STATE OF CALIFORNIA -- THE RESOURCES AGENCY GRAY DAVIS, *Governor*

CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
FRANCISCO, CA 94105-2219
E AND TDD (415) 904-5200

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STAFF REPORT AND RECOMMENDATION

ON CONSISTENCY CERTIFICATION

Consistency Certification No.	CC-010-02
Staff:	MPD-SF
File Date:	2/07/2002
3 Months:	5/07/2002
6 Months:	8/07/2002
Commission Meeting:	4/8/2002

APPLICANT: **City of San Diego**

PROJECT LOCATION: Point Loma Wastewater Treatment Plant, City of San Diego, and offshore waters (Exhibit 1)

PROJECT DESCRIPTION: Reissuance of Secondary Treatment Waiver

FEDERAL AGENCY AND PERMIT: EPA (Environmental Protection Agency) Reissuance, under Section 301(h) of the Clean Water Act, of a modified National Pollutant Discharge and Elimination System (NPDES) Permit for Wastewater Treatment Plant Discharges

SUBSTANTIVE FILE DOCUMENTS: See page 18.

EXECUTIVE SUMMARY

Under the Clean Water Act, wastewater discharges from publicly owned treatment works (POTWs) are required to receive at least secondary treatment. However, Clean Water Act Section 301(h), sometimes referred to as the "ocean waiver" provision of the Clean Water Act, gives the EPA Administrator (with the concurrence of the RWQCB (Regional Water Quality

Control Board)) the authority to grant a waiver from otherwise applicable secondary treatment requirements. Such a waiver would authorize the City to continue to discharge effluent receiving less than full secondary treatment in terms of suspended solids, biochemical oxygen demand, and pH. The waivers need to be renewed every five years.

In reviewing past secondary treatment waiver and waiver renewal request for the City of Morro Bay, Goleta and Orange County, the Commission has historically concurred with consistency certifications and found applicable water quality and marine resource policies of the Coastal Act to be met when: (1) adequate monitoring is in place; and (2) when EPA and the appropriate RWQCB have determined that the discharger's effluent complies with the applicable Clean Water Act and Ocean Plan requirements.

Secondary treatment waivers are jointly issued by EPA and the RWQCB. EPA's independent Technical Evaluation determined that San Diego's discharges meet the applicable Clean Water Act standards for a waiver, and on March 13, 2002, the San Diego RWQCB held a public hearing on whether the discharges would meet California Ocean Plan standards (with final RWQCB action scheduled for April 10, 2002). Monitoring results for the past 5 years support San Diego's claim that the discharges comply with secondary treatment waiver requirements and would not adversely affect marine resources. The stringent monitoring as required under Section 301(h) will be continued. The City has upgraded its facilities since the waiver was originally granted, including adding wastewater reclamation facilities. The City's discharges would be consistent with the water quality, marine resources, commercial and recreational fishing, and public access and recreation policies (Sections 30230, 30231, 30234, 30234.5, 30213, and 30220) of the Coastal Act.

STAFF SUMMARY AND RECOMMENDATION:

I. Project Description. The City of San Diego has requested a waiver under Section 301(h) of the Clean Water Act (the Act), 33 U.S.C. Section 1311(h), from the secondary treatment requirements contained in Section 301(b)(1)(B) of the Act, 33 U.S.C. Section 1311(b)(1)(B). The waiver is being sought for the Point Loma Wastewater Treatment Plant (WWTP) and Outfall, which discharges 4.5 miles from Point Loma. The waiver would allow the discharge of wastewater receiving less-than-secondary treatment into the Pacific Ocean. The applicant has been operating under a waiver granted under a "special exception" to the 301(h) program, when Congress modified the Clean Water Act by adding in Section 301(j)(5). That section allowed San Diego to apply for a waiver after the deadline for such applications had passed (it also contained substantive requirements, which are discussed below). EPA and the RWQCB granted the initial waiver on December 12, 1995 (NPDES Permit No. CA0107409). On April 2001, the City applied to EPA for a renewal of the waiver.

The Point Loma WWTP, which serves the Metropolitan San Diego area, is located near the southern tip of Point Loma, and discharges wastewater from the City of San Diego through the Point Loma ocean outfall at a distance 4.5 miles from shore, west of Point Loma, in

approximately 100 meters of water. Existing wastewater flows in recent years (1999 and 2000) have been around 175 million gallons per day (MGD) (average flows). Projected flows for the year 2006 (the end of the 5-year permit) are estimated at 195 MGD. System capacity are 240 MGD (average) and 432 MGD (peak wet weather flow). (The project service area and facilities are further described in Exhibit 4.)

The City has made a number of upgrades to the treatment system since the previous waiver was granted in 1995, including: 1) the addition of two new sedimentation basins at the Point Loma plant; 2) construction of the Metro Biosolids Center (MBC) a regional solids handling facility; 3) construction of the North City Wastewater Reclamation Plant (NCWRP); and 4) construction of the South Bay Water Reclamation Plant (SBWRP).

Secondary treatment is defined in Clean Water Act implementing regulations (40 CFR Part 133) in terms of effluent quality for suspended solids (SS), biochemical oxygen demand (BOD) and pH. The secondary treatment requirements for SS, BOD and pH are as follows:

SS: (1) The 30-day average shall not exceed 30 mg/l (milligrams per liter). (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%;

BOD: (1) The 30-day average shall not exceed 30 mg/l. (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%;

pH: The effluent limits for pH shall be maintained within the limits of 6.0 to 9.0 pH units.

State water quality standards (i.e., the California Ocean Plan) require removal of 75% of suspended solids. The Ocean Plan does not have an effluent limitation for BOD; the comparable standard is for dissolved oxygen, and the Plan requires that "dissolved oxygen shall not at any time be depressed more than 10% from that which occurs naturally as a result of the discharge of oxygen-demanding waste materials."

The special legislation created for the City's application for a secondary treatment waiver (Ocean Pollution Reduction Act of 1994 (OPRA)/CWA Section 301(j)(5)/Public Law 103-431) requires:

1. 80% removal of TSS (monthly ave.);

2. 58% removal of BOD (annual ave.);

3. 45 MGD of water reclamation capacity by the year 2010; and

4. Reduction of TSS during the 5-year period of permit modification (EPA has interpreted this standard to require reduction of TSS from 15,000 to 13,600 metric tons/yr).

The following table compares the various statutory requirements:

Table 1. Comparison of treatment removal requirements. [Source: EPA Tentative Decision Document]

Requirement	Suspended Solids Removal	Biochemical Oxygen Demand Removal	pH Limitation
Primary	30% as 30-day average	30% as 30-day average	6-9
California Ocean Plan	75% as 30-day average	No Requirement	6-9
OPRA	80% as 30-day average	58% as annual average	
Secondary	85% as 30-day average	85% as 30-day average	6-9

The City's advanced primary system currently removes 80% of suspended solids. The City currently removes approximately 58% of BOD. The City is in the process of implementing reclamation: the NCWRP is now on line and handles 30 MGD, and the SBWRP is anticipated to go on line as soon as spring 2002, adding another 15 MGD of reclamation (Exhibit 2). Thus, the City anticipates achieving the "OPRA" requirement of 45 MGD of water reclamation up to eight years ahead of schedule.

The City is requesting a variance from secondary treatment standards for BOD and SS. The City is not requesting a waiver of pH requirements. The City's proposed effluent limits would require the removal of 80% of SS as a monthly average and the removal of 58% of BOD as an annual average. In addition, the upper limits suspended solids loadings to the ocean would be reduced to no more than 13,600 metric tons/year by the end of the 5-year permit period. Current suspended solids loadings are less than 1000 metric tons/yr.

The City has applied to the EPA and the RWQCB for reissuance of the 301(h) waiver. These waivers are independently reviewed but jointly issued by EPA and the RWQCB. EPA's independent Technical Analysis is attached as Exhibit 4. After EPA performs its technical review it issues a Tentative Decision to grant the 301(h) waiver of secondary requirements, which is then followed by RWQCB hearing (including public comments), and a final EPA decision (including responses to comments). On March 13, 2002, the RWQCB held a public hearing on Order No. R9-2002-0025 on the permit; final RWQCB action is expected at the RWQCB's April 10, 2002, meeting. (If available, a transcript from the RWQCB March meeting will be provided as an addendum to this staff report.)

II. Previous Commission Reviews of Waivers. In 1979, and 1983-1985, the Commission reviewed a number of secondary treatment waiver applications under the federal consistency provisions of the Coastal Zone Management Act, and EPA ultimately granted many of these waivers. During these reviews the Commission expressed concern over the need for treatment meeting the *equivalent* of secondary treatment with respect to removal of toxics.

Nevertheless, at that time, the Commission consciously adopted a neutral position on the waivers. Since a position of "neutrality" is not an action that is recognized under CZMA regulations, the Commission's concurrence in the waivers was presumed pursuant to 15 CFR Section 630.63(a).

Section 301(h) waivers are only valid for 5 years, and three of the waivers initially granted subsequently came up for renewal: Morro Bay, Goleta, and Orange County (CSDOC). On January 13, 1999, and January 12, 1993, the Commission concurred with the City of Morro Bay's waiver renewals (CC-123-98 and CC-88-92). On January 8, 1997, and March 10, 1998, respectively, the Commission concurred with Goleta's and Orange County's Section 301(h) waiver renewals (CC-126-96 and CC-3-98).

On September 27, 1995, after a Commission public hearing, the Commission staff concurred with the previous submittal from the City of San Diego of a "No effects" letter (in lieu of a consistency certification) for the EPA-issued secondary treatment waiver (NE-94-95). That matter was reviewed as an administrative item due to unusual circumstances and history surrounding the waiver. The Commission normally reviews secondary treatment waivers and reissuances as consistency certifications, as is the case for the subject renewal.

III. Status of Local Coastal Program. The standard of review for federal consistency certifications is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal Program (LCP) of the affected area. If an LCP that the Commission has certified and incorporated into the California Coastal Management Program (CCMP) provides development standards that are applicable to the project site, the LCP can provide guidance in applying Chapter 3 policies in light of local circumstances. If the Commission has not incorporated the LCP into the CCMP, it cannot guide the Commission's decision, but it can provide background information. The City of San Diego's LCP has been certified by the Commission and incorporated into the CCMP.

IV. Applicant's Consistency Certification. The City of San Diego certifies the proposed activity complies with the federally approved California Coastal Management Program and will be conducted in a manner consistent with such program.

V. Staff Recommendation:

The staff recommends that the Commission adopt the following motion:

MOTION. I move that the Commission concur with City of San Diego's consistency certification.

The staff recommends a **YES** vote on this motion. A majority vote in the affirmative will result in adoption of the following resolution:

Concurrence

The Commission hereby **concurs** with the consistency certification made by the City of San Diego for the proposed project, finding that the project is consistent with the California Coastal Management Program.

VI. Findings and Declarations:

The Commission finds and declares as follows:

A. Water Quality/Marine Resources

1. **Regulatory Framework.** The Environmental Protection agency (EPA) and the applicable RWQCBs (Regional Water Quality Control Boards) regulate municipal wastewater outfalls discharging into the Pacific Ocean under NPDES permits issued pursuant to the federal Clean Water Act. As enacted in 1972, the Clean Water Act required secondary treatment for all wastewater treatment nationwide. Amendments to the Clean Water Act in 1977 provided for Section 301(h) (33 USC Section 1311(h)) waivers of the otherwise applicable requirements for secondary treatment for discharges from publicly owned treatment works into marine waters.

Section 301(h) of the Clean Water Act provides that an NPDES permit which modifies the secondary treatment requirements may be issued if the applicant: (1) discharges into oceanic or saline, well-mixed estuarine waters; and (2) demonstrates to EPA's satisfaction that the modifications will meet those requirements specified in Section 301(h) (see pp. 7-9), including: (a) that the waiver will not result in any increase in the discharge of toxic pollutants or otherwise impair the integrity of receiving waters; and (b) that the discharger must implement a monitoring program for effluent quality, must assure compliance with pre-treatment requirements for toxic control, must assure compliance with water quality standards, and must measure impacts to indigenous marine biota. In California, the applicable water quality standards are embodied in the California Ocean Plan (see pp. 9-11 and Exhibit 5).

While the State of California (through the SWRCB and RWQCBs) administers the NPDES permit program and issues permits for discharges to waters within State waters, authority to grant a waiver and issue a modified NPDES permit under Section 301(h) of the Act is reserved to the Regional Administrator of EPA. Prior state concurrence with the waiver is also required.

Section 307(f) of the federal CZMA specifically incorporates the Clean Water Act into the California Coastal Management Program (CCMP). Commission consistency certification review is required for 301(h) applicants, because EPA NPDES permits are listed in California's program as federal licenses or permits for activities affecting land or water uses in the coastal zone. In reviewing the discharges, the Commission relies on the Clean Water Act and its implementing regulations, the California Ocean Plan, the Coastal Act (Chapter 3 policies), and

Water Code Section 13142.5 (incorporated into the Coastal Act by Section 30412(a)). These requirements, which are further described and summarized below, provide both specific numerical standards for pollutants, as well as general standards for protection of marine biological productivity.

a. Clean Water Act/Section 301(h). Implementation of the Clean Water Act in California, for the most part, has been delegated to the applicable RWQCB for issuance of NPDES permits. Under an MOA between EPA and the State of California, NPDES permits for outfalls beyond 3 miles *and* for secondary treatment waivers (regardless of location) are issued jointly by EPA and the applicable RWQCB. The Clean Water Act divides pollutants into three categories for purposes of regulation, as follows: (1) conventional pollutants, consisting of total suspended solids (TSS or SS); biochemical oxygen demand (BOD, a measure of the amount of oxygen consumed during degradation of waste); pH; fecal coliform bacteria; and oil and grease; (2) toxic pollutants, including heavy metals and organic chemicals; and (3) non-conventional pollutants (a "catch-all" category for other substances needing regulation (e.g., nitrogen and phosphorus, chlorine, fluoride)).

Guidelines adopted under Section 403 of the Clean Water Act (40 CFR Part 125.120-124, Subpart M, "Ocean Discharge Criteria") specify that beyond an initial mixing zone, commonly referred to as the zone of initial dilution (ZID), the applicable water quality standards must be met. The zone of initial dilution is the boundary of the area where the discharge plume achieves natural buoyancy and first begins to spread horizontally. Discharged sewage is mostly freshwater, so it creates a buoyant plume that moves upward toward the sea surface, entraining ambient seawater in the process. The wastewater/seawater plume rises through the water column until its density is equivalent to that of the surrounding water, at which point it spreads out horizontally.

Section 301(h) of the Clean Water provides for secondary treatment waivers under certain circumstances. The following requirements must be met for EPA to grant a secondary treatment waiver:

> *(1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 304(a)(6) of this Act;*
>
> *(2) such modified requirements will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population (BIP) of shellfish, fish and wildlife, and allows recreational activities, in and on the water;*
>
> *(3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable,*

and the scope of the monitoring is limited to include only those scientific investigations which are necessary to study the effects of the proposed discharge;

(4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

(5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;

(6) in the case of any treatment works serving a population of 50,000 or more, with respect to any toxic pollutant introduced into such works by an industrial discharger for which pollutant there is no applicable pretreatment requirement in effect, sources introducing waste into such works are in compliance with all applicable pretreatment requirements, the applicant will enforce such requirements, and the applicant has in effect a pretreatment program which, in combination with the treatment of discharges from such works, removes the same amount of such pollutant as would be removed if such works were to apply secondary treatment to discharges and if such works had no pretreatment program with respect to such pollutant;

(7) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;

(8) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(9) the applicant at the time such modification becomes effective will be discharging effluent which has received at least primary or equivalent treatment and which meets the criteria established under section 304(a)(1) of the Clean Water Act after initial mixing in the waters surrounding or adjacent to the point at which such effluent is discharged.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 101(a)(2) of this Act. For the purposes of paragraph (9), "primary or equivalent treatment" means treatment by screening, sedimentation and skimming adequate to remove at least 30 percent of the biochemical oxygen demanding material and of the suspended solids in the

treatment works influent, and disinfection, where appropriate. A municipality which applies secondary treatment shall be eligible to receive a permit pursuant to this subsection which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from any treatment works owned by such municipality into marine waters. No permit issued under this subsection shall authorize the discharge of sewage sludge into marine waters. In order for a permit to be issued under this subsection for the discharge of a pollutant into marine waters, such marine waters must exhibit characteristics assuring that water providing dilution does not contain significant amounts of previously discharged effluent from such treatment works. No permit issued under this subsection shall authorize the discharge of any pollutant into marine estuarine waters which at the time of application do not support a balanced, indigenous population of shellfish, fish and wildlife, or allow recreation in and on the waters or which exhibit ambient water quality below applicable water quality standards adopted for the protection of public water supplies, shellfish and wildlife, or recreational activities or such other standards necessary to assure support and protection of such uses. The prohibition contained in the preceding sentence shall apply without regard to the presence or absence of a causal relationship between such characteristics and the applicant's current or proposed discharge. Notwithstanding any of the other provisions of this subsection, no permit may be issued under this subsection for discharge of a pollutant into the New York Bight Apex consisting of the ocean waters of the Atlantic Ocean westward of 73 degrees 30 minutes west longitude and westward of 40 degrees 10 minutes north latitude.

In addition, as discussed on page 3, Section 301(j)(5) of the Clean Water Act provides procedural and substantive requirements enabling the City to apply for a waiver and specifying that discharges must meet the following tests: 80% removal of TSS (monthly ave.); 58% removal of BOD (annual ave.); 45 MGD of water reclamation capacity by the year 2010; and reduction of TSS during the 5-year period of permit modification.

b. <u>California Ocean Plan</u>. The California Ocean Plan was originally adopted by the SWRCB and approved by the EPA in June 1972, and is revised every three years. Among the California Ocean Plan requirements are the following water quality objectives (Chapter II):

A. Bacterial Characteristics, for body-contact recreation and shellfish harvesting;

B. Physical Characteristics, including floatables, visible oil and grease, discoloration of the surface, the reduction of light penetration, and the rate of deposition of solid and inert materials on the bottom;

C. Chemical Characteristics, including dissolved oxygen, pH, dissolved sulfide in and near sediments, concentration of substances in the sediments, organic materials in the sediments, and nutrient levels, and including maintenance of standards such as protecting indigenous biota and marine life;

D. Biological Characteristics, including:

1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

2. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

3. The concentrations 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.

E. Radioactivity, including maintenance of a standard that marine life shall not be degraded.

General requirements in the Ocean Plan include:

A. 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.

B. Waste discharged to the ocean must be essentially free of:

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

2. Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.

3. Substances which will accumulate to toxic levels in marine waters, sediments or biota.

4. Substances that significantly decrease the natural light to benthic communities and other marine life.

5. Materials that result in aesthetically undesirable discoloration of the ocean surface.

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

D. Location of waste discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that: ...

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 designated as being of special biological significance.

3. Maximum protection is provided to the marine environment.

In addition, the Ocean Plan contains "Table A" effluent limitations for major wastewater constituents and properties, "Table B" limitations that provide maximum concentrations for toxic materials that may not be exceeded upon completion of initial dilution, and other standards. Table A and B limitations are contained in Exhibit 5.

(c) <u>Coastal Act Policies</u>. The Coastal Act contains policies protecting water quality and marine resources. Section 30230 of the Coastal Act provides:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 provides:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

In addition to these resource protection policies, Section 30412 addresses the Commission's relationship with the SWRCB (State Water Resources Control Board and RWQCB); Section 30412 provides:

> *(a) In addition to the provisions set forth in Section 13142.5 of the Water Code, the provisions of this section shall apply to the commission and the State Water Resources Control Board and the California regional water quality control boards.*
>
> *(b) The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate the provisions of this section. Neither the commission nor any regional commission shall, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.*
>
> *Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, regional commission, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out the provisions of this division.*

Finally, Section 13142.5 of the Water Code, which is referenced in Section 30412 above, provides:

> *In addition to any other policies established pursuant to this division, the policies of the state with respect to water quality as it relates to the coastal marine environment are that:*
>
> *(a) Waste water discharges shall be treated to protect present and future beneficial uses, and, where feasible, to restore past beneficial uses of the receiving waters. Highest priority shall be given to improving or eliminating discharges that adversely affect any of the following:*
>
> *(1) Wetlands, estuaries, and other biologically sensitive sites.*
> *(2) Areas important for water contact sports.*
> *(3) Areas that produce shellfish for human consumption.*
> *(4) Ocean areas subject to massive waste discharge.*

Ocean chemistry and mixing processes, marine life conditions, other present or proposed outfalls in the vicinity, and relevant aspects of areawide waste treatment management plans and programs, but not of convenience to the discharger, shall for the purposes of this section, be considered in determining the effects of such discharges...

2. <u>EPA Evaluation of the City of San Diego's Discharges</u>. EPA has conducted a technical evaluation analyzing San Diego's compliance with the 301(h) and other criteria discussed above. This tentative evaluation, dated, February 8, 2002 (Exhibit 4), includes the following EPA findings:

<u>SUMMARY OF FINDINGS</u>

Based upon review of the data, references, and empirical evidence furnished in the application and other relevant sources, EPA Region 9 makes the following findings with regard to compliance with the statutory and regulatory criteria:

1. The applicant's proposed discharge complies with the California Ocean Plan water quality standards for dissolved oxygen (DO), suspended solids, and pH. [Section 301(h)(1), 40 CFR 125.61]

2. The applicant's proposed discharge will not adversely impact public water supplies or interfere with the protection and propagation of a balanced, indigenous population (BIP) of fish, shellfish, and wildlife and will allow for recreational activities. [Section 301(h)(2), 40 CFR 125.62]

3. The applicant has a well-established water quality monitoring program and is committing the resources to continue the program. The City has been monitoring the area around the Point Loma discharge since 1991. EPA Region 9 and the San Diego Regional Water Quality Control Board (Regional Board) will review the existing monitoring program and modify as appropriate. These modifications will be included as provisions for monitoring the impact of the discharge in the 301(h) modified NPDES permit. [Section 301(h)(3), 40 CFR 125.63]

4. The applicant's proposed discharge will not result in any additional treatment requirements on any other point or nonpoint source (See letter from Regional Board dated January 24, 2002). [Section 301(h)(4), 40 CFR 125.64]

5. The applicant's existing pretreatment program was approved by EPA on June 29, 1982. [Section 301(h)(5), 40 CFR 125.66 and 125.68]

6. The applicant has complied with the urban area pretreatment requirements by demonstrating that it has an applicable pretreatment requirement in effect for each toxic pollutant introduced by an industrial discharger. The Urban Area Pretreatment Program was submitted to EPA and the Regional Board in August of 1996. This program was approved by the Regional Board on August 13, 1997 and by EPA Region 9 on December 1, 1998. [Section 301(h)(6), 40 CFR 125.65]

7. The City will continue their existing nonindustrial program which has been in effect since 1985. The City will also continue their existing comprehensive public education program to minimize the amount of toxic pollutants that enter the treatment system from nonindustrial sources. [Section 301(h)(7), 40 CFR 125.66]

8. There will be no new or substantially increased discharges from the point source of the pollutants to which the 301(h) variance will apply above those specified in the permit. [Section 301(h)(8), 40 CFR 125.67]

9. The applicant's removal of 80% of SS as a monthly average and 58% of BOD as an annual average is sufficient to demonstrate the federal requirement of at least 30% removal capability and the California Ocean Plan's 75% SS removal requirement. The discharge allows sufficient dilution to attain of State water quality standards and Federal water quality criteria. [Section 301(h)(9), 40 CFR 125.60]

10. The California Coastal Commission issued Consistency Certification for extending the Point Loma outfall on November 12, 1991. The City has requested a determination from the California Coastal Commission that the proposed discharge is consistent with the policies of the California Coastal Zone Management Program ... No permit may be issued that is not consistent with the policies of the California Coastal Management Program. The California Coastal Commission will be hearing this issue at their meeting on March 5-8, 2002. [40 CFR 125.59(b)(3)]

11. On June 28, 2999, the applicant sent letters to the US Fish and Wildlife Service and the National Marine Fisheries Service requesting concurrence with their conclusion that the discharge will have no impact to threatened or endangered species. The National Marine Fisheries Service concluded that there were no Federally listed species under its jurisdiction that would be affected by the discharge (letter dated August 10, 1999). No response has been received from the U.S. Fish and Wildlife Service. The permit is contingent on a finding from the U.S. Fish and Wildlife Service. There are no

designated marine sanctuaries located within the coastal zones of California that could be impacted by the modified discharge. [40 CFR 125.59(b)(3)]

12. In its operation of the Pt. Loma WWTP, the applicant will remove 80% of suspended solids from the effluent on an annual basis, remove 58% removal of biological oxygen demand from the effluent on an annual basis, and reduce the mass of solids during the period of modification to 13,599 metric tons per year. In addition, the applicant has constructed two reclamation facilities with a treatment capacity of 45 MGD.

13. The applicant sent a letter to the Regional Board requesting a determination that the proposed discharge would comply with the applicable water quality standards on April 4, 2000. The Regional Board confirmed that the City of San Diego's facilities on Point Loma are capable of meeting effluent limitations contained in the California Ocean Plan (see letter dated January 24, 2002). As specified in a Memorandum of Understanding (May 1986) between EPA Region IX and the California State Water Resources Control Board, the joint issuance of an NPDES permit which incorporates both the 301(h) decision and State waste discharge requirements will serve as the State's concurrence. A draft NPDES permit for the discharge has been developed jointly with the Regional Board. [40 CFR 125.59 (i)(2)]

3. <u>Commission Conclusion</u>. The information submitted by the City of San Diego, along with the supporting analysis and information from EPA and the RWQCB, supports its request for a continued secondary treatment waiver. Historically, the Commission has concurred with consistency certifications for these types of waivers and waiver renewals, and found applicable water quality and marine resource policies of the Coastal Act to be met, when: (1) adequate monitoring is in place; and (2) when EPA and the appropriate RWQCB have determined that the discharger's effluent complies with the applicable Clean Water Act and Ocean Plan requirements. In this case, the City has monitored its discharges since its initial waiver was granted in 1995, and these monitoring efforts support the City's conclusions that its discharges meet the applicable water quality and marine resource requirements. Moreover, the stringent monitoring as required under Section 301(h) will be continued.

Based on EPA's analysis including a review of plant performance and modeling efforts performed since 1995, the outfall does not appear to be resulting in any significant reduction in light transmissivity, any biologically significant changes in benthic community structure in the vicinity of the outfall (beyond the zone of initial dilution), or any significant changes in fish populations or fish diseases in the area. EPA and the RWQCB have also addressed a historic Commission's historic concern over toxics by continuing to include requirements for the implementation of a pollution prevention program to minimize discharge of toxic pollutants into the sewer system which might interfere with the treatment processes. As discussed on page 14, EPA states that the City complies with the urban area pretreatment requirements "by

demonstrating that it has an applicable pretreatment requirement in effect for each toxic pollutant," and that the City will continue its existing nonindustrial program (which has been in effect since 1985). Therefore, based on the analysis above, the Commission concludes that the City's discharges would be consistent with the applicable marine resource and water quality provisions (Sections 30230 and 30231) of the Coastal Act.

B. Commercial Fishing/Recreation

Section 30230 of the Coastal Act, quoted in full on page 11, includes a requirement that:

> *Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

The Coastal Act also contains more specific policies protecting commercial and recreational fishing; Section 30234 provides:

> *Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.*

Section 30234.5 provides:

> *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

The Coastal Act also protects public recreation (such as surfing and other water-contact recreation). Section 30213 provides, in part:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided..*

Section 30220 provides:

> *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

As discussed in the water quality/marine resource section above, the City's monitoring efforts over the past five years are sufficient to enable a determination that commercial/recreational fishing and other recreational concerns are met. Most recreational activities are centered around the Point Loma kelp beds and in nearshore waters. SCUBA diving is very popular in the offshore kelp beds. Only limited diving occurs outside the area of the kelp beds. EPA's analysis of the City's plume modeling and monitoring data show that while there have been shoreline and kelp bed water quality standard exceedances, they are unlikely to be related to the City's outfall discharges. EPA states:

> *There are numerous exceedances of the single sample thresholds for Total Coliform, Fecal coliform and enterococcus (Fig. 53 [Exhibit 3]). However, these do not appear to be related to the Point Loma outfall. A high percentage of these are related to storm events. There also seems to be a spatial pattern which suggests a southern source. For perspective, these data can be compared to comparable data collected as part of the IWTP shoreline monitoring program (See Fig. 54 [Exhibit 3]). There is some overlap between the two program (i.e., San Diego's Stations D1 and D2 overlap with IWTP's Stations S8 and S9). There is a clear south-north gradient in the frequency of exceedances with a peak at the Tijuana River for all three bacterial indicators.*
>
> *Exceedances are generally attributed to surface runoff (e.g. from the Tijuana River) rather than the outfall plume. This is supported by the lack of high concentrations in nearshore stations. This conclusion is also supported by modelling and monitoring efforts, which indicate that the outfall plume remains submerged in the offshore area.*
>
> *<u>Summary of bacteria data</u>. EPA's review of the bacterial monitoring data suggests that the outfall plume is trapped at depth offshore and that the plume surfaces infrequently. Elevated concentrations of bacteria in the kelp beds were observed on rare occasion (less than 0.5% of the time). Although bacterial concentrations along the shoreline frequently exceed the standards, there is no evidence to suggest that this is related to the outfall. Based on these data, along with the results of physical oceanographic modeling performed by the applicant in 1994, EPA concludes that the Point Loma modified discharge will meet the COP bacterial compliance standards at the shoreline, recreational areas and at kelp beds.*

Therefore, as discussed above with respect to marine resources, and with continued monitoring, the Commission concludes that the discharges would be consistent with the applicable commercial and recreational fishing and general recreation policies (Sections 30230, 30234, 30234.5, 30213, and 30220) of the Coastal Act.

