CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. R4-2002-0094

NPDES PERMIT NO. CA0054372

CITY OF AVALON

AVALON WASTEWATER TREATMENT FACILITY

March 20, 2002
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TABLE OF CONTENTS

State of California
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WASTE DISCHARGE REQUIREMENTS FOR CITY OF AVALON (Avalon Wastewater Treatment Facility)

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

PURPOSE OF ORDER

1. The City of Avalon (City or Discharger) discharges secondary treated municipal wastewater from the Avalon Wastewater Treatment Facility (Avalon WTF or Plant) under waste discharge requirements contained in Order No. 94-069 adopted by this Regional Board on July 18, 1994. Order No. 94-069 serves as the National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0054372) that regulates the discharge of treated wastewater to the Pacific Ocean, a water of the State and the United States. Order No. 94-069 had an expiration date of July 10, 1999.

2. On February 22, 1999, the City filed a report of waste discharge (ROWD) and applied for renewal of its waste discharge requirements and NPDES permit. Pursuant to 40 Code of Federal Regulations (CFR) section 122.6 and California Code of Regulations (CCR), Title 23, Section 2235.4, the Discharger's permit has been administratively extended until Regional Board action on the permit.

3. This Order is the reissuance of waste discharge requirements and NPDES permit for the Avalon WTF

FACILITY AND TREATMENT PROCESS DESCRIPTION

4. The City owns and operates the Avalon WTF located on Pebbly Beach Road, near the southeastern coastal tip of Santa Catalina Island, Los Angeles County, California (see Figure 1, Location Map). The Avalon WTF treats municipal wastewater, which is a mixture of fresh and salt water, from domestic and commercial sources. In addition, to protect water quality in Avalon Bay, the Avalon WTF also treats dry weather surface runoff and a portion of the first flush of stormwater, which are pumped from the storm drain to the Avalon WTF via a low flow diversion system. There are approximately 3,500 people in its service area. The Plant has an average dry weather design treatment capacity of 1.2 millions gallons per day (mgd). In 2000, the annually average discharge from the Plant was 0.56 mgd, with the highest monthly average of 0.77 mgd during the month of August. The treated wastewater is discharged into the Pacific Ocean, a water of the United States, through an ocean outfall off Pebbly Beach.

5. The United States Environmental Protection Agency (USEPA) and the Regional Board have classified the Avalon 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.

6. Wastewater treatment at the Avalon WTF consists of a rotating screen for removal of large particles, a trickling filter and activated sludge reactors for removal of organics, clarifiers for separation of solids, and a chlorination system. The effluent is partially chlorinated with the addition of sodium hypochlorite solution to maintain consistent compliance with the receiving water bacterial standards. Chlorine concentration is up to 2 mg/L in the effluent at the entrance to the chlorine contact chamber. Solids separated at the rotating screen are sent to a landfill. Waste sludge from the activated sludge reactors is aerobically digested, dewatered in a centrifuge, and dried in sludge drying beds before being hauled to a landfill. The trickling filter is only used during summer, when part of the influent is passed through the trickling filter to increase the dissolved oxygen content of the wastewater.

7. In 1998, improvements were made to the Avalon WTF to extend the life of the facility for five years or longer to allow the City's ongoing expansion plans to be realized. These improvements involved extensive structural rehabilitation and improvements, including replacement of the surface-mounted aerators with enhanced fine bubble diffuser system and modification of the sludge drying beds to provide improved wet weather performance. Other significant upgrades include the ocean outfall replacement with high density polythylene pipe in 1998, sewer main sliplining in 1998 and 2002, and the installation of lift station emergency generators in 2001.

OUTFALL, DISCHARGE QUALITY, AND RECEIVING WATER DESCRIPTION

8. The treated wastewater is discharged through the ocean outfall off Pebbly Beach at approximately half way between the Avalon WTF and Avalon Bay (see Figure 1). The description of the outfall is as follows:

Discharge Serial Number	001
Diameter of Pipe at Discharge Terminus (feet)	1
Outfall Distance Offshore (feet)	400
Discharge Depth Below Surface Water (feet)	130
Latitude	33°20'19" North
Longitude	118°18'40" West

9. The waste flow to the Avalon WTF is approximately 40 to 50% salt water. Seawater is used for toilet flushing in the City of Avalon. Effluent characteristics, shown in the following Table 1, are based on data listed in the ROWD and the Discharger's annual reports from 1995 to 2000 submitted to the Regional Board. Pollutants with nondetectable levels are not included.

