)(4) of this section.

(3) Notice

i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).

(4) Prohibition of bypass.

i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

A. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

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 which occurred during normal periods of equipment downtime or preventive maintenance; and

C. The permittee submitted notices as required under paragraph (m)(3) of this section.

ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

(n) <u>Upset</u>

(1) Definition. "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.

(2) 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 (n)(3) 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.

(3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

i) An upset occurred and that the permittee can identify the cause(s) of the upset;

ii) The permitted facility was at the time being properly operated; and

iii) The permittee submitted notice of the upset as required in paragraph (1)(6)(ii)(B) of this section (24-hour notice).

iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

(4) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

40CFR 122.42 Additional conditions applicable to specified categories of NPDES permits (applicable to State NPDES programs, see Section 123.25).

The following conditions, in addition to those set forth in Section 122.41, apply to all NPDES permits within the categories specified below:

(a) Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under Section 122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i) One hundred micrograms per liter (100 ug/l);

ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Sec. 122.21(g)(7); or

iv) The level established by the Director in accordance with Section 122.44(f).

(2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i) Five hundred micrograms per liter (500 ug/l);

ii) One milligram per liter (1 mg/l) for antimony;

iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Section 122.21(g)(7).

iv) The level established by the Director in accordance with Sec. 122.44(f).

(b) Publicly owned treatment works. All POTWs must provide adequate notice to the Director of the following:

(1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; 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 issuance of the permit.

(3) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under Sections 122.26(d)(2)(iv) and (d)(2)(v) of this part;

(4) A summary of data, including monitoring data, that is accumulated throughout the reporting year;

i) effluent introduced into the POTW, and

ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(c) Municipal separate storm sewer systems. The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the Director under Sec. 122.26(a)(1)(v) of this part must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report shall include:

(1) The status of implementing the components of the storm water management program that are established as permit conditions;

(2) Proposed changes to the storm water management programs that are established as permit condition. Such proposed changes shall be consistent with Section 122.26(d)(2)(iii) of this part; and

(3) Annual expenditures and budget for year following each annual report;

(4) A summary describing the number and nature of enforcement actions, inspections, and public education programs;

(5) Identification of water quality improvements or degradation;

(d) Storm water discharges. The initial permits for discharges composed entirely of storm water issued pursuant to Section 122.26(e)(7) of this part shall require compliance with the conditions of the permit as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit.

40CFR 122.43 Establishing permit conditions (applicable to State programs, see Section 123.25).

40CFR 122.43(a) through (c).

40CFR 122.44 Establishing limitations, standards, and other permit conditions (applicable to State programs, see Section 123.25).

40CFR 122.44(a) through (s).

40CFR 122.45 Calculating NPDES permit conditions (applicable to State programs, see Section 123.25).

40CFR 122.45(a) through (h).

40CFR 122.46 Duration of permits (applicable to State programs, see Section 123.25).

40CFR 122.46(a) through (e).

40CFR 122.47 Schedules of compliance (applicable to State programs, see Section 123.25).

40CFR 122.47(a) and (b).

40CFR 122.48 Requirements for recording and reporting of monitoring results. (applicable to State programs, see Section 123.25).

40CFR 122.48(a) through (c).

40CFR 122.49 Considerations under Federal law.

40CFR 122.49(a) through (g).

40CFR 122.50 Disposal into wells, into publicly owned treatment works (applicable to State programs, see Section 123.25).

40CFR 122.50(a) through (c).

40CFR 122.61 Transfer of permits (applicable to State programs, see Section 123.25).

40CFR 122.61(a) through (b).

40CFR 122.62 Modification or revocation and reissuance of permits (applicable to State programs, see Section 123.25).

40CFR 122.62(a) through (b).

40CFR 122.63 Minor modifications of permits.

40CFR 122.63(a) through (g).

40CFR 122.64 Termination of permits (applicable to State programs, see Section 123.25).

40CFR 122.64(a) through (b)

Note: The sections of 40CFR Standard Provisions listed above that are not quoted verbatim can be obtained through the following website: www.access.gpo.gov.

