

**State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

ORDER NO. R4-2002-0129

NPDES NO. CA0054097

**WASTE DISCHARGE REQUIREMENTS
FOR
CITY OF OXNARD
(Oxnard Wastewater Treatment Plant)**

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

PURPOSE OF ORDER

1. The City of Oxnard (City or Discharger) discharges treated municipal wastewater from the Oxnard Wastewater Treatment Plant (Oxnard WTP) under waste discharge requirements contained in Order No. 94-045 adopted by this Regional Board on June 13, 1994. Order No. 94-045 also serves as the National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0054097) that regulates the discharge of treated wastewater to the Pacific Ocean, a water of the State and the United States. Order No. 94-045 had an expiration date of June 13, 1999.
2. Section 122.6 of Title 40 Code of Federal Regulations (40 CFR) and section 2235.4 of Title 23 of the California Code of Regulations (CCR) state that an expired permit continues in force until the effective date of a new permit, provided the permittee has timely submitted a complete application for a new permit. On March 25, 1999, the City filed a report of waste discharge (ROWD) and applied for renewal of its waste discharge requirements (WDR) and NPDES permit. Therefore, the Discharger's permit has been administratively extended until the Regional Board acts on the new WDR and permit.
3. This Order is the reissuance of the waste discharge requirements and NPDES permit for the Oxnard WTP.

FACILITY AND TREATMENT PROCESS DESCRIPTION

4. The City owns and operates the Oxnard WTP, a publicly owned treatment work (POTW). The Oxnard WTP is a secondary treatment facility located at 6001 South Perkins Road, Oxnard, California. The plant has a dry weather average design capacity of 31.7 million gallons per day (mgd), but only discharges an average of 22 mgd (the Year 1999) of secondary treated municipal wastewater to the Pacific Ocean, at Ormond Beach, California. Figure 1 shows the vicinity map for the Oxnard WTP.
5. The Oxnard WTP serves a population of about 225,000 in the City of Oxnard, the City of Port Hueneme, and the US Naval Base, Ventura County. Flow to the plant consists of

domestic, commercial and industrial wastewater. For Fiscal Year 1999, industrial wastewater represented about 25% of the total flow to the plant.

6. The United States Environmental Protection Agency (USEPA) and the Regional Board have classified the Oxnard WTF as a major discharger. It has a Threat to Water Quality and Complexity rating of 1-A pursuant to CCR, Title 23, section 2200.
7. The Oxnard WTP developed, and has been implementing, an industrial wastewater pretreatment program, which has been approved by United States Environmental Protection Agency (USEPA) and the Regional Board.
8. The treatment system at the Oxnard WTP consists of bar screening, aerated grit removal, primary clarification, bio-filtration, activated sludge, secondary clarification, flow equalization, chlorine disinfection, and dechlorination. Grit removed from the wastewater is hauled to a permitted landfill. Sludge is anaerobically digested, dewatered and disposed at the City-owned farmland just outside of Wasco in Kern County. Figure 2 is a schematic of the treatment system.
9. All of the storm water runoff traversing the treatment areas of the Oxnard WTP premises is captured and treated in the plant.
10. On September 21, 1993, the City approved a master plan for recycling of effluent from the Oxnard WTP. The plan involves addition of tertiary treatment and partial demineralization prior to injection to drinking water aquifers to prevent/minimize saltwater intrusion. However, to date the plan has not yet been implemented.

DISCHARGE QUALITY DESCRIPTION

11. The effluent characteristics, shown in the following Table 1, are based on data listed in the Discharger's 2001 annual report submitted to the Regional Board.

Table 1 – Effluent Characteristics for Year 2001

Constituent	Unit	Average	Minimum	Maximum
Flow	mgd	21.9	20.0	24.5
Acute Toxicity	TUc	0.80	0.41	1.10
pH	pH units	7.5	7.3	7.6
Temperature- winter (Nov. – April)	°C	21.5	20.1	23.6
summer (May – Oct.)	°C	25.0	23.6	25.7
BOD _{5@20°C}	mg/L	12.8	10	18
Suspended solids	mg/L	7.0	5.5	8.8
Settleable solids	mL/L	<0.1	<0.1	<0.1
Turbidity (24-HR composite)	NTU	3.9	2.7	4.8
Oil and grease	mg/L	5	<5	6
Residual Chlorine (Dechlorinated)	mg/L	<0.001	<0.001	<0.001
Total Coliform	MPN/100mL	10,112	1,287	41,630
Fecal Coliform	MPN/100mL	11,672	74	64,034
Ammonia-N	mg/L	20	14	23

Table 1 – Effluent Characteristics for Year 2001 (Continued)

Constituent	Unit	Average	Minimum	Maximum
Organic-N	mg/L	3.33	2.15	5.70
Nitrate-N	mg/L	0.59	<0.01	2.35
Nitrite-N	mg/L	0.98	0.11	2.14
Arsenic	ug/L	1.2	<1.0	2.8
Cadmium	ug/L	<4.0	<4.0	4.1
Total Chromium	ug/L	<10.0	<10.0	37.9
Copper	ug/L	12.8	<10.0	14.8
Lead	ug/L	<10.0	<10.0	24.5
Mercury	ug/L	<0.5	<0.5	<0.5
Nickel	ug/L	<10	<10	22.0
Silver	ug/L	<4.0	<4.0	5.5
Zinc	ug/L	26.3	10.7	63.8
Cyanide	ug/L	<5.0	<5.0	<5.0
Aldrin	ug/L	<0.001	<0.001	<0.001
HCHs	ug/L	0.01	<0.01	0.03
Chlordane	ug/L	<0.002	<0.001	<0.002
4,4-DDT & Derivatives	ug/L	<0.001	<0.001	<0.001
Dieldrin	ug/L	<0.001	<0.001	<0.001
Endosulfan & Derivatives	ug/L	<0.002	<0.002	<0.005
Endrin & Derivatives	ug/L	<0.002	<0.002	<0.005
Heptachlor & Derivatives	ug/L	<0.001	<0.002	<0.002
Chlorinated-Phenolic Compounds	ug/L	<10.0	<10.0	<10.0
Non-Chlorinated-Phenolic Compounds	ug/L	<10.0	<10.0	<10.0
Polychlorinated biphenyls (PCBs)	ug/L	<0.01	<0.01	<0.01
Toxaphene	ug/L	<0.01	<0.01	<0.01

DISCHARGE OUTFALL AND RECEIVING WATER DESCRIPTION

12. The treated wastewater is discharged through an ocean outfall off Ormond Beach (see Figure 3). The description of the outfall (Table 2) is as follows:

Table 2 – The Description of the Outfall

Discharge Serial Number	001
Diameter of Pipe at Discharge Terminus (feet)	4
Outfall Distance Offshore (feet)	5,950 (including a 1,016-foot diffuser section)
Discharge Depth Below Surface Water (feet)	60
Latitude	34° 07' 34" North
Longitude	119° 11' 26" West

13. The receiving water (Pacific Ocean) off Ormond Beach for the Oxnard WTP discharge is part of the open coastline of the Regional Board-designated Ventura Coastal Watershed Management Area (WMA). In addition to the Oxnard WTP, there are two other major dischargers to the Ventura Coastal WMA – Ormond Beach and Mandalay Generating

Stations, now owned by Reliant Energy, Inc. (formerly owned by Southern California Edison).