Table 1. Effluent Characteristics*

Constituent	Units	Average	Minimum	Maximum
Flow	mgd	0.64	0.45	0.92
Temperature	°F			
Summer		76.1	72.5	79.5
Winter		67.5	64.4	80.0
pH	pH units	7.26	7.01	7.60
BOD_5 20°C	mg/L	8	4	15
Total organic carbon (TOC)	mg/L	6.4	2.1	9.9
Total suspended solids	mg/L	14	7	25
Total dissolved solids	mg/L	18419	16668	21180
Oil and grease**	mg/L	11	8	18
Chlorine residual	mg/L	<0.01	<0.01	<0.01
Settleable solids	ml/L	0.2	0.1	0.6
Turbidity	NTU	4	2.7	6.8
Ammonia (as N)	mg/L	0.46	<0.1	1.1
Nitrate (as N)	mg/L	53	34	77
Cyanide***	µg/L	--	--	50
Antimony***	µg/L	--	--	70
Arsenic***	µg/L	--	--	62
Cadmium***	µg/L	--	--	3
Chromium (III)***	µg/L	--	--	106
Nickel***	µg/L	--	--	23
Copper***	µg/L	--	--	34
Selenium***	µg/L	--	--	5
Zinc***	µg/L	--	--	61
Bis (2-ethylhexyl) phthalate	µg/L	--	--	13
Di-n-butyl phthalate	µg/L	--	--	18
Methyl-tert-butyl-ether (MTBE)**	µg/L	--	--	<0.6
TCDD equivalents**	pg/L	--	--	<5100
DDT**	µg/L	--	--	<0.006
PCBs**	µg/L	--	--	<0.121
Radioactivity				
Gross alpha	pCi/L	--	--	1
Total beta	pCi/L	--	--	0.5

* Unless otherwise indicated, the data are from the ROWD. The "<" symbol indicates that the pollutant was not detected (ND) at that concentration level.
** Based on the 2000 annual report.
*** Based on data from 1995 to 2000.

10. The receiving water (Pacific Ocean) is part of the Santa Catalina Subwatershed. In general, the water quality of ocean waters in the vicinity of the island is good. No part of the subwatershed is listed as impaired under the 1998 Clean Water Act (CWA) Section 303(d) list. However, since the implementation of Assembly Bill 411 in 1999, which

requires the Los Angeles County Department of Health Services (LADHS) to monitor weekly for bacteria in the water near the beaches, water in neaby Avalon Bay showed high counts of bacteria. The sources of these high counts are under investigation by the City of Avalon, LADHS, and the Regional Board. Based on bacteriological data presented in the receiving water monitoring reports, the Avalon WTF is unlikely to be the cause of these high coliform counts.

APPLICABLE LAWS, PLANS, POLICIES AND REGULATIONS

11. **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.

    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 and prospective revisions thereof. This Order implements the plans, policies, and provisions of the Board's Basin Plan.

12. **Sources of Drinking Water Policy.** On May 19, 1988, the State Board adopted Resolution No. 88-63, *Sources of Drinking Water (SODW)* Policy, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with State Board's SODW policy, on March 27, 1989, the Regional Board adopted Resolution No. 89-03, *Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans) – Santa Clara River Basin (4A)/ Los Angeles River Basin (4B).*