ATTACHMENT NO. 5

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CONTACT INFORMATION

Executive Officer
North Coast Regional Water
Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

Executive Officer
Central Coast Regional Water
Quality Control Board
81 Higuera Street, Suite 200
San Luis Obispo, CA 93401

Executive Officer
Central Valley Regional Water Quality
Control Board
3443 Routier Road
Sacramento, CA 95827-3098

Assistant Executive Officer
Central Valley Regional Water Quality
Control Board, Redding Branch Office
415 Knollcrest Street
Redding, CA 96002

Executive Officer
Santa Ana Regional Water Quality
Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Executive Officer
San Diego Regional Water Quality
Control Board
9771 Clairemont Mesa Boulevard., Suite A
San Diego, CA 92124-1331

Executive Officer
San Francisco Bay Regional Water
Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Executive Officer
Los Angeles Regional Water
Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Assistant Executive Officer
Central Valley Regional Water Quality
Control Board, Fresno Branch Office
3614 East Ashlan Avenue
Fresno, CA 93726

Executive Officer
Lahontan Regional Water Quality
Control Board, Victorville Office
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Executive Officer
Colorado River Basin Regional Water
Quality Control Board
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 2001-08
NPDES NO. CA0107611

MONITORING AND REPORTING PROGRAM
FOR THE
ALISO WATER MANAGEMENT AGENCY
ORANGE COUNTY

DISCHARGE TO THE PACIFIC OCEAN
THROUGH THE ALISO WATER MANAGEMENT AGENCY
OCEAN OUTFALL

This Monitoring and Reporting Program supersedes Monitoring and Reporting Program 95-107 in its entirety. This Monitoring and Reporting program shall become effective with the adoption of Order No. 2001-08.

A. PURPOSE

This monitoring program is intended to:

1. Document short-term and long-term effects of the discharge on receiving waters, sediments, biota, and beneficial uses of the receiving water.

2. Determine compliance with NPDES permit terms and conditions.

3. Assess the need for industrial pretreatment and toxic control programs.

The monitoring data will be used to determine compliance with water quality standards.

B. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature[1] of the monitored discharge. All samples shall be taken at the monitoring points specified in this monitoring program and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer. Samples shall be collected at times representative of "worse case" conditions with respect to compliance with the requirements of Order No. 2001-08.

2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the

accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 10% from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved under Title 40 of the Code of Federal Regulations Part 136 (40CFR 136), Guidelines Establishing Test Procedures for the Analysis of Pollutants, as amended, unless otherwise specified for sludge in 40CFR 503, or unless other test procedures have been specified in Order No. 2001-08 and/or in this monitoring and reporting program.

4. If the discharger monitors any pollutants more frequently than required by Order No. 2001-08 or by this monitoring and reporting program, using test procedures approved under 40CFR Part 136, or as specified in Order No. 2001-08 and this monitoring and reporting program, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.

5. 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 Order No. 2001-08 and this monitoring and reporting program, and records of all data used to complete the application for Order No. 2001-08. Records shall be maintained for a minimum of 5 years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer or the USEPA.

    a. Records of monitoring information shall include:

        (1) The date, exact location, and time of sampling or measurements;

        (2) The name(s) of individual(s) who performed the sampling or measurements;

        (3) The date(s) analyses were performed;

        (4) The name(s) of the laboratory and individual(s) who performed the analyses;

        (5) The analytical techniques or methods used; and

        (6) The results of such analyses.

6. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in Order 2001-08 or this monitoring and reporting program.

7. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices.

8. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Regional Board Executive Officer.

9. The discharger shall have and implement an acceptable written quality assurance (QA) plan for laboratory analyses. An annual report shall be submitted by February 1st of each year that summarizes the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples, or at least one sample per month, whichever is more frequent. A similar frequency shall be maintained for analyzing spiked samples. When requested by the USEPA or the Regional Board, the discharger will participate in the NPDES discharge monitoring report QA performance study. The discharger shall have a success rate equal to or greater than 80 percent.

10. The discharger shall report all instances of noncompliance not reported under Reporting Requirement G.11 of Order No. 2001-08 at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement G.11 of Order No. 2001-08.

11. By February 1st of each year, the discharger shall submit an annual report to the Regional Board and USEPA Region 9 that contains tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken, or which may be needed to bring the discharge into full compliance with the requirements of Order No. 2001-08 and this monitoring and reporting program.