SUBSTANTIVE FILE DOCUMENTS:

1. Consistency Certification No. CC-62-91/Coastal Development Permit No. 6-91-217 (City of San Diego, Point Loma outfall extension).

2. No Effects Determination NE-94-95 (City of San Diego, secondary treatment waiver).

3. RWQCB Tentative Order No. R9-2002-0025 and draft NPDES Permit No. CA0107409, City of San Diego.

4. RWQCB Order No. 95-106 and NPDES Permit No. CA0107409, City of San Diego.

5. Consistency Certifications for secondary treatment waiver renewals, CC-88-92 and CC-123-98 (City of Morro Bay), CC-126-96 (Goleta Sanitary District), and CC-3-98 (County Sanitation Districts of Orange County (CSDOC)).

6. Consistency Determination No. CD-137-96 (IBWC) International Boundary and Water Commission International Wastewater Treatment Plant Interim Operation.

STATE OF CALIFORNIA -- THE RESOURCES AGENCY GRAY DAVIS, *Governor*

CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
N FRANCISCO, CA 94105-2219
CE AND TDD (415) 904-5200

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STAFF REPORT AND RECOMMENDATION

ON CONSISTENCY CERTIFICATION

Consistency Certification No.	CC-010-02
Staff:	MPD-SF
File Date:	2/07/2002
3 Months:	5/07/2002
6 Months:	8/07/2002
Commission Meeting:	4/8/2002

APPLICANT: **City of San Diego**

PROJECT LOCATION: Point Loma Wastewater Treatment Plant, City of San Diego, and offshore waters (Exhibit 1)

PROJECT DESCRIPTION: Reissuance of Secondary Treatment Waiver

FEDERAL AGENCY AND PERMIT: EPA (Environmental Protection Agency) Reissuance, under Section 301(h) of the Clean Water Act, of a modified National Pollutant Discharge and Elimination System (NPDES) Permit for Wastewater Treatment Plant Discharges

SUBSTANTIVE FILE DOCUMENTS: See page 18.

EXECUTIVE SUMMARY

Under the Clean Water Act, wastewater discharges from publicly owned treatment works (POTWs) are required to receive at least secondary treatment. However, Clean Water Act Section 301(h), sometimes referred to as the "ocean waiver" provision of the Clean Water Act, gives the EPA Administrator (with the concurrence of the RWQCB (Regional Water Quality

Control Board)) the authority to grant a waiver from otherwise applicable secondary treatment requirements. Such a waiver would authorize the City to continue to discharge effluent receiving less than full secondary treatment in terms of suspended solids, biochemical oxygen demand, and pH. The waivers need to be renewed every five years.

In reviewing past secondary treatment waiver and waiver renewal request for the City of Morro Bay, Goleta and Orange County, the Commission has historically concurred with consistency certifications and found applicable water quality and marine resource policies of the Coastal Act to be met when: (1) adequate monitoring is in place; and (2) when EPA and the appropriate RWQCB have determined that the discharger's effluent complies with the applicable Clean Water Act and Ocean Plan requirements.

Secondary treatment waivers are jointly issued by EPA and the RWQCB. EPA's independent Technical Evaluation determined that San Diego's discharges meet the applicable Clean Water Act standards for a waiver, and on March 13, 2002, the San Diego RWQCB held a public hearing on whether the discharges would meet California Ocean Plan standards (with final RWQCB action scheduled for April 10, 2002. Monitoring results for the past 5 years support San Diego's claim that the discharges comply with secondary treatment waiver requirements and would not adversely affect marine resources. The stringent monitoring as required under Section 301(h) will be continued. The City has upgraded its facilities since the waiver was originally granted, including adding wastewater reclamation facilities. The City's discharges would be consistent with the water quality, marine resources, commercial and recreational fishing, and public access and recreation policies (Sections 30230, 30231, 30234, 30234.5, 30213, and 30220) of the Coastal Act.

STAFF SUMMARY AND RECOMMENDATION:

I. Project Description. The City of San Diego has requested a waiver under Section 301(h) of the Clean Water Act (the Act), 33 U.S.C. Section 1311(h), from the secondary treatment requirements contained in Section 301(b)(1)(B) of the Act, 33 U.S.C. Section 1311(b)(1)(B). The waiver is being sought for the Point Loma Wastewater Treatment Plant (WWTP) and Outfall, which discharges 4.5 miles from Point Loma. The waiver would allow the discharge of wastewater receiving less-than-secondary treatment into the Pacific Ocean. The applicant has been operating under a waiver granted under a "special exception" to the 301(h) program, when Congress modified the Clean Water Act by adding in Section 301(j)(5). That section allowed San Diego to apply for a waiver after the deadline for such applications had passed (it also contained substantive requirements, which are discussed below). EPA and the RWQCB granted the initial waiver on December 12, 1995 (NPDES Permit No. CA0107409). On April 2001, the City applied to EPA for a renewal of the waiver.

The Point Loma WWTP, which serves the Metropolitan San Diego area, is located near the southern tip of Point Loma, and discharges wastewater from the City of San Diego through the Point Loma ocean outfall at a distance 4.5 miles from shore, west of Point Loma, in

approximately 100 meters of water. Existing wastewater flows in recent years (1999 and 2000) have been around 175 million gallons per day (MGD) (average flows). Projected flows for the year 2006 (the end of the 5-year permit) are estimated at 195 MGD. System capacity are 240 MGD (average) and 432 MGD (peak wet weather flow). (The project service area and facilities are further described in Exhibit 4.)

The City has made a number of upgrades to the treatment system since the previous waiver was granted in 1995, including: 1) the addition of two new sedimentation basins at the Point Loma plant; 2) construction of the Metro Biosolids Center (MBC) a regional solids handling facility; 3) construction of the North City Wastewater Reclamation Plant (NCWRP); and 4) construction of the South Bay Water Reclamation Plant (SBWRP).

Secondary treatment is defined in Clean Water Act implementing regulations (40 CFR Part 133) in terms of effluent quality for suspended solids (SS), biochemical oxygen demand (BOD) and pH. The secondary treatment requirements for SS, BOD and pH are as follows:

SS: (1) The 30-day average shall not exceed 30 mg/l (milligrams per liter). (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%;

BOD: (1) The 30-day average shall not exceed 30 mg/l. (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%;

pH: The effluent limits for pH shall be maintained within the limits of 6.0 to 9.0 pH units.

State water quality standards (i.e., the California Ocean Plan) require removal of 75% of suspended solids. The Ocean Plan does not have an effluent limitation for BOD; the comparable standard is for dissolved oxygen, and the Plan requires that "dissolved oxygen shall not at any time be depressed more than 10% from that which occurs naturally as a result of the discharge of oxygen-demanding waste materials."

The special legislation created for the City's application for a secondary treatment waiver (Ocean Pollution Reduction Act of 1994 (OPRA)/CWA Section 301(j)(5)/Public Law 103-431) requires:

1. 80% removal of TSS (monthly ave.);

2. 58% removal of BOD (annual ave.);

3. 45 MGD of water reclamation capacity by the year 2010; and

4. Reduction of TSS during the 5-year period of permit modification (EPA has interpreted this standard to require reduction of TSS from 15,000 to 13,600 metric tons/yr).

The following table compares the various statutory requirements:

Table 1. Comparison of treatment removal requirements. [Source: EPA Tentative Decision Document]

Requirement	Suspended Solids Removal	Biochemical Oxygen Demand Removal	pH Limitation
Primary	30% as 30-day average	30% as 30-day average	6-9
California Ocean Plan	75% as 30-day average	No Requirement	6-9
OPRA	80% as 30-day average	58% as annual average	
Secondary	85% as 30-day average	85% as 30-day average	6-9

The City's advanced primary system currently removes 80% of suspended solids. The City currently removes approximately 58% of BOD. The City is in the process of implementing reclamation: the NCWRP is now on line and handles 30 MGD, and the SBWRP is anticipated to go on line as soon as spring 2002, adding another 15 MGD of reclamation (Exhibit 2). Thus, the City anticipates achieving the "OPRA" requirement of 45 MGD of water reclamation up to eight years ahead of schedule.

The City is requesting a variance from secondary treatment standards for BOD and SS. The City is not requesting a waiver of pH requirements. The City's proposed effluent limits would require the removal of 80% of SS as a monthly average and the removal of 58% of BOD as an annual average. In addition, the upper limits suspended solids loadings to the ocean would be reduced to no more than 13,600 metric tons/year by the end of the 5-year permit period. Current suspended solids loadings are less than 1000 metric tons/yr.

The City has applied to the EPA and the RWQCB for reissuance of the 301(h) waiver. These waivers are independently reviewed but jointly issued by EPA and the RWQCB. EPA's independent Technical Analysis is attached as Exhibit 4. After EPA performs its technical review it issues a Tentative Decision to grant the 301(h) waiver of secondary requirements, which is then followed by RWQCB hearing (including public comments), and a final EPA decision (including responses to comments). On March 13, 2002, the RWQCB held a public hearing on Order No. R9-2002-0025 on the permit; final RWQCB action is expected at the RWQCB's April 10, 2002, meeting. (If available, a transcript from the RWQCB March meeting will be provided as an addendum to this staff report.)

II. Previous Commission Reviews of Waivers. In 1979, and 1983-1985, the Commission reviewed a number of secondary treatment waiver applications under the federal consistency provisions of the Coastal Zone Management Act, and EPA ultimately granted many of these waivers. During these reviews the Commission expressed concern over the need for treatment meeting the *equivalent* of secondary treatment with respect to removal of toxics.

Nevertheless, at that time, the Commission consciously adopted a neutral position on the waivers. Since a position of "neutrality" is not an action that is recognized under CZMA regulations, the Commission's concurrence in the waivers was presumed pursuant to 15 CFR Section 630.63(a).

Section 301(h) waivers are only valid for 5 years, and three of the waivers initially granted subsequently came up for renewal: Morro Bay, Goleta, and Orange County (CSDOC). On January 13, 1999, and January 12, 1993, the Commission concurred with the City of Morro Bay's waiver renewals (CC-123-98 and CC-88-92). On January 8, 1997, and March 10, 1998, respectively, the Commission concurred with Goleta's and Orange County's Section 301(h) waiver renewals (CC-126-96 and CC-3-98).

On September 27, 1995, after a Commission public hearing, the Commission staff concurred with the previous submittal from the City of San Diego of a "No effects" letter (in lieu of a consistency certification) for the EPA-issued secondary treatment waiver (NE-94-95). That matter was reviewed as an administrative item due to unusual circumstances and history surrounding the waiver. The Commission normally reviews secondary treatment waivers and reissuances as consistency certifications, as is the case for the subject renewal.

III. Status of Local Coastal Program. The standard of review for federal consistency determinations is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal Program (LCP) of the affected area. If an LCP that the Commission has certified and incorporated into the California Coastal Management Program (CCMP) provides development standards that are applicable to the project site, the LCP can provide guidance in applying Chapter 3 policies in light of local circumstances. If the Commission has not incorporated the LCP into the CCMP, it cannot guide the Commission's decision, but it can provide background information. The City of San Diego's LCP has been certified by the Commission and incorporated into the CCMP.

IV. Applicant's Consistency Certification. The City of San Diego certifies the proposed activity complies with the federally approved California Coastal Management Program and will be conducted in a manner consistent with such program.

V. Staff Recommendation:

The staff recommends that the Commission adopt the following motion:

MOTION. I move that the Commission concur with City of San Diego's consistency certification.

The staff recommends a **YES** vote on this motion. A majority vote in the affirmative will result in adoption of the following resolution:

Concurrence

The Commission hereby **concurs** with the consistency certification made by the City of San Diego for the proposed project, finding that the project is consistent with the California Coastal Management Program.

VI. Findings and Declarations:

The Commission finds and declares as follows:

A. Water Quality/Marine Resources

1. Regulatory Framework. The Environmental Protection agency (EPA) and the applicable RWQCBs (Regional Water Quality Control Boards) regulate municipal wastewater outfalls discharging into the Pacific Ocean under NPDES permits issued pursuant to the federal Clean Water Act. As enacted in 1972, the Clean Water Act required secondary treatment for all wastewater treatment nationwide. Amendments to the Clean Water Act in 1977 provided for Section 301(h) (33 USC Section 1311(h)) waivers of the otherwise applicable requirements for secondary treatment for discharges from publicly owned treatment works into marine waters.

Section 301(h) of the Clean Water Act provides that an NPDES permit which modifies the secondary treatment requirements may be issued if the applicant: (1) discharges into oceanic or saline, well-mixed estuarine waters; and (2) demonstrates to EPA's satisfaction that the modifications will meet those requirements specified in Section 301(h) (see pp. 7-9), including: (a) that the waiver will not result in any increase in the discharge of toxic pollutants or otherwise impair the integrity of receiving waters; and (b) that the discharger must implement a monitoring program for effluent quality, must assure compliance with pre-treatment requirements for toxic control, must assure compliance with water quality standards, and must measure impacts to indigenous marine biota. In California, the applicable water quality standards are embodied in the California Ocean Plan (see pp. 9-11 and Exhibit 5).

While the State of California (through the SWRCB and RWQCBs) administers the NPDES permit program and issues permits for discharges to waters within State waters, authority to grant a waiver and issue a modified NPDES permit under Section 301(h) of the Act is reserved to the Regional Administrator of EPA. Prior state concurrence with the waiver is also required.

Section 307(f) of the federal CZMA specifically incorporates the Clean Water Act into the California Coastal Management Program (CCMP). Commission consistency certification review is required for 301(h) applicants, because EPA NPDES permits are listed in California's program as federal licenses or permits for activities affecting land or water uses in the coastal zone. In reviewing the discharges, the Commission relies on the Clean Water Act and its implementing regulations, the California Ocean Plan, the Coastal Act (Chapter 3 policies), and

Water Code Section 13142.5 (incorporated into the Coastal Act by Section 30412(a)). These requirements, which are further described and summarized below, provide both specific numerical standards for pollutants, as well as general standards for protection of marine biological productivity.

a. Clean Water Act/Section 301(h). Implementation of the Clean Water Act in California, for the most part, has been delegated to the applicable RWQCB for issuance of NPDES permits. Under an MOA between EPA and the State of California, NPDES permits for outfalls beyond 3 miles *and* for secondary treatment waivers (regardless of location) are issued jointly by EPA and the applicable RWQCB. The Clean Water Act divides pollutants into three categories for purposes of regulation, as follows: (1) conventional pollutants, consisting of total suspended solids (TSS or SS); biochemical oxygen demand (BOD, a measure of the amount of oxygen consumed during degradation of waste); pH; fecal coliform bacteria; and oil and grease; (2) toxic pollutants, including heavy metals and organic chemicals; and (3) non-conventional pollutants (a "catch-all" category for other substances needing regulation (e.g., nitrogen and phosphorus, chlorine, fluoride)).

Guidelines adopted under Section 403 of the Clean Water Act (40 CFR Part 125.120-124, Subpart M, "Ocean Discharge Criteria") specify that beyond an initial mixing zone, commonly referred to as the zone of initial dilution (ZID), the applicable water quality standards must be met. The zone of initial dilution is the boundary of the area where the discharge plume achieves natural buoyancy and first begins to spread horizontally. Discharged sewage is mostly freshwater, so it creates a buoyant plume that moves upward toward the sea surface, entraining ambient seawater in the process. The wastewater/seawater plume rises through the water column until its density is equivalent to that of the surrounding water, at which point it spreads out horizontally.

Section 301(h) of the Clean Water provides for secondary treatment waivers under certain circumstances. The following requirements must be met for EPA to grant a secondary treatment waiver:

> *(1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 304(a)(6) of this Act;*
>
> *(2) such modified requirements will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population (BIP) of shellfish, fish and wildlife, and allows recreational activities, in and on the water;*
>
> *(3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable,*

and the scope of the monitoring is limited to include only those scientific investigations which are necessary to study the effects of the proposed discharge;

(4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

(5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;

(6) in the case of any treatment works serving a population of 50,000 or more, with respect to any toxic pollutant introduced into such works by an industrial discharger for which pollutant there is no applicable pretreatment requirement in effect, sources introducing waste into such works are in compliance with all applicable pretreatment requirements, the applicant will enforce such requirements, and the applicant has in effect a pretreatment program which, in combination with the treatment of discharges from such works, removes the same amount of such pollutant as would be removed if such works were to apply secondary treatment to discharges and if such works had no pretreatment program with respect to such pollutant;

(7) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;

(8) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(9) the applicant at the time such modification becomes effective will be discharging effluent which has received at least primary or equivalent treatment and which meets the criteria established under section 304(a)(1) of the Clean Water Act after initial mixing in the waters surrounding or adjacent to the point at which such effluent is discharged.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 101(a)(2) of this Act. For the purposes of paragraph (9), "primary or equivalent treatment" means treatment by screening, sedimentation and skimming adequate to remove at least 30 percent of the biochemical oxygen demanding material and of the suspended solids in the

treatment works influent, and disinfection, where appropriate. A municipality which applies secondary treatment shall be eligible to receive a permit pursuant to this subsection which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from any treatment works owned by such municipality into marine waters. No permit issued under this subsection shall authorize the discharge of sewage sludge into marine waters. In order for a permit to be issued under this subsection for the discharge of a pollutant into marine waters, such marine waters must exhibit characteristics assuring that water providing dilution does not contain significant amounts of previously discharged effluent from such treatment works. No permit issued under this subsection shall authorize the discharge of any pollutant into marine estuarine waters which at the time of application do not support a balanced, indigenous population of shellfish, fish and wildlife, or allow recreation in and on the waters or which exhibit ambient water quality below applicable water quality standards adopted for the protection of public water supplies, shellfish and wildlife, or recreational activities or such other standards necessary to assure support and protection of such uses. The prohibition contained in the preceding sentence shall apply without regard to the presence or absence of a causal relationship between such characteristics and the applicant's current or proposed discharge. Notwithstanding any of the other provisions of this subsection, no permit may be issued under this subsection for discharge of a pollutant into the New York Bight Apex consisting of the ocean waters of the Atlantic Ocean westward of 73 degrees 30 minutes west longitude and westward of 40 degrees 10 minutes north latitude.

In addition, as discussed on page 3, Section 301(j)(5) of the Clean Water Act provides procedural and substantive requirements enabling the City to apply for a waiver and specifying that discharges must meet the following tests: 80% removal of TSS (monthly ave.); 58% removal of BOD (annual ave.); 45 MGD of water reclamation capacity by the year 2010; and reduction of TSS during the 5-year period of permit modification.

b. <u>California Ocean Plan</u>. The California Ocean Plan was originally adopted by the SWRCB and approved by the EPA in June 1972, and is revised every three years. Among the California Ocean Plan requirements are the following water quality objectives (Chapter II):

A. Bacterial Characteristics, for body-contact recreation and shellfish harvesting;

B. Physical Characteristics, including floatables, visible oil and grease, discoloration of the surface, the reduction of light penetration, and the rate of deposition of solid and inert materials on the bottom;

C. Chemical Characteristics, including dissolved oxygen, pH, dissolved sulfide in and near sediments, concentration of substances in the sediments, organic materials in the sediments, and nutrient levels, and including maintenance of standards such as protecting indigenous biota and marine life;

D. Biological Characteristics, including:

1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

2. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

3. The concentrations 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.

E. Radioactivity, including maintenance of a standard that marine life shall not be degraded.

General requirements in the Ocean Plan include:

A. 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.

B. Waste discharged to the ocean must be essentially free of:

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

2. Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.

3. Substances which will accumulate to toxic levels in marine waters, sediments or biota.

4. Substances that significantly decrease the natural light to benthic communities and other marine life.

5. Materials that result in aesthetically undesirable discoloration of the ocean surface.

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

D. Location of waste discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that: ...

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 designated as being of special biological significance.

3. Maximum protection is provided to the marine environment.

In addition, the Ocean Plan contains "Table A" effluent limitations for major wastewater constituents and properties, "Table B" limitations that provide maximum concentrations for toxic materials that may not be exceeded upon completion of initial dilution, and other standards. Table A and B limitations are contained in Exhibit 5.

(c) <u>Coastal Act Policies</u>. The Coastal Act contains policies protecting water quality and marine resources. Section 30230 of the Coastal Act provides:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 provides:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

In addition to these resource protection policies, Section 30412 addresses the Commission's relationship with the SWRCB (State Water Resources Control Board and RWQCB); Section 30412 provides:

> *(a) In addition to the provisions set forth in Section 13142.5 of the Water Code, the provisions of this section shall apply to the commission and the State Water Resources Control Board and the California regional water quality control boards.*
>
> *(b) The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate the provisions of this section. Neither the commission nor any regional commission shall, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.*
>
> *Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, regional commission, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out the provisions of this division.*

Finally, Section 13142.5 of the Water Code, which is referenced in Section 30412 above, provides:

> *In addition to any other policies established pursuant to this division, the policies of the state with respect to water quality as it relates to the coastal marine environment are that:*
>
> *(a) Waste water discharges shall be treated to protect present and future beneficial uses, and, where feasible, to restore past beneficial uses of the receiving waters. Highest priority shall be given to improving or eliminating discharges that adversely affect any of the following:*
>
> *(1) Wetlands, estuaries, and other biologically sensitive sites.*
> *(2) Areas important for water contact sports.*
> *(3) Areas that produce shellfish for human consumption.*
> *(4) Ocean areas subject to massive waste discharge.*

Ocean chemistry and mixing processes, marine life conditions, other present or proposed outfalls in the vicinity, and relevant aspects of areawide waste treatment management plans and programs, but not of convenience to the discharger, shall for the purposes of this section, be considered in determining the effects of such discharges...

2. <u>EPA Evaluation of the City of San Diego's Discharges</u>. EPA has conducted a technical evaluation analyzing San Diego's compliance with the 301(h) and other criteria discussed above. This tentative evaluation, dated, February 8, 2002 (Exhibit 4), includes the following EPA findings:

<u>SUMMARY OF FINDINGS</u>

Based upon review of the data, references, and empirical evidence furnished in the application and other relevant sources, EPA Region 9 makes the following findings with regard to compliance with the statutory and regulatory criteria:

1. The applicant's proposed discharge complies with the California Ocean Plan water quality standards for dissolved oxygen (DO), suspended solids, and pH. [Section 301(h)(1), 40 CFR 125.61]

2. The applicant's proposed discharge will not adversely impact public water supplies or interfere with the protection and propagation of a balanced, indigenous population (BIP) of fish, shellfish, and wildlife and will allow for recreational activities. [Section 301(h)(2), 40 CFR 125.62]

3. The applicant has a well-established water quality monitoring program and is committing the resources to continue the program. The City has been monitoring the area around the Point Loma discharge since 1991. EPA Region 9 and the San Diego Regional Water Quality Control Board (Regional Board) will review the existing monitoring program and modify as appropriate. These modifications will be included as provisions for monitoring the impact of the discharge in the 301(h) modified NPDES permit. [Section 301(h)(3), 40 CFR 125.63]

4. The applicant's proposed discharge will not result in any additional treatment requirements on any other point or nonpoint source (See letter from Regional Board dated January 24, 2002). [Section 301(h)(4), 40 CFR 125.64]

5. The applicant's existing pretreatment program was approved by EPA on June 29, 1982. [Section 301(h)(5), 40 CFR 125.66 and 125.68]

6. The applicant has complied with the urban area pretreatment requirements by demonstrating that it has an applicable pretreatment requirement in effect for each toxic pollutant introduced by an industrial discharger. The Urban Area Pretreatment Program was submitted to EPA and the Regional Board in August of 1996. This program was approved by the Regional Board on August 13, 1997 and by EPA Region 9 on December 1, 1998. [Section 301(h)(6), 40 CFR 125.65]

7. The City will continue their existing nonindustrial program which has been in effect since 1985. The City will also continue their existing comprehensive public education program to minimize the amount of toxic pollutants that enter the treatment system from nonindustrial sources. [Section 301(h)(7), 40 CFR 125.66]

8. There will be no new or substantially increased discharges from the point source of the pollutants to which the 301(h) variance will apply above those specified in the permit. [Section 301(h)(8), 40 CFR 125.67]

9. The applicant's removal of 80% of SS as a monthly average and 58% of BOD as an annual average is sufficient to demonstrate the federal requirement of at least 30% removal capability and the California Ocean Plan's 75% SS removal requirement. The discharge allows sufficient dilution to attain of State water quality standards and Federal water quality criteria. [Section 301(h)(9), 40 CFR 125.60]

10. The California Coastal Commission issued Consistency Certification for extending the Point Loma outfall on November 12, 1991. The City has requested a determination from the California Coastal Commission that the proposed discharge is consistent with the policies of the California Coastal Zone Management Program ... No permit may be issued that is not consistent with the policies of the California Coastal Management Program. The California Coastal Commission will be hearing this issue at their meeting on March 5-8, 2002. [40 CFR 125.59(b)(3)]

11. On June 28, 2999, the applicant sent letters to the US Fish and Wildlife Service and the National Marine Fisheries Service requesting concurrence with their conclusion that the discharge will have no impact to threatened or endangered species. The National Marine Fisheries Service concluded that there were no Federally listed species under its jurisdiction that would be affected by the discharge (letter dated August 10, 1999). No response has been received from the U.S. Fish and Wildlife Service. The permit is contingent on a finding from the U.S. Fish and Wildlife Service. There are no

designated marine sanctuaries located within the coastal zones of California that could be impacted by the modified discharge. [40 CFR 125.59(b)(3)]

12. In its operation of the Pt. Loma WWTP, the applicant will remove 80% of suspended solids from the effluent on an annual basis, remove 58% removal of biological oxygen demand from the effluent on an annual basis, and reduce the mass of solids during the period of modification to 13,599 metric tons per year. In addition, the applicant has constructed two reclamation facilities with a treatment capacity of 45 MGD.

13. The applicant sent a letter to the Regional Board requesting a determination that the proposed discharge would comply with the applicable water quality standards on April 4, 2000. The Regional Board confirmed that the City of San Diego's facilities on Point Loma are capable of meeting effluent limitations contained in the California Ocean Plan (see letter dated January 24, 2002). As specified in a Memorandum of Understanding (May 1986) between EPA Region IX and the California State Water Resources Control Board, the joint issuance of an NPDES permit which incorporates both the 301(h) decision and State waste discharge requirements will serve as the State's concurrence. A draft NPDES permit for the discharge has been developed jointly with the Regional Board. [40 CFR 125.59 (i)(2)]

3. <u>Commission Conclusion</u>. The information submitted by the City of San Diego, along with the supporting analysis and information from EPA and the RWQCB, supports its request for a continued secondary treatment waiver. Historically, the Commission has concurred with consistency certifications for these types of waivers and waiver renewals, and found applicable water quality and marine resource policies of the Coastal Act to be met, when: (1) adequate monitoring is in place; and (2) when EPA and the appropriate RWQCB have determined that the discharger's effluent complies with the applicable Clean Water Act and Ocean Plan requirements. In this case, the City has monitored its discharges since its initial waiver was granted in 1995, and these monitoring efforts support the City's conclusions that its discharges meet the applicable water quality and marine resource requirements. Moreover, the stringent monitoring as required under Section 301(h) will be continued.

Based on EPA's analysis including a review of plant performance and modeling efforts performed since 1995, the outfall does not appear to be resulting in any significant reduction in light transmissivity, any biologically significant changes in benthic community structure in the vicinity of the outfall (beyond the zone of initial dilution), or any significant changes in fish populations or fish diseases in the area. EPA and the RWQCB have also addressed a historic Commission's historic concern over toxics by continuing to include requirements for the implementation of a pollution prevention program to minimize discharge of toxic pollutants into the sewer system which might interfere with the treatment processes. As discussed on page 14, EPA states that the City complies with the urban area pretreatment requirements "by

demonstrating that it has an applicable pretreatment requirement in effect for each toxic pollutant," and that the City will continue its existing nonindustrial program (which has been in effect since 1985). Therefore, based on the analysis above, the Commission concludes that the City's discharges would be consistent with the applicable marine resource and water quality provisions (Sections 30230 and 30231) of the Coastal Act.

B. Commercial Fishing/Recreation

Section 30230 of the Coastal Act, quoted in full on page 11, includes a requirement that:

> *Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

The Coastal Act also contains more specific policies protecting commercial and recreational fishing; Section 30234 provides:

> *Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.*

Section 30234.5 provides:

> *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

The Coastal Act also protects public recreation (such as surfing and other water-contact recreation). Section 30213 provides, in part:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided..*

Section 30220 provides:

> *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

As discussed in the water quality/marine resource section above, the City's monitoring efforts over the past five years are sufficient to enable a determination that commercial/recreational fishing and other recreational concerns are met. Most recreational activities are centered around the Point Loma kelp beds and in nearshore waters. SCUBA diving is very popular in the offshore kelp beds. Only limited diving occurs outside the area of the kelp beds. EPA's analysis of the City's plume modeling and monitoring data show that while there have been shoreline and kelp bed water quality standard exceedances, they are unlikely to be related to the City's outfall discharges. EPA states:

> *There are numerous exceedances of the single sample thresholds for Total Coliform, Fecal coliform and enterococcus (Fig. 53 [Exhibit 3]). However, these do not appear to be related to the Point Loma outfall. A high percentage of these are related to storm events. There also seems to be a spatial pattern which suggests a southern source. For perspective, these data can be compared to comparable data collected as part of the IWTP shoreline monitoring program (See Fig. 54 [Exhibit 3]). There is some overlap between the two program (i.e., San Diego's Stations D1 and D2 overlap with IWTP's Stations S8 and S9). There is a clear south-north gradient in the frequency of exceedances with a peak at the Tijuana River for all three bacterial indicators.*
>
> *Exceedances are generally attributed to surface runoff (e.g. from the Tijuana River) rather than the outfall plume. This is supported by the lack of high concentrations in nearshore stations. This conclusion is also supported by modelling and monitoring efforts, which indicate that the outfall plume remains submerged in the offshore area.*
>
> *<u>Summary of bacteria data</u>. EPA's review of the bacterial monitoring data suggests that the outfall plume is trapped at depth offshore and that the plume surfaces infrequently. Elevated concentrations of bacteria in the kelp beds were observed on rare occasion (less than 0.5% of the time). Although bacterial concentrations along the shoreline frequently exceed the standards, there is no evidence to suggest that this is related to the outfall. Based on these data, along with the results of physical oceanographic modeling performed by the applicant in 1994, EPA concludes that the Point Loma modified discharge will meet the COP bacterial compliance standards at the shoreline, recreational areas and at kelp beds.*

Therefore, as discussed above with respect to marine resources, and with continued monitoring, the Commission concludes that the discharges would be consistent with the applicable commercial and recreational fishing and general recreation policies (Sections 30230, 30234, 30234.5, 30213, and 30220) of the Coastal Act.