    Consistent with Regional Board Resolution No. 89-03 and State Board Resolution No. 88-63, in 1994 the Regional Board conditionally designated all inland surface waters in Table 2-1 of the 1994 Basin Plan as existing, intermittent, or potential for Municipal and Domestic Supply (MUN). At the same time, the Regional Board conditionally designated the nearshore ocean waters off of Santa Catalina as potential MUN. However, the conditional designation in the 1994 Basin Plan included the following implementation provision: "no new effluent limitations will be placed in Waste Discharge Requirements as a result of these [potential MUN designations made pursuant to the SODW policy and the Regional Board's enabling resolution] until the Regional Board adopts [a special Basin Plan Amendment that incorporates a detailed review of the waters in the Region that should be exempted from the potential MUN designations arising from SODW policy and the Regional Board's enabling resolution]." On February 15, 2002, the USEPA clarified its partial approval of the 1994 Basin Plan amendments and acknowledged that the conditional designations do not currently have

a legal effect, do not reflect new water quality standards subject to USEPA review, and do not support new effluent limitations based on the SODW policy until a subsequent review by the Regional Board designates the waters. This permit is designed to be consistent with the existing Basin Plan.

13. **Ocean Plan.** On November 16, 2000, the State Board adopted a revised *Water Quality Control Plan for the Ocean Waters of California* (Ocean Plan*)*. The OAL and the USEPA approved revised plan on July 9, 2001 and December 3, 2001, respectively. 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.

14. **Beneficial Uses.** The beneficial uses of the Santa Catalina Island nearshore zones (defined as the zone 1000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline) are:

    Existing: navigation, water contact recreation, non-contact water recreation, ocean commercial and sport fishing, preservation of rare and endangered species, marine habitat, shellfish harvesting, and areas of special biological significance (ASBS).

    Potential: spawning, reproduction, and/or early development.

    The potential beneficial use of municipal and domestic water supply (MUN) was designated because of the presence of a desalination plant in the area and is consistent with Regional Board Resolution 89-03; however it has been determined that the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designed to solely protect the conditional MUN designation. However, no effluent limits in this permit are based on protection of the conditional MUN use. In addition, the desalination plant is currently non-operational and is not expected to be operated during the life of the permit.

15. **Areas of Special Biological Significance (ASBS).** Figure 2 is a vicinity map of the Avalon WTF and the surrounding ocean water. The State Board has designated the area from Binnacle Rock to Jewfish Point on Santa Catalina Island as an ASBS (*Areas of Special Biological Significance,* State Water Resources Control Board, Revised August 1998). The discharge outfall is outside the ASBS area, about 1.5 miles north of the ASBS area.

16. **Federal Water Pollution Control Act (Commonly Referred to as Clean Water Act, CWA).** Effluent limitations, guidelines, water quality standards, and ocean discharge criteria 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 307 (Toxic and Pretreatment Effluent Standards), and Section 402 (NPDES), Section 403 (Ocean Discharges), and Section 405 (Sewage Sludge Disposal) of the CWA. The CWA and amendments thereto are applicable to the discharge.

17. **Secondary Treatment Standards.** Pursuant to Section 301(b)(1)(B) of the CWA, the USEPA develop secondary treatment standards for publicly owned treatment works (POTW) as defined in Section 304(d)(1). These secondary treatment standards are codified in 40 CFR Part 133.

18. **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. The provisions of this Order are consistent with the antidegradation policies.

19. **Antibacksliding Policies.** Antibacksliding provisions are contained in Section 303(d) 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)(1) expressly prohibits backsliding of effluent limitations, while Section 402(o)(2) and Section 402(o)(3) provide the circumstances when relaxation of limits may be allowed.

20. The relaxation of effluent limitations for certain discharges covered by this Order are excepted from antibacksliding pursuant to CWA section 402(o)(2)(B)(i) 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) attached to this Order, certain constituents that previously had effluent limitations currently do not have reasonable potential. Consistent with antibacksliding statutes and regulations and USEPA regulations, the 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.

21. **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, however, the mass-based limits are inappropriate during storm events when plant flows may exceed design capacity. Therefore, during storm events when flows exceed design capacity, only concentration-based limits are applicable.

22. **Maximum Daily Effluent Limitations.** Pursuant to 40 CFR 122.45(d)(2), for a POTW's 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 permit, 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 122.45(d)(1), are included in the permit for certain constituents as discussed in the Fact Sheet accompanying this Order.

23. **Sludge Disposal.** 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. The State has not been delegated the authority to implement this program; therefore, the USEPA is the implementing agency. It is the responsibility of the City to comply with said regulations that are enforceable by USEPA.