12. Laboratory method detection limits (MDLs) and practical quantitation levels (PQLs) shall be identified for each constituent in the matrix being analyzed with all reported analytical data. Acceptance of data shall be based on demonstrated laboratory performance.

13. Monitoring results shall be reported at intervals and in a manner specified in Order No. 2001-08 and in this monitoring and reporting program.

14. Monitoring reports shall be submitted to the Regional Board and to USEPA Region 9 according to the following schedule:

Monitoring Frequency	**Reporting Period**	**Report Due**
Continuous, Daily, Weekly, or Monthly	All	By the first day of the second month after the month of sampling.
Quarterly	Jan.-March	May 1
	April-June	August 1
	July-September	November 1
	October-December	February 1
Semiannually	January-June	August 1
	July-December	February 1
Annually	January-December	February 1
Once every 5 years	---	February 1

C. INFLUENT MONITORING

1. Influent monitoring is intended to:

    a. Determine compliance with NPDES permit conditions and water quality standards.

    b. Assess treatment plant performance.

    c. Assess the need for and/or performance of an Industrial Pretreatment Program and a Toxic Control Program.

2. Sampling stations shall be established at each point of inflow to all treatment plants and shall be located upstream of any in-plant return flows, and where representative samples of the influent can be obtained. Influent samples shall be collected on the same day as, and shortly before the collection of effluent samples.

3. During periods when no effluent from a particular treatment plant is discharged to the Pacific Ocean, no influent monitoring, except for flowrate monitoring, is required at that treatment plant.

4. The following shall constitute the influent monitoring program:

Parameter	Unit	Type of Sample[1]	Minimum Frequency
Flowrate	MGD	recorder/ totalizer	continuous
$CBOD_5$ @ 20°C	mg/L	24-hour composite	weekly
BOD_5 @ 20°C	mg/L	24-hour composite	monthly
Suspended Solids	mg/L	24-hour composite	weekly

D. EFFLUENT MONITORING

For the purpose of this Monitoring and Reporting Program, effluent includes Aliso Creek flows diverted to the AWMA Ocean Outfall as well as treatment plant effluent.

1. Effluent monitoring is intended to:

    a. Determine compliance with NPDES permit conditions and water quality standards.

    b. Identify operational problems in order to improve plant performance.

    c. Provide information on waste characteristics and flows for use in interpreting water quality and biological data.

2. The effluent sampling station shall be located downstream of any in-plant return flows, and disinfection units, where representative samples of the effluent discharged through the ocean outfall can be obtained.

3. During periods where no effluent from a particular treatment plant is discharged to the Pacific Ocean, no effluent monitoring, except for flowrate monitoring, is required at that treatment plant.

4. The following shall constitute the effluent monitoring program:

Parameter	Unit	Type of Sample[1]	Minimum Frequency
Flowrate	MGD	recorder/totalizer	continuous
$CBOD_5$ @ 20°C	mg/L	24-hour composite	daily[2]
BOD_5 @ 20°C	mg/L	24-hour composite	monthly
Suspended Solids	mg/L	24-hour composite	daily[2]
pH	pH units	grab	daily[2]
Oil and Grease	mg/L	grab	monthly[3]
Settleable Solids	mL/L	grab	daily[2]

Parameter	Unit	Type of Sample[1]	Minimum Frequency
Turbidity	NTU	24-hour composite	weekly[3]
Acute Toxicity	TUa	24-hour composite	monthly
Dissolved Oxygen	mg/L	grab	weekly
Temperature	°F	--	weekly
Arsenic	ug/L	24-hour composite	quarterly[3,4]
Cadmium	ug/L	24-hour composite	quarterly[3,4]
Chromium (hexavalent)	ug/L	24-hour composite	quarterly[3,4,5]
Copper	ug/L	24-hour composite	quarterly[3,4]
Lead	ug/L	24-hour composite	quarterly[3,4]
Mercury	ug/L	24-hour composite	quarterly[3,4]
Nickel	ug/L	24-hour composite	quarterly[3,4]
Selenium	ug/L	24-hour composite	quarterly[3,4]
Silver	ug/L	24-hour composite	quarterly[3,4]
Zinc	ug/L	24-hour composite	quarterly[3,4]
Cyanide	mg/L	24-hour composite	quarterly[3,4]
Total Residual Chlorine	mg/L	grab	daily[6]
Ammonia (as N)	mg/L	24-hour composite	monthly[3]
Chronic Toxicity	TUc	24-hour composite	monthly[7]
Phenolic Compounds (nonchlorinated)	mg/L	24-hour composite	quarterly[3,4]
Phenolic Compounds (chlorinated)	mg/L	24-hour composite	quarterly[3,4]
Endosulfan	ug/L	24-hour composite	quarterly[3,4]
Endrin	ug/L	24-hour composite	quarterly[3,4]
HCH	ug/L	24-hour composite	quarterly[3,4]
Radioactivity	pCi/L	24-hour composite	quarterly[3]
Acrolein	ug/L	grab	semiannually[3]
Antimony	ug/L	24-hour composite	semiannually[3]