14. An area of the ocean located immediately off the coast of Ormond Beach was sampled as part of the 1994 Southern California Bight Pilot Project and the Bight 1998. The 1994 results are summarized in a series of reports published by the Southern California Coastal Water Research Project. In general, the water quality of ocean waters in this area is good. The 1998 results should be available at the end of the year 2002. The ocean water in this area is not listed as impaired under the 1998 Clean Water Act (CWA) Section 303(d) List.

APPLICABLE LAWS, PLANS, POLICIES AND REGULATIONS

15. **Federal Clean Water Act** - Section 301(a) of the federal Clean Water Act (CWA) requires that point source discharges of pollutants to a water of the United States must be done in conformance with a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality. CWA section 402 authorizes the U. S. Environmental Protection Agency (USEPA) or States with an approved NPDES program to issue NPDES permits. The State of California has an approved NPDES program.
16. **Basin Plan** - The Regional Board adopted a revised *Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) on June 13, 1994, and amended on January 27, 1997, by Regional Board Resolution No. 97-02. This updated and consolidated plan represents the Board's master quality control planning document and regulations. The State Water Resources Control Board (State Board) and the State of California Office of Administrative Law (OAL) approved the revised Basin Plan on November 17, 1994, and February 23, 1995, respectively. On May 26, 2000, the USEPA approved the revised Basin Plan except for the implementation plan for potential municipal and domestic supply (MUN) designated water bodies, which is not applicable to this discharge.

The Basin Plan (i) designates beneficial uses for surface and groundwater, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated (existing and potential) beneficial uses and conform to the State's antidegradation policy, and (iii) includes implementation provisions, programs, and policies to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The 1994 Basin Plan was prepared to be consistent with all State and Regional Board plans and policies adopted in 1994 and earlier. This Order implements the plans, policies, and provisions of the Board's Basin Plan.

17. **Ocean Plan** - On November 16, 2000, the State Water Resources Control Board (State Board) adopted a revised *Water Quality Control Plan for the Ocean Waters of California* (Ocean Plan). The revised plan was approved by the OAL on July 9, 2001 and approved by the USEPA on December 3, 2001. The revised plan contains water quality objectives for coastal waters of California. This Order includes effluent and receiving water limitations, prohibitions, and provisions that implement the objectives of the plan.

18. **Beneficial Uses** - The beneficial uses of the receiving water nearshore zones (defined as the zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot contour, whichever is further from the shoreline) are:

Ormond Beach	Existing:	Industrial water supply, navigation, water contact and non contact recreation, commercial, marine habitat, wildlife habitat, threatened or endangered species, shellfish harvesting
	Potential:	Spawning, reproduction, and/or early development
Nearshore	Existing:	Industrial water supply, navigation, water contact and non contact recreation, commercial, marine habitat, wildlife habitat, threatened or endangered species, shellfish harvesting
	Potential:	Spawning, reproduction, and/or early development
Offshore	Existing:	navigation, water contact and non contact recreation, commercial, marine habitat, wildlife habitat, threatened or endangered species, shellfish harvesting, migration of aquatic organisms, Spawning, reproduction, and/or early development, shellfish harvesting
	Potential:	none

19. **Antidegradation Policy** – On October 28, 1968, the State Board adopted Resolution No. 68-16, *Maintaining High Quality Water*, which established an antidegradation policy for State and Regional Boards. Similarly, the CWA (section 304(d)(4)(B)) and USEPA regulations (40 CFR section 131.12) require that all permitting actions be consistent with the federal antidegradation policy. Together, the State and Federal policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. The provisions of this Order are consistent with the antidegradation policies.
20. **Watershed Management** – This Regional Board has been implementing a Watershed Management Approach (WMA) to address water quality protection in the Los Angeles and Ventura Counties. The approach is in accordance with the USEPA guidance on *Watershed Protection: A Project Focus* (EPA841-R-95-003, August 1995). The objective is to provide a comprehensive and integrated strategy resulting in water resource protection, enhancement, and restoration while balancing economic and environmental impacts within a hydrologically defined drainage basin or watershed. The Management Approach emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with the resources available. This Order and the accompanying *Monitoring and Reporting Program* fosters the implementation of this approach. The *Monitoring and Reporting Program* requires the Discharger to participate in regional water quality (Bight 2003 and Central Bight Cooperative Water Quality Program) and kelps beds monitoring program for the Southern California Bight.

REGULATORY BASES FOR EFFLUENT AND RECEIVING WATER LIMITS AND OTHER DISCHARGE REQUIREMENTS

21. **Water Quality Objectives and Effluent Limits** - Water Quality Objectives (WQOs) and effluent limitations in this permit are based on:
- A. The plans, policies and water quality standards (beneficial uses + objectives + antidegradation policy) contained in the 1994 *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*, as amended;
 - B. *Water Quality Control Plan, Ocean Waters of California, California Ocean Plan*, State Water Resources Control Board, 2001 ;
 - C. *Guidance for Implementing Whole Effluent Toxicity Programs Final* , USEPA Regions 9 & 10, May 31, 1996;
 - D. *Whole Effluent Toxicity (WET) Control Policy*, USEPA, July 1994;
 - E. Applicable Federal Laws and Regulations
 - a. Federal Clean Water Act, and
 - b. 40 CFR Parts 122, 125, and 131, among others; and,
 - F. Best professional judgment (pursuant to 40 CFR 122.44).
22. U.S. EPA regulations, policy, and guidance documents upon which Best Professional Judgment (BPJ) was developed include, in part:
- A. *Technical Support Document for Water Quality Based Toxics Control*, March 1991 (EPA-505/ 2-90-001); and,
 - B. *U.S. EPA NPDES Permit Writers' Manual*, December 1996 (EPA-833-B-96-003).
23. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that water quality based effluent limits may be set based on USEPA criteria and supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.
24. **Mass and Concentration Limits** – 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods

and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents, except during wet-weather, storm events that cause flows to the treatment plant to exceed the plant's design capacity.