24. **Stormwater Management.** The Avalon WTF does not collect nor treat storm water runoff except those that fall on or run on to the treatment tanks, or that infiltrate the sewer system. Storm water discharges from the facility are regulated under the State Board's *NPDES General Permit No. CAS00001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities* contained in Order No. 97-03-DWQ, adopted on April 17, 1997. This general permit was originally issued in November 1991, and amended in September 1992. In 1994, the City submitted a Notice of Intent to comply with the requirements of the general permit. It has developed and implemented a *Storm Water Pollution Prevention Plan* as required by the general permit.

25. **Watershed Management.** This Regional Board has implemented a Watershed Management Approach to address water quality protection in the Los Angeles region. 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 Executive Officer may require the Discharger to participate in a regional monitoring program for the Southern California Bight.

26. **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 standard, 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 the ocean waters off Santa Catalina Island are contained in 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.

BASES OF EFFLUENT AND RECEIVING WATER LIMITS

27. Effluent limitations for conventional, nonconventional, and toxic pollutant parameters 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 60:1 (i.e., 60 parts seawater to one part effluent). This ratio was calculated by the State Board.

28. Effluent limits for conventional pollutants are technology based. 40 CFR section 401.16 lists conventional pollutants designated pursuant to CWA Section 304(a)(4). These constituents include: biochemical oxygen demand (BOD), total suspended solids (TSS), oil and grease, pH, and coliforms. Effluent limitations for BOD and total suspended solids are based on the minimum level of effluent quality attainable by secondary treatment as specified in 40 CFR section 133.102.

29. Specific effluent limitations for each constituent contained in this order were developed in accordance with the foregoing laws, regulations, plans, policies, and guidance. The specific methodology and example calculations for effluent limitations are documented in the fact sheet prepared by Regional Board staff that accompanies this Order.

REASONABLE POTENTIAL ANALYSES (RPA) FOR TOXIC POLLUTANTS

30. 40 CFR section 122.44(d)(1)(i and iii) provide 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 section 122.44(d)(1)(ii) provides the procedure and factors, including variability of the level of 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 (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.

31. **Reasonable Potential Determination.** Regional Board staff conducted RPAs for all toxic pollutants listed in Table B of the Ocean Plan. Effluent data in the Discharger's monitoring reports from January 1995 to December 2000 and a dilution ratio of 60 were used in the analyses.

32. A reported maximum effluent value was first identified for each pollutant that had at least one detected value. If the pollutant was not detected in any of the effluent samples, the reported maximum MDL (minimum 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 there are less than 10 data points, 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 the pollutant is then calculated by factoring in the dilution ratio of 60. Finally, the projected receiving water concentration is compared with the appropriate water quality objective listed in the Ocean Plan.

33. Regional Board staff had determined that beryllium, copper, lead, silver, aldrin, chlordane, dieldrin, DDT, endrin, heptachlor, heptachlor epoxide, HCH, toxaphene, PCBs, benzidine, bis (2-chloroethyl) ether, 3,3'-dichloro-benzidine, 1,2-diphenylhydrazine, N-nitrosodi-N-propylamine, PAHs, 2,4,6-trichlorophenol, acrylonitrile, TCDD, cyanide, hexachloro-benzene, chlorinated phenolics, and tributyltin showed the potential to exceed their respective objectives, and, therefore, require effluent limitations. Water quality-based effluent limitations for these pollutants were calculated using the procedure outlined in the Ocean Plan.

34. 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.

35. The requirements contained in this Order are based on 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, resolutions, and statutes.

PERFORMANCE GOALS

36. 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 Regional Board on November 1, 1993, performance goals that are more stringent than the

effluent limits 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.

37. 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.

38. The performance goals are based upon the actual performance of the Avalon WTF and are specified only as an indication of the treatment efficiency of the facility. Performance goals are intended to minimize pollutant loading (primarilly 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 performance goals is identified in the Fact Sheet accompanying this Order.