Bis(2-chloroethoxy) Methane	ug/L	grab	semiannually[3]
Bis(2-chloroisopropyl) Ether	ug/L	grab	semiannually[3]
Chlorobenzene	ug/L	grab	semiannually[3]
Chromium (III)	ug/L	24-hour composite	semiannually[3]
Di-n-butyl phthalate	ug/L	grab	semiannually[3]
Dichlorobenzenes	ug/L	grab	semiannually[3]
1,1-dichloroethylene	ug/L	grab	semiannually[3]
Diethyl phthalate	ug/L	grab	semiannually[3]
Dimethyl phthalate	ug/L	grab	semiannually[3]
4,6-dinitro-2-Methylphenol	ug/L	grab	semiannually[3]
2,4 dinitrophenol	ug/L	grab	semiannually[3]

Parameter	**Unit**	**Type of Sample[1]**	**Minimum Frequency**
Ethylbenzene	ug/L	grab	semiannually[3]
Fluoranthene	ug/L	grab	semiannually[3]
Hexacyclopentadiene	ug/L	grab	semiannually[3]
Isophorone	ug/L	grab	semiannually[3]
Nitrobenzene	ug/L	grab	semiannually[3]
Thallium	ug/L	24-hour composite	semiannually[3]
Toluene	ug/L	grab	semiannually[3]
1,1,2,2-tetrachloro-ethane	ug/L	grab	semiannually[3]
Tributyltin	ug/L	24-hour composite	semiannually[3]
1,1,1-trichloroethane	ug/L	grab	semiannually[3]
1,1,2-trichloroehtane	ug/L	grab	semiannually[3]
Acrylonitrile	ug/L	grab	semiannually[3]
Aldrin	ug/L	grab	semiannually[3]
Benzene	ug/L	grab	semiannually[3]
Benzidine	ug/L	grab	semiannually[3]
Beryllium	ug/L	24-hour composite	semiannually[3]
Bis(2-chloroethyl) Ether	ug/L	grab	semiannually[3]
Bis(2-ethylhexyl) Phthalate	ug/L	grab	semiannually[3]
Carbon Tetrachloride	ug/L	grab	semiannually[3]
Chlordane	ug/L	grab	semiannually[3]
Chloroform	ug/L	grab	semiannually[3]
DDT	ug/L	grab	semiannually[3]
1,4-dichlorobenzene	ug/L	grab	semiannually[3]
3,3-dichlorobenzidine	ug/L	grab	semiannually[3]
1,2-dichloroethane	ug/L	grab	semiannually[3]
Dichloromethane	ug/L	grab	semiannually[3]
1,3-dichloropropene	ug/L	grab	semiannually[3]

Dieldrin	ug/L	grab	semiannually[3]
2,4-dinitrotoluene	ug/L	grab	semiannually[3]
1,2-diphenylhydrazine	ug/L	grab	semiannually[3]
Halomethanes	ug/L	grab	semiannually[3]
Heptachlor	ug/L	grab	semiannually[3]
Hexachlorobenzene	ug/L	grab	semiannually[3]
Hexachlorobutadiene	ug/L	grab	semiannually[3]
Hexachloroethane	ug/L	grab	semiannually[3]
N-nitrosodimethyl-amine	ug/L	grab	semiannually[3]
N-nitrosodiphenyl-amine	ug/L	grab	semiannually[3]