25. **Maximum Daily Effluent Limitations** – Pursuant to 40 CFR section 122.45(d)(2), for POTWs continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. It is impracticable to only include average weekly and average monthly effluent limitations in the permits, because a single daily discharge of certain pollutants, in excess amounts, can cause violations of water quality objectives. The effects of certain pollutants on aquatic organisms are often rapid. For many pollutants, an average weekly or average monthly effluent limitation alone is not sufficiently protective of beneficial uses. As a result, maximum daily effluent limitations, as referenced in 40 CFR section 122.45(d)(1), are included in the permit for certain constituents as discussed in the Fact Sheet accompanying this Order.
26. **Pretreatment** – Pursuant to 40 CFR section 403, the City developed and has been implementing an approved industrial wastewater pretreatment program. This Order requires the City to continue the implementation of the approved pretreatment program and modifications thereof.
27. **Sludge Disposal** – To implement CWA Section 405(d), on February 19, 1993, the USEPA promulgated 40 CFR Part 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the City to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program.
28. **Stormwater Management** – CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR section 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Board issued a statewide general permit, *General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities*. This permit was amended in September 1992 and reissued on April 17, 1997 in State Board Order No. 97-03-DWQ.

Because storm water runoff is captured and treated, General NPDES permit No. CAS000001 is not applicable to storm water discharges from the Oxnard WTP's premises. Instead, the City is covered under the Ventura County Municipal Storm Water Program (Order No. 00-108) under which the City has been implementing the Storm Water Prevention Control Plan (SWPCP) model program.

29. **Clean Water Act Effluent Limitations** – Numeric and narrative effluent limitations are established pursuant to Section 301 (Effluent Limitations), Section 302 (Water Quality-Related Effluent Limitations), Section 303 (Water Quality Standards and Implementation Plans), Section 304 (Information and Guidelines [Effluent]), Section 305 (Water Quality Inventory), Section 307 (Toxic and Pretreatment Effluent Standards), and Section 402 (NPDES) of the CWA. The CWA and amendments thereto are applicable to the discharges herein.
30. **Antibacksliding Policies** – Antibacksliding provisions are contained in Sections 303(d)(4) and 402(o) of the CWA and in 40 CFR section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions. Section 402(o)(2) outlines six exceptions where effluent limitations may be relaxed.
31. The relaxation of effluent limitations for certain discharges covered by this Order are excepted from antibacksliding pursuant to CWA sections 402(o)(2)(B)(I) and 303(d)(4) because information is available about the likelihood of constituents to be present in concentrations with a reasonable potential to cause or contribute to excursions above water quality standards, which would have justified the application of a less stringent effluent limitation at the time the NPDES permit was previously issued. Pursuant to the reasonable potential analysis (Attachment A), certain constituents that previously had effluent limitations have been shown not to have reasonable potential, and as a result no longer require effluent limitations to protect water quality standards. Consistent with antibacksliding statutes and regulations and antidegradation policies, the continued effluent limitations contained in this Order are at least as stringent as existing effluent limitation guidelines and are fully protective of existing, intermittent, and potential designated uses.
32. **Types of Pollutants** – For CWA regulatory purposes, pollutants are grouped into three general categories under the NPDES program: conventional, toxic, and non-conventional. By definition, there are five conventional pollutants (listed in 40 CFR 401.16) – 5-day biochemical oxygen demand, total suspended solids, fecal coliform, pH, and oil and grease. Toxic or “priority” pollutants are those defined in Section 307(a)(1) of the CWA (and listed in 40 CFR 401.12 and 40 CFR 423, Appendix A) and include heavy metals and organic compounds. Non-conventional pollutants are those which do not fall under either of the two previously described categories and include such parameters as ammonia, phosphorous, chemical oxygen demand, whole effluent toxicity, etc.
33. **Technology-Based Limits for Municipal Facilities (POTWs)** – Technology-based effluent limits require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the discharger to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level—referred to as “secondary treatment”—that all POTWs were required to meet by July 1, 1977. More specifically, Section 301(b)(1)(B) of the CWA required that USEPA develop secondary treatment standards for POTWs as defined in Section 304(d)(1). Based on this statutory requirement, USEPA developed national secondary treatment regulations which are specified in 40 CFR 133. These technology-based regulations apply to all POTWs and

identify the minimum level of effluent quality to be attained by secondary treatment in terms of five-day biochemical oxygen demand, total suspended solids, and pH.

34. **Water Quality Based Effluent Limits (WQBELs)** – Water quality-based effluent limits are designed to protect the quality of the receiving water by ensuring that State water quality standards are met by discharges from an industrial/municipal point source. If, after technology-based effluent limits are applied, a point source discharge will cause, have the reasonable potential to cause, or contribute to an exceedance of an applicable water quality criterion, then 40 CFR 122.44(d)(1) requires that the permit contain a WQBEL. Although the CWA establishes explicit technology-based requirements for POTWs, Congress did not exempt POTWs from additional regulation to protect water quality standards. As a result, POTWs are also subject to WQBELs. Applicable water quality standards for ocean waters off the Ventura Coastline are contained in the Table B of the Ocean Plan. Any constituent for which a reasonable potential exists pursuant to 40 CFR 122.44(d)(1) to exceed the Ocean Plan Table B objectives has WQBEL.
35. **Ocean Plan Limits and Objectives** – Effluent limitations for conventional, nonconventional, and toxic pollutants were calculated based on effluent limitations in *Table A*, and water quality objectives in *Table B* of the Ocean Plan. The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants based on water quality objectives in *Table B* of the Ocean Plan is 98:1 (i.e., 98 parts seawater to one part effluent). This ratio was calculated by the State Board.

REASONABLE POTENTIAL ANALYSES (RPA) FOR TOXIC POLLUTANTS

36. 40 CFR Part 122.44(d)(1)(i and iii) provides that effluent limitations shall be prescribed in permits for all pollutants or pollutant parameters determined to (or may) be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard. 40 CFR Part 122.44(d)(1)(ii) provides the procedure and factors, including variability of the pollutants in the effluent, to be considered in determining reasonable potential. The procedure for statistical determination of the reasonable potential for a discharged pollutant to exceed an objective is outlined in the USEPA guidance, the revised *Technical Support Document for Water Quality-based Toxics Control* (TSD; EPA/505/2-90-001, March 1991). This statistical approach combines knowledge of effluent variability (in terms of the calculated coefficient of variation, CV) with uncertainty (that is a function of the number of effluent data) to estimate a maximum effluent value at a high level of confidence. The estimated maximum effluent value is calculated as the 99 percent confidence level of the 99th percentile based on a lognormal distribution of daily effluent values. The projected receiving water value (based on the estimated maximum effluent value and dilution ratio) is then compared to the appropriate objective to determine the potential for exceedance of that objective and the need for an effluent limitation.
37. **Reasonable Potential Determination** – Regional Board staff conducted RPAs for all toxic pollutants listed in *Table B* of the Ocean Plan. Effluent data provided in the Discharger's monitoring reports from January 1995 to June 2001 and a dilution ratio of 98 were used in the analyses.