39. **Pollutant Minimization Program.** This Order provides for the use of a Pollutant Minimization Program, developed in conformance with Section III.C.8 of the Ocean Plan, when there is evidence that a priority pollutant is present in the discharger's effluent above an effluent limitation. The goal of the pollutant minimization plan is to reduce all potential sources of a pollutant through pollution minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the WQBEL.

NOTIFICATION & CEQA

40. 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.

41. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

42. 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.

43. 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.

44. Pursuant to 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 the City of Avalon, 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 regulations and guidelines adopted thereunder, shall comply with the following:

I. DISCHARGE REQUIREMENTS

A. EFFLUENT LIMITATIONS AND PERFORMANCE GOALS

1. Wastes discharged shall be limited to chlorinated, secondary-treated wastewater only, as proposed.

2. The pH of the effluent discharged shall at all times be within the range of 6.0 and 9.0.

3. The temperature of waste discharged shall not exceed l00°F.

4. 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

		EFFLUENT LIMITATIONS [1]		
Constituent	Units	Monthly Average	Weekly Average	Daily Maximum[2]
BOD_5 20ºC[3]	mg/L	20	35	---
	lbs/day	200	350	---
Suspended solids[4]	mg/L	30	45	---
	lbs/day	300	450	---
Oil and grease[5]	mg/L	25	40	75
	lbs/day	250	400	---

a. Major Wastewater Constituents (continued)

Constituent	Units	EFFLUENT LIMITATIONS [1] Monthly Average	Weekly Average	Daily Maximum[2]
Settleable solids[5]	ml/L	1	1.5	3.0
Turbidity[5]	NTU	75	100	225

b. Toxic Materials Limitations for Protection of Marine Aquatic Life

Constituent	Units	EFFLUENT LIMITATIONS [1] [9] 30-Day Average	Daily Maximum[2]	Instantaneous Maximum [6]	PERFORMANCE GOALS[7] Monthly Average
Arsenic	µg/L	[10]	---	---	50 [8]
Cadmium	µg/L	[10]	---	---	17 [8]
Chromium (hexavelant)[13]	µg/L	[10]	---	---	20 [11]
Copper	µg/L	63	250	630	[12]
	lbs/day	0.63	2.5	---	---
Lead	µg/L	120	490	1200	10 [11]
	lbs/day	1.2	4.9	---	---
Mercury	µg/L	[10]	---	---	1 [11]
Nickel	µg/L	[10]	---	---	67 [8]
Selenium	µg/L	[10]	---	---	15 [11]
Silver	µg/L	33	130	330	10 [11]
	lbs/day	0.33	1.3	---	---
Zinc	µg/L	[10]	---	---	340 [8]
Cyanide	µg/L	61	240	610	50 [11]
	lbs/day	0.61	2.4	---	---
Total residual chlorine	µg/L	[10]	---	---	120 [11]
Ammonia as N	µg/L	[10]	---	---	1300 [11]

b. Toxic Materials Limitations for Protection of Marine Aquatic Life (continued)

Constituent	Units	EFFLUENT LIMITATIONS [1] [9] 30-Day Average	Daily Maximum[2]	Instantaneous Maximum [7]	PERFORMANCE GOALS[7] Monthly Average
Chronic toxicity [14]	TUc		61		---
Phenolic compounds (non-chlorinated)	µg/L	[10]	---	---	36[11]
Chlorinated phenolics	µg/L lbs/day	61 0.61	240 2.4	610 ---	25 [11] ---
Endosulfan [15]	ng/L	[10]	---	---	30 [11]
Endrin	ng/L lbs/day	120 0.0012	240 0.0024	370 ---	30 [11] ---
HCH[16]	ng/L lbs/day	240 0.0024	490 0.0049	730 ---	[12] ---
Radioactivity	Not to exceed limits 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	Units	EFFLUENT LIMITATIONS[9] Monthly Average	PERFORMANCE GOALS[7] Monthly Average
Acrolein	µg/L	[10]	33 [11]
Antimony	µg/L	[10]	90 [11]
Bis(2-chloroethoxy) methane	µg/L	[10]	16 [11]
Bis(2-chloroisopropyl) ether	µg/L	[10]	19 [11]
Chlorobenzene	µg/L	[10]	5 [11]