Parameter	**Unit**	**Type of Sample[1]**	**Minimum Frequency**
PAHs	ug/L	grab	semiannually[3]
PCBs	ng/L	grab	semiannually[3]
TCDD equivalents	pg/L	grab	semiannually[8,3]
Tetrachloroethylene	ug/L	grab	semiannually[3]
Toxaphene	ug/L	grab	semiannually[3]
Trichloroethylene	ug/L	grab	semiannually[3]
2,4,6-trichlorophenol	ug/L	grab	semiannually[3]
Vinyl Chloride	ug/L	grab	semiannually[3]

E. SOLIDS MONITORING

1. Solids monitoring is intended to:

   a. Assess the need for a pretreatment program.

   b. Maintain a record of the volume of solids generated and disposal sites used.

   c. Evaluate the character of sludge to ensure that appropriate disposal methods are employed.

2. A report identifying the volume of screenings, sludges, grit, and other solids removed from the wastewater and the point(s) at which these wastes were disposed of shall be submitted annually. A copy of all annual reports required by 40CFR 503 shall be submitted to the Regional Board at the same time those reports are submitted to the USEPA.

F. RECEIVING WATER MONITORING

1. To determine compliance with water quality standards, the receiving water quality monitoring program must document conditions in the vicinity of the "Zone of Initial Dilution" (ZID) boundary, at reference stations, and at areas beyond the ZID where discharge impacts might

reasonably be expected. Monitoring must reflect conditions during all critical environmental periods.

2. Receiving water and sediment monitoring in the vicinity of the AWMA Ocean Outfall shall be conducted as specified below. Station location, sampling, sample preservation and analyses, when not specified, shall be by methods approved by the Executive Officer. The monitoring program may be modified by the Executive Officer at any time.

3. Receiving water and sediment monitoring stations shall be located and numbered as follows:

Monitoring Station Locations

Station	Description
	Surf Zone Stations:
S1	Surf 20,000 feet south of outfall.
S2	Surf 15,000 feet south of outfall.
S3	Surf 10,000 feet south of outfall.
S4	Surf 5,000 feet south of outfall.
S5	Surf 4,000 feet south of outfall.
S6	Surf 3,000 feet south of outfall.
S7	Surf 2,000 feet south of outfall.
S8	Surf 1,000 feet south of outfall.
S9	Surf at outfall.
S10	Surf 1,000 feet north of outfall.
S11	Surf 2,000 feet north of outfall.
S12	Surf 3,000 feet north of outfall.
S13	Surf 4,000 feet north of outfall.
S14	Surf 5,000 feet north of outfall.
S15	Surf 10,000 feet north of outfall.
S16	Surf 15,000 feet north of outfall.
	Nearshore Stations:
N1	1,000 feet offshore, 2,500 feet south of the outfall.
N2	1,000 feet offshore, 1,000 feet south of the outfall.
N3	1,000 feet offshore, 500 feet south of the outfall.
N4	1,000 feet offshore, at the outfall.
N5	1,000 feet offshore, 500 feet north of the outfall.
N6	1,000 feet offshore, 1,000 feet north of the outfall.
N7	1,000 feet offshore, 2,500 feet north of the outfall.
	Offshore Stations:
A1-A4	At the corners of a 1,000 x 1,000-foot square having one side parallel to shore and the intersection of the diagonals located at the center of the outfall diffuser section. Station

A1 shall be located at the northeastern corner and Stations A2 through A4 at successive corners in a clockwise direction.

A5 At the intersection of the diagonals of the above square.

B1 One mile down-coast from the outfall and over the same depth contour as Station A5.

B2 One mile up-coast from the outfall and over the same depth contour as Station A5.

It is recommended that stations be located using a land-based microwave positioning system, such as Mini-Ranger or trisponder, or a satellite positioning system such as Global Positioning System (GPS). The high levels of accuracy and precision afforded by this type of positioning system will ensure that stations are properly located with respect to the ZID. If an alternate navigation system (e.g. Loran C) is proposed, its accuracy should be compared to that of the systems recommended herein, and any compromises in accuracy should be justified.

Monitoring station locations may be modified with the approval of the Executive Officer.