38. A reported maximum effluent value was first identified for each pollutant that has at least one detected value. If the pollutant was not detected in any of the effluent samples, the reported maximum MDL (method detection limit) was selected as the reported maximum effluent value for that pollutant. Effluent data were used to calculate the pollutant-specific CVs that were used to generate the pollutant-specific reasonable potential multipliers. When at least 80 percent of the data are reported as not detected, a default CV of 0.6 was used. The estimated maximum effluent values were determined by multiplying the reported maximum effluent values with the respective multipliers. The projected receiving water concentration for each pollutant is then calculated by factoring in the dilution ratio of 98. Finally, the projected receiving water concentration is compared with the appropriate objective listed in the Ocean Plan.
39. Regional Board staff have determined that acrylonitrile, aldrin, benzidine, bis(2-chloroethyl) ether, chlordane, DDT, 3,3'-dichloro-benzidine, dieldrin, 1,2-diphenylhydrazine, heptachlor, heptachlor epoxide, hexachlorobenzene, n-nitrosodi-n-propylamine, PAHs, PCBs, TCDD, and toxaphene showed the potential to exceed their respective objectives, and, therefore, require effluent limitations. WQBELs for these pollutants were calculated using the procedure outlined in the Ocean Plan.
40. For constituents that have been determined to have no reasonable potential of causing, or contributing to, excursions of water quality objectives, no numerical limits are prescribed; instead a narrative limit to comply with all Ocean Plan objectives is provided and the discharger is required to monitor for these constituents to gather data for use in RPAs for future permit renewals and/or updates.
41. The Order is consistent with State and Federal antidegradation policies in that it does not authorize a change in the quantity of wastewater discharged by the facility, nor does it authorize a change or relaxation in the manner of treatment. As a result, both the quantity and quality of the discharge are expected to remain the same or be improved, consistent with antidegradation policies. In conformance with reasonable potential analysis procedures identified in State Board and USEPA documents, effluent limitations for some toxic constituents are not carried forth in this Order because there is not presently a reasonable potential for the constituents to cause or contribute to an exceedance of water quality standards. Without reasonable potential, there is no longer a need to maintain prior WQBELs under WQBEL regulations, antibacksliding provisions, or antidegradation policies. The accompanying monitoring and reporting program requires continued data collection and if monitoring data show a reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the permit will be reopened to incorporate appropriate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for potential and existing uses and conforms with antidegradation policies and antibacksliding provisions.
42. The effluent limitations and other requirements in this Order are based upon the Basin Plan, Ocean Plan, other federal and state plans, policies, and guidelines, plant performance, and best engineering judgment; and, as they are met, will be in conformance with the goals of the aforementioned water control plans and statutes. The specific methodology and example calculations for effluent limitations are documented in the fact sheet that accompanies this Order.

PERFORMANCE GOALS

43. Chapter III, section F.2 of the Ocean Plan allows the Regional Board to establish more restrictive water quality objectives and effluent limitations than those set forth in the Ocean Plan as necessary for the protection of the beneficial uses of ocean waters.

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (*Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task force, September 30, 1993*) that was adopted by the Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order. This approach is consistent with the antidegradation policy in that it requires the City to maintain its treatment level and effluent quality recognizing normal variations in treatment efficiency, and sampling and analytical techniques. However, this approach does not address substantial changes in plant operations that could significantly affect the quality of the treated effluent.

44. While performance goals were present in many POTW permits in the region previously, they are not continued for discharges that are made to inland surface waters. For inland surface waters, the California Toxics Rule (40 CFR 131.38) has resulted in effluent limits as stringent as many performance goals. However, the Ocean Plan allows for significant dilution, and the continuing use of performance goals serves to maintain existing treatment levels and effluent quality and supports the State and Federal antidegradation policies.
45. The performance goals are based upon the actual performance of the Oxnard WTF and are specified only as an indication of the treatment efficiency of the facility. Performance goals are intended to minimize pollutant loading (primarily toxics) and, at the same time, maintain the incentive for future voluntary improvement of water quality whenever feasible, without the imposition of more stringent limits based on improved performance. They are not considered as limitations or standards for the regulation of the discharge from the treatment facility. The Executive Officer may modify any of the performance goals if the City requests and has demonstrated that the change is warranted. The methodology for calculating the performance goals is documented in the Fact Sheet accompanying this Order.

PUBLIC NOTIFICATION AND CEQA COMPLIANCE

46. The Regional Board has notified the City and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.
47. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements. All Orders and documents referred to above and records of hearings and testimony therein are included in the administrative records by reference.
48. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and shall take effect at the end of fifty days from the date of adoption provided the Regional Administrator of the USEPA has no objections.

49. The issuance of waste discharge requirements that serve as an NPDES permit for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 (California Environmental Quality Act) of the Public Resources Code in accordance with California Water Code Section 13389.
50. Pursuant to the California Water Code Section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento CA 95812, within 30 days of adoption of this Order.

IT IS HEREBY ORDERED that CITY OF OXNARD, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, and the provisions of the Ocean Plan and regulations and guidelines adopted thereunder, shall comply with the following:

I. DISCHARGE LIMITATIONS

A. Effluent Limitations

1. Wastes discharged shall be limited to secondary-treated wastewater only, as proposed in the ROWD.
2. The pH of wastes discharged shall at all times be within the range of 6.0 and 9.0.
3. The temperature of wastes discharged shall not exceed 100⁰F.
4. The arithmetic mean values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of values, of BOD₅20⁰C and the suspended solids by weight, for influent samples collected at approximately the same time during the same period.
5. The effluent discharge limitations and performance goals for the discharge are given below. The discharge of an effluent with constituents in excess of the discharge effluent limitations is prohibited.