SUBSTANTIVE FILE DOCUMENTS:

1. Consistency Certification No. CC-62-91/Coastal Development Permit No. 6-91-217 (City of San Diego, Point Loma outfall extension).

2. No Effects Determination NE-94-95 (City of San Diego, secondary treatment waiver).

3. RWQCB Tentative Order No. R9-2002-0025 and draft NPDES Permit No. CA0107409, City of San Diego.

4. RWQCB Order No. 95-106 and NPDES Permit No. CA0107409, City of San Diego.

5. Consistency Certifications for secondary treatment waiver renewals, CC-88-92 and CC-123-98 (City of Morro Bay), CC-126-96 (Goleta Sanitary District), and CC-3-98 (County Sanitation Districts of Orange County (CSDOC)).

6. Consistency Determination No. CD-137-96 (IBWC) International Boundary and Water Commission International Wastewater Treatment Plant Interim Operation.

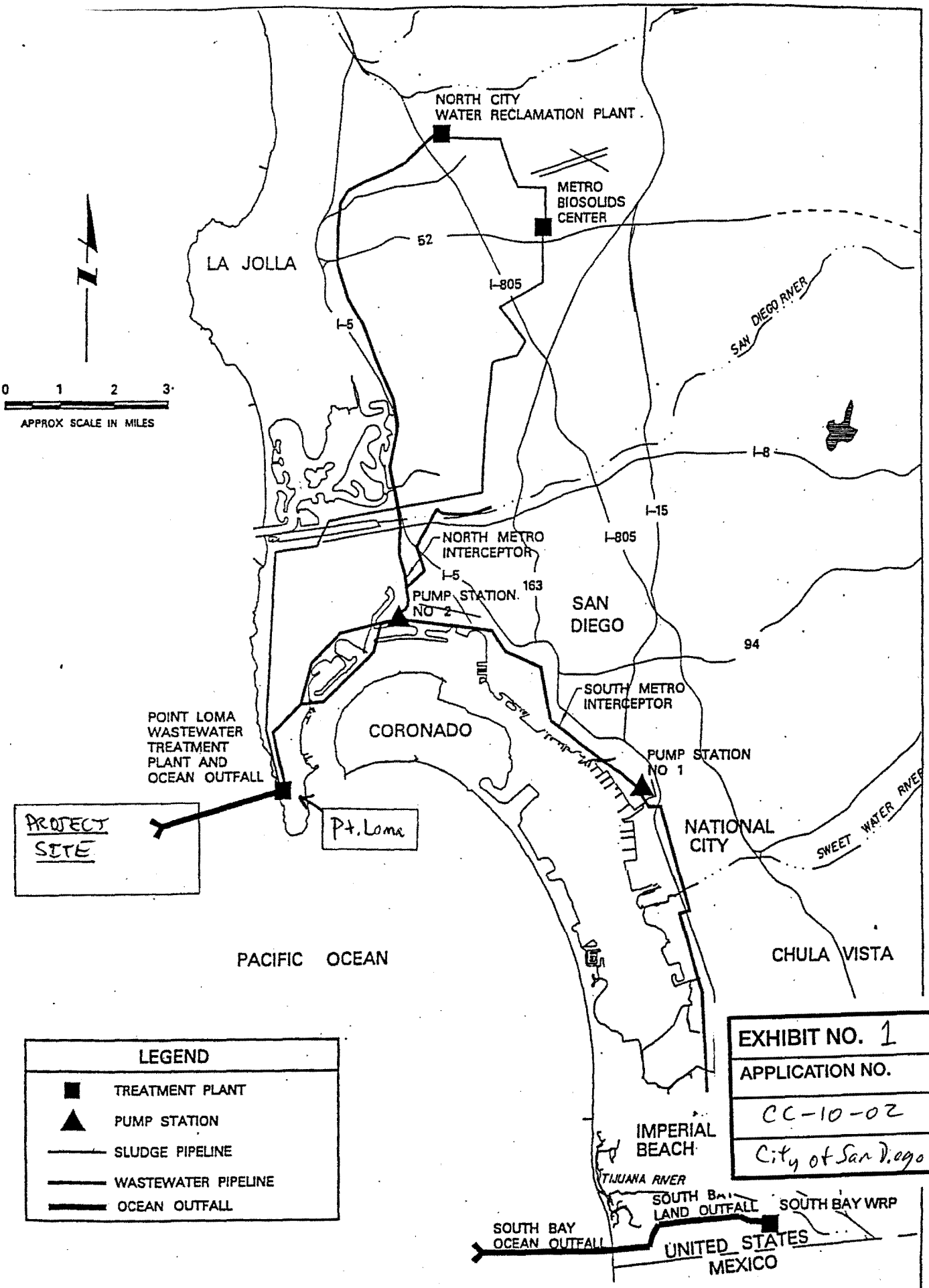

EXHIBIT NO. 1
APPLICATION NO.
CC-10-02
City of San Diego

METRO FACILITIES LOCATION MAP

Figure 1

THE CITY OF SAN DIEGO

February 8, 2002

RECEIVED
FEB 13 2002
CALIFORNIA
COASTAL COMMISSION

Mr. Mark Delaplaine
California Coastal Commission
45 Fremont Street, 20th Floor
San Francisco, CA. 94105-2221

Dear Mr. Delaplaine:

The purpose of this letter is to document actions by the City of San Diego to comply with the requirement to construct 45 MGD of water reclamation capacity by the year 2010. This was a condition of the Ocean Pollution Reduction Act that allowed the City to re-enter the 301(h) (Waiver) process.

The North City Water Reclamation Plant (NCWRP) was completed and put on-line in 1997. This is a 30 MGD facility. The South Bay Water Reclamation Plant (SBWRP) is in the final stages of completion. It is currently scheduled to go on-line in the spring of 2002. This is a 15 MGD facility.

With the completion of the SBWRP the City will have fulfilled its obligation to have 45 MGD of reclamation capacity nearly eight years ahead of the 2010 requirement.

If you need additional information please contact me at (619) 758-2300.

Sincerely,

Alan C. Langworthy
Deputy Metropolitan Wastewater Director

cc: Scott Tulloch
Ted Bromfield

EXHIBIT NO. 2
APPLICATION NO.
CC-10-02

Environmental Monitoring and Technical Services Division • Metropolitan Wastewater
4918 North Harbor Drive, Suite 201 • San Diego, CA 92106-2359
Tel (619) 758-2300 Fax (619) 758-2309

DIVERSITY

Figure 53. Summary of single sample exceedances for San Diego Shoreline Stations (1995-2000)

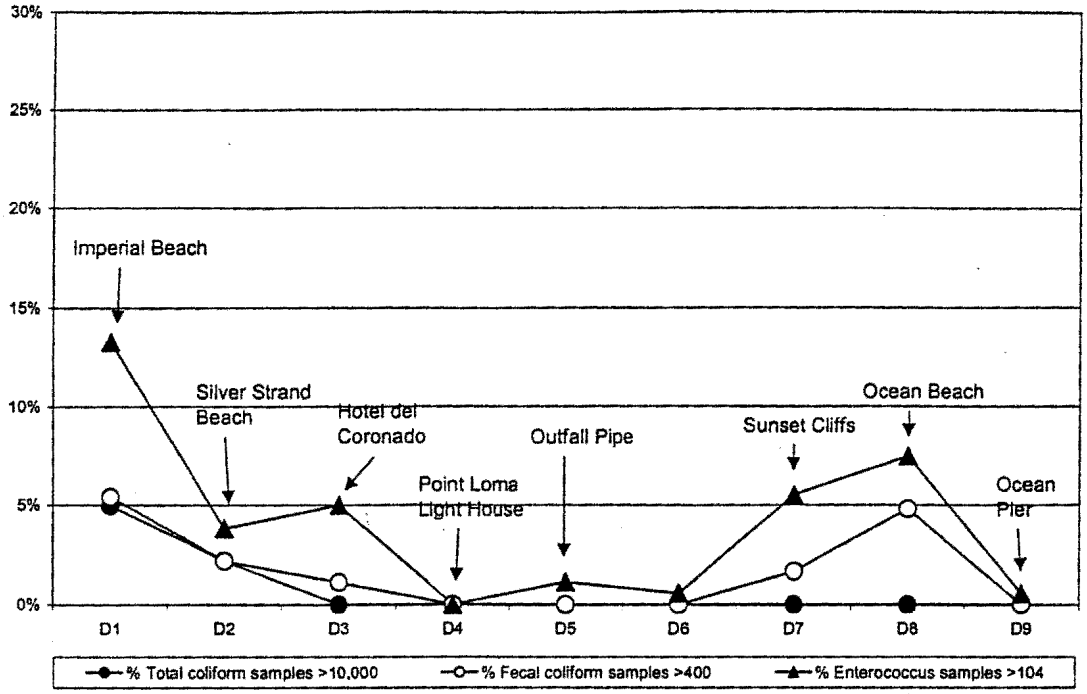

Figure 54. Summary of single sample exceedances for ITP Shoreline Stations (1995-2000)

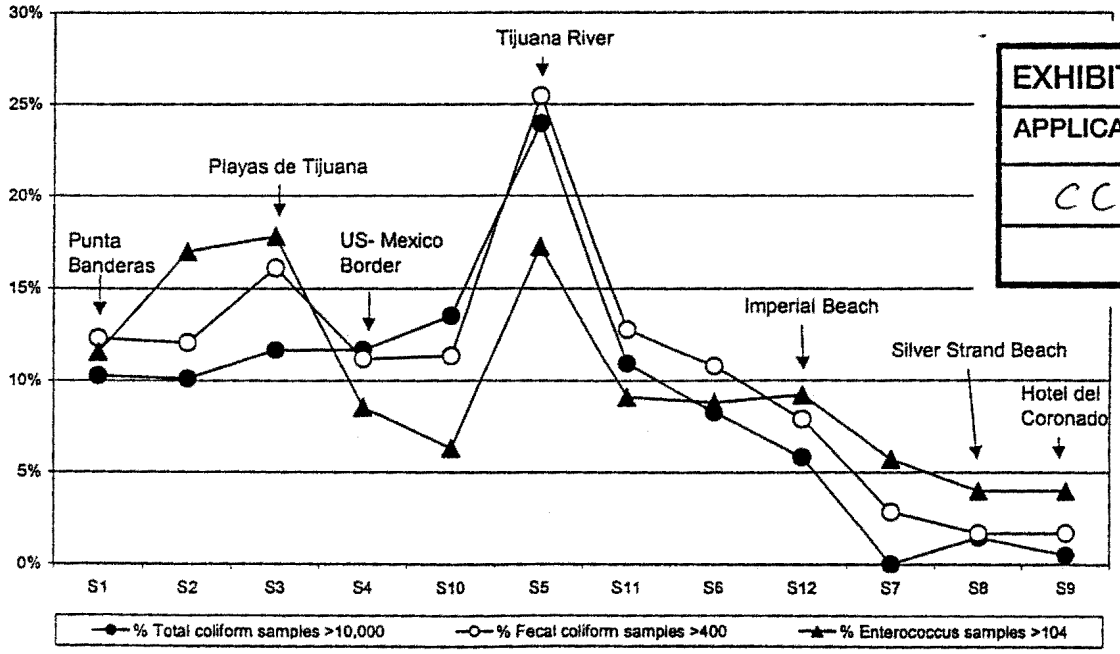

EXHIBIT NO. 3
APPLICATION NO.
CC-10-02

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

OFFICE OF THE
REGIONAL ADMINISTRATOR

In Re:

CITY OF SAN DIEGO'S POINT LOMA WASTEWATER TREATMENT PLANT, APPLICATION FOR A MODIFIED NPDES PERMIT UNDER SECTION 301(h) OF THE CLEAN WATER ACT	TENTATIVE DECISION OF THE REGIONAL ADMINISTRATOR PURSUANT TO 40 CFR PART 125, SUBPART G

I have reviewed the attached evaluation analyzing the merits of the application of the City of San Diego for the Point Loma Wastewater Treatment Plant and Ocean Outfall requesting a modification from secondary treatment requirements of the Clean Water Act (the Act). It is my tentative decision that the Point Loma Wastewater Treatment Plant and Ocean Outfall be granted a modification in accordance with the terms, conditions and limitations of the attached evaluation, subject to concurrence by the State of California with the granting of a modification as required by section 301(h) of the Act. USEPA Region 9 will prepare a draft modified National Pollutant Discharge Elimination System (NPDES) permit in accordance with this decision.

Because my decision is based on available evidence specific to this particular discharge, it is not intended to assess the need for secondary treatment in general, nor does it reflect on the necessity for secondary treatment by other publicly owned treatment works discharging to the marine environment. This decision and the NPDES permit implementing this decision are subject to revision on the basis of subsequently acquired information relating to the impacts of the less-than-secondary discharge on the marine environment.

Under the procedures of the Permit Regulations, 40 CFR Part 124 (45 Fed. Reg. 33848 *et seq.*) public notice, comment and administrative appeals regarding this decision and accompanying draft NPDES permit will be made available to interested persons.

Dated: 08 FEBRUARY 2002

Wayne Nastri
Regional Administrator

RECEIVED
FEB 14 2002
CALIFORNIA
COASTAL COMMISSION

EXHIBIT NO. 4
APPLICATION NO.
CC-10-02
EPA Analysis (Text)

TABLE OF CONTENTS

INTRODUCTION 1

DECISION CRITERIA 1

SUMMARY OF FINDINGS 4

CONCLUSION 5

RECOMMENDATION 6

DESCRIPTION OF TREATMENT FACILITY 6

APPLICATION OF STATUTORY AND REGULATORY CRITERIA 7
1. Compliance with the California State Water Quality Standards 7
A. Suspended Solids 8
1. Solids Removal 8
2. Turbidity 10
3. Light Transmittance 11
B. Biochemical Oxygen Demand and Dissolved Oxygen 11
1. BOD. 12
2. Dissolved Oxygen Concentrations. 12
C. pH Compliance. 14
D. Conclusions on Compliance with Applicable Water Quality Standards. . . . 14
2. Protection and propagation of a balanced, indigenous population of fish, shellfish, and wildlife, recreational activities or public water supplies. 14
A. Physical Characteristics of the Discharge. 14
1. Outfall/Diffuser and Initial Dilution. 14
2. USEPA Water Quality Criteria and State Water Quality Standards. 15
3. Dilution Water Recirculation. 18
4. Transport and Dispersion of Diluted Wastewater and Particulates, Physical and Chemical Effects. 19
B. Impact of Discharge on Public Water Supplies. 25
C. Biological Impact of Discharge. 25
1. Phytoplankton. 25
2. Benthic Infauna. 27
3. Fish and Epibenthic Macroinvertebrates. 32
4. Bioaccumulation and Toxic Pollutants. 33
5. Incidences of lesions and parasites. 39
D. Impact of Discharge on Recreational Activities. 39
E. Summary of Conclusions. 42
3. Establishment of a Monitoring Program. 42
4. Impact of Modified Discharge on Other Point and Nonpoint Sources. 43

5. Toxics Control Program. 43
A. Chemical Analysis. 43
B. Toxic Pollutant Source Identification. 43
C. Industrial Pretreatment Requirements. 43
6. Urban Area Pretreatment Program. 44
7. Nonindustrial Source Control Program. 46
8. Increase in Effluent Volume or Amount of Pollutants Discharged. 46
9. Compliance with Primary Treatment and Federal Water Quality Criteria. 47

COMPLIANCE WITH OTHER APPLICABLE LAWS 48
1. State Coastal Zone Management Program. 48
2. Marine Sanctuaries. 48
3. Endangered or Threatened Species. 49

STATE CONCURRENCE IN MODIFICATION 50

REFERENCES 51

FIGURES

APPENDIX A. Summary of water quality data

APPENDIX B. Summary of sediment chemistry data from regional surveys

LIST OF FIGURES

Figure 1. Facilities map
Figure 2. Ambient monitoring station locations
Figure 3. Trends in arsenic concentrations in effluent (1995-1999)
Figure 4. Trends in copper concentrations in effluent (1995-1999)
Figure 5. Trends in dioxin measurements in effluent (1995-1999)
Figure 6. Trends in phenol concentrations in effluent (1995-1999)
Figure 7. Trends in cyanide concentrations in effluent (1995-1999)
Figure 8. Trends in zinc concentrations in effluent (1995-1999)
Figure 9. Regional monitoring stations
Figure 10. Trends in TVS concentrations in sediments (1991-2000)
Figure 11. Trends in TOC concentrations in sediments (1991-2000)
Figure 12. Trends in BOD concentrations in sediments (1991-2000)
Figure 13. Trends in sulfide concentrations in sediments (1991-2000)
Figure 14. Trends in arsenic concentrations in sediments (1991-2000)
Figure 15. Trends in cadmium concentrations in sediments (1991-2000)
Figure 16. Trends in chromium concentrations in sediments (1991-2000)
Figure 17. Trends in copper concentrations in sediments (1991-2000)
Figure 18. Trends in lead concentrations in sediments (1991-2000)
Figure 19. Trends in mercury concentrations in sediments (1991-2000)
Figure 20. Trends in nickel concentrations in sediments (1991-2000)
Figure 21. Trends in zinc concentrations in sediments (1991-2000)
Figure 22. Trends in species richness in sediments (1991-2000)
Figure 23. Species richness from regional surveys (1994-1999)
Figure 24. Trends in benthic abundances in sediments (1991-1999)
Figure 25. Benthic abundances from regional surveys (1994-1999)
Figure 26. Trends in Amphiodia urtica abundances in sediments (1991-1999)
Figure 27. Abundances of Amphiodia urtica from regional surveys (1994-1999)
Figure 28. Trends in abundances of Parvilucina tenuisculpta in sediments (1991-1999)
Figure 29. Abundances of Parvilucina tenuisculpta from regional surveys (1994-1999)
Figure 30. Trends in abundances of Euphilomedes cacharodonta in sediments (1991-1999)
Figure 31. Abundances of Euphilomedes cacharodonta from regional surveys (1994-1999)
Figure 32. Trends in abundances of Capitella spp. in sediments (1991-1999)
Figure 33. Abundances of Capitella spp. from regional surveys (1994-1999)
Figure 34. Trends in infaunal trophic index in sediments (1991-1999)
Figure 35. Infaunal trophic index values from regional surveys (1994-1999)
Figure 36. Trends in benthic response index in sediments (1991-1999)
Figure 37. Benthic response index values from regional surveys (1994-1999)
Figure 38. Map of fish trawl stations
Figure 39. Trends in number of fish species (1991-2000)
Figure 40. Trends in fish abundances (1991-2000)
Figure 41. Trends in fish biomass (1991-2000)
Figure 42. Trends in arsenic in longfin sanddab muscle (1991-2000)
Figure 43. Trends in arsenic in California scorpionfish muscle (1991-2000)
Figure 44. Trends in mercury in longfin sanddab muscle (1991-2000)
Figure 45. Trends in mercury in California scorpionfish muscle (1991-2000)
Figure 46. Trends in total DDT in longfin sanddab liver (1991-2000)
Figure 47. Trends in total DDT in Pacific sanddab liver (1991-2000)
Figure 48. Trends in total PCBs in longfin sanddab liver (1991-2000)
Figure 49. Trends in total PCBs in Pacific sanddab liver (1991-2000)
Figure 50. Trends in total coliforms at shoreline stations (1996-2000)
Figure 51. Trends in fecal coliforms at shoreline stations (1996-2000)
Figure 52. Trends in enterococcus at shoreline stations (1996-2000)
Figure 53. Single sample exceedance rates at San Diego shoreline stations (1996-2000)
Figure 54. Single sample exceedance rates at ITWP shoreline stations (1996-2000)

INTRODUCTION

The City of San Diego, California, (the applicant) is requesting the renewal of a modification under section 301(h) of the Clean Water Act (the Act), 33 U.S.C. section 1311(h), from the secondary treatment requirements contained in section 301(b)(l)(B) of the Act, 33 U.S.C. section 1311(b)(l)(B). The applicant was given the opportunity to apply for a 301(h) waiver under the Ocean Pollution Reduction Act of 1994, 33 U.S.C. § 301(j)(5) (OPRA). The applicant submitted the application on April 26, 1995. The USEPA issued a tentative decision to grant the waiver on August 14, 1995. The final decision and permit were issued on November 9, 1995. This became effective December 12, 1995. The applicant submitted its application for renewal on April 10, 2001.

The modification is being sought for the Point Loma Wastewater Treatment Plant (WWTP), a publicly owned treatment works (POTW). The applicant is seeking a 301(h) modification to discharge wastewater receiving less-than-secondary treatment to the Pacific Ocean. Secondary treatment is defined in regulations (40 CFR Part 133) in terms of effluent quality for suspended solids (SS), biochemical oxygen demand (BOD) and pH. The secondary treatment requirements for SS, BOD and pH are listed below:

SS: (1) The 30-day average shall not exceed 30 mg/l. (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%

BOD: (1) The 30-day average shall not exceed 30 mg/l. (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%.

pH: The effluent limits for pH shall be maintained within the limits of 6.0 to 9.0 pH units

The application is based on an improved discharge, as defined by 40 CFR 125.58(g) and qualifies as a large discharge as defined in 40 CFR 125.58(c). The applicant is requesting a modification for BOD and SS. The proposed effluent limits would require the removal of 80% of SS as a monthly average and the removal of 58% of BOD as an annual average. In addition suspended solids loadings to the ocean would be less than 13,600 metric tons/year. These limits satisfy sections 301(h) and (j)(5) of the CWA.[1]

This document presents findings, conclusions and recommendations of the Environmental Protection Agency (USEPA) Region 9 regarding the compliance of the applicant's proposed discharge with the criteria set forth in section 301(h) of the Act as implemented by regulations contained in 40 CFR Part 125, Subpart G (47 Fed. Reg. 53666, November 26, 1982) and other appropriate guidance.

---

[1]This decision is issued without prejudice to the rights of any party to address the legal issue of the applicability of 33 U.S.C. § 1311(j)(5) to the City's future NPDES permits.

DECISION CRITERIA

Under section 301(b)(1)(B) of the Act, 33 U.S.C. section 1311(b)(1)(B), POTWs in existence on July 1, 1977, were required to meet effluent limitations based upon secondary treatment as defined by the Administrator of EPA (the Administrator). Secondary treatment has been defined by the Administrator in terms of three parameters: biochemical oxygen demand (BOD), suspended solids (SS), and pH. Uniform national effluent limitations for these pollutants were promulgated and included in National Pollutant Discharge Elimination System (NPDES) permits for POTWs issued under section 402 of the Act. POTWs were required to comply with these limitations by July 1, 1977.

Congress subsequently amended the Act, adding section 301(h) which authorizes the Administrator, with State concurrence, to issue NPDES permits which modify the secondary treatment requirements of the Act. P.L. 95-217, 91 Stat. 1566, as amended by, P.L. 97-117, 95 Stat. 1623; and section 303 of the Water Quality Act (WQA) of 1987. Section 301(h) provides that:

> *The Administrator, with the concurrence of the State, may issue a permit under section 402 [of the Act] which modifies the requirements of subsection (b)(1)(B) of this section [the secondary treatment requirements] with respect to the discharge of any pollutant from a publicly owned treatment works into marine waters, if the applicant demonstrates to the satisfaction of the Administrator that:*
>
> *(1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 304(a)(6) of this Act;*
>
> *(2) such modified requirements will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population (BIP) of shellfish, fish and wildlife, and allows recreational activities, in and on the water;*
>
> *(3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable, and the scope of the monitoring is limited to include only those scientific investigations which are necessary to study the effects of the proposed discharge;*
>
> *(4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;*
>
> *(5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;*
>
> *(6) in the case of any treatment works serving a population of 50,000 or more, with respect to any toxic pollutant introduced into such works by an industrial discharger for*

which pollutant there is no applicable pretreatment requirement in effect, sources introducing waste into such works are in compliance with all applicable pretreatment requirements, the applicant will enforce such requirements, and the applicant has in effect a pretreatment program which, in combination with the treatment of discharges from such works, removes the same amount of such pollutant as would be removed if such works were to apply secondary treatment to discharges and if such works had no pretreatment program with respect to such pollutant;

(7) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;

(8) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(9) the applicant at the time such modification becomes effective will be discharging effluent which has received at least primary or equivalent treatment and which meets the criteria established under section 304(a)(1) of the Clean Water Act after initial mixing in the waters surrounding or adjacent to the point at which such effluent is discharged.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 101(a)(2) of this Act. For the purposes of paragraph (9), "primary or equivalent treatment" means treatment by screening, sedimentation and skimming adequate to remove at least 30 percent of the biochemical oxygen demanding material and of the suspended solids in the treatment works influent, and disinfection, where appropriate. A municipality which applies secondary treatment shall be eligible to receive a permit pursuant to this subsection which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from any treatment works owned by such municipality into marine waters. No permit issued under this subsection shall authorize the discharge of sewage sludge into marine waters. In order for a permit to be issued under this subsection for the discharge of a pollutant into marine waters, such marine waters must exhibit characteristics assuring that water providing dilution does not contain significant amounts of previously discharged effluent from such treatment works. No permit issued under this subsection shall authorize the discharge of any pollutant into marine estuarine waters which at the time of application do not support a balanced, indigenous population of shellfish, fish and wildlife, or allow recreation in and on the waters or which exhibit ambient water quality below applicable water quality standards adopted for the protection of public water supplies, shellfish and wildlife, or recreational activities or such other standards necessary to assure support and protection of such uses. The prohibition contained in the preceding sentence shall

apply without regard to the presence or absence of a causal relationship between such characteristics and the applicant's current or proposed discharge. Notwithstanding any of the other provisions of this subsection, no permit may be issued under this subsection for discharge of a pollutant into the New York Bight Apex consisting of the ocean waters of the Atlantic Ocean westward of 73 degrees 30 minutes west longitude and westward of 40 degrees 10 minutes north latitude.

EPA regulations implementing section 301(h) provide that a 301(h) modified NPDES permit may not be issued in violation of 40 CFR 125.59 (b), which requires among other things, compliance with the provisions of the Coastal Zone Management Act (16 U.S.C. 1451 *et seq.*), the Endangered Species Act (16 U.S.C. 1531 *et seq.*), the Marine Protection Research and Sanctuaries Act (16 U.S.C. 1431 *et seq.*), and any other applicable provision of State or Federal law or Executive Order. In the discussion which follows, the data submitted by the applicant is analyzed in the context of the statutory and regulatory criteria.

SUMMARY OF FINDINGS

Based upon review of the data, references, and empirical evidence furnished in the application and other relevant sources, EPA Region 9 makes the following findings with regard to compliance with the statutory and regulatory criteria:

1. The applicant's proposed discharge complies with the California Ocean Plan water quality standards for dissolved oxygen (DO), suspended solids, and pH. [Section 301(h)(1), 40 CFR 125.61]

2. The applicant's proposed discharge will not adversely impact public water supplies or interfere with the protection and propagation of a balanced, indigenous population (BIP) of fish, shellfish, and wildlife and will allow for recreational activities. [Section 301(h)(2), 40 CFR 125.62]

3. The applicant has a well-established water quality monitoring program and is committing the resources to continue the program. The City has been monitoring the area around the Point Loma discharge since 1991. USEPA Region 9 and the San Diego Regional Water Quality Control Board (Regional Board) will review the existing monitoring program and modify as appropriate. These modifications will be included as provisions for monitoring the impact of the discharge in the 301(h) modified NPDES permit. [Section 301(h)(3), 40 CFR 125.63]

4. The applicant's proposed discharge will not result in any additional treatment requirements on any other point or nonpoint source (See letter from Regional Board dated January 24, 2002). [Section 301(h)(4), 40 CFR 125.64]

5. The applicant's existing pretreatment program was approved by EPA on June 29, 1982. [Section 301(h)(5), 40 CFR 125.66 and 125.68]

6. The applicant has complied with the urban area pretreatment requirements by

demonstrating that it has an applicable pretreatment requirement in effect for each toxic pollutant introduced by an industrial discharger. The Urban Area Pretreatment Program was submitted to EPA and the Regional Board in August of 1996. This program was approved by the Regional Board on August 13, 1997 and by EPA Region 9 on December 1, 1998. [Section 301(h)(6), 40 CFR 125.65]

7. The City will continue their existing nonindustrial program which has been in effect since 1985. The City will also continue their existing comprehensive public education program to minimize the amount of toxic pollutants that enter the treatment system from nonindustrial sources. [Section 301(h)(7), 40 CFR 125.66]

8. There will be no new or substantially increased discharges from the point source of the pollutants to which the 301(h) modification will apply above those specified in the permit. [Section 301(h)(8), 40 CFR 125.67]

9. The applicant's removal of 80% of SS as a monthly average and 58% of BOD as an annual average is sufficient to demonstrate the federal requirement of at least 30% removal capability and the California Ocean Plan's 75% SS removal requirement. The discharge allows sufficient dilution to attain of State water quality standards and Federal water quality criteria. [Section 301(h)(9), 40 CFR 125.60]

10. The California Coastal Commission issued Consistency Certification for extending the Point Loma outfall on November 12, 1991. The applicant has requested a determination from the California Coastal Commission that the proposed discharge is consistent with the policies of the California Coastal Zone Management Program (letter dated July 13, 2000). No permit may be issued that is not consistent with the policies of the California Coastal Management Program. The California Coastal Commission will be hearing this issue at their meeting on March 5-8, 2002. [40 CFR 125.59(b)(3)]

11. On June 28, 1999, the applicant sent letters to the US Fish and Wildlife Service and the National Marine Fisheries Service requesting concurrence with their conclusion that the discharge will have no impact to threatened or endangered species. The National Marine Fisheries Service concluded that there were no Federally listed species under its jurisdiction that would be affected by the dishcharge (letter dated August 10, 1999). No response has been received from the U.S. Fish and Wildlife Service. The permit is contingent on a finding from the U.S. Fish and Wildlife. There are no designated marine sanctuaries located within the coastal zones of California that could be impacted by the modified discharge. [40 CFR 125.59(b)(3)]

12. In its operation of the Pt. Loma WWTP, the applicant will remove 80% of suspended solids from the effluent on an annual basis, remove 58% of biological oxygen demand from the effluent on an annual basis, and reduce the mass of solids during the period of modification to 13,599 metric tons per year. In addition, the applicant has constructed two reclamation facilities with a treatment capacity of 45 MGD.