4. SURF ZONE WATER QUALITY MONITORING

a. Surf zone monitoring is intended to assess bacteriological conditions in areas used for body-contact activities (e.g., swimming); and to assess aesthetic conditions for general recreational uses (e.g., picnicking).

b. All "surf zone stations" shall be monitored as follows:

(1) Grab samples shall be collected and analyzed for total and fecal coliforms, and enterococcus at a minimum frequency of twice weekly.

(2) At the same time samples are collected from "surf zone stations," the following information shall be recorded: observation of wind (direction and speed), weather (e.g., cloudy, sunny, or rainy), current (e.g., direction), and tidal conditions; observations of water color, discoloration, oil and grease, turbidity, odor, and materials of sewage origin in the water or on the beach; and water temperature (°F).

(3) In the event of stormy weather which makes sampling hazardous at certain surf zone stations, collection of samples at such stations can be omitted, provided that such omissions do not occur more than 5 days in any calendar year or occur at consecutive sampling times. The observations listed in (2) above shall still be recorded and reported to the Regional Board for these stations at the time the sample was attempted to be collected.

5. NEARSHORE WATER QUALITY MONITORING

a. Nearshore monitoring is intended to assess bacteriological conditions in areas used for body-contact activities (e.g. scuba diving) and where shellfish and/or kelp may be harvested; and to assess aesthetic conditions for general boating and recreational uses.

b. All Nearshore Stations shall be monitored as follows:

(1) Reduced Monitoring

If the Executive Officer determines that the effluent at all times complies with Discharge Specifications B.1, B.5, and B.6 of Order No. 2001-08, only the reduced nearshore water quality monitoring specified below is required.

Determination	Units	Type of Sample	Minimum Frequency
Visual Observations			Monthly
Total and Fecal Coliforms,	#/100mL	Grab[9]	Monthly
Enterococcus[10]	#/100mL	Grab[9]	Monthly

(2) Intensive Monitoring

The intensive nearshore water quality monitoring specified below is required during the 12-month period beginning July 1, 2004 through June 30, 2005, and must be submitted by September 1, 2005. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by August 21, 2005, 180 days prior to the Order's expiration date of February 21, 2006. The intensive nearshore water quality monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specifications B.1, B.5, and B.6 of Order No. 2001-08.

Determination	Units	Type of Sample	Minimum Frequency
Visual Observations	--	--	Monthly
Total and Fecal Coliforms	#/100mL	Grab[11]	Monthly
Enterococcus	#/100mL	Grab[11]	Monthly

6. OFFSHORE WATER QUALITY MONITORING

Offshore monitoring is intended to determine compliance with the Ocean Plan; and to determine if the applicant's discharge causes significant impacts on the water quality within the ZID and beyond the ZID as compared to reference areas.

a. All "offshore stations" shall be monitored as follows:

(1) Reduced Monitoring

If the Executive Officer determines that the effluent at all times complies with Discharge Specifications B.1, B.5, and B.6 of Order No. 2001-08, only the reduced offshore water quality monitoring specified below is required.

Determination	Units	Type of Sample	Minimum Frequency
Visual Observations			Monthly
Total and Fecal Coliforms,	#/100mL	Grab[11]	Monthly
Enterococcus[10]	#/100mL	Grab[11]	Monthly

(2) Intensive Monitoring

The intensive offshore water quality monitoring specified below is required during the 12-month period beginning July 1, 2004 through June 30, 2005, and must be submitted by September 1, 2005. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by August 21, 2005, 180 days prior to the Order's expiration date of February 21, 2006. The intensive offshore water quality monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specifications B.1, B.5, and B.6 of Order No. 2001-08.

Determination	**Units**	**Type of Sample**	**Minimum Frequency**
Visual Observations			Monthly
Total and Fecal Coliforms,	#/100mL	Grab[11]	Monthly
Enterococcus	#/100mL	Grab[11]	Monthly
Temperature	°F	Grab[12]	Monthly
Dissolved Oxygen	mg/L	Grab[12]	Monthly
Light Transmittance	%	Instrument[12]	Monthly
pH	pH units	Grab[9]	Annually

7. BENTHIC MONITORING

Benthic monitoring is intended to assess the status of the benthic community, and to evaluate the physical and chemical quality of the sediments.

a. The intensive sediment monitoring specified below is required during the 12-month period beginning July 1, 2004 through June 30, 2005, and must be submitted by September 1, 2005. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by August 21, 2005, 180 days prior to the Order's expiration date of February 21, 2006. The intensive sediment monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specifications B.1, B.5, and B.6 of Order No. 2001-08.

b. Sediment Characteristics

Analyses shall be performed on the upper two inches of core.