The Discharger shall maintain, if not improve, its treatment efficiency. Any exceedance of the performance goals shall trigger an investigation into the cause of the exceedance. If the exceedance persists in two successive monitoring periods, the City shall submit a written report to the Regional Board on the nature of the exceedance, the results of the investigation as to the cause of the exceedance, and the corrective actions taken or proposed corrective measures with timetable for implementation, if necessary.

a. Major Wastewater Constituents

<u>Constituent</u>	Unit	Discharge Limitations ^[1]		
		Monthly Average	Weekly Average	Daily Maximum ^[2]
BOD ₅ 20°C ^[3]	mg/L	30	45	[4]
	lbs/day	7,900	12,000	
Suspended solids ^[3]	mg/L	30	45	[4]
	lbs/day	7,900	12,000	
Oil and grease ^[5]	mg/L	25	40	75
	lbs/day	6,600	10,600	20,000
Settleable solids ^[5]	mL/L	1.0	1.5	3.0
Turbidity ^[5]	NTU	75	100	225

b. Toxic Constituents Limitations for Protection of Marine Aquatic Life

Constituent	Unit	Discharge Limitations ^[1, 6]			
		30-Day Average	Daily ^[2] Maximum	Instantaneous Maximum ^[7]	Performance Goal ^[8] Monthly
Arsenic	µg/L	[9]	[9]	[9]	5.2 ^[10]
	lbs/day				1.4
Cadmium	µg/L	[9]	[9]	[9]	3.2 ^[10]
	lbs/day				0.84
Chromium VI ^[11]	µg/L	[9]	[9]	[9]	10
	lbs/day				2.8
Copper	µg/L	[9]	[9]	[9]	25 ^[10]
	lbs/day				6.5
Lead	µg/L	[9]	[9]	[9]	15 ^[10]
	lbs/day				4.1
Mercury	µg/L	[9]	[9]	[9]	0.43 ^[10]
	lbs/day				0.11
Nickel	µg/L	[9]	[9]	[9]	46 ^[10]
	lbs/day				12
Selenium	µg/L	[9]	[9]	[9]	2.2 ^[10]
	lbs/day				0.58
Silver	µg/L	[9]	[9]	[9]	5.4 ^[10]
	lbs/day				1.4
Zinc	µg/L	[9]	[9]	[9]	68 ^[10]
	lbs/day				18
Cyanide	µg/L	[9]	[9]	[9]	19 ^[10]
	lbs/day				5.0
Total Residual Chlorine	mg/L	[9]	[9]	[9]	0.085 ^[10]
	lbs/day				23
Ammonia (as N)	mg/L	[9]	[9]	[9]	25 ^[10]
	lbs/day				6600

b. Toxic Constituents Limitations for Protection of Marine Aquatic Life
(Continued)

Constituent	Unit	Discharge Limitations ^[1]			Performance Goal ^[8] Monthly
		30-Day Average	Daily ^[2] Maximum	Instantaneous ^[7] Maximum	
Chronic Toxicity ^[12]	TUc	[9]	[9]	[9]	23 ^[12]
Non-Chlorinated-Phenolic Compounds	µg/L	[9]	[9]	[9]	10 ^[25]
	lbs/day				1.9
Chlorinated-Phenolic Compounds	µg/L	[9]	[9]	[9]	50 ^[13]
	lbs/day				13
Endosulfan ^[14]	µg/L	[9]	[9]	[9]	0.005 ^[10]
	lbs/day				0.0013
Endrin	µg/L	[9]	[9]	[9]	0.006 ^[10]
	lbs/day				0.0016
HCH ^[15]	µg/L	[9]	[9]	[9]	0.16 ^[10]
	lbs/day				0.042
Radioactivity	Not to exceed limit specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 1, Section 30253 of the California Code of Regulations. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.				

c. Human Health Toxicants - Non-Carcinogens

Constituent	Unit	Monthly Average Discharge Limitations ^[1, 6]	Performance Goal ^[8]
Acrolein	µg/L	[9]	100 ^[13]
	lbs/day		27
Antimony	µg/L	[9]	49 ^[10]
	lbs/day		13
Bis(2-chloroethoxy)methane	µg/L	[9]	100 ^[13]
	lbs/day		27
Bis(2-chloroisopropyl)ether	µg/L	[9]	100 ^[13]
	lbs/day		27
Chlorobenzene	µg/L	[9]	5 ^[13]
	lbs/day		1.3
Chromium III ^[11]	µg/L	[9]	10
	lbs/day		2.8
Di-n-butyl phthalate	µg/L	[9]	100 ^[13]
	lbs/day		27
Dichlorobenzenes ^[16]	µg/L	[9]	100 ^[13]
	lbs/day		27

c. Human Health Toxicants - Non-Carcinogens (Continued)

Constituent	Unit	Monthly Average Discharge Limitations ^[1, 6]	Performance Goal ^[8]
Diethyl phthalate	µg/L	[9]	100 ^[13]
	lbs/day		27
Dimethyl phthalate	µg/L	[9]	100 ^[13]
	lbs/day		27
4,6-dinitro-2-methylphenol	µg/L	[9]	500 ^[13]
	lbs/day		130
2,4-dinitrophenol	µg/L	[9]	400 ^[17]
	lbs/day		110
Ethylbenzene	µg/L	[9]	5 ^[13]
	lbs/day		1.3
Fluoranthene	µg/L	[9]	5 ^[13]
	lbs/day		1.3
Hexachlorocyclopentadiene	µg/L	[9]	100 ^[13]
	lbs/day		27
Nitrobenzene	µg/L	[9]	100 ^[13]
	lbs/day		27
Thallium	µg/L	[9]	30 ^[10]
	lbs/day		8.0
Toluene	µg/L	[9]	1.1 ^[10]
	lbs/day		0.29
Tributyltin	µg/L	[9]	0.003
	lbs/day		0.0008
1,1,1-trichloroethane	µg/L	[9]	5 ^[13]
	lbs/day		1.3

d. Human Health Toxicants - Carcinogens

Constituent	Unit	Monthly Average Discharge Limitations ^[1, 6]	Performance Goal ^[8] , Monthly
Acrylonitrile	µg/L	9.9	[18]
	lbs/day	2.6	
Aldrin	ng/L	2.2	[18]
	lbs/day	0.00058	
Benzene	µg/L	[9]	2.5 ^[13]
	lbs/day		0.66
Benzidine	ng/L	6.8	[18]
	lbs/day	1.8	
Beryllium	µg/L	[9]	0.97 ^[10]
	lbs/day		0.26
Bis(2-chloroethyl)ether	µg/L	4.5	[18]
	lbs/day	1.2	

d. Human Health Toxicants – Carcinogens (Continued)