13. The applicant sent a letter to the Regional Board requesting a determination that the

proposed discharge would comply with the applicable water quality standards on April 4, 2000. The Regional Board confirmed that the City of San Diego's facilities on Point Loma is capable of meeting effluent limitations contained in the California Ocean Plan (see letter dated January 24, 2002). As specified in a Memorandum of Understanding (May 1986) between EPA Region 9 and the California State Water Resources Control Board, the joint issuance of an NPDES permit which incorporates both the 301(h) decision and State waste discharge requirements will serve as the State's concurrence. A draft NPDES permit for the discharge has been developed jointly with the Regional Board. [40 CFR 125.59 (i)(2)]

CONCLUSION

It is concluded that the applicant's proposed discharge will satisfy CWA sections 301(h) and (j)(5) and 40 CFR 125, Subpart G.

RECOMMENDATION

It is recommended that the applicant be granted a section 301(h) modification in accordance with the above findings, contingent upon the satisfaction of the following conditions, and that a draft NPDES permit be prepared in accordance with the applicable provisions of 40 CFR Parts 122-125.

The applicant's receipt of a section 301(h) modification is contingent upon concurrence from the Regional Board.

The draft NPDES permit includes, in addition to all applicable terms and conditions required by 40 CFR Part 122, the following terms and conditions specific to section 301(h):

1. Effluent limitations in accordance with the terms and conditions of this document in accordance with 40 CFR 125.68(a).

2. Monitoring program requirements in accordance with 40 CFR 125.68(c).

3. Reporting requirements that include the results of monitoring programs in accordance with 40 CFR 125.68(d).

DESCRIPTION OF TREATMENT FACILITY

There have been a number of upgrades to the treatment system since 1995. These include: 1) the addition of two new sedimentation basins at the Point Loma plant, 2) construction of the Metro Biosolids Center (MBC) a regional solids handling facility, 3) construction of the North City Water Reclamation Plant (NCWRP) and 4) construction of the South Bay Water Reclamation Plant (SBWRP) and associated outfall. These facilities make up the wastewater treatment system (Fig. 1).

Preliminary treatment consists of screening at pump station No. 2 (coarse screens) and at the

treatment plant (fine screens). The wastewater is then distributed to six aerated grit removal chambers. Ferric chloride is added prior to grit chamber removal to enhance solids removal. Wastewater exiting the grit chamber is then treated with anionic polymers to aid coagulation of solids and distributed to what is now twelve sedimentation tanks. Sludge generated by the advanced primary treatment is digested anaerobically. The Fiesta Island processing facility was closed down and digested sludge from Point Loma is now pumped to the MBC for dewatering. The centrate from this dewatering is returned to sewer system upstream of pump station No.2. The treated advanced primary effluent is discharged through the Point Loma ocean outfall. The ocean outfall extends approximately 7.1 Km (about 4.5 miles) offshore to an approximate depth of 100 meters (about 310 ft). Two diffuser legs branch from the end of the outfall in a "Y"-configuration. Each leg of the diffuser is 760 m (2,946 ft) in length and contains 208 diffuser ports.

The 30-MGD NCWRP began operation shortly after the 1995 permit was issued. The water reclamation plant consists of preliminary screening, grit removal, primary treatment, secondary treatment with provisions for nitrification and partial denitrification, tertiary filtration, and chlorination. Based on demand, a portion of the waste water stream will receive tertiary treatment and be reclaimed. Excess secondary treated water is released back into the sewer system and routed through pump station No. 2 to the Point Loma plant. The waste solids (sludge) are pumped to the MBC where it is thickened, digested in anaerobic digesters, and dewatered. The centrate from the NCWRP is released back into the sewer system upstream of pump station No. 2.

The MBC receives waste solids from the NCWRP and digested solids from the Point Loma plant. NCWRP solids are thickened, digested and dewatered at the MBC plant. The Point Loma solids are dewatered at the MBC. The centrate from these processes is released back into the sewer system upstream of pump station No. 2.

The SBWRP is a 15-MGD plant which is expected to go on line in 2002. Solids removed from the treatment process are released back into the sewer system upstream of pump station No. 2 for treatment at Point Loma. Water for reclamation receives full tertiary treatment. Excess secondary treated effluent will be discharged 3.5 miles offshore through the South Bay Ocean Outfall (SBOO), which is shared with the International Wastewater Treatment Plant (IWTP).

The IWTP is currently operating as a 25-MGD advanced primary plant that was constructed to handle waste from Mexico. While not considered part of the Wastewater System, the plant removes a significant portion of flow from Mexico that was previously discharged to the Metro Wastewater System.

The original application was based on an end of permit flow of 205 MGD. Since then the rating capacity of the plant has been increased to 240 MGD (See addendum 2 to Board Order No. 95-106). The actual flows have been lower than projected. In the years 1999 and 2000 annual flows were around 175 MGD. The projected annual flow for the year 2006 (end of next permit period) is projected to be 195 MGD.

APPLICATION OF STATUTORY AND REGULATORY CRITERIA

1. Compliance with the California State Water Quality Standards [Section 301(h)(1), 40 CFR 125.61].

Under 40 CFR 125.61 which implements section 301(h)(1), there must be a water quality standard applicable to the pollutants for which the modification is requested and the applicant must demonstrate that the proposed modified discharge will comply with these standards. The applicant must obtain a favorable State determination that the proposed modified discharge will comply with applicable provisions of State law including water quality standards.

The applicant is requesting a waiver from the secondary treatment requirement for suspended solids and BOD requirements. The applicant must demonstrate that it meets (and will continue to meet through the end-of-permit period) all effluent limits for suspended solids and turbidity and meets ambient standards for turbidity, light transmittance and dissolved oxygen.

A. Suspended Solids.

1. Solids Removal. The California Ocean Plan (COP) calls for at least 75% removal of suspended solids (30-day average). In this permit, 80% removal of suspended solids as a system-wide monthly average is set as a limit as requested by the City in its application. The percent removal computation is based on a system-wide calculation which accounts for solids removal from the NCWRP and the return of solids associated with the centrate from the MBC.

Table 1. Comparison of treatment removal requirements.

Requirement	Suspended Solids Removal	Biochemical Oxygen Demand Removal	pH Limitation
Primary	30% as 30-day average	30% as 30-day average	6-9
California Ocean Plan	75% as 30-day average	No Requirement	6-9
CWA § 301(h) and (j)(5)	80% as 30-day average	58% as annual average	
Secondary	85% as 30-day average	85% as 30-day average	6-9

The applicant has demonstrated through past performance the ability to meet on a monthly basis both the 75% and 80% removal requirements. In 1999, the average monthly percent removal ranged from 82% to 88%. In 2000, the average monthly removals ranged from 85% to 89%. These percentages are adjusted for system-wide removal. The difference between straight removal (Point Loma only) and system-wide removal (Point Loma plus NCWRP) is only a small percentage (Table 2). The NPDES permit issued to the City will require compliance with the COP objective of 75% removal on a monthly basis and the CWA's 80% removal on a monthly average.

Table 2. Plant performance at Point Loma expressed as percent removal (2000)

	TSS	$TSS_{System-wide}$	BOD	$BOD_{System-wide}$
January	88	89	63	66
February	87	88	56	61
March	87	88	60	64
April	87	88	62	66
May	86	87	59	63
June	87	88	63	67
July	86	87	58	62
August	87	88	59	63
September	85	86	59	63
October	85	87	59	64
November	84	85	59	63
December	88	88	64	66

Suspended solids concentrations. The suspended solids concentration in the effluent has remained relatively consistent over the course of the existing permit (1995-2000). The average monthly suspended solids concentrations are generally around 40 mg/l (Table 3).

Table 3. Average monthly effluent concentration of suspended solids (mg/l) from Point Loma (1995-2000).

Month	1995	1996	1997	1998	1999	2000	Average 1995-2000
January	36	44	41	38	38	35	38
February	41	42	42	62	38	34	43
March	39	44	42	63	36	34	43
April	45	48	38	43	39	35	41
May	40	42	39	33	40	39	39
June	42	44	42	32	41	36	40
July	39	40	44	31	43	38	39
August	46	40	40	33	37	36	39
September	43	46	34	28	37	39	38
October	44	42	33	27	40	38	37
November	48	42	42	32	33	47	40
December	45	44	35	39	30	38	38
Annual Average	42	43	39	38	38	37	40

In 1994, USEPA predicted a maximum increase in suspended solids concentrations of 0.5 mg/l in the immediate area of the outfall based on a worst-case minimum initial dilution of 99:1 and an effluent concentration of 53 mg/l. Applying this worst-case minimum initial dilution to the range

of values in Table 3, the maximum increases in suspended solids concentrations should be on the order of 0.3 to 0.6 mg/l.

To further evaluate the effect of the outfall on ambient suspended solids concentrations, USEPA looked at data from the City's water quality monitoring program. The City has been measuring water quality parameters (e.g., suspended solids, turbidity, dissolved oxygen, bacteria) in the waters around the current outfall locations since 1991 (Fig. 2). The data for the time period between 1995 and 2000 are summarized in the appendix (Table A1). These data indicate that background concentrations in these waters are typically on the order of 2 to 6 mg/l and that there were no substantial differences between suspended solids concentrations measured at stations near the outfall (Stations E10, E16, E14, E8, E12, E18) and those measured at far field reference stations (Stations B9, B12, B1, B5). The minor increases in suspended solids concentrations within the zone of initial dilution predicted by the simple dilution model (0.3 to 0.6 mg/l) are not considered substantial given the range of natural variability in suspended solids concentrations of the receiving water.

Suspended solids loadings. The original permit called for reductions in permitted loadings from 15,000 MT/yr to 13,600 MT/yr by January 1, 2001. The actual loadings during this time period were much smaller due to lower than projected flows and lower suspended solids concentrations than assumed (Table 4). In 1999 and 2000 solids loadings were less than 10,000 MT/yr. The applicant is requesting the same permit limits for the new permit cycle (2001 to 2006), with a limit of 13,599 MT/yr for the last year of the permit term, satisfying section 301(j)(5)(B)(ii).

Table 4. Total Suspended Solids (TSS) Mass Emission Rate (MER) in metric tons per year

Year	Loadings (Actual/*Projected*)	Permit limits (Existing/*Proposed*)
1994	12,021	
1995	11,174	
1996	10,622	15,000
1997	10,183	15,000
1998	10,469	15,000
1999	9,188	15,000
2000	8,888	13,600
2001	*14,100*	*15,000*
2002	*14,200*	*15,000*
2003	*14,300*	*15,000*
2004	*14,500*	*15,000*
2005	*14,600*	*15,000*
2006	*13,599*	*13,599*

2. Turbidity. Turbidity is a surrogate measure for the effects of suspended solids on light transmittance. The COP has an effluent limitation for turbidity and an ambient limitation for light transmittance. These effluent limits are listed below:

	30-day Ave	Weekly Ave	Maximum
Turbidity	75 NTU	100 NTU	225 NTU

To evaluate compliance with the turbidity standard, USEPA evaluated the daily effluent data from 1995 to 2000 (summarized in Table 5).

Table 5. Average monthly concentration for effluent turbidity (NTU) from Point Loma (1995-2000).

Month	1995	1996	1997	1998	1999	2000
January	31	36	38	26	33	37
February	35	37	40	32	30	34
March	34	38	40	37	31	33
April	38	41	37	32	31	37
May	37	46	37	31	38	40
June	37	46	42	34	40	36
July	36	43	40	33	41	41
August	40	41	40	31	37	39
September	39	44	38	30	39	39
October	38	41	34	31	41	38
November	42	38	32	32	37	46
December	37	42	29	37	35	40
Annual Average	37	41	37	32	36	38

The average NTU concentration was 37 NTU. The highest 30-day running average, the highest 7-day running average, and the highest daily maximum concentrations over this five-year period are as listed below:

	30-day Ave	Weekly Ave	Maximum
Turbidity	46 NTU	52 NTU	60 NTU

The effluent turbidity concentrations are well within ocean plan limits. To ensure continued compliance with the COP, effluent limits for turbidity will be included in the NPDES permit.

3. Light Transmittance. The COP states that "*natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge.*" In 1994, USEPA found that the effect of outfall-related solids on light transmittance was minimal and well within the range of variability measured at the other stations.

To re-evaluate this conclusion USEPA evaluated the results of the City's ambient water quality monitoring program. The results support the conclusion that the outfall is not having a major effect on light transmittance (Table A.2). The percent transmissivity measured at stations near the outfall (Stations E10, E16, E14, E8, E12, E18) were similar to those at far field reference stations (Stations B1, B5, B9, B12). Percent transmissivity was generally greater than 85%. Values tended to be slightly lower and slightly more variable at nearshore stations (as a result of shoreline influences) and at samples taken near the bottom depth (as a result of resuspension).

The outfall does not appear to be resulting in any significant reduction in transmissivity.

B. Biochemical Oxygen Demand and Dissolved Oxygen.

The secondary treatment removal requirement for BOD is 85% removal and 30 mg/l as a 30-day average. The permit calls for 58% removal of BOD computed as an annual average. The COP does not have an effluent limitation for BOD. However, the COP water quality standard for dissolved oxygen is applicable. The COP states that "*dissolved oxygen shall not at any time be depressed more than 10% from that which occurs naturally as a result of the discharge of oxygen-demanding waste materials.*"

1. BOD. USEPA reviewed five-years of effluent BOD data from the Point Loma Plant (summarized in Table 6). The existing permit allows BOD removal to be calculated as a system-wide basis to eliminate double counting of BOD returned to the Point Loma WWTP from the Metro Biosolids Center and the North City Water Reclamation Plant (NCWRP). The plant is currently being operated in a manner which meets the 58% removal requirement. Based on daily averages from 1994, the plant operated at better than 58% removal sixty percent of the time. Since that time the applicant has made improvements including new sedimentation basins and solids handling facilities to ensure that they continue to meet the 58% removal on a system-wide basis.

Table 6. Summary of effluent BOD from Point Loma outfall (1995-2000).

Month	1995	1996	1997	1998	1999	2000
January	88	112	104	95	106	91
February	106	119	112	98	108	91
March	96	116	118	126	105	90
April	108	121	107	103	109	90
May	115	125	108	97	115	93
June	113	124	114	110	110	82
July	105	121	105	106	101	96
August	105	116	102	106	96	97
September	107	119	99	100	102	95
October	114	112	97	105	96	94
November	117	116	95	109	89	106
December	114	124	100	114	88	98
Annual Average Effluent BOD	107	119	105	106	102	94
Annual system-wide percent removal	60%	58%	59%	56%	61%	64%

According to the applicant, the percent removal in 1998 was 56% as a result of complications associated with bringing the new solids handling facility (MBC) on line. In 1999 the monthly average system wide percent removals ranged from 53% to 63%, the annual average was 61%. In 2000 the average ranged from 61% to 67%, the average for the year was 64%. The NPDES permit issued to the City will require compliance with the 58% removal requirement.

2. Dissolved Oxygen Concentrations. In 1995, the applicant used a modeling approach to

predict the effect of the discharge on ambient dissolved oxygen concentrations. In its review USEPA (1995) evaluated these efforts and conducted a similar modeling effort to verify the model predictions. These results were slightly higher but comparable to the applicant's. USEPA believes that the results of these models are still valid for use in this review as the initial assumptions about flow (240 MGD), TSS (48 mg/l) and BOD (121 mg/l) concentrations used in the model are conservative with respect to existing conditions (compare to Tables 5 and 6). The results of the applicant's modeling effort and USEPA's review are summarized below.

As recommended in USEPA's 1994 Amended Section 301(h) Technical Support Document (ATSD), modeling efforts were directed toward evaluating the potential for (1) DO depressions following initial dilution during the period of maximum stratification (or other critical period), (2) farfield DO depressions associated with BOD exertion in the wastefield, (3) DO depressions associated with steady-state sediment oxygen demand and (4) DO depressions associated with the resuspension of sediments (Table 7).

Table 7. Predicted worst-case dissolved oxygen depressions (mg/l) from San Diego (1994) and USEPA (1995)

Sources of potential oxygen demand	San Diego	USEPA
Dissolved oxygen depression upon initial dilution	0.05	0.05
Dissolved oxygen depression due to BOD exertion in the farfield	0.14	0.23
Dissolved oxygen depression due to steady-state sediment oxygen demand	0.07	0.16
Dissolved oxygen depression due to abrupt sediment resuspension	0.07	0.12

These model predictions have been compared to the most recent ambient water quality data (Table 8) to assess the potential for reductions in DO concentrations greater than 10% as a result of the outfall. The dissolved oxygen depressions after initial dilution (0.5 mg/l) and due to BOD exertion in the farfield (0.14 to 0.23 mg/l) were compared to ambient dissolved oxygen concentrations at mid-depths which correspond to the trapping depth of the plume. Concentrations at these depths are generally greater than 5 and never less than 3 mg/l. The DO depressions associated with sediment demand (0.7 to 0.16 mg/l) should be compared to bottom waters at the outfall depth. Most of the time these waters are well above 3 (lowest value was 2.5 mg/l). Based on the predictions of the models and the ambient dissolved oxygen concentrations in the water column, it is unlikely that the outfall could reduce dissolved oxygen concentrations in the water column by 10%.

USEPA also looked at the ambient data to determine if there were any depressions in DO that might be attributable to the outfall (Table A-3). Dissolved oxygen concentrations in surface waters were generally around 8 mg/l. DO decreased with depth, largely as a result of low DO associated with bottom water. There are no real differences between nearfield stations (Stations E8, E10, E12, E16, E18) and farfield stations (Stations B9, B12, B1, B5).

Table 8. Depth distribution of dissolved oxygen concentration in waters offshore of Point Loma (1995-2000).

Depth (feet)	# of samples	% of samples DO > 5 mg/l	% of samples DO < 5 mg/l	% of samples DO < 4 mg/l	% of samples DO < 3 mg/l
5	1621	99%	1%		
10	180	100%			
20	180	100%			
40	359	99%	1%		
60	355	94%	6%		
140	1080	85%	15%	2%	
200	898	69%	31%	7%	
260	610	50%	50%	16%	
290	120	33%	67%	29%	3%
320	468	25%	75%	31%	3%
380	94	17%	83%	44%	6%

USEPA concludes that the applicant will be able to meet the 58% removal requirement, and that the discharge is not likely to cause dissolved oxygen depressions greater than 10%. USEPA's conclusion on ambient effects is based on a review of plant performance, modeling efforts performed in 1995 and more recent ambient monitoring data. Permit limits for suspended solids and BOD will be established to ensure that the plant continues to operate at a comparable level of performance through the permit period.

C. pH Compliance.

The COP states that receiving water pH shall "*not be changed at any time more than 0.2 pH units from that which occurs naturally.*" In addition, the COP requires that effluent pH be within 6.0 to 9.0 pH units at all times. This is the same as the secondary treatment requirement for pH. The applicant is not seeking a waiver from the pH requirement.

D. Conclusions on Compliance with Applicable Water Quality Standards.

Based on the information provided by the applicant, the outfall will be operated in a manner which ensures compliance with the State water quality standards relevant to suspended solids, BOD and pH. A review of past performance indicates that the discharge can be operated in a manner that will meet the effluent limits specified in the COP for suspended solids (75% removal), turbidity (75 NTU) and pH (6.0 to 9.0). Based on the review of effluent data, ambient water quality data (1995 to 2000), and model projections USEPA finds that the discharge will have minimal effects on ambient suspended solids concentrations, light transmittance, dissolved oxygen or pH.

Effluent limits for suspended solids and BOD will be established in the NPDES permit to ensure continued compliance with State standards for effluent (suspended solids, turbidity and pH) and receiving water (suspended solids, light transmittance, dissolved oxygen and pH).

2. Protection and propagation of a balanced, indigenous population of fish, shellfish, and wildlife, recreational activities or public water supplies. [Section 301(h)(2), 40 CFR 125.62].

A. Physical Characteristics of the Discharge.

1. Outfall/Diffuser and Initial Dilution. 40 CFR 125.62(a) provides that the proposed outfall and diffuser must be located and designed to provide adequate initial dilution, dispersion, and transport of wastewater to meet all applicable water quality standards at and beyond the boundary of the zone of initial dilution (ZID). This evaluation is based on conditions occurring during periods of maximum stratification, and during other periods when discharge characteristics, water quality, biological seasons, or oceanographic conditions indicate more critical situations may exist.

The COP specifies that "*waste effluents shall be discharged in a manner which provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.*" In the COP, minimum initial dilution is defined as the "*lowest average initial dilution within any single month of the year.*" Dilution estimates are "*based on observed waste flow characteristics, observed receiving water density structure and the assumption that no current, of sufficient strength to influence the initial dilution process, flow across the discharge structure.*"

In the 1995 application, the City offered an estimate of initial dilution of 204:1 based on a modified version of the RSB model (USEPA, 1994; Roberts *et al.*, 1989 a,b,c,) and a projected flow of 205 MGD. Additional physical oceanographic modeling performed by the applicant indicated that the lowest 5th percentile initial dilution was 215:1 and that the median dilution was 365:1. Using a slightly different set of assumptions, USEPA (1995) predicted minimum monthly-average initial dilutions ranging from 169:1 to 205:1 and predicted a long-term effective dilution of 328:1 in the area around the outfall. USEPA's estimates for the worst-case initial dilutions ranged from 99:1 to 143:1.

Based on the information provided, the diffuser is well designed and achieves a high degree of dilution. The USEPA's and the City's numbers are comparable given the uncertainties associated with physical oceanographic models. USEPA finds that the value of 204:1 provides a conservative estimate of initial dilution and uses this value for evaluating compliance with water quality standards. USEPA uses a value of 99:1 in this review to assess worst-case conditions.

2. USEPA Water Quality Criteria and State Water Quality Standards. Under section 303(d)(1) of the WQA, a discharger must be in compliance with the criteria established under section 304(a)(1) of the Clean Water Act at the time their 301(h) permit becomes effective.

State standards for a variety of toxic materials are established in the COP. The receiving water standards for the protection of marine aquatic life and human health are listed in Table B of the COP. USEPA uses an initial dilution of 204 for establishing compliance with the State standards and USEPA water quality criteria related to the protection of aquatic life. USEPA uses the long-term average initial dilution of 328:1 for evaluating compliance with federal water quality criteria for the protection of human health. This is appropriate since these criteria are based on

consumption of fish experiencing long-term exposure to chemical concentrations above the criteria.

USEPA reviewed five-years (January 1995 through December 1999) of effluent data provided by the applicant in electronic format. The data were screened to identify those chemicals that have the potential to exceed either state standards or federal criteria after allowing for dilution. To accomplish this, the statistical distribution of each chemical parameter was evaluated to define a chemical-specific coefficient of variability. This was then used along with the maximum detected value (or maximum detection limit) to estimate the projected upper bound of the distribution based on a 99th percentile confidence limits. In effect, we calculated the effluent concentration that we can say with 99% certainty will not be exceeded during the course of the permit. This procedure known as reasonable potential analysis is documented in the Technical Support Document for Water Quality-Based Toxics Control (USEPA/505/2-90-001, March 1991). The results from this analysis are summarized in Table 9. For perspective, the results from previous reasonable potential analysis performed in 1995 are also provided.

Table 9. Comparison of Reasonable Potential Analyses. Bolded figures are based on detected values, all others are based on detection limits.

1990-1994	1995-1999
	Arsenic
Beryllium	
Copper	**Copper**
Aldrin	*Aldrin*
Dieldrin	*Dieldrin*
Chlordane	*Chlordane*
Toxaphene	*Toxaphene*
Guthion	*Guthion*
DDT	
PCBs	*PCBs*
Acrylonitrile	
Benzidene	*Benzidene*
3,3-dichlorobenzene	*3,3-dichlorobenzene*
Hexachlorobenzene	*Hexachlorobenzene*
Heptachlor	
Heptachlor epoxide	
	Dioxin
Total PAHs	*Total PAHs*

In the 1995 Tentative Decision Document (USEPA, 1995), sixteen chemical parameters were identified with the potential to exceed water quality standards. Of these sixteen, four were based on actual detected values (beryllium, copper, chlordane, DDT). The remaining twelve compounds on the list were based on detection limits only. The results of the new reasonable potential analysis identified thirteen parameters. Three are based on actual detected concentrations (arsenic, copper and dioxin) and ten are based on detection limits only. The difference between the two lists in part reflects improvements in either the effluent quality (i.e., beryllium, DDT, chlordane are no longer detected in the effluent) or detection limits achieved by the laboratory (i.e., for acrylonitrile, heptachlor and heptachlor epoxide). The effluent data for arsenic, copper and dioxin are discussed in more detail below.

Arsenic. The average weekly effluent arsenic concentration was 1.2 ug/l with a standard deviation of 0.4 ug/l (Fig. 3). The maximum arsenic concentration measured in the effluent was 2.7 ug/l. This is lower than the assumed background concentration for seawater of 3.0 (COP, 2001). The predicted maximum arsenic concentration after mixing with ambient seawater is 3.7 ug/l. This is below the USEPA criteria for protection of aquatic life of 36 ug/l and below the COP criteria of 8 ug/l, but above the USEPA human health water quality criteria of 0.14 ug/l. The toxicity of arsenic in marine systems was reviewed by Neff (1997). This review (and references therein) documents that concentrations of total arsenic in clean coastal waters range from 1 to 3 ug/l with an average of 1.7 ug/l. The review also suggested that USEPA's human health water quality criterion is inappropriate for marine waters and that arsenic concentrations typically found in clean coastal waters represent a low risk to human consumers of fish. The effluent is consistently below the COP standard of 8 ug/l. Effluent concentrations have not exceeded the permit limits for arsenic.

Copper. The mean effluent concentration was 55 ug/l with a standard deviation of 37 ug/l (Fig. 4). The maximum measured concentration of copper was 292 ug/l. The COP assumes that background copper concentrations in the ocean are 2 ug/l. After dilution the predicted maximum concentration is 3.4 ug/l. This is higher than the COP standard of 3.0 ug/l and the USEPA criteria of 2.9 ug/l. The assumption in the COP about background concentrations may be overly conservative. Flegal *et al.*, (1991) reported that background copper concentrations California coastal waters were around 0.1 ug/l. Using this number, the expected concentration after dilution would be 1.5 ug/l, which is below the COP standard. Effluent concentrations have not exceeded the permit limits for copper.

Dioxin. Dioxin was measured above the detection limit in 6 of 72 samples collected between 1995 and 2000 (Fig. 5). This is related to improved detection limits from the laboratory. The City uses a high resolution method (USEPA Method 1613) that can detect dioxins in the range of 1 to 10 pg/l. This is low but still several orders of magnitude higher than the COP standard for total dioxins of 0.0039 pg/l. The detection limits achieved by the applicant are close to the permit limit of 0.8 pg/l. For most chemicals the COP defines minimum levels that "*represent the lowest concentration that can be quantitatively measured in a sample given the current state of performance in analytical chemistry methods in California*". The COP also states that "*Dischargers are out of compliance with the effluent limitation if the concentration of the pollutant is greater than the permit limit and greater than or equal to the reported minimum level.*" The COP does not, however, identify a minimum level for dioxins. The applicant points

out that their detection limits for dioxin are three to six orders of magnitude lower than measured at other comparable treatment plants (SCCWRP, In Prep) and that detection of dioxins at these levels can be complicated by false positives associated with working at or near the level of detection, matrix interferences and low-level laboratory contamination. Given the uncertainties associated with the low-level analysis of dioxins, we do not consider the values reported by the applicant to represent water quality exceedances. We believe this is consistent with the intent of COP. The applicant is working to improve the methodology for dioxin analyses and will be submitting this to USEPA for approval under the alternative test procedures.

Based on this review of the effluent data, EPA concludes that the effluent quality of the plant is sufficient to meet water quality standards. In a letter dated January 24, 2002 the Regional Board stated that the wastewater discharge "will comply with the applicable water quality standards for waters of the Pacific Ocean included in the 2001 California Ocean Plan and the Water Quality Control Plan for the San Diego Basin (Basin Plan)."