Determination	**Units**	**Type of Sample**	**Minimum Frequency**
Sulfides	mg/kg	Core	Semiannually
Total Chlorinated Hydrocarbons	mg/kg	Core	Semiannually
BOD	mg/kg	Core	Semiannually
COD	mg/kg	Core	Semiannually

Particle Size Distribution		Core	Semiannually
Arsenic	mg/kg	Core	Annually
Cadmium	mg/kg	Core	Annually
Total Chromium	mg/kg	Core	Annually
Copper	mg/kg	Core	Annually
Lead	mg/kg	Core	Annually
Mercury	mg/kg	Core	Annually
Nickel	mg/kg	Core	Annually
Silver	mg/kg	Core	Annually
Zinc	mg/kg	Core	Annually
Cyanide	mg/kg	Core	Annually
Phenolic Compounds (non-chlorinated)	mg/kg	Core	Annually
Chlorinated Phenolics	mg/kg	Core	Annually
Aldrin and Dieldrin	mg/kg	Core	Annually
Chlordane and Related Compounds	mg/kg	Core	Annually
DDT and Derivatives	mg/kg	Core	Annually
Endrin	mg/kg	Core	Annually
HCH	mg/kg	Core	Annually
PCBs	mg/kg	Core	Annually
Toxaphene	mg/kg	Core	Annually
Radioactivity	pCi/kg	Core	Annually

a. Infauna

Samples are to be collected with a Paterson, Smith-McIntyre, or orange-peel-type dredge, having an open sampling area of not less than 124 square inches and a sediment capacity of not less than 210 cubic inches. The sediment shall be sifted through a one-millimeter mesh screen and all organisms shall be identified to as low a taxon as possible.

Five replicate samples of bottom sediments shall be taken semiannually [once during late winter (February/March)] and once during late summer (August/September)] from all offshore stations. These samples shall be separate from those collected for sediment analyses.

The following data shall be reported for benthic infauna:

(1) Total Biomass of:

a. Mollusks
b. Echinoderms
c. Polychaetes
d. Crustaceans
e. All other macroinvertebrates.

(2) Community structure analysis for each station and each replicate. Community structure analysis consists of the wet weight of each taxonomic group in a. (1) above, number of species, number of individuals per species, total numerical abundance, species abundance per square meter per station, species richness, species diversity, similarity analyses, and cluster analyses (using unweighted pair-group method).

(3) Station mean, range, standard deviation, and 95% confidence limits, if appropriate, for values determined above in (2). The discharger may be required to conduct additional statistical analyses to determine temporal and spatial trends in the marine environment.

b. Biota Monitoring

Determination	**Units**	**Type of Sample**	**Minimum Frequency**
Benthic Biota	Identification and Enumeration	3 Grabs	Semiannually

8. ADDITIONAL BIOLOGICAL MONITORING

a. Kelp Bed Monitoring

Kelp bed monitoring is intended to assess the extent to which the discharge of wastes may affect the areal extent and health of coastal kelp beds.

(1) The discharger shall participate with other ocean dischargers in the San Diego Region in an annual regional kelp bed photographic survey. Kelp beds shall be monitored annually by means of vertical aerial infrared photography to determine the maximum areal extent of the region's coastal kelp beds within the calendar year. Surveys shall be conducted as close as possible to the time when kelp bed canopies cover the greatest area. The entire San Diego Region coastline, from the international boundary to the San Diego Region / Santa Ana Region boundary, shall be photographed on the same day.

(2) The images produced by the surveys shall be presented in the form of a 1:24,000 scale photo-mosaic of the entire San Diego Region coastline. Onshore reference points, locations of all ocean outfalls and diffusers, and the 30-foot (MLLW) and 60-foot (MLLW) depth contours shall be shown.

(3) The areal extent of the various kelp beds photographed in each survey shall be compared to that noted in surveys of previous years. Any significant losses which persist for more than one year shall be investigated by divers to determine the probable reason for the loss.