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

Constituent	Units	EFFLUENT LIMITATIONS[9] Monthly Average	PERFORMANCE GOALS[7] Monthly Average
Chromium (III)	µg/L	[10]	20 [11]
Di-n-butyl phthalate	µg/L	[10]	15 [11]
Dichlorobenzenes	µg/L	[10]	3.0 [11]
Diethyl phthalate	µg/L	[10]	16 [11]
Dimethyl phthalate	µg/L	[10]	16 [11]
4,6-Dinitro-o-cresol	µg/L	[10]	50 [11]
2,4-Dinitrophenol	µg/L	[10]	71 [11]
Ethylbenzene	µg/L	[10]	2.0 [11]
Fluoranthene	µg/L	[10]	13 [11]
Hexachlorocyclopentadiene	µg/L	[10]	13 [11]
Nitrobenzene	µg/L	[10]	15 [11]
Thallium	µg/L	[10]	20 [11]
Toluene	µg/L	[10]	2.0 [11]
Tributyltin	ng/L lbs/day	85 0.00085	[12]
1,1,1-Trichloroethane	µg/L	[10]	3.0 [11]

d. Human Health Toxicants – Carcinogens

Constituent	Units	EFFLUENT LIMITATIONS[9] Monthly Average	PERFORMANCE GOALS[7] Monthly Average
Acrylonitrile	µg/L lbs/day	6.1 0.061	[12]
Aldrin	ng/L lbs/day	1.3 0.000013	[12]
Benzene	µg/L	[10]	1.5 [11]
Benzidine	ng/L lbs/day	4.2 0.000042	[12]
Beryllium	µg/L lbs/day	2.0 0.020	[12]
Bis(2-Chloroethyl) ether	µg/L lbs/day	2.8 0.028	[12]
Bis(2-Ethylhexyl) phthalate	µg/L	[10]	9.5 [11]
Carbontetrachloride	µg/L	[10]	1.0 [11]
Chlordane [17]	ng/L lbs/day	1.4 0.000014	[12]
Chlorodibromomethane	µg/L	[10]	1.0 [11]
Chloroform	µg/L	[10]	1.0 [11]
DDT [18]	ng/L lbs/day	10 0.000010	[12]
1,4-Dichlorobenzene	µg/L	[10]	1.0 [11]
3, 3-Dichlorobenzidine	µg/L lbs/day	0.49 0.0049	[12]
1,2-Dichloroethane	µg/L	[10]	1.0 [11]
1,1-Dichloroethylene	µg/L	[10]	3.0 [11]

d. Human Health Toxicants – Carcinogens (continued)

Constituent	Units	EFFLUENT LIMITATIONS[9] Monthly Average	PERFORMANCE GOALS[7] Monthly Average
Dichlorobromomethane	µg/L	[10]	1.0 [11]
Methylene Chloride	µg/L	[10]	1.0 [11]
1,3-Dichloropropylene	µg/L	[10]	5.0 [11]
Dieldrin	ng/L lbs/day	2.4 0.000024	[12]
2,4-Dinitrotoluene	µg/L	[10]	12 [11]
1, 2-Diphenylhydrazine	µg/L lbs/day	9.8 0.098	[12]
Halomethanes	µg/L	[10]	2.5 [11]
Heptachlor	ng/L lbs/day	3.1 0.000031	[12]
Heptachlor epoxide	ng/L lbs/day	1.2 0.000012	[12]
Hexachlorobenzene	ng/L lbs/day	13 0.00013	[12]
Hexachlorobutadiene	µg/L	[10]	6.5 [11]
Hexachloroethane	µg/L	[10]	8.5 [11]
Isophorone	µg/L	[10]	21 [11]
N-nitrosodimethylamine	µg/L	[10]	14 [11]
N-nitrosodi-N-propylamine	µg/L lbs/day	23 0.23	13
N-nitrosodiphenylamine	µg/L	[10]	8.5 [11]
PAHs [19]	ng/L lbs/day	540 5.4	[12]

d. Human Health Toxicants – Carcinogens (continued)