Constituent	Unit	Monthly Average Discharge Limitations ^[1, 6]	Performance Goal ^[8] , Monthly
Bis(2-ethylhexyl)phthalate	µg/L	[9]	50 ^[13]
	lbs/day		13
Carbon tetrachloride	µg/L	[9]	2.5 ^[13]
	lbs/day		0.66
Chlordane ^[19]	ng/L	2.3	[18]
	lbs/day	0.0006	
Chlorodibromomethane	µg/L	[9]	5 ^[13]
	lbs/day		1.3
Chloroform	µg/L	[9]	4.7 ^[10]
	lbs/day		1.2
DDT ^[20]	ng/L	17	7.4 ^[10]
	lbs/day	0.0045	2.0
1,4-dichlorobenzene	µg/L	[9]	2.8 ^[10]
	lbs/day		0.74
3,3 -Dichlorobenzidine	µg/L	0.80	[18]
	lbs/day	0.21	
1,2-dichloroethane	µg/L	[9]	5 ^[13]
	lbs/day		1.3
1,1-dichloroethylene	µg/L	[9]	5 ^[13]
	lbs/day		1.3
Dichlorobromomethane	µg/L	[9]	5 ^[13]
	lbs/day		1.3
Dichloromethane	µg/L	[9]	0.86
	lbs/day		0.23
1,3-dichloropropene	µg/L	[9]	5 ^[13]
	lbs/day		1.3
Dieldrin	ng/L	4.0	[18]
	lbs/day	0.0011	
2,4-dinitrotoluene	µg/L	[9]	50 ^[14]
	lbs/day		13
1,2-Diphenylhydrazine	µg/L	16	[18]
	lbs/day	4.2	[18]
Halomethanes ^[21]	µg/L	[9]	5 ^[14]
	lbs/day		1.3
Heptachlor	ng/L	5.0	[18]
	lbs/day	0.0013	
Heptachlor epoxide	ng/L	2.0	[18]
	lbs/day	0.00053	
Hexachlorobenzene	ng/L	21	[18]
	lbs/day	5.6	

d. Human Health Toxicants – Carcinogens (Continued)

Constituent	Unit	Monthly Average Discharge Limitations ^[1, 6]	Performance Goal ^[8] , Monthly
Hexachlorobutadiene	µg/L	[9]	50 ^[13]
	lbs/day		13
Hexachloroethane	µg/L	[9]	50 ^[13]
	lbs/day		13
Isophorone	µg/L	[9]	50 ^[13]
	lbs/day		13
n-nitrosodimethylamine	µg/L	[9]	50 ^[13]
	lbs/day		13
n-nitrosodi-n-propylamine	µg/L	38	[18]
	lbs/day	10	
n-nitrosodiphenylamine	µg/L	[9]	50 ^[13]
	lbs/day		13
PAHs ^[22]	µg/L	0.87	[18]
	lbs/day	0.23	
PCBs ^[23]	ng/L	1.9	[18]
	lbs/day	0.0005	
TCDD equivalents ^[24]	pg/L	0.39	[18]
	lbs/day	0.0000001	
1,1,2,2-tetrachloroethane	µg/L	[9]	5 ^[13]
	lbs/day		1.3
Tetrachloroethylene	µg/L	[9]	2.5 ^[13]
	lbs/day		0.66
Toxaphene	ng/L	21	[18]
	lbs/day	0.0055	
Trichloroethylene	µg/L	[9]	5 ^[13]
	lbs/day		1.3
1,1,2-trichloroethane	µg/L	[9]	2.5 ^[13]
	lbs/day		0.66
2,4,6-trichlorophenol	µg/L	[9]	29 ^[17]
	lbs/day		7.6
Vinyl chloride	µg/L	[9]	2.5 ^[13]
	lbs/day		0.66

Footnotes for Effluent Limitations

- [1]. The mass emission rate limits are based on the average design flow rate of 31.7 mgd. During storm events when flow exceeds the design capacity, the mass emission rate limit shall not apply. Only the concentration limits shall apply.
- [2]. The daily maximum effluent concentration limit shall apply to flow-weighted 24-hour composite samples, except in cases where a grab sample is the appropriate method

of sampling for the constituent, e.g., oil and grease, chromium VI.

- [3]. Limits are based on secondary treatment requirements, 40 CFR section 133.102.
- [4]. Daily maximum limits are not specified for the secondary-treatment standards in the 40 CFR section 133.102.
- [5]. Limits are based on Ocean Plan effluent limitations, *Table A*.
- [6]. Limits are based on Ocean Plan objectives using a dilution ratio of 98 parts of seawater to 1 part effluent.
- [7]. The instantaneous maximum shall apply to grab sample results.
- [8]. The performance goals are based upon the actual performance of the Oxnard WTP and are specified only as an indication of the treatment efficiency of the plant. They are not considered as limitations or standards for the regulation of the treatment plant. Oxnard WTP shall make best efforts to maintain, if not improve, the effluent quality at the level of the performance goals. The Executive Officer may modify any of the performance goals if the City requests and has demonstrated that the change is warranted.
- [9]. These constituents did not show reasonable potential to exceed the Ocean Plan objectives, therefore, no numerical limits are prescribed.
- [10]. Numerical effluent quality performance goals were derived statistically using data in the Discharger's Monitoring Reports from January 1995 to June 2001. Effluent pollutant data with values above detection limits are assumed lognormally distributed. One half of the detection limit was assigned to each nondetected sample in order to perform a successful statistical analysis. The performance goal was set at the 95th percentile using the protocol described in *Appendix E* of the *Technical Support Document for Water Quality-based Toxics Control, 1991*.
- [11]. The City has the option to meet the hexavalent chromium limitation with a total chromium analysis. However, if the total chromium level exceeds the hexavalent chromium limitation, it will be considered a violation unless an analysis has been made for hexavalent chromium in a replicate/split sample and the result has been shown to be in compliance with the hexavalent chromium limit.
- [12]. Expressed as Chronic Toxicity Units (TU_c)

$$TU_c = 100/NOEC$$

where: NOEC (No Observed Effect Concentration) 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 in Table III-1, Appendix III of the Ocean Plan adopted and effective on December 3, 2001.

NOEC shall be determined based on toxicity tests having chronic endpoints.

The chronic performance goal was derived statistically using data in the Discharger's Monitoring Reports for the period from August 2000 to December 2001. Effluent pollutant data were assumed lognormally distributed.