G. Aliso Creek Monitoring

1. The stream flow diversion from Aliso Creek to the AWMA Ocean Outfall shall be monitored for the following:

Parameter	Unit	Type of Sample	Frequency
Flowrate	MGD	recorder/totalizer	continuous
$CBOD_5$ @ 20°C	mg/L	24-hour composite	daily[2]
Suspended Solids	mg/L	24-hour composite	daily[2]
pH	pH units	grab	daily[2]
Total and Fecal Coliform	#/100mL	grab	weekly
Acute Toxicity	TUa	24-hour composite	once every two months[13]

I, John H. Robertus, Executive Officer of the San Diego Regional Water Quality Control Board, do hereby certify the foregoing is a full, true, and correct copy of Order No. 2001-08 adopted by the California Regional Water Quality Control Board, San Diego Region, on February 21, 2001.

JOHN H. ROBERTUS
Executive Officer

MONITORING AND REPORTING PROGRAM ENDNOTES

1 For samples collected from the various treatment plants which are to be physically composited prior to analysis or for the results of analyses which are to be arithmetically composited, the basis for compositing shall be the rate of discharge from the various plants to the ocean, not the rate of inflow to the various plants.

2 Five days per week except seven days per week for at least one week in July or August of each year.

3 The minimum frequency of monitoring for this constituent shall be automatically increased to twice the minimum frequency specified here if any analysis for this constituent yields a result higher than the effluent limit specified in Order No. 2001-08 for this constituent. The increased minimum frequency of monitoring shall remain in effect until the results of a minimum of four consecutive analyses for this constituent are below all effluent limits specified in Order No. 2001-08 for this constituent.

4 The minimum frequency of monitoring for this constituent is automatically reduced to semiannually if the results of twelve consecutive analyses, representing each month of the year, or the results of twenty-four consecutive analyses, representing each quarter of the year, are below the Ocean Plan 6-month median water quality objective for this constituent, or below the laboratory MDL for this constituent in the matrix being analyzed, whichever is higher.

5 The discharger may at its option monitor for total chromium. If the measured total chromium concentration exceeds the hexavalent chromium limitation, it will be assumed that the hexavalent chromium limitation was exceeded unless the results of a hexavalent chromium analysis of a replicate sample indicate otherwise. When analyzing for hexavalent chromium, the appropriate sampling and analytical method must be used (i.e., 24-hour composite cooled to 4° C and analyzed within 24 hours).

6 Monitoring of Total Chlorine Residual is not required on days when none of the treatment facilities that are subject to Order No. 2001-08 use chlorine for disinfection. If only one sample is collected for total Chlorine residual analysis on a particular day, that samples must be collected at the time when the concentration of total chlorine residual in the discharge would be expected to be greatest. The times of chlorine discharges on the days the samples are collected, and the time at which samples are collected shall be reported.

7 A screening period for chronic toxicity shall be conducted every other year for three months, using a minimum of three test species (one plant, one invertebrate, and one vertebrate) chosen from the list of approved chronic toxicity test protocols specified in the 1997 Ocean Plan. After the screening period, the most sensitive species (i.e. the species exhibiting the lowest NOEL) shall be used for the monthly testing. Repeat screening periods may be terminated after the first month if the most sensitive species is the same as the species previously found to be most sensitive.

8 EPA method 8280 shall be used to analyze for TCDD equivalents.

9 At the surface.

10 If the discharger demonstrates to the satisfaction of the Executive Officer, by means of daily analyses, that the concentrations of total and fecal coliform bacteria in the effluent are consistently less than 1,000 per 100 mL, enterococcus monitoring may be suspended. The discharger shall conduct the monitoring as specified unless the Executive Officer provides written authorization to suspend it. If this monitoring is suspended, the discharger shall resume it at the request of the Executive Officer.

11 At surface and mid-depth.

12 At surface, mid-depth, and bottom.

MONITORING AND REPORTING PROGRAM ENDNOTES (cont.)

13 Sampling shall be conducted each year a diversion is initiated. Sampling shall be conducted within the first three days following initiation of Aliso Creek diversion into the AWMA Ocean Outfall for the season and once every two months thereafter until the seasonal diversion ends.