Constituent	Units	EFFLUENT LIMITATIONS[9] Monthly Average	PERFORMANCE GOALS[7] Monthly Average
PCBs [20]	ng/ lbs/day	1.2 0.000012	[12]
TCDD equivalents [21]	pg/L lbs/day	0.24 0.0000000024	[12]
1,1,2,2-Tetrachloroethane	µg/L	[10]	2.0 [11]
Tetrachloroethylene	µg/L	[10]	1.0 [11]
Toxaphene	ng/L lbs/day	13 0.00013	[12]
Trichloroethylene	µg/L	[10]	1.0 [11]
1,1,2-Trichloroethane	µg/L	[10]	2.0 [11]
2, 4, 6-Trichlorophenol	µg/L lbs/day	18 0.00018	[12]
Vinyl chloride	µg/L	[10]	1.5 [11]

Footnotes for Effluent Limitations

[1] The mass emission rate limits are based on the average design flow rate of 1.2 million gallons per day (mgd). During storm events, when flow exceeds the design capacity, the mass emission rate limits 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.

[3] Limits are based on previous permit (Order No. 94-069)

[4] Limits are based on secondary treatment requirements, 40 CFR section 133.102.

[5] Limits are based on Ocean Plan effluent limitations, *Table A*.

[6] The instantaneous maximum shall apply to grab sample determinations.

[7] The performance goals are based upon the actual performance of the Avalon Wastewater Treatment Facility (Avalon WTF) and are specified only as an indication of the treatment efficiency of the facility. They are not considered as limitations or standards for the regulation of the treatment facility. Avalon WTF shall make best efforts to maintain effluent quality performance goals. The Executive Officer may modify any of the performance goals if the City requests and has demonstrated that the change is warranted.

[8] Numerical Effluent Quality Performance Goals were derived statistically using data in Discharge Monitoring Reports for the period from January 1995 to December 2000. Effluent pollutant data with values above the detection limits are assumed lognormally distributed. For constituents with the number of detected samples is between one and three, and the percentage of nondetected sample is less than 95%, one half of the detection limits were 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.*

[9] Limits are based on Ocean Plan objectives using a dilution ratio of 60 parts of seawater to 1 part effluent.

[10] These constituents did not show any reasonable potential to exceed effluent limits based on Ocean Plan objectives, therefore, no numerical limits are prescribed.

[11] These constituents were not detected. Performance goals are therefore set at five times (for carcinogens and marine aquatic life toxicants) or ten times (for noncarcinogens) of the minimum reported method detection limits. For constituents showing no reasonable potential to exceed respective calculated effluent limits and the calculated performance goals exceed the respective calculated effluent limits, performance goals are set at the calculated effluent limits.

[12] For these constituents, the calculated performance goals are higher than the respective effluent limitations, therefore, no performance goals are specified.

[13] The discharger has the option to meet the hexavalent chromium limitations 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 is show to be within the hexavalent chromium limits.

[14] 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.

[15] Endosulfan shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

[16] HCH means the sum of alpha, beta, gamma (lindane), and delta isomers of hexachlorocyclohexane.

[17] Chlordane means the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma and oxychlordane.

[18] DDT means the sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD and 2,4'-DDD.

[19] PAHs (polynuclear aromatic hydrocarbons) mean the sum of acenaphthylene, anthracene, l, 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.

[20] PCBs (polychlorinated biphenyls) mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-l232, Aroclor-1242, Aroclor-l248, Aroclor-1254 and Aroclor-1260.

[21] 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
l,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

5. 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.

6. The arithmetic mean values, by weight, of $BOD_5 20^oC$ and suspended solids for effluent samples collected in a period of 30 days shall not exceed 15 percent of the arithmetic mean values, by weight, of the respective constituents for influent samples collected at approximately the same time during the same period.

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 sampling stations 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)

(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 bacteriological standards to be exceeded:

The median total coliform density for any 6-month period shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL.

2. 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 is the moving average based on no less than five samples, spaced evenly over the 30-day period. 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.