- [13]. These constituents were not detected. Performance goals are set at five times (for carcinogens and marine aquatic life toxicants) or ten times (for noncarcinogens) of the minimum reported method detection limits.
- [14]. Endosulfan shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.
- [15]. HCH means the sum of alpha, beta, gamma (lindane), and delta isomers of hexachlorocyclohexane.
- [16]. Dichlorobenzenes shall mean the sum of 1,2- and 1,3-dichlorobenzene.
- [17]. These constituents were determined not to have reasonable potential to exceed the respective calculated effluent limits, but the calculated performance goals according to the footnote [13] exceed the respective calculated effluent limits. Thus, the performance goals are set at the calculated effluent limits based on Ocean Plan objectives.
- [18]. These constituents have been determined to have reasonable potential. The calculated performance goals according to footnote [13], however, are higher than the respective effluent limitations, therefore, no performance goals are prescribed.
- [19]. Chlordane means the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma and oxychlordane.
- [20]. DDT means the sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD and 2,4'-DDD.
- [21]. Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).
- [22]. PAHs (polynuclear aromatic hydrocarbons) mean the sum of acenaphthylene, anthracene, 1, 2-benzanthracene, 3, 4-benzofluoranthene, benzo[k]-fluoranthene, 1, 12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1, 2, 3-cd]pyrene, phenanthrene and pyrene.
- [23]. PCBs (polychlorinated biphenyls) mean the sum of chlorinated biphenyls which analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.
- [24]. TCDD equivalents mean the sum of the concentration of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below:

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

octa CDF

0.001

[25]. Detection limit of 10 µg/L is used as the performance goal.

6. Waste discharged to the ocean must be essentially free of:
 - a. Material that is floatable or will become floatable upon discharge.
 - b. Settleable material or substances that may form sediments, which will degrade benthic communities or other aquatic life.
 - c. Substances that 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.

- B. Receiving Water limitations
 1. Bacterial Characteristics
 - a. 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 waste discharged shall not cause the following bacterial standards throughout the water column to be exceeded:

 - (1). 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 1000 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).
 - (2). 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.

b. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the waste discharged shall not cause the following bacteria standards to be exceeded:

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.

If a shore station consistently exceeds a total or fecal 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 City shall conduct a sanitary survey to determine if the discharge is the source of the contamination. The geometric mean shall be a moving average based on no less than five samples, spaced evenly over the time interval. When a sanitary survey identifies a controllable source of indicator organisms associated with the discharge of sewage, the City shall take action to control the source.

2. Physical Characteristics

The waste discharged shall not:

- a. Cause floating particulates and oil and grease to be visible;
- b. Cause aesthetically undesirable discoloration of the ocean surface;
- c. Significantly reduce the transmittance of natural light at any point outside the initial dilution zone; and,
- d. Change the rate of deposition of inert solids and the characteristics of inert solids in ocean sediments such that benthic communities are degraded.

3. Chemical Characteristics

The waste discharged shall not:

- a. Cause the dissolved oxygen concentration at any time to be depressed more than 10 percent from that which occurs naturally, excluding effects of naturally induced upwelling;
- b. Change the pH of the receiving waters at any time more than 0.2 units from that which occurs naturally;

- c. Cause the dissolved sulfide concentration of waters in and near sediments to be significantly increased above that present under natural conditions;
 - d. Contain individual pesticides or combinations of pesticides in concentrations that adversely affect beneficial uses;
 - e. Cause the concentration of substances set forth in Chapter II, Table B of the Ocean Plan, in marine sediments to increase to levels that would degrade indigenous biota;
 - f. Cause the concentration of organic materials in marine sediments to be increased to levels that would degrade marine life; and,
 - g. Contain nutrients at levels that will cause objectionable aquatic growths or degrade indigenous biota.
4. Biological Characteristics

The waste discharged shall not:

- a. Degrade marine communities, including vertebrate, invertebrate, and plant species;
- b. Alter the natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption; and,
- c. Cause the concentration of organic materials in fish, shellfish or other marine resources used for human consumption to bioaccumulate to levels that are harmful to human health.

II. PRETREATMENT REQUIREMENTS

- A. This Order and permit include the City's pretreatment program as previously submitted to and approved by this Regional Board Executive Officer and the USEPA. Any change to the program shall be reported to the Regional Board and USEPA in writing and shall not become effective until approved by the Executive Officer and the USEPA Regional Administrator.
- B. The City shall implement and enforce its approved pretreatment program. The City shall be responsible and liable for the performance of all pretreatment requirements contained in 40 CFR Part 403 including subsequent regulatory revisions thereof. Where Part 403 or subsequent revision places mandatory actions upon the City as Control Authority but does not specify a timetable for completion of the actions, the City shall complete the required actions within six months from the issuance date of this Order and permit or the effective date of the Part 403 revisions, whichever comes later. For violations of pretreatment requirements, the City shall be subject to enforcement actions, penalties, fines, and other remedies by USEPA, Regional

Board, or other appropriate parties, as provided in the Clean Water Act. USEPA or the Regional Board may initiate enforcement action against an industrial user for noncompliance with applicable standards and requirements as provided in the Clean Water Act and/or the California Water Code.

- C. The City shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the Clean Water Act with timely, appropriate and effective enforcement actions. The City shall cause industrial users subject to the 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.
- D. The City shall perform the pretreatment functions as required in the Federal Regulations 40 CFR Part 403 including, but not limited to:
 - 1. Implement the necessary legal authorities as provided in 40 CFR 403.8(f) (1);
 - 2. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
 - 3. Implement the programmatic functions as provided in 40 CFR 403.8(f) (2); and
 - 4. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f) (3).
- E. The City shall submit annually a report to the Regional Board with copies to the USEPA, and the State Board describing the City's pretreatment activities over the previous year. In the event of noncompliance with any conditions or requirements of this permit, the City shall include the reasons for noncompliance and state how and when the City shall comply with such conditions and requirements. This annual report shall cover operations from January through December 31 of the previous year and is due on March 1 of each year and shall contain, but not be limited to, the information required in the attached "*Requirements for Pretreatment - Annual Report*" (Attachment No. P), or an approved revised version thereof.

III. PROHIBITIONS

- A. The bypass or overflow of untreated or partially treated wastewater to waters of the State, either at the treatment plant or from the collection system or pump stations tributary to the treatment plant, is prohibited except as provided for bypasses under the conditions stated in 40 CFR 122.41 (m)(4). Bypassing of individual treatment process, for example during periods of elevated wet weather flow, is allowable provided that the combined discharge of fully treated and partially treated wastewater complies with the effluent and receiving water limitations in this Order.
- B. The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited.
- C. The discharge of sludge digester supernatant and centrate directly to the ocean, or into a waste stream that discharges to the ocean without further treatment is

prohibited.