In the 1995 permit, USEPA and the Regional Board established mass-based performance goals based on the effluent data (1990 - April 1995). For most parameters these performance-based goals are set below the effluent limits established in the permit. They were designed to provide an early measure of changes in effluent quality which might substantially increase the mass of pollutants to the ocean. Consistent with the State Board's anti degradation policy, these performance goals were intended to serve as a trigger for anti degradation analyses during permit renewal. Three parameters (phenols, zinc, cyanide) were observed to exceed the annual mass-based performance goals in at least one year. San Diego prepared an anti degradation analyses in their renewal application to evaluate the reasons for these increases and the effects of these increases on the marine environment (See Volume 1, Part 3). USEPA reviewed the weekly effluent data for these three parameters (Figs. 6, 7, and 8). As discussed by the applicant, the concentrations of these three parameters are well below the permitted limits. The exceedances of the annual mass-based performance goal for zinc (in 1996) and cyanide (in 1997) appear to be related to episodic events and do not appear to represent any long-term trend of increased loadings. Phenols exceeded the performance goal all five years. The applicant noted that effluent concentrations in phenols were higher in the 1995 to 2000 time frame than in the previous time period (1990 to 1995) on which the benchmarks were established and suggested that this reflected increases in influent concentrations. We do not see any trends in the effluent data which would suggest that phenol concentrations increased since 1995 (Fig. 6). The existing performance goals will remain in the permit as a baseline for measuring future changes in effluent quality and mass loadings.

In summary, the applicant's discharge will be operated in a manner that ensures compliance with state standards and federal marine water quality criteria. Effluent limits have been established for all COP chemicals and for those USEPA criteria where an analysis of past effluent data indicates a reasonable potential to exceed the standards or criteria. Effluent concentrations will continue to be monitored for all COP constituents and remaining priority pollutants on a regular basis. The results of the effluent monitoring program will be evaluated against performance goals established in the permit.

3. Dilution Water Recirculation. Under section 303(e) of the WQA, before a 301(h) permit may be issued for discharge of a pollutant into marine water, such marine waters must exhibit characteristics assuring that the water providing dilution does not contain significant amounts of previously discharged effluent from the treatment works.

This issue was addressed by City in the 1994 application. To estimate the potential for re-entrainment effects on the 30-day average concentration, the applicant made the assumption that receiving water around the outfall contains all the wastewater effluent discharged during a 30-day period. This is an extremely conservative assumption, as physical oceanographic models indicate that the residence time for wastewater within a 30 Km by 12 Km area around the outfall is about 4.5 days and that 95% of the wastewater is advected out of the area within two weeks. A background effluent concentration was estimated by dividing the volume of wastewater discharged over thirty days by an estimate of the volume of ambient water providing dilution over the 30-day period. Overall, the effect of re-entrainment was to reduce initial dilutions by 8.4 to 8.7%. The minimum monthly-average initial dilution was reduced by around 10%.

USEPA believes that the 10% reduction predicted by the applicant provides a conservative estimate of the effect of re-entrainment on initial dilution. Based on our review of effluent data (above), a 10% difference in initial dilution would not affect the ability of the discharge to comply with State standards or USEPA water quality criteria.

4. Transport and Dispersion of Diluted Wastewater and Particulates, Physical and Chemical Effects. Accumulation of suspended (settleable) solids in and beyond the vicinity of the discharge can have adverse effects on water usage and biological communities. 40 CFR 125.62(a) requires that following initial dilution, the diluted wastewater and particulates must be transported and dispersed so that water use areas and areas of biological sensitivity are not adversely affected.

Solids and Organic matter. The COP states that "*the rate of deposition of inert solids shall not be changed such that benthic communities are degraded" and that "the concentration of organic material in marine sediments shall not be increased to levels which would degrade marine life.*"

In 1994, the City used a sediment deposition model (SEDPXY) to predict the rates of solids deposition around the outfall. The model was run under two flow scenarios assuming flow rates of 205 MGD and 240 MGD assuming solids mass emission rates of 14,073 MT/yr and 16,476 MT/yr, respectively. USEPA (1995) estimated sediment deposition using a modified version of the ASTD sediment deposition model. This model was run assuming a flow of 205 MGD flow rate assuming a solids loading of 13,600 MT/yr. The results from these efforts are summarized in Table 10. The results from this USEPA's ASTD model have been adjusted in this review to evaluate deposition associated with loadings for the 15,000 MT/yr scenario.

The predictions generated using USEPA's model are likely to be different from the applicant's for a number of reasons, including differences in the use of current meter data, bathymetry, trapping depth distributions, the size and resolution of the model grid, and different assumptions regarding the rate with which effluent particles settle (*e.g.*, the settling velocities used by USEPA were about two times higher than those used by the applicant). As a result of these differences

USEPA's model predicts a greater number of particles settling over a smaller area and thus are more conservative in nature.

Table 10. Results of sediment deposition modeling performed by the City (1994) and USEPA (1995).

	San Diego	USEPA
Mass of particles (Mt/yr)	14,073 - 16,476	13,600 - 15,000
Area modeled (km2)	360	200
Percent of particles settling in area modeled	8%	12%
Area around the diffuser modeled (Km^2)	0.01	0.25
Solids deposition rates ($g/m^2/yr$)	152 - 174	254 - 280
Organic deposition rates ($g/m^2/yr$)	122 - 139	203 - 224
Peak a 90-day solids deposition rates (g/m^2/90-days)	45 - 51	72 - 79
Peak 90-day organic deposition rates (g/m^2/90-days)	37 - 57	58 - 64
Steady-state organic accumulation (g/m^2)	18 - 38	56 - 62

Estimates of solid deposition rates range from 152 to 280 $g/m^2/yr$. This can be compared to an estimate of 625 $g/m^2/yr$ from sediment trap data for the San Diego area (Hendricks and Eganhouse, 1992). Assuming that effluent solids are 80% organic matter, the estimates of organic deposition rates in the area around the outfall range from 122 to 224 $g/m^2/yr$. Although not strictly comparable, our best estimates of the organic carbon flux from the water column associated with primary and secondary production in Southern California are 26 to 62 g $C/m^2/yr$ (Nelson et al., 1987).

The models predict a range of organic accumulation in the sediments from 18 to 62 g/m^2. The steady-state accumulation of organic matter in the sediment is a function of the rate with which organic matter is deposited in the sediments and the rate with which it decays. Both USEPA and the City used a default decay rate of 0.01/day and the conservative assumptions of the sediment deposition models used by USEPA and the City is that there is no resuspension and transport of solids outside the area. This tends to overestimate actual accumulation of outfall deposits in the sediments. For instance, Hendricks and Eganhouse estimated a background accumulation rate for solids of 103 $g/m^2/yr$, one sixth of their estimate for solids deposition. Applying this ratio to the model results in Table 10 yields organic accumulation rates of 20 to 37 g/m^2 and steady-state accumulation rates of 5 to 10 g/m^2. Empirical evidence suggests that steady-state organic accumulations less than 50 g/m^2 have minimal effects on benthic communities (USEPA, 1982).

To evaluate whether significant accumulation is actually occurring in the field, USEPA looked at trends in sediment monitoring data that occurred in the years from 1991 to 2000 (see Fig. 2 for station locations). We compared the results of pre-discharge monitoring surveys (1991 to 1993) and discharge monitoring surveys (1994 to 2000). High rates of organic accumulation in sediments should be associated with elevated sediment concentrations of total volatile solids(TVS), total organic carbon (TOC), biochemical oxygen demand (BOD), and sulfides. To

put these values in perspective we also compared the data from around the outfall to the results from regional surveys conducted in the offshore areas of San Diego (SCBPP, 1994, San Diego, 1995, 1996, 1997; SCCWRP, 1998, San Diego, 1999).

Total Volatile Solids (TVS). TVS is one measure of organic matter in the sediments. The average pre-discharge concentrations from these stations ranged from 2.1 to 2.3% and the average concentrations since 1994 have ranged from 2.4 to 2.7%. Although there appears to be a slight increase during the discharge period (Fig. 10), there does not appear to be any spatial pattern which would suggest that this is an outfall-related effect. The average concentration from the regional surveys was 2.4% with a standard deviation of 1.1%.

Total Organic Carbon (TOC). TOC is a direct measure of organic carbon in the sediments. There does not appear to be any spatial or temporal trends in TOC which might suggest an outfall-related effect (Fig. 11). The concentrations at the outfall depth averaged around 0.5% in both the pre-discharge and discharge time periods. The one exception is at Station B12 (12.7 Km north of the outfall) where TOC values ranged from 0.5% to 3.0%. Background TOC concentrations in the San Diego region ranged from 0 to 3.8%. The average concentration from the regional surveys was 0.5%.

Biochemical Oxygen Demand (BOD). Sediment BOD is an indirect measure of organic enrichment. Although there is some variability in the data (Fig. 12), sediment concentrations were generally in the 200 to 400 ug/g range. There as no apparent increase during the period of the discharge. These values are typical of background concentrations from regional reference surveys in the San Diego Region.

Sediment sulfides. Sulfides are a by-product of anaerobic digestion of organic matter by sulfur bacteria. Sulfide concentrations increased during the discharge period at most stations (Fig. 13). The highest concentrations were seen at station E14 (as high as 30 ug/g). Elevated concentrations were also seen on occasion upcoast of the outfall but the pattern does not appear to be consistent over time. Sulfide concentrations from regional surveys in the San Diego region ranged from 0.1 to 272 ug/g, but were generally less than 5 ug/g. The average concentration from the regional surveys was 8.1 ug/g with a standard deviation of 26.9 ug/g.

Both model predictions and monitoring results indicated that deposition and accumulation rates associated with the outfall are not likely to have negative effects on benthic communities outside the ZID. Sediment parameters associated with organic accumulation (such as total volatile solids, biochemical oxygen demand, total organic carbon and dissolved sulfides) do not appear to show any outfall-related effects. The one exception is dissolved sulfide which does indicate an outfall-related pattern. All these parameters are within the range of natural variability in other surveys and not likely to have significant effects on benthic communities.

<u>Sediment Contamination</u>. The COP states that *"the concentrations of toxic substances in marine sediments shall not be increased to levels which would degrade indigenous biota or degrade marine life."*

The concentrations of nine metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel,

silver, and zinc), total PCBs and total DDTs were evaluated in this review. Trends in sediment contaminant concentrations at stations along the 98-m depth contour (diffuser depth) were evaluated. The data from stations around the outfall were compared to data from the regional reference surveys. To assess the potential impacts to biological communities, the data were compared to sediment guidelines in the literature (as summarized Table 11). Although these guidelines are not regulatory in nature, they do provide some information on the concentrations where the potential for biological effects are likely to occur. The TELs and ERLs are thought to reflect concentrations which pose little risk of toxicity. When sediment concentrations are higher than PEL and ERM values there may be potential for sediment toxicity and further investigation is warranted (Long *et al.*, 1998).

Table 11. Overview of numeric sediment quality guidelines (from Buchman, 1999).

Pollutant	TEL	ERL	PEL	ERM	AET
Arsenic (ug/g)	7.24	8.2	41.6	70	35
Cadmium (ug/g)	0.67	1.2	4.2	9.6	3.0
Chromium-total (ug/g)	52.3	81	160.4	370	260
Copper (ug/g)	18.7	34	108	270	390
Lead (ug/g)	30.2	46.7	112	218	400
Mercury (ug/g)	0.13	0.15	0.696	0.71	0.41
Nickel (ug/g)	15.9	20.9	42.8	51.6	110
Silver (ug/g)	0.73	1	1.77	3.7	3.1
Zinc (ug/g)	124	150	271	410	410
DDT-total (ug/kg)	3.89	1.58	51.7	46.1	11

TEL = threshold effects level; PEL = probable effects level; ERL = effects range low; ERM = effects range median; AET = apparent effects threshold

Arsenic. The average arsenic concentration ranged from 2.2 to 2.5 ug/g during the pre-discharge period and from 3.1 to 3.8 ug/g during the discharge period. This suggests that arsenic concentrations in the sediments have increased by about 1 ug/g during discharge period (Fig. 14). The highest increases were at E14 (near the outfall) and B12 (located 12.7 Km north of the outfall). The average arsenic concentration from the regional surveys was 3.4 ug/g, with a standard deviation of 1.4 ug/g. Arsenic concentrations around the outfall are low relative to ER-L (8.2) and TEL (7.2) thresholds.

Cadmium. Cadmium concentrations greater than the detection limit (0.5 ug/g) were not observed in any of the discharge period samples collected along the 98-m contour (Fig. 15). Cadmium concentrations from the regional surveys were also generally low, being measured in only 25 out of 184 of the measurements collected for the regional surveys between 1995 and 1999. The average measured cadmium concentration was 0.6 ug/g with a standard deviation of 0.3 ug/g. These values are similar to background concentrations for the Bight reported by NOAA (Mearns *et al*, 1991). Cadmium concentrations near the outfall are similar to background and low relative to threshold values (TEL = 0.67 ug/g, ERL = 1.2 ug/g).

Chromium. The average chromium concentration during the discharge period (17.7 ug/g) was slightly higher than in the pre-discharge period (15.8 ug/g). This suggests that chromium concentrations have increased by about 2 ug/g since the plant started discharging (Fig. 16). The average value from the regional surveys was 16.0 ug/g with a standard deviation of 6.7 ug/g. The

numbers around the outfall are similar to background numbers and well below the lowest effects thresholds (TEL = 52 ug/g, ERL = 81 ug/g).

Copper. Copper values ranged from 3.1 to 20 ug/g, with a single outlier of 80.4 ug/g in June 1994 at station B9 located 10.5 Km north of the outfall (Fig. 17). If we remove the outlier, we find that the average concentrations appear to have increased from an average of 7.3 ug/g in the pre-discharge period to 8.8 ug/g for the discharge period. The average value from the regional reference surveys was 8.6 ug/g with a standard deviation of 5.4 ug/g. The copper values are generally low relative to sediment quality thresholds (TEL = 18.7 ug/g, ERL = 34 ug/g).

Lead. Lead concentrations in the sediments were generally below the detection limit of 5 ug/g, being detected in less than 25% of the samples (27 out of 120 measurements). Concentrations in the discharge period for the summer 98-m stations ranged from detection limits to 15.5 ug/g (Fig. 18). Lead was also rarely detected above 5 ug/g in the regional surveys (33 out of 184 samples). The average measured concentration from the regional surveys was 6.9 ug/g with an standard deviation of 1.6 ug/g. This is consistent with data from previous reference surveys (Thompson *et al.*, 1987, 1992) where background concentrations for the Bight were around 2 to 12 ug/g. Concentrations around the outfall are similar to those reported in the regional surveys and well below any of the sediment quality thresholds (ERL = 46.7 ug/g, TEL = 30.2 ug/g).

Mercury (Hg). Comparison of concentrations from the pre-discharge and discharge periods (Fig. 19) is complicated by differences in detection limits (which ranged from 0.025 to 0.047 ug/g) between years and the limited number of detected values in any given year. Mercury was only detected in about 25% of the samples. The maximum detected value was 0.11 ug/g. In the regional surveys, mercury was detected in about 65% of the samples (119/184 or 65% of the samples). The average measured concentration from the regional surveys was 0.05 ug/g with a standard deviation of 0.02 ug/g. Eganhouse *et al.*, (1976) suggested that background concentrations in the Bight were around 0.05 ug/g. The mercury concentrations in sediments near the outfall appear to be similar to background values and below the lower sediment quality threshold values for mercury (TEL = 0.13 ug/g, ERL = 0.15 ug/g).

Nickel (Ni). There does appear to be an outfall-related pattern in the data (Fig. 20). This pattern is driven largely by a single sample at E14 in 1994. This value of 29 ug/g is questionable as duplicate analysis of this sample yielded a value of 11 ug/g. For perspective, the average differences in nickel concentrations between duplicate samples is around 1 ug/g. Averaging the two duplicates from E14, yields a value of 20 ug/g. While this value is still high, it is more in line with other values. On average, nickel concentrations have increased from 6.6 to 7.8 ug/g. The average nickel concentration from the regional reference surveys was 8.3 ug/g with a standard deviation of 3.3 ug/g. The maximum value was 21 ug/g. With the exception of the one outlier at E14, the concentrations near the outfall are below the lower sediment quality thresholds (ERL = 20.9 ug/l, TEL = 15.9 ug/l).

Silver (Ag). Almost all samples were below detection limits of 3 ug/g (Fig. 21). Silver was also detected very infrequently in regional surveys (172/188 or less than 10% of the samples). The maximum concentration in the regional surveys was 6.2 ug/g. NOAA's suggested background concentration for silver is 0.01 to 0.1 ug/g. Although silver has been suggested as a useful

indicator of sewage effluent (Mearns *et al.*, 1991; Sanudo-Wilhelmy and Flegal, 1992), it is impossible to make conclusions about silver concentrations at the Point Loma outfall because the detection limits of 3 ug/g are high relative to background concentrations. These detection limits are also high relative to threshold values for silver (TEL = 0.73 ug/l, ERL = 3.7 ug/l).

Zinc (Zn). There is no apparent outfall-related pattern in zinc concentrations. Zinc concentrations are generally around 20 to 40 ug/g. The one notable exception was in 1997 at station B9 (10.5 Km north of the outfall) where the concentration was 140 ug/g (Fig. 22). The average pre-discharge concentration was 29 ug/g. The average concentration from the discharge period data (excluding the outlier) was 31 ug/g. The average concentration from the regional surveys was 27.4 ug/g with a standard deviation of 13.9 ug/g. The maximum value from the regional survey was 94 ug/g. These values are lower than the average concentrations at the 60- and 150-m stations from 1985 and 1990 SCCWRP reference surveys which ranged from 45 to 55 ug/g. Most values are low relative to threshold values (TEL = 124 ug/l, ERL = 150 ug/g) and within the range of background concentrations.

DDT. *p,p*-DDT was detected in 3 out of 120 samples. Its degradation product *p,p*-DDE was detected in 53 out of 116 samples. The other four DDT isomers (*p,p*-DDD, *o,p*-DDT, *o,p*-DDD and *o,p*-DDE) were not detected at the 100-m stations. Analysis of trends in the DDT data is complicated by differences in detection limits among years (Table 12). Detection limits were 1 ng/g in the pre-discharge time period (1991 to 1993). The detection limits have improved since then. During the 1994-1999 time period, the detection limits ranged from 0.37 to 0.55 ng/g. The three detected values for *p,p*-DDT were 1.2 ng/g, 2.9 ng/g and an anomalously high 40 ng/g (at Station E2 , located 4.6 Km south of the outfall). Trends in *p,p*-DDE can be assessed by comparing the number of detected values greater than 1.0 ng/g in the pre-discharge and discharge periods. In the pre-discharge period, *p,p*-DDE values greater than 1.0 ng/g were detected in 18 out of 36 measurements. In the discharge period data, only 11 out of 84 measurements were greater than 1.0 ng/g. The highest values were for 1993 where all 12 stations were higher than1.0 ppb (max concentration was 4.4 ppb). It is unclear why the *p,p*-DDE concentrations would be greater in sediments from the pre-discharge period. With the exception of 1993, the values from the pre-discharge and discharge periods are similar.

Table 12. DDT detection limits in sediments from San Diego (concentrations in ng/g)

DDT Isomer	91	92	93	94	95	96	97	98	99	00
p,p-DDT	1.00	1.00	1.00	0.44	0.44	0.94	0.94	0.94	0.94	0.41
p,p-DDD	1.00	1.00	1.00	0.32	0.32	0.91	0.91	0.91	0.91	0.59
p,p-DDE	1.00	1.00	1.00	0.37	0.47	0.44	0.44	0.44	0.44	0.55
o,p-DDT	1.00	1.00	1.00	0.51	0.51	0.39	0.39	0.39	0.39	0.57
o,p-DDD				0.36	0.36	0.26	0.26	0.26	0.26	0.32
o,p-DDE				0.54	0.54	0.39	0.39	0.39	0.39	0.48

Similar findings were observed in the regional surveys. The parent compound *p,p*-DDT was detected rarely (2 out of 184 samples), the degradation product *p,p*-DDE was detected more

frequently (59 out of 184 samples), and the isomers *p,p*-DDD, *o,p*-DDT, *o,p*-DDD, and *o,p*-DDE were not detected at all. The maximum concentrations of *p,p*-DDT and *p,p*-DDE in the regional surveys were 3.3 and 3.4 ng/g respectively. The DDT concentrations near the outfall are similar to background concentrations. These values are generally low relative to sediment quality thresholds for total DDT (ERL = 1.58 ng/g, TEL = 3.89 ng/g).

PCBs. The applicant reported that PCBs were not detected in the sediments at the outfall depth. Detection limits for PCB Arochlors 1248, 1254, 1260 and 1262 ranged between 10 and 13 ng/g. The applicant has also been measuring PCB congeners since 1998. PCB congeners were only detected on two occasions at the 100-meter stations (E25, January 2000; E2, April 2000). The detection limits for the various congeners ranged from 1 to 8 ng/g.

Summary of sediment contaminant data. The sediment chemistry data presented by the applicant does not indicate any substantial increase in sediment contaminant concentrations. There appear to be minor increases in the concentrations of certain metals (arsenic, chromium, copper and nickel). Concentrations of metals and organics are within the range of natural variability. The concentrations measured near the outfall were generally below the lowest sediment quality thresholds (such as TELs or ERLs) suggesting that the probability of sediment toxicity is low.

Therefore, USEPA concludes that the discharge will not increase the concentrations of toxic substances in marine sediments to levels that degrade indigenous biota or marine life. The monitoring program being developed as part of the NPDES permit will be designed to continue tracking sediment conditions over time.

B. Impact of Discharge on Public Water Supplies. The applicant's proposed modified discharge will have no effect on the protection of public water supplies and will not interfere with the use of planned or existing public water supplies.

C. Biological Impact of Discharge. The proposed modified discharge must allow for attainment or maintenance of water quality to protect and propagate a balanced, indigenous population (BIP) of shellfish, fish, and wildlife. The applicant must demonstrate that a BIP of shellfish, fish, and wildlife will exist in all areas beyond the ZID that may be affected by the proposed modified discharge.

A BIP is generally defined in the section 301(h) regulations [40 CFR 125.58(f)] as an *ecological community* which exhibits characteristics similar to those of nearby, healthy communities existing under comparable but unpolluted environmental conditions. Consequently, for the purpose of 301(h) the term *population* should be interpreted to mean biological communities and the terms *shellfish, fish and wildlife* should be interpreted to include any or all biological communities that might be adversely affected by the discharge.

The ZID describes an area adjacent to the outfall system in which inhabitants, including the benthos, may be chronically exposed to concentrations of pollutants in violation of water quality standards and criteria. In general, the ZID boundary is operationally defined by the depth of the outfall. For the Point Loma outfall, the ZID boundary is 93.5 m (320 feet) from the outfall and diffuser.

In this evaluation, the effect of the outfall on the BIP is evaluated with respect to potential effects on phytoplankton, effects on benthic and fish community structure, and the potential for bioaccumulation of toxic substances in fish tissue.

1. Phytoplankton. The two following COP standards are applicable to plankton:

> Marine communities, including vertebrate, invertebrate, and plant species shall not be degraded.
>
> Nutrient material shall not cause objectionable aquatic growths or degrade indigenous biota.

Planktonic populations were not measured as part of the applicant's monitoring program. Therefore, this review focuses on variables measured as part of the monitoring program which may relate to phytoplankton, such as ammonia, transmissivity and total suspended solids.

Effluent suspended solids may affect phytoplankton by attenuating light penetration and thus reducing primary productivity. As discussed previously (See Section 1.A), an outfall-related increase in suspended solids of 0.3 to 0.6 mg/l in the area of the ZID is well within the range of natural variability (typically 2 to 5 mg/l). The monitoring data indicates that the effect of the discharge on light transmittance is minimal. These analyses indicate that the outfall-related effects on light penetration are not likely to have a significant effect on phytoplankton productivity.

Effluent ammonia concentrations may also affect phytoplankton productivity because ammonia tends to be a limiting nutrient in coastal waters. Natural background ammonia concentrations within the euphotic zone of the Southern California Bight generally range from below detection limits to 0.02 mg/l (Eppley *et al.*, 1979a). Concentrations in the offshore area are typically lower than 0.01 mg/l. The average ammonia concentrations in the effluent from 1995 to 2000 was 26 mg/l (Table 13).

Table 13. Average monthly effluent concentration for ammonia (mg/l) from Point Loma (1995-2000).

Month	1995	1996	1997	1998	1999	2000	Average 1995-2000
January	19	27	25	24	27	27	25
February	23	26	28	20	25	28	25
March	23	26	30	26	26	28	26
April	24	28	30	26	27	28	27
May	23	27	29	27	26	28	27
June	22	27	28	27	27	28	26
July	23	27	27	26	28	28	27
August	24	26	25	25	26	27	25
September	26	25	22	23	28	28	25
October	26	26	23	23	27	27	25
November	26	28	24	26	29	27	27
December	29	29	25	26	28	29	28
Annual Average	24	27	26	25	27	28	26

The highest monthly average concentration during this time period was 34 mg/l. This equates to a worst-case concentration of 0.34 mg/l (based on 99:1) and a long-term average of 0.09 mg/l (based on a long-term average dilution of 365:1). If these concentrations were to occur in the euphotic zone they could potentially stimulate phytoplankton productivity around the outfall. However, since the wastefield is generally trapped below the euphotic zone, the influence of the wastefield ammonia concentrations on phytoplankton should be minimal.

The applicant measured chlorophyl *a* concentrations (a measure of phytoplankton abundance) in offshore waters since January 1996 as part of their monthly water quality monitoring effort. Although the data is limited, there is no sign of any increase in chlorophyl a concentrations near the outfall.

Summary of effects on phytoplankton. The potential effects of the outfall on phytoplankton productivity were evaluated using the results of the existing monitoring program and model projections provided by the applicant for end-of-permit conditions. Decreases in light transmittance associated with the plume are minimal compared to the range of natural variability. Ammonia concentrations within the plume are likely to be elevated relative to background and could enhance phytoplankton productivity in the vicinity of the outfall. Any substantial increase in phytoplankton productivity would be unlikely however, because the plume trapping depth is generally below the euphotic zone. No increases in chlorophyl a concentrations near the outfall were observed in the monitoring data. Therefore it is concluded that the outfall will not result in phytoplankton blooms or other degraded conditions.

2. Benthic Infauna. The COP standards appropriate to evaluating benthic infauna are:

> Marine communities, including vertebrate, invertebrate, and plant species shall not be degraded.
>
> The rate of deposition of inert solids shall not be changed such that benthic communities are degraded.
>
> The concentrations of toxic substances in marine sediments shall not be increased to levels which would degrade indigenous biota or degrade marine life.

The potential effects of solids deposition and concentrations of toxic substances in marine sediments on benthic communities were addressed previously (See Section 2.A.4). To evaluate whether benthic communities are degraded we evaluated benthic data from the grid of stations near the outfall since 1991 (Fig. 2) and data collected as part of regional reference surveys conducted every summer since 1994 (Fig. 9). In this review we look for differences in the abundances, number of species, as well as differences in the distribution of pollution sensitive and pollution tolerant species. We also looked at the response of two benthic indices designed to evaluate pollutant effects on benthic communities. These were the infaunal trophic index (Word, 1978, 1980) and the Benthic Response Index (Smith *et al.*, 2001). As recommended in the ATSD (USEPA, 1994), outfall-related effects on benthic communities should be evaluated in the context of (1) an evaluation of the range of natural variability in the reference conditions (2) an estimate of the magnitude and areal extent of the effect and (3) the potential for adverse effects.

To evaluate the magnitude and effect of the outfall, we focus on data from the outfall depth (100-meters) and compare values from ZID and nearfield stations to values from farfield and control stations. Station E-14 is located approximately 119 meters from the "Y" of the diffuser and should be considered the ZID boundary station. Stations E11 and E17 are the closest nearfield stations located approximately 204 meters from the south end of the diffuser and 278 meters from the north end of the diffuser, respectively. The remaining E stations are considered farfield stations. The B stations are considered control stations.

The data from the regional reference surveys are used to evaluate the range of natural variability. Since depth is important we focus the review on the benthic data from the 75 to 125 meter depth interval. These data provide a regional perspective on background conditions on the distribution of benthic organisms offshore of San Diego at depths comparable to the outfall.

Within the context of the COP, adverse effects to benthic communities are described in terms of degradation and degradation is defined in terms of statistical significance. We used two distinct but complementary statistical approaches to evaluate benthic degradation (Smith, 2001b). The first statistical approach uses an analysis of variance approach where conditions at control and impact sites are evaluated before and after the outfall went on line. This is known as a BACI (Before-After-Control-Impact) design. In the BACI design, effects at Station E14 were compared to all other100-m stations (Table 14). In addition, the two nearfield stations (E11 and E17) were compared to Stations B9 and E26 representing the reference and most upcoast farfield station. The second statistical approach uses the regional reference data to develop a reference envelope for key benthic parameters. Tolerance intervals were then defined to establish bounds around the reference envelope. Data from the outfall were then evaluated against the upper and/or lower bounds of the reference envelope. In the BACI design outfall impacts are evaluated against fixed control site(s). In the reference envelope approach impacts are evaluated against multiple sites which are intended to reflect background or reference conditions. The results of the BACI analyses are summarized in Table 14. The tolerance intervals are presented in Table 15 along with summary statistics from the regional surveys.

Table 14. Summary results of BACI analysis. (Values in table refer to alpha value, NS means not statistically significant).

	E14 vs. all stations	E17 vs. E26&B9	E14 vs. E26&B9	E11 vs. E26&B9
Number of species	0.05	0.05	0.05	0.05
Total abundance	0.05	NS	0.1	0.05
Amphiodia	0.05	NS	0.05	NS
Parvilucina tenuisculpta	0.05	0.05	0.05	0.05
Euphilomedes carcharodonta	0.05	NS	0.05	0.1
Capitella spp.	0.1	NS	0.1	NS
Infaunal Trophic Index	0.05	0.05	0.05	0.05
Benthic Response Index	0.05	0.05	0.05	0.05

Number of species. One potential indicator of environmental degradation would be a reduction in the number of species around the outfall. The data from the 98-m stations suggests that number of species generally increased after 1993 when the discharge at the current deepwater site began (Fig. 22). The number of species ranged from 93 to 128 per grab in the discharge period. Although there is a lot of variability between years, the BACI analysis indicates that the number of species at Station E14 is statistically higher than at the other stations. The two closest nearfield stations (Stations E11, E17) were also statistically elevated when compared to upcoast reference (Station B9) and farfield (Station E26) stations. This suggests that there may be an outfall-related enhancement in the number of species near the outfall. The fact that increases in species number were also seen at most other stations suggests that some other region-wide factors may also be influencing species number. In the regional surveys the number of species ranged from 50 to 149 per grab (Fig. 23). The number of species at stations near the outfall were within the bounds of the reference envelope (51 to 134) and not likely to be environmentally significant.