3. Physical Characteristics

a. Floating particulates and oil and grease shall not be visible as a result of wastes discharged.

b. The waste discharged shall not cause aesthetically undesirable discoloration of the ocean surface.

c. The waste discharged shall not be significantly reduced the transmittance of natural light at any point outside the initial dilution zone.

d. The waste discharged shall not change the rate of deposition of inert solids and the characteristics of inert solids in ocean sediments such that benthic communities are degraded.

4. Chemical Characteristics

a. The waste discharged shall not 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. The waste discharged shall not change the pH of the receiving waters at any time more than 0.2 units from that which occurs naturally.

c. The waste discharged shall not cause the dissolved sulfide concentration of waters in and near sediments to be significantly increased above that present under natural conditions.

d. The wastes discharged shall not contain individual pesticides or combinations of pesticides in concentrations that adversely affect beneficial uses.

e. The waste discharged shall not 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. The waste discharged shall not cause the concentration of organic materials in marine sediments to be increase to levels that would degrade marine life.

g. Nutrient materials in the waste discharged shall not cause objectionable aquatic growths or degrade indigenous biota.

5. The waste discharged shall not degrade marine communities, including vertebrate, invertebrate, and plant species.

6. The waste discharged shall not cause 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.

7. The waste discharged shall not alter the natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption.

8. The wastes discharged shall not cause objectionable odors to emanate from the receiving waters.

9. The wastes discharged shall not cause receiving waters to contain any substance in concentrations toxic to human, animal, plant, or fish life.

10. No physical evidence of wastes discharged shall be visible at any time in the water or on beaches, shores, rocks, or structures.

11. The waste discharged shall not change the salinity of the receiving waters to an extent such as to be harmful to the marine biota.

II. PROHIBITIONS

A. The bypassing of untreated or partially treated wastes to the ocean is prohibited.

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.

III. PROVISIONS

A. This Order includes the attached Standard Provisions and General Monitoring and Reporting Requirements (Standard Provisions, Attachment N). If there is any conflict between provisions stated herein and said "Standard Provisions", those provisions stated herein shall prevail.

B. This Order includes the attached Monitoring and Reporting Program (*M&RP*, Attachment T). If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the Monitoring and Reporting Program shall 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. The City shall comply with the applicable requirements of State Board's *General NPDES Permit and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities* (State Water Resources Control Board Order No. 97-03-DWQ adopted on April 17, 1997), such as the *Storm Water Pollution Prevention Plan* updates and Monitoring and Reporting Program.

F. Sludge Requirements. 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.

G. 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 calculation the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero.

H. 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).

I. **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 form 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:

i. All PMP monitoring results for the previous year;
ii. A list of potential sources of the reportable pollutant;
iii. A summary of all action taken in accordance with control strategy; and,
iv. A description of actions to be taken in the following year.

J. 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.

K. Waste effluents shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.

L. 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.

M. 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.

N. In addition to regular water quality monitoring, the discharger shall conduct a special study to delineate the typical summer movement and dilution of the wastewater plume. The study may be conducted with current meters and dye tracers (dye study) or may be conducted by spatially intensive, water quality profiling (CTD study).

Within 30 days of the effective date of this Order, the Discharger shall submit to the Regional Board a workplan with time schedule for approval. The study shall be conducted during the summer of 2002.

If the plume study demonstrates a potential for impacts on beach water quality from the discharge, the Executive Officer shall address the issue through the imposition of further monitoring and/or study requirements as necessary.

O. 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.

P. 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.

Q. 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:

- Name and general composition of the chemical,
- Frequency of use,
- Quantities to be used,
- Proposed discharge concentrations, and
- USEPA registration number, if applicable.

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

IV. REOPENERS AND MODIFICATION

A. This Order may be reopened and modified, to incorporate new limits based on future reasonable potential analysis 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 non compliances does not stay any condition of this Order and permit.

V. EXPIRATION DATE

This Order expires on April 10, 2007.

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.

VI. RESCISSION

Order No. 94-069 adopted by this Board on July 18, 1994, is hereby rescinded except for enforcement purposes.

I, Dennis A. 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 April 25, 2002.

Dennis A. Dickerson
Executive Officer