- D. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States is prohibited unless specifically authorized elsewhere in this permit. This requirement is not applicable to products used for lawn and agricultural purposes. Discharge of chlorine for disinfection in plant potable and service water systems and in sewage treatment is authorized.
- E. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this Order.

IV. PROVISIONS

- A. This Order includes the attached "*Standard Provisions, General Monitoring and Reporting Requirements*". ("Standard Provisions", Attachment N). If there is any conflict between provisions stated hereinbefore and said "Standard Provisions", those provisions stated hereinbefore prevail.
- B. This Order and permit includes the attached *Monitoring and Reporting Program (CI-2022) (M&RP, Attachment T)*. If there is any conflict between provisions stated in the Standard Provisions and the Monitoring and Reporting Program, those provisions in the latter prevail.
- C. The wastes discharged shall comply with all Ocean Plan objectives.
- D. The City shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, and 405 of the Federal Clean Water Act and amendments thereto.
- E. Biosolids Use and Disposal Requirements (Attachment B). For biosolids/sludge management, the City must comply with all requirements of 40 CFR sections 257, 258, 501, and 503, including all monitoring, record keeping, and reporting requirements.

Since the State of California, hence the Regional Board, has not been delegated the authority to implement the sludge program, enforcement of the sludge requirements contained in this Order shall be the responsibility of the USEPA. The Board, however, shall be furnished with a copy of any report submitted to the USEPA.

- F. Compliance Determination
 - 1. Compliance with single constituent effluent limitations – If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (see Reporting Requirement III. A. of *M&RP*), then the Discharger is out of compliance.

2. Compliance with monthly average limitations - In determining compliance with monthly average limitations, the following provisions shall apply to all constituents:

- a. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the monthly average limit for that constituent, the Discharger will have demonstrated compliance with the monthly average limit for that month.
- b. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the monthly average limit for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after the sample was obtained, whichever is later.

When all sample results are greater than or equal to the reported Minimum Level (see Reporting Requirement III. A. of M&RP), the numerical average of the analytical results of these four samples will be used for compliance determination.

When one or more samples results are reported as "Not-Detected (ND)" or "Detected, but Not Quantified (DNQ)" (see Reporting Requirement III. D. of M&RP), the median value of these four samples will be used for compliance determination. If one or both of the middle values is ND or DNQ, the median will be the lower of the two middle values.

- c. In the event of noncompliance with a monthly average effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the monthly average effluent limitation has been demonstrated.
- d. If only one sample was obtained for the month or more than a monthly period and the result exceed the monthly average, then the Discharger is in violation of the monthly average limit.

3. Compliance with effluent limitations expressed as a sum of several constituents – If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero.

G. In calculating mass emission rates and the monthly average concentrations, use one half of the method detection limit for "Not Detected" (ND) and the estimated concentration for "Detected, but Not Quantified" (DNQ).

H. **Pollutant Minimization Program (PMP)**

1. The goal of the PMP is to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention

measures, in order to maintain the effluent concentration at or below the effluent limitation.

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

2. The Discharger shall develop and conduct a PMP if all of the following conditions are true, and shall submit the PMP to the Regional Board within 90 days of determining the conditions are true:
 - a. The calculated effluent limitation is less than the reported minimum level;
 - b. The concentration of the pollutant is reported as "Detected, but Not Quantified", DNQ;
 - c. There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.
3. The Discharger shall also develop and conduct a PMP if all of the following conditions are true, and shall submit the PMP to the Regional Board within 90 days of determining the conditions are true:
 - a. The calculated effluent limitation is less than the method detection limit;
 - b. The concentration of the pollutant is reported as "Not-Detected", ND;
 - c. There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.
4. The Discharger shall consider the following in determining whether the pollutant is present in the effluent at levels above the calculated effluent limitation:
 - a. health advisories for fish consumption;
 - b. presence of whole effluent toxicity;
 - c. results of benthic or aquatic organism tissue sampling;
 - d. sample results from analytical methods more sensitive than methods included in the permit;
 - e. the concentration of the pollutant is reported as DNQ and the effluent limitation is less than the method detection limit.
5. Elements of a PMP. The PMP shall include actions and submittals acceptable to the Regional Board including, but not limited to, the following:

- a. An annual review and semi-annual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other bio-uptake sampling;
- b. Quarterly monitoring for the reportable pollutant in the influent to the wastewater treatment system;
- c. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant in the effluent at or below the calculated effluent limitation;
- d. Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy; and,
- e. An annual status report that shall be sent to the Regional Board including:
 - All PMP monitoring results for the previous year;
 - A list of potential sources of the reportable pollutant;
 - A summary of all action taken in accordance with control strategy; and,
 - A description of actions to be taken in the following year.
- I. 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.
- J. Waste effluents shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.
- K. Location of waste discharge must assure the following:
 1. 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.
 2. Natural water quality conditions are not altered in areas designed as being of special biological significance or areas that existing marine laboratories use as a source of seawater.
 3. Maximum protection is provided to the marine environment.
- L. 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 should be used.

- M. The City shall notify the Regional Board immediately by telephone or electronically, but not later than 24 hours, of the presence of adverse conditions in the receiving waters or on beaches and shores as a result of the waste discharge; written confirmation shall follow as soon as possible but not later than five working days after notification.
- N. The City shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other causes, the discharge of raw or inadequately treated sewage does not occur.
- O. The City shall notify the Executive Officer in writing no later than six months prior to planned discharge of any chemical, other than chlorine or other product previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
 - 1. Name and general composition of the chemical,
 - 2. Frequency of use,
 - 3. Quantities to be used,
 - 4. Proposed discharge concentrations, and
 - 5. USEPA registration number, if applicable.

No discharge of such chemical shall be made prior to obtaining approval from the Executive Officer.

V. REOPENERS AND MODIFICATION

- A. This Order may be reopened and modified, to incorporate new limits based on future reasonable potential analyses to be conducted based on on-going monitoring data collected by the Discharger and evaluated by the Regional Board.
- B. This Order and permit may be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR Parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption and issuance. The filing of a request by the City for an Order and permit modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliances does not stay any condition of this Order and permit.

VI. EXPIRATION DATE

- A. This Order expires on July 10, 2007.
- B. The City must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the expiration date as application for issuance of new waste discharge requirements.

VII. RESCISSION

Order No. 94-045 adopted by this Board on June 13, 1994 is hereby rescinded upon the effective date of this Order, except for purposes of enforcement.

I, Dennis Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on July 11, 2002.

Dennis A. Dickerson
Executive Officer

/DTSAI