Abundance. Benthic abundances are generally predicted to increase in response to organic enrichment. Increased abundances associated with moderate levels of organic enrichment are generally not considered to be adverse unless accompanied by a reduction in the number of species. However as the level of organic enrichment increases the number of species may begin to decline and extremely high abundances associated with reduced number of species would be considered an indication of an adverse outfall-related effect. Benthic abundances would be expected to decline when levels of organic enrichment result in anoxic sediment conditions. In this case, decreased abundances would be indicative of a degraded condition.

Benthic invertebrate abundances at the 100-m stations ranged from 223 to 662 per grab in the discharge period (Fig. 24). Although the inter-annual variability is high, benthic abundances appear to have increased during the discharge period at all stations. BACI analysis indicates that the higher abundances at Stations E14 and E11 are statistically significant. In the regional surveys, average benthic abundances ranges from 173 to 1,072 per grab (Fig. 25). Abundance values at the outfall depth were generally within the tolerance limits for the reference envelope (140 to 616).

Indicator species. We looked at the presence of four key benthic species known to respond to outfall related effects: a brittle star (*Amphiodia urtica*), a bivalve (*Parvilucina tenuisculpta*), a crustacean (*Euphilomedes carcarodonta*) and a polychaete (*Capitella spp.*)

Amphiodia urtica has been suggested as a key indicator species, because it is one of the most abundant species on the shelf and because its abundances are very much reduced near sewage treatment outfalls (Thompson, *et al.*, In Prep). *Amphiodia* abundances from the regional survey ranged from 0 to 175 per grab. They tend to be more abundant at midshelf depths (Fig. 26). The 100-meter outfall depth is at one edge of the depth distribution for *Amphiodia*. The values at the 100-m stations ranged from 5 to 97 per grab. However, there is a clear outfall related pattern in their distribution (Fig. 27). *Amphiodia* abundances appear to have increased at all stations except in the "Y" of the outfall (Station E14) where numbers remain lower than pre-discharge. BACI analysis indicates that this decrease at Station E14 is statistically significant. The effect on *Amphiodia* abundances does not appear to extend beyond the ZID boundary.

The bivalve, *Parvilucina tenuisculpta*, has been suggested as an indicator species because it is found in high abundances in areas of moderate organic enrichment. Abundances from the 100-m stations ranged from 0 to 14 per grab. There is a distinct pattern of increased abundance nearby (Stations E17, E14, E11) which suggests that the outfall is having an enhancement effect near the outfall (Fig. 28). The BACI analysis indicates that abundances at Station E14 are statistically significant as were the abundances at Stations E11 and E17. The range in abundances at these stations near the outfall is also similar to that observed in the regional reference surveys (Fig. 29), where the number ranged from 0 to 13 per grab and the upper bound for the tolerance interval is 14 per grab.

The crustacean, *E. carcharodata* is of interest as indicator species because the abundances of this ostracod species are generally higher near outfalls. At the 100-m stations, *E. caracarodata* abundances ranged from 0 to 28 per grab in the pre-discharge period and from 0 to 31 per grab in the discharge period (Fig. 30). The pattern of increased abundances near the outfall (Stations E14 and E11) and decreased abundances upcoast of the outfall (Stations E17, E20, E23) is similar to that observed with *Parvilucina*. BACI analysis indicates that the increase at Station E14 is statistically significant at the 0.05 alpha level; the increase at Station E11 was statistically significant at the 0.10 alpha level (Table 14). *E. carcharodata* abundances from the regional surveys ranged from 0 to 18 per grab (Fig. 31). Abundances at the outfall depth were generally below the upper limit of the tolerance interval (17 per grab).

Capitella capitata abundances are generally indicative of organic enrichment. Abundances in the regional surveys are fairly low, ranging from 0 to 4 individuals per grab (Fig. 32). A comparison *Capitella* abundances during the pre-discharge and discharge periods clearly indicates enhanced numbers near the outfall (Stations E14 and E17). However, these differences were not statistically significant at the 0.05 level using the BACI model (Table 14). *Capitella* abundances around the ZID boundary (Stations E14 and E17) are higher than the upper reference envelope limit of 3 (Fig. 33). This indicates localized enhancement in the immediate vicinity of the outfall.

Benthic Indices. The ITI is a numerical index which incorporates the relative abundance of over 500 invertebrate species into a single number. The ITI is largely driven by the abundance of many of the species listed above (e.g. *Amphiodia spp.*, *Euphilomedes spp.*, *Parvalucina tenuisculpta*; *Capitella spp.*) and so will reflect and amplify many of the patterns previously discussed.

ITI values from the regional surveys ranged from 73 to 95 ITI units (Fig. 34). At the 100-m stations they ranged from 74-92 over this same time period. There appears to be a long-term temporal pattern in the ITI values (Fig. 35). Values increased from 1991 to 1993, decreased in 1994, remained relatively low until 1997, and then increased again in 1998 and 1999. The range of variability in the ITI values is roughly the same for the pre-discharge and discharge periods. There does appear to be an outfall-related spatial pattern, with values near the outfall (Stations E14, E17, E11) being generally lower than nearfield and farfield stations by 3 to 5 units. The decrease at Station E14 is statistically significant. Although the ITI values at E17 and E11 are higher during the discharge period than they were during the pre-discharge period, the depression relative to other stations (i.e., Stations B9, E26) was statistically significant (Table 14). The ITI

values at stations near the outfall were generally higher than 74, the lower limit of the reference envelope.

The BRI is a benthic response index developed by SCCWRP as part of the Southern California Bight Pilot Project (Smith *et al.*, 2001a) which incorporates information on over 700 benthic species. Values lower than 25 are generally considered to be un-impacted. BRI values from the regional surveys ranged from -4 to 15 (Fig. 36). BRI values from the 100-m stations ranged from -2 to 16. BRI values were generally higher at Stations E14, E11, and E17 (Fig. 37). These were statistically significant based on the BACI analysis. The upper bound for the reference envelope was 11. BRI values higher than this were only observed at Station E14 indicating that the effect is localized.

Table 15. Summary of benthic data from regional reference surveys (1994-1999)

	1994	1995	1996	1997	1998	1999	Tolerance Intervals	
Number of species							**Lower**	**Upper**
Min	57	67	71	59	37	50		
Ave	77	101	92	84	98	87	51	134
Max	104	149	121	123	172	130		
Total Abundance								
Min	173	261	226	233	187	240		
Ave	353	439	324	340	520	390	140	616
Max	602	587	457	500	1072	574		
Amphiodia spp.								
Min	5	1	23	20	0	17		
Ave	50	66	66	76	45	90	0	NA
Max	106	175	138	151	149	203		
Parvalucina tenuisculpta								
Min	0	0	0	0	0	0		
Ave	1	1	1	1	3	0	NA	14
Max	5	7	4	2	13	1		
Euphilomedes cacharodata								
Min	0	0	0	0	0	0		
Ave	1	3	2	4	3	1	NA	17
Max	8	18	5	17	13	3		
Capitella spp.								
Min	0	0	0	0	0	0		
Ave	0	0	0	0	1	0	NA	3
Max	0	1	3	0	4	1		
ITI								
Min	75	76	80	78	73	85		
Ave	81	83	85	85	83	90	74	NA
Max	85	88	89	90	91	95		
BRI								
Min	0	0	2	-1	-1	-4		
Ave	1	4	5	3	9	0	NA	11
Max	5	6	9	8	15	3		

Summary of effects on benthic community structure. The monitoring program is able to pickup shifts in biological communities responding to the presence of the outfall. There are statistically significant changes at the ZID boundary (Station E14) for almost all parameters evaluated in this review. For certain parameters such as number of species, the BRI, and possibly the ITI, these extend to the nearfield stations (Stations E17 and E11). Conditions beyond the zone of initial dilution were generally similar to background conditions as defined by the reference envelope. The outfall does not appear to be causing any biologically significant changes in benthic community structure in the vicinity of the outfall which might be construed as degradation. USEPA concludes that the discharge is not having significant effects on benthic populations beyond the zone of initial dilution

3. Fish and Epibenthic Macroinvertebrates. The COP states that 'marine communities, including vertebrate, invertebrate, and plant species shall not be degraded'.

This review of fish populations focuses on community parameters such as number of species, total abundances and changes in the abundances of common species. For the purpose of analyses, trawl stations SD9, SD10, SD11 and SD12 are considered nearfield stations (see Fig. 38 for station locations). Stations SD07 and SD08 are the southern farfield stations and Stations SD13 and SD14 are the northern farfield stations. Spatial and temporal trends were evaluated by comparing three years of pre-discharge monitoring to the seven years of monitoring that has occurred since the discharge began at the deep ocean outfall.

Table 16. Summary of fish trawl data

	Nearfield stations 1990-1993	Farfield stations 1990-1993	Nearfield stations 1994-2000	Farfield stations 1994-2000
Number of species	12	13	13	15
Total abundance	174	200	327	302
Biomass (kg)	3.5	4.0	6.2	4.7

The average number of species collected per trawl over the ten-year monitoring period ranged from 6 to 23 (Fig. 39). The average number of species at the nearfield increased from 12 to 13 and the average number of species in the farfield stations increased from 13 to 15. These apparent increases are well within the range of natural variability and there were no spatial patterns or temporal trends in the number of species which might suggest an outfall-related trend.

Fish abundances were more variable with values ranging from 22 to 807 fish per trawl (Fig. 40). Abundances appear to have increased during the period since the discharge began. At the nearfield stations, abundances increased from 174 to 327; at the farfield stations the numbers increased from 200 to 302. Abundances tended to be lower at all stations in 1992 and 1998 and higher at all stations in 1999 and 2000. The southern stations (SD7 and SD8) tended to have lower abundances than the more northern stations.

The fish biomass data also tended to be highly variable, with values ranging from 0.6 to 24.2 kilograms of fish per trawl (Fig. 41). At the nearfield stations, biomass appears to have increased from 3.5 to 6.2 Kg. At the farfield stations average biomass increased from 4.0 to 4.7 Kg. Most of the increase in biomass at the nearfield stations is due to two trawls at SD11 in 1994 (high abundance and high species richness) and SD12 in 1997 (moderate abundances and high species

richness). When these two data points are removed, the differences in fish biomass between pre- and post-discharge are minor. As with abundance data, the biomass data tended to be lower at the southern-most stations.

The same species were abundant in both pre-discharge and discharge period. These numerically dominant species and their relative abundance (expressed as percent) are listed in Table 17.

Table 17. Dominant fish species across all stations for the pre-discharge and discharge periods.

Common Name	Percentage (1990-1993)	Percentage (1994-2000)
Pacific sanddab	64.2%	58.0%
Plainfin midshipman	10.0%	8.3%
Dover sole	5.9%	6.9%
Yellowchin sculpin	2.3%	5.0%
Stripetail rockfish	5.4%	5.0%
Longfin sanddab	2.1%	4.8%
Longspine combfish	0.4%	2.6%
Pink seaperch	0.9%	1.5%
Halfbanded rockfish	0.7%	1.1%
Bay goby	1.2%	1.1%
	93.2%	94.1%

These ten fish species represented more than 90% of the total abundance. Pacific sanddab was the most abundant fish in both the pre-discharge and discharge periods, representing around 60% of the total catch (all surveys combined). There were about 19 more fish species in the trawl data from the discharge period. This is probably related to the fact that we have an additional 4 years of trawl data from the discharge period. There were four species that were present in relatively low abundances in the pre-discharge period trawls were not seen in the discharge period trawls. These were speckled sanddab, blackeye goby, big skate, and jack mackerel. These four species were represented by a total of 12 individual fish. The outfall does not appear to be having any major effects on fish species in the area.

Summary of effects on fish community structure. Analyses of temporal and spatial patterns in the fish trawl data did not reveal any outfall-related patterns. There are no meaningful differences in species composition, abundance or biomass between trawls from the pre-discharge and discharge periods that can be attributed to the outfall.

4. Bioaccumulation and Toxic Pollutants. The COP states that "*The concentration of organic materials in fish, shellfish or other marine resource used for human consumption shall not bioaccumulate to levels that are harmful to human health*". The COP does not define tissue concentration levels that would be harmful to human health or the health of the organism.

The applicant's bioaccumulation monitoring program consists of chemical analysis of both muscle and liver tissue from selected fish species from eight trawl stations. Chemical analyses for priority pollutants in fish tissue are performed on a semi-annual basis (from spring and fall trawls). The applicant also performs chemical analyses on rig-caught fish from two sites (RF1 is near the outfall and RF2 is an area 7 miles upcoast of the outfall). USEPA reviewed the data for the time period from July 1991 through October 2000.

Chemical concentrations in muscle tissue. The muscle tissue data is summarized in Table 18. Tissue concentrations were compared with results from other studies of fish bioaccumulation in the Southern California Bight (as summarized in Mearns *et al.* 1991). Where applicable, the data were also compared to Food and Drug Administration (FDA) action levels and risk-based numbers for tissue concentrations (USEPA, 2000). These are summarized in Table 19.

Arsenic. Arsenic levels in the muscle tissue of fish caught off Point Loma ranged from 0.6 to 28.8 ug/g, with a mean of 6.8 ug/g. Longfin sanddab arsenic concentrations ranged from 0.05 to 28.8 ug/g. The mean concentration prior to the discharge was 9.6 and the mean concentration after the discharge went on line was 11.8 ug/g. Pacific sanddabs off Point Loma had arsenic concentrations ranging from 1.0 to 10.7 ug/g, with a mean of 3.5 ug/g (n = 57). Literature values for Pacific sanddab in the Bight range from 3.1 to 11.6 ug/g. California scorpionfish caught off Point Loma had concentrations ranging from 0.5 to 16.0 ug/g, with a mean of 4.6 ug/g (n = 126). Literature values for California scorpionfish from the Bight range from 0.7 to 1.7 ug/g.

The mean arsenic concentration in fish from the Point Loma area are greater than the USEPA risk-based thresholds of 1.2 ug/g (for non-carcinogenic risk) and 0.026 ug/g (for carcinogenic risks). However, it is unlikely that the Point Loma discharge is a significant source of arsenic. The maximum arsenic concentration measured in the effluent (2.7 ug/l) is less than the background concentration (3 ug/l). The applicant also points out the presence of a significant natural source in submarine hot springs near Punta Banda where concentrations can be as high as 420,500 ug/l. There is no spatial or temporal pattern in the tissue concentrations of longfin sanddab or California Scorpionfish which would suggest that the outfall is having an affect on the fish tissue (Figs. 42 and 43).

Cadmium. Cadmium was rarely detected in fish muscle tissue (in about 8% of the samples). Cadmium concentrations ranged from below detection limits (0.1 to 0.34 ug/g) to a maximum detected value of 1.9 ug/g (n = 359). Concentrations in longfin sanddab values ranged from 0.1 to 0.6 ug/g with an average of 0.32 ug/g (n=114). Cadmium was detected only once in longfin sanddab during in the discharge period. Concentrations in Pacific sanddabs ranged from 0.2 to 0.34 with an average of 0.33 ug/g (n =29). It was not detected Pacific sanddab samples from the discharge period. Concentrations in California scorpionfish values were at the detection limit of 0.34 ug/g (n=116). It was detected only once in the California scorpionfish during the discharge period. Literature values for the Bight (from Mearns *et al.*, 1991) range from <0.001 to 0.200 ug/g. The applicant's data on cadmium in fish tissue can not be compared to these data because of differences in detection limits.

Chromium. Chromium was detected in about 19% of the fish samples. Concentrations ranged from below detection limits (0.2 ug/g to 0.33 ug/g) to a maximum detected value of 54 ug/g. The concentrations in longfin sanddabs ranged from 0.2 to 7.8 ug/g with an average of 0.5 ug/g (n = 119). The concentration in Pacific sanddabs ranged from 0.20 to 0.96 ug/g with and average of 0.39 ug/g (n=30). The concentrations in California Scorpionfish ranged from 0.3 to 1.2 with an average of 0.34 ug/g (n = 116). The two highest measurements (7.8 ug/g in longfin sanddab and 54 ug/g in English sole), were measured in April of 1993 before the discharge went on line. The detection limits associated with the Point Loma data are generally higher than background measurements for the Bight from the literature which ranged from 0.004 to 0.123 ug/g (from

Mearns *et al.*, 1991). There does not appear to be any spatial or temporal trend to suggest that chromium concentrations are increasing as a result of the outfall.

Copper. Copper was measured in concentrations above the detection limit in about half (45%) of the samples. Concentrations in muscle tissue ranged from below detection limits (0.2 to 0.76 ug/g) to a maximum concentration of 9 ug/g. Concentrations in the muscle tissue of longfin sanddab ranged from 0.2.to 7.7 ug/g, with an average of 1.0 ug/g (n = 147). Concentrations in the tissue of Pacific sanddab ranged from 0.2 to 4.1 ug/g, with an average of 1.0 ug/g (n=35). This can be compared to literature values for Pacific sanddab for the Bight which ranged from 0.1 to 0.6 ug/g. Copper concentrations in the muscle tissue of California scorpionfish ranged from 0.5 to 9 ug/g, with a mean of 1.2 ug/g (n = 120). These values are higher than reported literature values for California scorpionfish from other areas in the Bight which ranged from 0.1 to 0.2 ug/g.

Lead. Lead was detected in about 13% of the fish tissue samples. Concentrations in the muscle tissue of fish off Point Loma ranged from 0.2 to 14 ug/g (n = 376). Our review of the lead data is complicated by relatively high detection limits (2.5 ug/g) for most of the samples (i.e., 328 of samples). For the forty-eight samples where detection limits were lower (0.2 to 0.5 ug/g) the range of values was 0.2 to 14 ug/g. There were 19 samples with concentrations greater than 1 ug/g. These were all collected before 1994. We have no independent estimate of lead concentrations in fish tissue for the Bight, but there does not appear to be any trend toward increased concentrations or increased number of detects.

Mercury. Mercury was detected in almost all (94%) of the fish sampled. Concentrations ranged from 0.01 to 0.99 ug/g, with an average of 0.088 ug/g. Concentrations in longfin sanddab ranged from 0.01 to 0.36, with an average of 0.07 ug/l (n=209). Concentrations in Pacific sanddab ranged from 0.01 to 0.11 ug/g with an average of 0.04 ug/l (n=50). Literature values for Pacific sanddab from the Bight ranged from 0.053 to 0.16 ug/g, with a mean of 0.04 ug/g (n = 23). Concentrations in the California scorpionfish ranged from 0.01 to 0.59 ug/g with an average of 0.13 ug/g (n=123). Literature values for this species in the Bight ranged from 0.03 to 5.49 ug/g. There were no spatial or temporal patterns were observed in longfin sanddab or California scorpionfish to suggest that the outfall is having an affect on mercury concentrations (Figs. 44 and 45). The average mercury concentration was lower in the discharge period data than in the data from pre-discharge period.

The FDA limit for total mercury in 0.5 ug/g. USEPA has established a health risk value of 0.4 ug/g based on methyl mercury. Concentrations of total mercury greater than 0.4 ug/g was measured in muscle tissue in 4 out of 524 measurements (Greenblotched rockfish, 0.99 ug/g; California scorpionfish, 0.59 ug/g; Greenspotted rockfish, 0.49 ug/g, and Speckled rockfish, 0.46 ug/g). Based on these results less than 1% of the fish in the San Diego area have tissue concentrations greater than the USEPA risk screening threshold value.

Selenium. Selenium concentrations were measured in detectable concentrations in most (96%) of the samples (detection limits ranged form 0.1 to 1.0 ug/l). Selenium concentrations ranged from 0.13 to 4.3 ug/g. Concentrations in longfin sanddab ranged from 0.18 to 4.3 ug/g, with an average of 0.98 ug/l (n=129). Concentrations in Pacific sanddab ranged from 0.13 to 3.3 ug/g,

with an average of 0.49 ug/g (n=32). Literature values for Pacific sanddab from the Bight ranged from 0.47 to 0.94 ug/g. Selenium concentrations in California scorpion fish ranged from 0.13 to 0.80 ug/g, with a mean of 0.26 ug/g (n = 116). Literature values for the Bight ranged from 0.44 to 1.26 ug/g for California scorpionfish.

Silver. The applicant detected silver in muscle tissue in only five instances. Silver was detected three times in longfin sanddab samples at concentrations ranging from 0.01 to 0.05 ug/g, once in Pacific sanddab at a concentration of 0.28 ug/g and once in California scorpionfish at a concentration of 2.68 ug/g. Literature values for Pacific sanddab from the Bight range from 0.001 to 0.014 ug/g.

Zinc. Zinc was detected in all fish samples (n=503). Concentrations in longfin Sanddab ranged from 1.52 to 65 ug/g, with an average of 3.54 (n=197). Concentrations in Pacific sanddab ranged from 1.8 to 10.0 ug/g, with an average of 3.54 ug/g (n = 47). Zinc concentrations in California scorpionfish ranged from 2.12 to 16.8 ug/g, with a mean of 4.53 ug/g (n = 125). Literature values for California scorpion fish from the Bight ranged from 0.6 to 6.5 ug/g. Thus, zinc concentrations in muscle tissue measured by the applicant are similar to background concentrations for the Bight.

PCBs. PCBs were only detected in reportable concentrations in about 7% of the fish sampled (19 out of 274 measurements). There was only one detected value prior to 1995 (0.34 ug/g in longfin sanddab). There have been more detected values since 1995, largely as a result of better detection limits associated with measuring specific congeners (as opposed to arochlor mixtures). The next highest concentration was 0.089 ug/g (unidentified rockfish, April 1999). All other values were below the 0.08 ug/g threshold for non-carcinogenic risk. Eight samples were above the 0.02 ug/g threshold for carcinogenic risk. This represents about 3% of the fish. The minimum value reported in the literature for the Bight for total PCBs in fish muscle tissue is 0.001 ug/g.

DDT. Most of the DDT compounds were below detection limits. Out of 331 fish tissue samples p,p DDT was detected only twice; o,p-DDT only once; p,p,-DDD was detected three times, o,p-. DDD was not detected in measurable quantities; and o,p-DDE was detected only once. The compound p,p-DDE was measured in low but detectable concentrations in almost all fish samples (510 out of 551 samples). The concentration of p,p-DDE ranged from 0.001 ug/g to 0.53 ug/g (n = 510). No values were greater than the 2.0 ug/g non-carcinogenic threshold. Five samples were greater than the carcinogenic risk threshold. This represents less than 1% of the fish sampled. The minimum value for total DDT in fish tissue from the Bight reported in the literature is 0.02 ug/g.

Table 18. Summary of metals data in fish muscle tissue from the Point Loma area (1990-2000)

All Fish				Longfin Sanddab		
Metals	# of Detects / # of Samples	Range	Avg.	# of Detects / # of Samples	Range	Avg.
Arsenic	454/545	0.06-28.8	5.9	208/225	0.0-28.8	8.8
Cadmium	30/359	0.1-1.9	0.3	17/114	0.1-0.6	0.32
Chromium	67/357	0.2-54	.056	33/119	0.2-7.8	0.5
Copper	185/415	0.2-9	1.1	71/147	0.2-7.7	1.0
Lead	48/376	0.2-14	2.4	37/135	0.2-7.7	2.1
Nickel	48/366	0.4-50	1.2	33/123	0.4-38	1.2
Mercury	491/521	0.01-0.99	0.088	199/209	0.01-0.36	0.070
Selenium	363/378	0.13-4.3	0.057	129/129	0.18-4.3	0.98
Silver	5/332	0.1-2.68	0.62	3/101	0.5-0.62	
Zinc	503/503	1.52-65	3.84	197/197	1.52-65	3.54

California Scorpionfish				Pacific Sanddab		
Metals	# of Detects / # of Samples	Range	Avg.	# of Detects / # of Samples	Range	Avg.
Arsenic	108/126	0.05-16	4.6	50/57	0.05-10.7	3.5
Cadmium	1/116	0.34-0.34	0.34	2/29	0.2-0.34	0.04
Chromium	10/116	.03-1.2	0.34	6/30	0.2-0.96	0.39
Copper	55/120	0.5-9	1.2	12/35	0.2-4.1	0.96
Lead	0/113	2.5-2.5	2.5	9/36	0.3-14	2.5
Nickel	2/118	0.5-0.95	0.78	5/30	0.79-27	1.04
Mercury	117/123	0.01-0.59	0.13	49/50	0.01-0.11	0.04
Selenium	113/116	0.13-0.8	0.26	24/32	0.13-3.3	0.49
Silver	1/113	0.63-2.68	0.13	1/28	0.2-.62	0.61
Zinc	125/125	2.12-16.8	4.53	47/47	1.84-10	3.47

Table 19. Comparison of maximum contaminant concentrations in muscle tissue from fish collected in the vicinity of the San Diego Point Loma outfall with recommended screening values for recreational fishers.

Analyte	Maximum observed concentration level	Health risk screening level	
		Non Carcinogenic	Carcinogenic
Arsenic (inorganic)	28.8 (total)	1.2	0.026
Cadmium	1.9	4.0	
Methyl mercury	0.99 (total)	0.4	
Selenium	4.3	20	
Total Chlordane	0.0012	2.0	0.114
Total DDT	1.08	2.0	0.117
Dieldrin	ND	0.2	0.0025
Endosulfan	0.0033	24	
Endrin	ND	1.2	
Heptachlor epoxide	0.0035	0.052	0.00439
Hexachorobenzene	0.0047	3.2	0.025
Lindane	ND	1.2	.0307
Mirex	ND	0.8	
Toxaphene	ND	1.0	0.0363
PAHs	ND		0.00547
PCBs	0.34	0.08	0.02
Dioxins/Furans	NA		0.000000256

Liver tissue. Spatial and temporal trends in contaminant concentrations were evaluated using liver tissue data from the longfin sanddab, Pacific sanddab, and the California scorpionfish because these species provide the most complete data set for assessing temporal trends. We looked at total PCB and DDTs because these have the potential to accumulate in fish tissue. These values were also compared to fish tissue data from the 1994 Southern California Bight Pilot Project (SCBPP).

According to the applicant DDT in longfin sanddab ranged from 0.48 ug/g to 3.80 ug/g, with an average of 1.66 ug/g (Fig. 46). The average DDT concentrations in liver from the SCBPP were 0.22 ug/g for longfin sanddab. Pacific sanddab ranged from 0.29 to 1.76 ug/g with an average of 0.67 ug/g (Fig. 47). DDT concentrations in liver from the SCBPP were 0.15 ug/g for Pacific sanddab. Concentrations in California scorpionfish ranged from 0.31 to 2.31 ug/g with an average of 2.26 ug/g. For all three species the high values (>1 ug/g) were only observed on samples collected in October of 1993, before the outfall went online. With the exception of one

other fish sample (Pacific Sanddab, April 1997, 12.7 ug/g) all other samples were below 0.1 ug/g. DDT concentrations in fish around the outfall from the discharge period are low relative to background values for the Bight.

The applicant reported that Total PCB concentrations in longfin sanddab ranged from 0.11 ug/g to 5.64 ug/g with an average of 0.90 ug/g (Fig. 48). According to the applicant, PCB concentrations in longfin sanddab have decreased from 2.13 ug/g during the pre-discharge period to 0.90 ug/g during the discharge period. Concentrations in Pacific sanddab ranged from 0.12 ug/g to 1.45 ug/g with an average of 0.44 ug/g (Fig. 49). Data from the SCBPP indicates average concentration in longfin sanddab is around 0.07 ug/g and the average for Pacific sanddab is around 0.02 ug/g. These numbers are higher than reported for background in the Bight. However, there does not appear to be any spatial or temporal patterns to suggest that the outfall is having an affect on bioaccumulation in fish tissue. PCBs were detected at very low concentrations in the effluent and not detected in sediments.

Summary of fish bioaccumulation. USEPA's review of the fish bioaccumulation data provided by the applicant does not indicate that the outfall is having a significant effect on the contaminant concentrations in fish tissue (muscle or liver).

5. Incidences of lesions and parasites. All trawled fish caught during the monitoring program were visually examined by the City for gross morphological evidence of diseases and ectoparasites. No fin erosion or tumors were found on trawl-caught fish in the discharge area. The overall abundance of external parasites was minimal. The overall incidence of parasitism in the first year of the post-discharge monitoring was determined to be 0.006%.

Mearns and Sherwood (1977) examined approximately 290,000 fishes from more than 900 trawl samples throughout the Bight (including the Palos Verdes Shelf) from 1969 to 1976. These specimens included 151 species and 48 families of sharks, rays and bony fishes. Over the entire Bight, approximately 5% of the specimens were found to be affected with external disease symptoms, including fin and tail erosion, tumors, abnormal coloration, and attached macroparasites. A more recent assessment of fish assemblages in close to 300 trawls (SCBPP, 1994) indicates that the prevalence of anomalies was down to about 1%. It appears, from the limited data available, that the incidence of fish disease around the Point Loma outfall is negligible compared to the historical data and current background conditions.

D. Impact of Discharge on Recreational Activities. Under section 125.62(d), the applicant's proposed modified discharge must allow for the attainment or maintenance of water quality which allows for recreational activities at and beyond the zone of initial dilution, including, without limitation, swimming, diving, boating, fishing, picnicking and sports activities along shorelines and beaches.

The ocean shoreline along the southern portion of Point Loma is predominantly on a military reservation (Fort Rosencrans) and the extreme southern portion of the peninsula is within the Cabrillo National Monument. As a result, access is limited to several designated tide pooling areas within the boundaries of the national monument. Consequently, most recreational activities are centered around the Point Loma kelp beds and in nearshore waters. SCUBA diving is very

popular in the offshore kelp beds. Only limited diving occurs outside the area of the kelp beds.

The COP applies the following bacterial standards for shoreline and body contact sports area (including kelp beds):

> Total Coliform bacteria: Greater than 80% of samples in an 30-day period shall be less than 1,000 per 100 ml at each sampling station. No single sample, when verified by a repeat sample within 48 hours, shall be greater than 10,000 per 100 ml
>
> Fecal Coliform bacteria: The geometric mean shall not exceed 200 per 100 ml based on at least 5 samples in any 30-day period and not more than 10% of the total samples during any 60-day period shall exceed 400 per 100 ml.

The applicant monitors total coliform, fecal coliform, and enterococcus concentrations at a number of stations in the area subject to water contact standards. These monitoring stations include nine shoreline stations (D-1 - D9), eight kelp bed stations (A1, A6, A7, C4 - C8) and at seventeen offshore stations located upcoast and downcoast from the ZID (Fig. 2). We evaluated the bacterial monitoring data collected by the applicant from 1996 to 2000.

Offshore. The seventeen offshore water quality stations were sampled on a monthly basis at a minimum of three depths (near-surface, mid-depth, near-bottom). These data are summarized in Tables A-4, A-5, and A-6. These samples were not collected for compliance purposes but rather to provide information about the location of the plume to help interpret the results of kelp station and shoreline monitoring results. The higher concentrations of total coliforms were generally seen offshore at depths ranging from 140 to 380 feet, indicating that the outfall is generally trapped at depth. At these depths concentrations of total coliforms can be in the tens of thousands and the concentrations of fecal coliforms in the thousands. In the surface waters, the average concentrations of total coliforms ranged from 2 to 50 CFU/100 ml (Table A-4). High total concentrations were seen in the offshore surface waters in two isolated instances. One was in July of 1998 at station A5 (2800 CFU/100 ml), and the other was in January 2000 at station E8 (2400 CFU/100 ml). This indicates that the plume does surface on occasion, albeit infrequently. The fecal coliform concentrations at the offshore surface waters ranged from 2 to 11 CFU/100 ml (Table A-5). The maximum concentration measured at the surface was 300 CFU/100 ml (at station B1 in June 1997 and at station E16 in December 1997). The average enterococcus concentrations in surface water from the offshore stations ranged from 2 to 10 CFU/100 ml (Table A-6). The maximum observed enterococcus value of 200 CFU/100 ml was observed in ten instances (at Stations A2, A10, A14, B2, B9, E18).

Kelp beds. There were no violations of the total coliform standards in the kelp beds (Table 20). Total coliform values greater than 1000 were seen in 9 occasions out of 7172 samples (around 0.1%). Fecal coliform concentrations were below the geometric mean standard of 200 per 100 ml. Fecal coliform concentrations greater than 400 per 100 ml were observed on rare occasion (6 out of 6585 measurements). The enterococcus data can be compared to USEPA water quality criteria for bacteria (USEPA, 1986). There were two occasions (February and March of 1998) where the 30-day geometric mean was for enterococcus was greater than 35 per 100 ml. Enterococcus concentrations greater than 104 per 100 ml were observed about 0.5% of the time

(35 out of 6581 measurements). These were generally seen at depth suggesting an association with the outfall plume. The rarity of these events is consistent with the applicant's modeling results which suggested that the plume is not likely to reach the kelp beds for the following reasons:

1. Density stratification traps the plume below the depth of the kelp beds.
2. The shelf slope as a barrier between the submerged plume and the shallow kelp beds.
3. The predominant surface flows are longshore and mainly downcoast away from the kelp beds.

Table 20. Summary of bacterial concentrations (CFU/100 ml) at kelp stations (1995-2000)

Long-term average concentrations of total coliforms (and standard deviation) from Kelp Stations					
60-foot kelp stations	**A1**	**A7**	**A6**	**C7**	**C8**
5	57 (625)	8 (22)	6 (20)	7 (33)	17 (106)
40	21 (73)	22 (81)	20 (44)	11 (29)	10 (26)
60	79 (472)	44 (159)	46 (120)	19 (45)	21 (41)
30-foot kelp stations	**C4**	**C5**	**C6**		
5	11 (55)	12 (111)	5 (11)		
10	11 (50)	8 (23)	8 (41)		
20	10 (26)	9 (49)	11 (61)		
Long-term average concentrations of fecal coliforms (and standard deviation) from Kelp Stations					
60-foot kelp stations	**A1**	**A7**	**A6**	**C7**	**C8**
5	3 (6)	3 (12)	3 (12)	3 (12)	4 (8)
40	9 (39)	7 (34)	6 (12)	4 (7)	4 (13)
60	36 (355)	13 (57)	11 (3)	6 (10)	7 (16)
30-foot kelp stations	**C4**	**C5**	**C6**		
5	3 (4)	3 (10)	3 (5)		
10	4 (13)	3 (4)	3 (10)		
20	3 (12)	3 (7)	4 (19)		
Long-term average concentrations of enterococcus (and standard deviation) from Kelp Stations					
60-foot kelp stations	**A1**	**A7**	**A6**	**C7**	**C8**
5	3 (8)	4 (27)	3 (13)	3 (5)	4 (14)
40	4 (14)	4 (14)	5 (26)	3 (13)	3 (8)
60	7 (26)	7 (32)	4 (13)	5 (14)	13 (145)
30-meter kelp stations	**C4**	**C5**	**C6**		
5	6 (38)	4 (18)	3 (12)		
10	4 (18)	4 (18)	3 (4)		
20	3 (13)	4 (18)	3 (4)		

Shoreline. The data from the applicant's shoreline monitoring program is presented in Figs. 50-52. There are numerous exceedances of the single sample thresholds for total coliform, fecal coliform and enterococcus (Fig. 53). However, these do not appear to be related to the Point Loma outfall. A high percentage of these are related to storm events. There also seems to be a spatial pattern which suggests a southern source. For perspective, these data can be compared to comparable data collected as part of the IWTP shoreline monitoring program (See Fig. 54). There is some overlap between the two programs (i.e., San Diego's Stations D1, D2 and D3 overlap with IWTP's Stations S12, S8 and S9). There is a clear south-north gradient in the frequency of exceedances with a peak at the Tijuana River for all three bacterial indicators.

Exceedances are generally attributed to surface runoff (e.g. from the Tijuana River) rather than

the outfall plume. This is supported by the lack of high concentrations in nearshore stations. This conclusion is also supported by modeling and monitoring efforts, which indicate that the outfall plume remains submerged in the offshore area.

Summary of bacteria data. USEPA's review of the bacterial monitoring data suggests that the outfall plume is trapped at depth offshore and that the plume surfaces infrequently. Elevated concentrations of bacteria in the kelp beds were observed on only rare occasion (less than 0.5% of the time). Although bacterial concentrations along the shoreline frequently exceed the standards, there is no evidence to suggest that this is related to the outfall. Based on these data, along with the results of physical oceanographic modeling performed by the applicant in 1994, USEPA concludes that the Point Loma modified discharge will meet the COP bacterial compliance standards at the shoreline, recreational areas and at kelp beds.

E. Summary of Conclusions. In this review of the data provide by the applicant, it appears that a balanced indigenous population is being maintained in the vicinity of the outfall. This conclusion is based on the following considerations:

1. The ability of the discharger to meet state standards and federal criteria for water quality

2. The lack of any substantial increase in suspended solids deposition or accumulation of organic matter in the sediments as predicted by sediment models

3. Observations from the monitoring program do not indicate any major changes in chemical contaminant concentrations in sediments from around the outfall

4. Observations from the monitoring program indicate only minor changes in benthic community assemblages around the outfall and the lack of any observable changes in fish community structure

5. Observations from the monitoring program do not indicate any increases in the tissue contaminant burdens of selected fish species

6. Observations from the monitoring program indicate that recreational standards are being attained

7. Physical oceanographic measurements and plume modeling efforts performed by the applicant suggest that these standards will continue to be maintained throughout the permit period.

3. Establishment of a Monitoring Program. [Section 301(h)(3), 40 CFR 125.62]

Under 40 CFR 125.62, which implements section 301(h)(3), the applicant must have a monitoring program designed to evaluate the impact of the modified discharge on the marine biota, demonstrate compliance with applicable water quality standards, measure toxic substances in the discharge, and have the capability to implement these programs upon issuance of a

301(h)-modified NPDES permit. The frequency and extent of the monitoring program are to be determined by taking into consideration the applicant's rate of discharge, quantities of toxic pollutants discharged, and potentially significant impacts on receiving water, marine biota, and designated water uses.

The City's current monitoring program was developed jointly with the City, USEPA and the Regional Board. This is described in Volume IV, Appendix D. The monitoring program may be modified during the development of the permit.

4. Impact of Modified Discharge on Other Point and Nonpoint Sources. [Section 301(h)(4), 40 CFR 125.63]

Under 40 CFR 125.63, which implements section 301(h)(4), the applicant's proposed modified discharge must not result in the imposition of additional treatment requirements on any other point or nonpoint source.

The Regional Board has determined that the Point Loma discharge will not have any effect on any existing or planned point or non-point source discharges (letter dated March 21, 1995).

5. Toxics Control Program. [Section 301(h)(5), 40 CFR 125.66(a)-(c)]

A. Chemical Analysis.

A 301(h) large applicant is required to provide a chemical analysis of its effluent under both wet and dry conditions for toxic pollutants and pesticides. The City of San Diego routinely conducts influent and effluent sampling. Effluent samples are collected and analyzed weekly for metals, cyanide, ammonia, chlorinated pesticides, phenolic compounds and PCBs. Other pesticides, volatile organics, and other pollutants are analyzed on a monthly basis. The results of influent and effluent data are provided in monthly, quarterly and annual reports submitted to the Regional Board and USEPA Region 9. The City also submitted effluent data from 1995 to 2000 to USEPA in electronic format as part of the renewal process (see section 2A for review of effluent data). Based on data from1999, the applicant indicates that there is no significant differences in effluent quality between wet and dry conditions (Volume II, Table III.H.1c-3).

B. Toxic Pollutant Source Identification.

Under 40 CFR 125.66(b) the large applicant must submit an analysis of the sources of toxic pollutants identified in section 125.66(a) and, to the extent practicable, categorize the sources according to industrial and nonindustrial types. As part of the City's Industrial Waste Source Control Program, the City surveys industries which may contribute toxics to the sewer system, establishes discharge permits where necessary, and monitors the permitted industrial discharges. In addition the City monitors also performs an annual system-wide non-industrial toxics survey program to identify other potential sources of toxics. The known and suspected sources of metals, cyanide and organic constituents detected in the effluent are summarized in Volume II of the application (Table III.H.1d-1 and Table III.H.1.d-2).

C. Industrial Pretreatment Requirements.

Under 40 CFR 125.66(c) an applicant that has known or suspected industrial sources of toxic pollutants must have an approved pretreatment program under 40 CFR Part 403. USEPA approved the City of San Diego's industrial pretreatment program on June 29, 1982.

6. Urban Area Pretreatment Program. [Section 301(h)(6), Section 303(c) of the Water Quality Act of 1987]

Large applicants for a modified NPDES permit under section 301(h) of the Act that receive one or more toxic pollutants from an industrial source are required to comply with the urban area pretreatment requirements. A POTW subject to these requirements must demonstrate, for each toxic pollutant known or suspected to be introduced by an industrial source, that it either has an applicable pretreatment requirement in effect, or that it has a program that achieves secondary removal equivalency. In addition, an applicant must demonstrate that industrial sources are in compliance with applicable pretreatment requirements. The City of San Diego is subject to these requirements.

In the the 1994 application, the City indicated that it will comply with the urban area pretreatment requirements by demonstrating that it has applicable pretreatment requirements in effect. The City submitted their Urban Area Pretreatment Program to USEPA in 1996. This UAPP was approved by the Regional Board on August 13, 1997 and by USEPA Region 9 on December 1, 1998.

Under 40 CFR 125.65(b)(2), the City must demonstrate that industrial sources introducing waste into the applicant's treatment works are in compliance with all applicable pretreatment requirements, including numerical standards set by local limits, and that it will enforce those requirements.

As explained in the preamble to the revised 301(h) regulations (FR 40656, August 9, 1994), "*EPA intends to determine a POTW's continuing eligibility for a 301(h) waiver under section 301(h)(6) by measuring industrial user compliance and POTW enforcement activities against existing criteria in the Agency's National Pretreatment Program. ... In 1989, EPA established criteria for determining POTW compliance with pretreatment implementation obligations. One element of these criteria is the level of significant noncompliance of the POTW's industrial users. The General Pretreatment Regulations (part 403) identify the circumstances when industrial user noncompliance is significant. The industrial user significant noncompliance (SNC) criteria are set out in 40 CFR 403.8(f)(2)(vii) and address both effluent and reporting violations. ... For pretreatment purposes, a POTW's enforcement program is considered adequate if no more than 15 percent of its industrial users meet the SNC criteria in a single year. ... In addition, a POTW is also considered in SNC if it fails to take formal appropriate and timely enforcement action against any industrial user, the wastewater from which passes through the POTW or interferes with the POTW operations.*"

"*In enforcing the pretreatment programs, POTWs are expected to respond to industrial user noncompliance using local enforcement authorities in accordance with an approved enforcement*

response plan (ERP) which is required of all approved pretreatment programs (see 40 CFR 403.5). POTWs including 301(h) POTWs, with greater than 15 percent of their users in SNC, or which fail to enforce appropriately against any single industrial user causing pass through or interference, are deemed to be failing to enforce their pretreatment program. ...EPA believes that the combination of industrial user compliance and POTW enforcement provides an appropriate measurement of the POTW's eligibility for the 301(h) waiver under section 301(h)(6)."

The 1989 criteria discussed in the preamble is a September 27, 1989, memorandum from James R. Elder to USEPA Regional Water Management Division Directors titled: FY 1990 Guidance for Reporting and Evaluating POTW Noncompliance with Pretreatment Implementation Requirements.

Although the preamble for the urban area pretreatment requirements refers to "*industrial users*" when discussing the 15% noncompliance criteria, the 1989 criteria apply to "*significant industrial users*." This term is defined at 40 CFR 403.3(t) and includes all industrial users subject to categorical standards and other industrial users designated by the POTW. In addition, the Agency has issued clarifying guidance explaining that the significant noncompliance criteria at 40 CFR 403.8(f)(2)(vii) apply only to significant industrial users rather than to all industrial users. Consequently, the Agency views the 15% noncompliance criteria in the urban area pretreatment requirements as applying only to significant industrial users rather than to all industrial users.

Under the 1989 measures, violating industries are not included in the 15% noncompliance criteria when the POTW has issued a formal enforcement action or penalties. Consequently, the Agency views the 15% noncompliance in the urban area pretreatment requirements as including only significant industrial users that are in significant noncompliance and which have not received at least a formal enforcement action from the POTW.

USEPA believes that the combination of industrial user compliance and POTW enforcement provides an appropriate measurement of the POTW's eligibility for the 301(h) waiver under section 301(h)(6). The City's enforcement plan is described in Appendix K (attachment K2) of the application

The City's Enforcement Response Plan is included in Technical Appendix K-3 of its section 301(h) application. The second level of formal enforcement is an Administrative Notice and Order which may be issued when:

- An industrial user fails to take any significant action to establish compliance withing 30 days of receiving a Notice of Violation
- An industrial user fails to establish full compliance, beginning on the 91st day after the industrial user received a Notice of Violation;
- An industrial user is in significant noncompliance status; or
- An industrial user violates a Compliance Findings of Violation and Order.

The Agency recognizes that specific enforcement response to a violation must be decided on a case-by-case basis. We believe, however, that in most cases an Administrative Notice and Order

as described in the City's Enforcement Response Plan are appropriate when a significant industrial user is in significant noncompliance.

The local limits approved by USEPA as part of the UAPP were included in all industrial discharge permits by December 1997. As a consequence of the new local limits, some significant industrial users may need time to come into compliance with those local limits. In any such cases, the Agency expects the City to issue a Compliance Findings of Violation and Order which is the first level of formal enforcement in the City's Enforcement Response Plan. The Order shall contain a schedule for achieving compliance with the new local limits. Significant industrial users receiving such Orders will not be included in the 15% noncompliance criteria.

Table 21. Summary of compliance status for significant industrial users (modified from Table 4.2.1, appendix K of the application. The numbers for SNC have been adjusted based on discussions with Pretreatment Program Manager.

Year	1993	1994	1995	1996	1997	1998	1999
Number of Significant Industrial users	118	139	130	130	133	131	139
Number in Significant Noncompliance (SNC)	25	27	12	16	25	16	14
Number SNC adjusted for enforcement			9	15	20	13	13
Percent SNC	21%	19%	9%	12%	19%	12%	10%
Percent SNC adjusted			7%	12%	15%	10%	9%

USEPA finds that the information in the City's application regarding the urban area pretreatment requirements is acceptable for the purpose of issuing this tentative decision. The permit will require the City to maintain an annual rate of significant noncompliance for significant industrial users of no more than 15 percent of the total number of significant industrial users.

7. Nonindustrial Source Control Program. [Section 301(h)(7), 40 CFR 125.64(d)]

Under 40 CFR 125.64(d), which implements section 301 (h)(7), the applicant must have a proposed public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into their treatment facility, and develop and implement additional nonindustrial source control programs in the earliest possible schedule.

The City proposes to continue their existing nonindustrial program and public education program that have been in effect since 1985. The nonindustrial program will be supplemented with an updated survey of industrial and nonindustrial contaminant sources. These programs are described in Appendix K of the application.

8. Increase in Effluent Volume or Amount of Pollutants Discharged. [Section 301(h)(8), 40 CFR 125.65]

Under 40 CFR 125.65, which implements section 301(h)(7), the applicant's proposed modified discharge may not increase above the amount specified in the 301(h) modified NPDES permit. CWA § 301(j)(5)(C) specifies 80% removal of suspended solids on a monthly average and 58% removal of BOD on an annual average. In addition to these conditions. The NPDES permit establishes the following limits based on an annual average flow of 205 MGD. The flows for the projected end of permit (2006) are 195 MGD.

Table 22. Proposed effluent limitations for Point Loma Permit

Effluent Parameter	Annual Removal	Monthly Removal	Annual Mass Emission	Monthly Average
TSS	80%	80%	13,599 mt/yr	75 mg/l
BOD	58%	--	--	--

Table 23. Proposed and projected mass emission rates (MT/yr) for TSS and BOD

Year	Proposed MER	Projected MER
2001	15000	14100
2002	15000	14200
2003	15000	14300
2004	15000	14500
2005	15000	14600
2006	13599	13599

9. Compliance with Primary Treatment and Federal Water Quality Criteria. [Section 301(h)(9), Section 303(d)(1) and (2) of the Water Quality Act of 1987]

Under section 303(d)(1) of the WQA the applicant's wastewater effluent must be receiving at least primary treatment at the time their section 301(h) permit becomes effective. Section 303(d)(2) of the WQA states that, "Primary or equivalent treatment means treatment by screening, sedimentation, and skimming adequate to remove at least 30 percent of the biological oxygen demanding material and other suspended solids in the treatment works influent, and disinfection, where appropriate."

The Point Loma discharge is subject to State and Federal requirements which are much stricter than the primary treatment standard. The COP requires that "Dischargers shall, as a 30-day average, remove 75% of suspended solids from the influent stream before discharging wastewater to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/l."

The average monthly removals for suspended solids in 1999 and 2000 ranged from 82% to 87%.

The average monthly removals for BOD in 1999 and 2000 ranged from 53% to 67%. The applicant meets the primary treatment standard of at least 30% removal for suspended solids and biological oxygen demand. The draft NPDES permit will include effluent limits of 80% removal for suspended solids on an monthly average basis and 58% removal of BOD on an annual average basis.

COMPLIANCE WITH OTHER APPLICABLE LAWS

40 CFR 125.59(b)(3) provides that a 301(h) modified NPDES permit may not be issued if such issuance would conflict with applicable provisions of local, State, or other Federal laws or existing Executive Orders.

1. State Coastal Zone Management Program. [40 CFR 125.59(b)(3)]

40 CFR 125.59(b)(3) provides that issuance of a 301(h) modified NPDES permit must comply with the Coastal Zone Management Act, 16 USC 1451 *et seq*. In accordance with 16 USC 1456(c)(3)(A), a 301(h) modified NPDES permit may not be issued unless the proposed discharge is certified by the State to comply with applicable State coastal zone management program(s) approved under the Coastal Zone Management Act, or the State waives such certification.

In 1991, the California Coastal Commission issued Consistency Certification No. CC-62-91 for extending the Point Loma outfall to 4.5 miles. In 1995, the California Coastal Commission issued Consistency Certification the City's Waiver Application. As part of this permit renewal cycle, the City of San Diego requested the Commission to provide a determination that the existing and proposed discharge is consistent with applicable coastal zone management requirements (See Letter dated July 13, 2000). No permit may be issued that is inconsistent with the policies of the California Coastal Management Program. The California Coastal Commission will be hearing this issue at their meeting on March 5-8, 2002.

2. Marine Sanctuaries. [40 CFR 125.59(b)(3)]

40 CFR 125.59(b)(3) provides that issuance of a 301(h) modified NPDES permit must comply with Title III of the Marine Protection, Research and Sanctuaries Act, 16 USC 1431 *et seq*. In accordance with 16 USC 1432(f)(2) a 301(h) modified NPDES permit may not be issued for a discharge located in a marine sanctuary designated pursuant to Title III if the regulations applicable to the sanctuary prohibit issuance of such a permit.

The Point Loma ocean outfall discharge is not located in a marine sanctuary. Two zones (San Diego-La Jolla Ecological Reserve and San Diego Marine Life Reserve) approximately 21-22 km (13-14 mi) north of the discharge point have been designated by the California Water Resources Control Board as "*Areas of Special Biological Significance.*" Discharges of wastewater to these zones are prohibited by the Water Quality Control Plan for Ocean Waters of California. The Point Loma outfall discharges wastewater at a location and distance that would not have a significant impact on these zones.

The applicant also listed several protected areas in the San Diego region. We believe that significant dilution of any pollutant discharged through the Point Loma outfall would occur and concentrations would be at background level by the time the wastefield approaches any of these protected areas.

3. Endangered or Threatened Species. [40 CFR 125.59(b)(3)]

40 CFR 125.59(b)(3) provides that issuance of a 301(h) modified NPDES permit must comply with the Endangered Species Act, 16 USC 1531 *et seq*. In accordance with 16 USC 1536(a)(2) a 301(h) modified NPDES permit may not be issued if the proposed discharge will adversely impact threatened or endangered species or critical habitat listed pursuant to the Endangered Species Act.

As part of the California Environmental Quality Act requirements, the City prepared an Environmental Impact Report (EIR) to address impacts from the outfall extension project. The National Marine Fisheries Service (NMFS) requested an informal consultation to assess impacts to the gray whale, and established mitigation to minimize construction-related impacts to the whale. The U.S. Fish and Wildlife Service (USFWS) did not comment on the EIR.

More recently, the City of San Diego initiated an informal consultation on endangered species with both the USFWS and NMFS through correspondence to both agencies, inviting comments specifically on the existing discharge and proposed 301(h) modification request. Responses were provided by both agencies. In a letter dated May 8, 1995, the USFWS stated that they have determined that the San Diego project "will have no effect on any listed species or any designated critical habitat." NMFS in their March 27, 1995 letter confirmed the list prepared by the City of San Diego of potentially impacted species under the jurisdiction of NMFS, with one exception, the gray whale, which is no longer a listed species. NMFS also stated that "available information indicates that no Federally listed species under the jurisdiction of the NMFS are likely to be affected by the modified discharges at the Point Loma outfall."

The City sent letters to USFWS and NMFS on June 28, 1999. NMFS concluded that there were no Federally listed species under its jurisdiction that are likely to be affected by the modified discharges at the Point Loma outfall. No response from has been received from USFWS. The permit is contingent on a finding from the U.S. Fish and Wildlife.

In regards to State law, the Point Loma outfall discharges beyond the three-mile limit for waters controlled by the State of California. Therefore, the discharge is into waters governed by Federal laws. Within the three-mile limit, the State of California Endangered Species Act applies. The State Endangered Species Act has provisions similar to the Federal Endangered Species Act. See the discussion above for compliance with the Federal Endangered Species Act.

STATE CONCURRENCE IN MODIFICATION

Section 301(h) and 40 CFR 125.59(i)(2) provide that a 301(h) modification may not be granted until the appropriate State certification/concurrence is granted or waived pursuant to 40 CFR 124.54. In accordance with the procedures of 40 CFR 124.53(a), before USEPA may issue the

applicant a 301(h) modified NPDES permit, the State must either grant certification pursuant to section 401 of the Act or waive certification. Such action by the State will serve as State concurrence in the modification.

USEPA Region 9 and the California State Water Resources Control Board have developed a Memorandum of Understanding (MOU; May 1984) outlining the procedures that each agency will follow to coordinate the implementation of section 301(h) and State waste discharge requirements. The MOU specifies that the joint issuance of an NPDES permit which incorporates both 301(h) decision and State waste discharge requirements will serve as the State's concurrence. USEPA and the Regional Board will jointly issue the NPDES permit for the City of San Diego.

II. WATER QUALITY OBJECTIVES

A. General Provisions

1. This chapter sets forth limits or levels of water quality characteristics for ocean* waters to ensure the reasonable protection of beneficial uses and the prevention of nuisance. The discharge of waste* shall not cause violation of these objectives.

2. The Water Quality Objectives and Effluent Limitations are defined by a statistical distribution when appropriate. This method recognizes the normally occurring variations in treatment efficiency and sampling and analytical techniques and does not condone poor operating practices.

3. Compliance with the water quality objectives of this chapter shall be determined from samples collected at stations representative of the area within the waste field where initial* dilution is completed.

B. Bacterial Characteristics

1. Water-Contact Standards

   a. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Board, but including all kelp* beds, the following bacterial objectives shall be maintained throughout the water column:

      (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 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.

   b. The "Initial* Dilution Zone" of wastewater outfalls shall be excluded from designation as "kelp* beds" for purposes of bacterial standards, and Regional Boards should recommend extension of such exclusion zone where warranted to the SWRCB (for consideration under Chapter III.H.). 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.

EXHIBIT NO. 5
APPLICATION NO.
CC-10-02
California Ocean Plan

* See Appendix I for definition of terms.

2. Shellfish* Harvesting Standards

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

      (1) 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.

C. Physical Characteristics

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

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

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

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

D. Chemical Characteristics

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

   a. Table B water quality objectives apply to all discharges within the jurisdiction of this Plan.

   b. Table B Water Quality Objectives

* See Appendix I for definition of terms.

TABLE B
WATER QUALITY OBJECTIVES

	Units of Measurement	Limiting Concentrations 6-Month Median	Daily Maximum	Instantaneous Maximum
OBJECTIVES FOR PROTECTION OF MARINE AQUATIC LIFE				
Arsenic	ug/l	8.	32.	80.
Cadmium	ug/l	1.	4.	10.
Chromium (Hexavalent) (see below, a)	ug/l	2.	8.	20.
Copper	ug/l	3.	12.	30.
Lead	ug/l	2.	8.	20.
Mercury	ug/l	0.04	0.16	0.4
Nickel	ug/l	5.	20.	50.
Selenium	ug/l	15.	60.	150.
Silver	ug/l	0.7	2.8	7.
Zinc	ug/l	20.	80.	200.
Cyanide (see below, b)	ug/l	1.	4.	10.
Total Chlorine Residual (For intermittent chlorine sources see below, c)	ug/l	2.	8.	60.
Ammonia (expressed as nitrogen)	ug/l	600.	2400.	6000.
Acute* Toxicity	TUa	N/A	0.3	N/A
Chronic* Toxicity	TUc	N/A	1.	N/A
Phenolic Compounds (non-chlorinated)	ug/l	30.	120.	300.
Chlorinated Phenolics	ug/l	1.	4.	10.
Endosulfan	ug/l	0.009	0.018	0.027
Endrin	ug/l	0.002	0.004	0.006
HCH*	ug/l	0.004	0.008	0.012
Radioactivity	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, 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.			

* See Appendix I for definition of terms.

Table B Continued

Chemical	30-day Average (ug/l) Decimal Notation	Scientific Notation
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH – NONCARCINOGENS		
acrolein	220.	2.2×10^{2}
antimony	1,200.	1.2×10^{3}
bis(2-chloroethoxy) methane	4.4	4.4×10^{0}
bis(2-chloroisopropyl) ether	1,200.	1.2×10^{3}
chlorobenzene	570.	5.7×10^{2}
chromium (III)	190,000.	1.9×10^{5}
di-n-butyl phthalate	3,500.	3.5×10^{3}
dichlorobenzenes*	5,100.	5.1×10^{3}
diethyl phthalate	33,000.	3.3×10^{4}
dimethyl phthalate	820,000.	8.2×10^{5}
4,6-dinitro-2-methylphenol	220.	2.2×10^{2}
2,4-dinitrophenol	4.0	4.0×10^{0}
ethylbenzene	4,100.	4.1×10^{3}
fluoranthene	15.	1.5×10^{1}
hexachlorocyclopentadiene	58.	5.8×10^{1}
nitrobenzene	4.9	4.9×10^{0}
thallium	2.	$2. \times 10^{0}$
toluene	85,000.	8.5×10^{4}
tributyltin	0.0014	1.4×10^{-3}
1,1,1-trichloroethane	540,000.	5.4×10^{5}
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH – CARCINOGENS		
acrylonitrile	0.10	1.0×10^{-1}
aldrin	0.000022	2.2×10^{-5}
benzene	5.9	5.9×10^{0}
benzidine	0.000069	6.9×10^{-5}
beryllium	0.033	3.3×10^{-2}
bis(2-chloroethyl) ether	0.045	4.5×10^{-2}
bis(2-ethylhexyl) phthalate	3.5	3.5×10^{0}
carbon tetrachloride	0.90	9.0×10^{-1}
chlordane*	0.000023	2.3×10^{-5}
chlorodibromomethane	8.6	8.6×10^{0}

* See Appendix I for definition of terms.

Table B Continued

Chemical	30-day Average (ug/l) Decimal Notation	Scientific Notation
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH – CARCINOGENS		
chloroform	130.	1.3×10^{2}
DDT*	0.00017	1.7×10^{-4}
1,4-dichlorobenzene	18.	1.8×10^{1}
3,3'-dichlorobenzidine	0.0081	8.1×10^{-3}
1,2-dichloroethane	28.	2.8×10^{1}
1,1-dichloroethylene	0.9	9×10^{-1}
dichlorobromomethane	6.2	6.2×10^{0}
dichloromethane	450.	4.5×10^{2}
1,3-dichloropropene	8.9	8.9×10^{0}
dieldrin	0.00004	4.0×10^{-5}
2,4-dinitrotoluene	2.6	2.6×10^{0}
1,2-diphenylhydrazine	0.16	1.6×10^{-1}
halomethanes*	130.	1.3×10^{2}
heptachlor	0.00005	5×10^{-5}
heptachlor epoxide	0.00002	2×10^{-5}
hexachlorobenzene	0.00021	2.1×10^{-4}
hexachlorobutadiene	14.	1.4×10^{1}
hexachloroethane	2.5	2.5×10^{0}
isophorone	730.	7.3×10^{2}
N-nitrosodimethylamine	7.3	7.3×10^{0}
N-nitrosodi-N-propylamine	0.38	3.8×10^{-1}
N-nitrosodiphenylamine	2.5	2.5×10^{0}
PAHs*	0.0088	8.8×10^{-3}
PCBs*	0.000019	1.9×10^{-5}
TCDD equivalents*	0.0000000039	3.9×10^{-9}
1,1,2,2-tetrachloroethane	2.3	2.3×10^{0}
tetrachloroethylene	2.0	2.0×10^{0}
toxaphene	0.00021	2.1×10^{-4}
trichloroethylene	27.	2.7×10^{1}
1,1,2-trichloroethane	9.4	9.4×10^{0}
2,4,6-trichlorophenol	0.29	2.9×10^{-1}
vinyl chloride	36.	3.6×10^{1}

* See Appendix I for definition of terms.

Table B Notes:

a) Dischargers may at their option meet this objective as a total chromium objective.

b) If a discharger can demonstrate to the satisfaction of the Regional Board (subject to EPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR PART 136, as revised May 14, 1999.

c) Water quality objectives for total chlorine residual applying to intermittent discharges not exceeding two hours, shall be determined through the use of the following equation:

$$\log y = -0.43 (\log x) + 1.8$$

where: y = the water quality objective (in ug/l) to apply when chlorine is being discharged;
x = the duration of uninterrupted chlorine discharge in minutes.

E. Biological Characteristics

1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded*.

2. The natural taste, odor, and color of fish, shellfish*, or other marine resources used for human consumption shall not be altered.

3. The concentration of organic materials in fish, shellfish* or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

F. Radioactivity

1. Discharge of radioactive waste* shall not degrade* marine life.

* See Appendix I for definition of terms.

III. PROGRAM OF IMPLEMENTATION

A. General Provisions

1. Effective Date

   a. The *Water Quality Control Plan, Ocean Waters of California, California Ocean Plan* was adopted and has been effective since 1972. There have been multiple amendments of the Ocean Plan since its adoption.

   This document includes the most recent amendments of the Ocean Plan as approved by the SWRCB on November 16, 2000. However, amendments in this version of the Ocean Plan do not become effective until approved by the US EPA. Persons using the Ocean Plan prior to US EPA approval of this version should reference the 1997 Ocean Plan. Once approved by the US EPA, this document (the 2001 Ocean Plan) will supercede the 1997 Ocean Plan.

2. General Requirements For Management Of Waste Discharge To The Ocean*

   a. 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.

   b. Waste discharged* to the ocean* must be essentially free of:

      (1) Material that is floatable or will become floatable upon discharge.

      (2) Settleable material or substances that may form sediments which will degrade* benthic communities or other aquatic life.

      (3) Substances which will accumulate to toxic levels in marine waters, sediments or biota.

      (4) Substances that significantly* decrease the natural* light to benthic communities and other marine life.

      (5) Materials that result in aesthetically undesirable discoloration of the ocean* surface.

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

   d. Location of waste* discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that:

      (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 designated 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.

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* See Appendix I for definition of terms.

e. 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.

3. Areas of Special Biological Significance

   a. ASBS* shall be designated by the SWRCB following the procedures provided in Appendix IV. A list of ASBS* is available in Appendix V.

4. Combined Sewer Overflow: Not withstanding any other provisions in this plan, discharges from the City of San Francisco's combined sewer system are subject to the US EPA's Combined Sewer Overflow Policy.

B. Table A Effluent Limitations

TABLE A
EFFLUENT LIMITATIONS

		Limiting Concentrations		
	Unit of Measurement	Monthly (30-day Average)	Weekly (7-day Average)	Maximum at any time
Grease and Oil	mg/l	25.	40.	75.
Suspended Solids			See below +	
Settleable Solids	Ml/l	1.0	1.5	3.0
Turbidity	NTU	75.	100.	225.
PH	Units		Within limit of 6.0 to 9.0 at all times	

Table A Notes:

\+ Suspended Solids: Dischargers shall, as a 30-day average, remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean*, except that the effluent limitation to be met shall not be lower than 60 mg/l. Regional Boards may recommend that the SWRCB (Chapter IIIJ), with the concurrence of the Environmental Protection Agency, adjust the lower effluent concentration limit (the 60 mg/l above) to suit the environmental and effluent characteristics of the discharge. As a further consideration in making such recommendation for adjustment, Regional Boards should evaluate effects on existing and potential water* reclamation projects.

If the lower effluent concentration limit is adjusted, the discharger shall remove 75% of suspended solids from the influent stream at any time the influent concentration exceeds four times such adjusted effluent limit.

1. Table A effluent limitations apply only to publicly owned treatment works and industrial discharges for which Effluent Limitations Guidelines have not been established pursuant to Sections 301, 302, 304, or 306 of the Federal Clean Water Act.

* See Appendix I for definition of terms.

2. Table A effluent limitations shall apply to a discharger's total effluent, of whatever origin (i.e., gross, not net, discharge), except where otherwise specified in this Plan.

3. The SWRCB is authorized to administer and enforce effluent limitations established pursuant to the Federal Clean Water Act. Effluent limitations established under Sections 301, 302, 306, 307, 316, 403, and 405 of the aforementioned Federal Act and administrative procedures pertaining thereto are included in this plan by reference. Compliance with Table A effluent limitations, or Environmental Protection Agency Effluent Limitations Guidelines for industrial discharges, based on Best Practicable Control Technology, shall be the minimum level of treatment acceptable under this plan, and shall define reasonable treatment and waste control technology.

C. Implementation Provisions for Table B

1. Effluent concentrations calculated from Table B water quality objectives shall apply to a discharger's total effluent, of whatever origin (i.e., gross, not net, discharge), except where otherwise specified in this Plan.

2. Effluent limitations shall be imposed in a manner prescribed by the SWRCB such that the concentrations set forth below as water quality objectives shall not be exceeded in the receiving water upon completion of initial* dilution, except that objectives indicated for radioactivity shall apply directly to the undiluted waste* effluent.

3. Calculation of Effluent Limitations

   a. Effluent limitations for water quality objectives listed in Table B, with the exception of acute* toxicity and radioactivity, shall be determined through the use of the following equation:

   Equation 1: $Ce = Co + Dm (Co - Cs)$

   where:

   Ce = the effluent concentration limit, ug/l

   Co = the concentration (water quality objective) to be met at the completion of initial* dilution, ug/l

   Cs = background seawater concentration (see Table C below), ug/l

   Dm = minimum probable initial* dilution expressed as parts seawater per part wastewater.

TABLE C
BACKGROUND SEAWATER CONCENTRATIONS (Cs)

Waste Constituent	Cs (ug/l)
Arsenic	3.
Copper	2.
Mercury	0.0005
Silver	0.16
Zinc	8.

For all other Table B parameters, Cs = 0.

* See Appendix I for definition of terms.

b. Determining a Mixing Zone for the Acute* Toxicity Objective

The mixing zone for the acute* toxicity objective shall be ten percent (10%) of the distance from the edge of the outfall structure to the edge of the chronic mixing zone (zone of initial dilution). There is no vertical limitation on this zone. The effluent limitation for the acute* toxicity objective listed in Table B shall be determined through the use of the following equation:

Equation 2: $Ce = Ca + (0.1)\ Dm\ (Ca)$

where:

Ca = the concentration (water quality objective) to be met at the edge of the acute mixing zone.

Dm = minimum probable initial* dilution expressed as parts seawater per part wastewater (This equation applies only when Dm > 24).

c. Toxicity Testing Requirements based on the Minimum Initial* Dilution Factor for Ocean Waste Discharges

(1) Dischargers shall conduct acute* toxicity testing if the minimum initial* dilution of the effluent is greater than 1,000:1 at the edge of the mixing zone.

(2) Dischargers shall conduct either acute* or chronic* toxicity testing if the minimum initial* dilution ranges from 350:1 to 1,000:1 depending on the specific discharge conditions. The RWQCB shall make this determination.

(3) Dischargers shall conduct chronic* toxicity testing for ocean waste discharges with minimum initial* dilution factors ranging from 100:1 to 350:1. The RWQCBs may require that acute toxicity testing be conducted in addition to chronic as necessary for the protection of beneficial uses of ocean waters.

(4) Dischargers shall conduct chronic toxicity testing if the minimum initial* dilution of the effluent falls below 100:1 at the edge of the mixing zone.

d. For the purpose of this Plan, minimum initial* dilution is the lowest average initial* dilution within any single month of the year. Dilution estimates shall be based on observed waste flow characteristics, observed receiving water density structure, and the assumption that no currents, of sufficient strength to influence the initial* dilution process, flow across the discharge structure.

e. The Executive Director of the SWRCB shall identify standard dilution models for use in determining Dm, and shall assist the Regional Board in evaluating Dm for specific waste discharges. Dischargers may propose alternative methods of calculating Dm, and the Regional Board may accept such methods upon verification of its accuracy and applicability.

* See Appendix I for definition of terms.

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

g. The daily maximum shall apply to flow weighted 24 hour composite samples.

h. The instantaneous maximum shall apply to grab sample determinations.

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

j. Discharge requirements shall also specify effluent limitations in terms of mass emission rate limits utilizing the general formula:

Equation 3: lbs/day = 0.00834 x Ce x Q

where:

Ce = the effluent concentration limit, ug/l

Q = flow rate, million gallons per day (MGD)

k. The six-month median limit on daily mass emissions shall be determined using the six-month median effluent concentration as Ce and the observed flow rate Q in millions of gallons per day. The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as Ce and the observed flow rate Q in millions of gallons per day.

l. Any significant change in waste* flow shall be cause for reevaluating effluent limitations.

4. Minimum* Levels

For each numeric effluent limitation, the Regional Board must select one or more Minimum* Levels (and their associated analytical methods) for inclusion in the permit. The "reported" Minimum* Level is the Minimum* Level (and its associated analytical method) chosen by the discharger for reporting and compliance determination from the Minimum* Levels included in their permit.

a. Selection of Minimum* Levels from Appendix II

The Regional Board must select all Minimum* Levels from Appendix II that are below the effluent limitation. If the effluent limitation is lower than all the Minimum* Levels in Appendix II, the Regional Board must select the lowest Minimum* Level from Appendix II.

* See Appendix I for definition of terms.

b. Deviations from Minimum* Levels in Appendix II

The Regional Board, in consultation with the State Water Board's Quality Assurance Program, must establish a Minimum* Level to be included in the permit in any of the following situations:

1. A pollutant is not listed in Appendix II.
2. The discharger agrees to use a test method that is more sensitive than those described in 40 CFR 136 (revised May 14, 1999).
3. The discharger agrees to use a Minimum* Level lower than those listed in Appendix II.
4. The discharger demonstrates that their calibration standard matrix is sufficiently different from that used to establish the Minimum* Level in Appendix II and proposes an appropriate Minimum* Level for their matrix.
5. A discharger uses an analytical method having a quantification practice that is not consistent with the definition of Minimum* Level (e.g., US EPA methods 1613, 1624, 1625).

5. Use of Minimum* Levels

a. Minimum* Levels in Appendix II represent the lowest quantifiable concentration in a sample based on the proper application of method-specific analytical procedures and the absence of matrix interferences. Minimum* Levels also represent the lowest standard concentration in the calibration curve for a specific analytical technique after the application of appropriate method-specific factors.

Common analytical practices may require different treatment of the sample relative to the calibration standard. Some examples are given below:

Substance or Grouping	Method-Specific Treatment	Most Common Factor
Volatile Organics	No differential treatment	1
Semi-Volatile Organics	Samples concentrated by extraction	1000
Metals	Samples diluted or concentrated	½ , 2 , and 4
Pesticides	Samples concentrated by extraction	100

b. Other factors may be applied to the Minimum* Level depending on the specific sample preparation steps employed. For example, the treatment typically applied when there are matrix effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied during the computation of the reporting limit. Application of such factors will alter the reported Minimum* Level.

c. Dischargers are to instruct their laboratories to establish calibration standards so that the Minimum* Level (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve. In accordance with Section 4b, above, the discharger's laboratory may employ a calibration standard lower than the Minimum* Level in Appendix II.

* See Appendix I for definition of terms.

6. Sample Reporting Protocols

   a. Dischargers must report with each sample result the reported Minimum* Level (selected in accordance with Section 4, above) and the laboratory's current MDL*.

   b. Dischargers must also report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

      (1) Sample results greater than or equal to the reported Minimum* Level must be reported "as measured" by the laboratory (i.e., the measured chemical concentration in the sample).

      (2) Sample results less than the reported Minimum* Level, but greater than or equal to the laboratory's MDL*, must be reported as "Detected, but Not Quantified", or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc.").

      (3) Sample results less than the laboratory's MDL* must be reported as "Not Detected", or ND.

7. Compliance Determination

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

   a. Compliance with Single-Constituent Effluent Limitations

      Dischargers are out of compliance with the effluent limitation if the concentration of the pollutant (see Section 7c, below) in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum* Level.

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

      Dischargers are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

   c. Multiple Sample Data Reduction

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

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* See Appendix I for definition of terms.

d. Powerplants and Heat Exchange Dischargers

Due to the large total volume of powerplant and other heat exchange discharges, special procedures must be applied for determining compliance with Table B objectives on a routine basis. Effluent concentration values (Ce) shall be determined through the use of equation 1 considering the minimal probable initial* dilution of the combined effluent (in-plant waste streams plus cooling water flow). These concentration values shall then be converted to mass emission limitations as indicated in equation 3. The mass emission limits will then serve as requirements applied to all inplant waste* streams taken together which discharge into the cooling water flow, except that limits for total chlorine residual, acute* (if applicable per Section (3)(c)) and chronic* toxicity and instantaneous maximum concentrations in Table B shall apply to, and be measured in, the combined final effluent, as adjusted for dilution with ocean water. The Table B objective for radioactivity shall apply to the undiluted combined final effluent.

8. Pollutant Minimization Program

a. Pollutant Minimization Program Goal

The goal of the Pollutant Minimization Program is to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures, in order to maintain the effluent concentration at or below the effluent limitation.

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

b. Determining the need for a Pollutant Minimization Program

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

   (a) The calculated effluent limitation is less than the reported Minimum* Level

   (b) The concentration of the pollutant is reported as DNQ

   (c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

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

   (a) The calculated effluent limitation is less than the Method Detection Limit*.

   (b) The concentration of the pollutant is reported as ND.

   (c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

* See Appendix I for definition of terms.

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

1. health advisories for fish consumption,
2. presence of whole effluent toxicity,
3. results of benthic or aquatic organism tissue sampling,
4. sample results from analytical methods more sensitive than methods included in the permit (in accordance with Section 4b, above).
5. the concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL

d. Elements of a Pollutant Minimization Program

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

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

9. Toxicity Reduction Requirements

a. If a discharge consistently exceeds an effluent limitation based on a toxicity objective in Table B, a toxicity reduction evaluation (TRE) is required. The TRE shall include all reasonable steps to identify the source of toxicity. Once the source(s) of toxicity is identified, the discharger shall take all reasonable steps necessary to reduce toxicity to the required level.

* See Appendix I for definition of terms.

b. The following shall be incorporated into waste discharge requirements: (1) a requirement to conduct a TRE if the discharge consistently exceeds its toxicity effluent limitation, and (2) a provision requiring a discharger to take all reasonable steps to reduce toxicity once the source of toxicity is identified.

D. Implementation Provisions for Bacterial Assessment and Remedial Action Requirements

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

   a. Measurement of enterococcus density shall be conducted at all stations where measurement of total and fecal coliforms are required. In addition to the requirements of Chapter II.B.I, if a shore station consistently exceeds a coliform objective or exceeds a geometric mean enterococcus density of 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a six-month period, the Regional Board shall require the appropriate agency to conduct a survey to determine if that agency's discharge is the source of the contamination. The geometric mean shall be a moving average based on no less than five samples per month, spaced evenly over the time interval. When a sanitary survey identifies a controllable source of indicator organisms associated with a discharge of sewage, the Regional Board shall take action to control the source.

   b. Waste discharge requirements shall require the discharger to conduct sanitary surveys when so directed by the Regional Board. Waste discharge requirements shall contain provisions requiring the discharger to control any controllable discharges identified in a sanitary survey.

E. Implementation Provisions For Areas* of Special Biological Significance (ASBS)

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

2. Regional Boards may approve waste discharge requirements or recommend certification for limited-term (i.e. weeks or months) activities in ASBS*. Limited-term activities include, but are not limited to, activities such as maintenance/repair of existing boat facilities, restoration of sea walls, repair of existing storm water pipes, and replacement/repair of existing bridges. Limited-term activities may result in temporary and short-term changes in existing water quality. Water quality degradation shall be limited to the shortest possible time. The activities must not permanently degrade water quality or result in water quality lower than that necessary to protect existing uses, and all practical means of minimizing such degradation shall be implemented.

* See Appendix I for definition of terms.

F. Revision of Waste* Discharge Requirements

1. The Regional Board shall revise the waste* discharge requirements for existing* discharges as necessary to achieve compliance with this Plan and shall also establish a time schedule for such compliance.

2. The Regional Boards may establish more restrictive water quality objectives and effluent limitations than those set forth in this Plan as necessary for the protection of beneficial uses of ocean* waters.

3. Regional Boards may impose alternative less restrictive provisions than those contained within Table B of the Plan, provided an applicant can demonstrate that:

   a. Reasonable control technologies (including source control, material substitution, treatment and dispersion) will not provide for complete compliance; or

   b. Any less stringent provisions would encourage water* reclamation;

4. Provided further that:

   a. Any alternative water quality objectives shall be below the conservative estimate of chronic* toxicity, as given in Table D, and such alternative will provide for adequate protection of the marine environment;

   b. A receiving water quality toxicity objective of 1 TUc is not exceeded; and

   c. The State Board grants an exception (Chapter III. I.) to the Table B limits as established in the Regional Board findings and alternative limits.

TABLE D
CONSERVATIVE ESTIMATES OF CHRONIC TOXICITY

Constituent	Estimate of Chronic Toxicity (ug/l)
Arsenic	19.
Cadmium	8.
Hexavalent Chromium	18.
Copper	5.
Lead	22.
Mercury	0.4
Nickel	48.
Silver	3.
Zinc	51.
Cyanide	10.
Total Chlorine Residual	10.0
Ammonia	4000.0
Phenolic Compounds (non-chlorinated)	a) (see below)
Chlorinated Phenolics	a)
Chlorinated Pesticides and PCB's	b)

* See Appendix I for definition of terms.

Table D Notes:

a) There are insufficient data for phenolics to estimate chronic toxicity levels. Requests for modification of water quality objectives for these waste* constituents must be supported by chronic toxicity data for representative sensitive species. In such cases, applicants seeking modification of water quality objectives should consult the Regional Water Quality Control Board to determine the species and test conditions necessary to evaluate chronic effects.

b) Limitations on chlorinated pesticides and PCB's shall not be modified so that the total of these compounds is increased above the objectives in Table B.

G. Monitoring Program

1. The Regional Boards shall require dischargers to conduct self-monitoring programs and submit reports necessary to determine compliance with the waste* discharge requirements, and may require dischargers to contract with agencies or persons acceptable to the Regional Board to provide monitoring reports. Monitoring provisions contained in waste discharge requirements shall be in accordance with the Monitoring Procedures provided in Appendix III.

2. Where the Regional Board is satisfied that any substance(s) of Table B will not significantly occur in a discharger's effluent, the Regional Board may elect not to require monitoring for such substance(s), provided the discharger submits periodic certification that such substance(s) is not added to the waste* stream, and that no change has occurred in activities that could cause such substance(s) to be present in the waste* stream. Such election does not relieve the discharger from the requirement to meet the objectives of Table B.

3. The Regional Board may require monitoring of bioaccumulation of toxicants in the discharge zone. Organisms and techniques for such monitoring shall be chosen by the Regional Board on the basis of demonstrated value in waste* discharge monitoring.

H. Discharge Prohibitions

1. Hazardous Substances

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

2. Areas Designated for Special Water Quality Protection

   a. Waste* shall not be discharged to designated Areas* of Special Biological Significance except as provided in Chapter III E. Implementation Provisions For Areas of Special Biological Significance.

3. Sludge

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

---

* See Appendix I for definition of terms.

OFFICE OF
THE MAYOR

TELEPHONE
(619) 441-1788

CITY OF EL CAJON

RECEIVED
MAR 11 2002
CALIFORNIA
COASTAL COMMISSION

March 5, 2002

California Coastal Commission
45 Fremont, Suite 2000
San Francisco, CA 94105-2219

Re: Waiver Renewal to the City of San Diego for Secondary Treatment

Ladies and Gentlemen:

The City of El Cajon supports the adoption of Tentative Order No. R9-2002-0025 (NPDES Permit No. CA0107409) granting the City of San Diego renewal of the waiver from secondary treatment at the Point Loma Wastewater Treatment Plant.

This recommendation is based on the available scientific evidence indicating that the current system of treatment performed at the treatment plant causes no environmental harm to the ocean or shoreline environments. The evaluation by the EPA found that the current system fully protects the environment and the public health. The proposed NPDES permit by the EPA provides full protection of the environment and the public health.

If the waiver is not granted it will be necessary to significantly raise the sewer fees for the constituents of the City of El Cajon to pay for the construction of secondary treatment facilities at Point Loma. Evidence has shown secondary treatment is unnecessary and will not provide any further protection to the environment and public health. The financial burden on the citizens of the City of El Cajon and all the ratepayers of the Participating Agencies of the Metropolitan Sewage System would be unnecessary and significant.

Thank you for your consideration.

Yours truly,

Mark Lewis
Mayor

ML:er

EXHIBIT NO. 6
APPLICATION NO.
CC-10-02

200 EAST MAIN STREET • EL CAJON, CALIFORNIA 92020

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STATE OF CALIFORNIA -- THE RESOURCES AGENCY GRAY DAVIS, *Governor*

CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
E AND TDD (415) 904-5200

RECORD PACKET COPY

M 11a

Addendum

Date: **March 20, 2002**

To: **Commissioners and Interested Persons**

From: **Peter Douglas, Executive Director**
Mark Delaplaine, Federal Consistency Staff

Subject: **Consistency Certification CC-10-02, City of San Diego Secondary Treatment Waiver Renewal**

Attached is written testimony submitted to the Regional Water Quality Control Board (RWQCB) on the above referenced secondary treatment waiver renewal. The RWQCB held an initial public hearing on March 13, 2002. When the Commission staff receives a transcript of the public comments made at the hearing, an additional addendum will be prepared containing this transcript.

Attachment

Written testimony received by the California Regional Water Quality Control Board, San Diego Region, for Tentative Order No. R9-2002-0025 and draft NPDES Permit No. CA0107409.

JM 2/28
Brian K
pls include in material sent to Bd members for hearing on 13 Mar.

CITY OF
CHULA VISTA
OFFICE OF THE CITY COUNCIL

February 25, 2002

Mr. John Minan, Chairman
San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
FAX 858-571-6972

RE: March 13 Agenda, Item #7. Tentative Order No. R9-2002-0025.

Dear Chairman Minan,

The City of Chula Vista joins the Metropolitan Wastewater Commission in supporting the tentative order referenced above. This order would renew the waiver granted to the San Diego region, allowing the Point Loma wastewater treatment facility to operate at its current level of outfall treatment.

Scientific evidence, obtained through testing of the ocean waters near the Point Loma Outfall, gives no indication that plant effluent is damaging the ocean environment. An increase to secondary treatment would, however, greatly amplify the cost of wastewater disposal to the citizens of Chula Vista and the rest of the San Diego region while not benefiting the ocean significantly. Residents and business owners, already struggling with the effects of deregulation of the electric utility industry as well as a nation-wide recession, would face staggering and unnecessary cost increases of 150 - 300%.

On behalf of the Chula Vista City Council, I respectfully request your support of Tentative Order No. R9-2002-0025 when it comes before your Board on March 13, 2002.

Sincerely,

Shirley Horton

Shirley Horton, Mayor

cc:

- Jay Goldby; Chair, Metropolitan Wastewater Commission
- Chula Vista City Council

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OFFICE OF
THE MAYOR

TELEPHONE
(619) 441-1788

CITY OF EL CAJON

March 5, 2002

California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Re: Waiver Renewal to the City of San Diego for Secondary Treatment

Ladies and Gentlemen:

The City of El Cajon supports the adoption of Tentative Order No. R9-2002-0025 (NPDES Permit No. CA0107409) granting the City of San Diego renewal of the waiver from secondary treatment at the Point Loma Wastewater Treatment Plant.

This recommendation is based on the available scientific evidence indicating that the current system of treatment performed at the treatment plant causes no environmental harm to the ocean or shoreline environments. The evaluation by the EPA found that the current system fully protects the environment and the public health. The proposed NPDES permit by the EPA provides full protection of the environment and the public health.

If the waiver is not granted it will be necessary to significantly raise the sewer fees for the constituents of the City of El Cajon to pay for the construction of secondary treatment facilities at Point Loma. Evidence has shown secondary treatment is unnecessary and will not provide any further protection to the environment and public health. The financial burden on the citizens of the City of El Cajon and all the ratepayers of the Participating Agencies of the Metropolitan Sewage System would be unnecessary and significant.

Thank you for your consideration.

Yours truly,

Mark Lewis
Mayor

ML:er

SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD
2002 MAR -7 1:07

CITY
COUNCIL

CITY OF EL CAJON

TELEPHONE
(619) 441-1788

February 27, 2002

California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Re: Waiver Renewal to the City of San Diego for Secondary Treatment

The City of El Cajon supports the adoption of Tentative Order No. R9-2002-0025 (NPDES Permit No. CA0107409) granting the City of San Diego renewal of the waiver from secondary treatment at the Point Loma Wastewater Treatment Plant.

This recommendation is based on the available scientific evidence indicating that the current system of treatment performed at the treatment plant causes no environmental harm to the ocean or shoreline environments. The evaluation by the EPA found that the current system fully protects the environment and the public health. The proposed NPDES permit by the EPA provides full protection of the environment and the public health.

If the waiver is not granted it will be necessary to significantly raise the sewer fees for the constituents of the City of El Cajon to pay for the construction of secondary treatment facilities at Point Loma. Evidence has shown secondary treatment is unnecessary and will not provide any further protection to the environment and public health. The financial burden on the citizens of the City of El Cajon and all the ratepayers of the Participating Agencies of the Metropolitan Sewage System would be unnecessary and significant.

Thank you for your consideration,

Richard Ramos
Councilmember and Representative to the
Metro Commission and Metro Wastewater
Joint Powers Authority

Bill Garrett
City Manager

2002 MAR -5 P 1:14

SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD

RR/BG:th

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DH

City of Imperial Beach, California

OFFICE OF THE CITY MANAGER

March 11, 2002

David Hansen
California Regional Water Quality Control Board
San Diego Region (WTR-5)
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Re: Support for EPA Tentative Order for the NPDES Permit for the City of San Diego's Point Loma Wastewater Treatment Plant

Dear Mr. Hansen,

On behalf of the Mayor and City Council of the City of Imperial Beach, I want to notify you of their formal action to SUPPORT the Environmental Protection Agency's tentative decision to allow continued discharge from the City of San Diego Point Loma Wastewater Treatment Plant (Order No. R-92002-0025, NPDES Permit No. CA0107409).

In conjunction with this letter of support, the Mayor and City Council do request that any and all efforts be made to improve compliance within the five year term of the tentative permit; and any and all efforts are directed towards continued and enhanced monitoring and study of potential environmental impacts. Periodic monitoring and study results should be provided to all commenting and interested parties.

Please call 619-423-0314 if you have any questions.

Sincerely,

Barry Johnson
City Manager

c: Augie Caires, Padre Dam, Metro Commission
Robin Stuber, EPA

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD
2002 MAR 14 P 12:55

825 Imperial Beach Boulevard • Imperial Beach, California 91932 • (619) 423-8303 • Fax (619) 429-9770

THE CITY OF SAN DIEGO

March 12, 2002

SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD
2002 MAR 12 P 3:27

Mr. David Hanson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Dear Mr. Hanson:

The City of San Diego wishes to provide the following written comments in regard to tentative Order No. R9-2002-0025, draft NPDES permit No. CA0107409 and tentative Monitoring and Reporting Program No. R9-2002-0025 for the E.W. Blom Point Loma Metropolitan Wastewater Treatment Plant. The individual comments are numbered below and are divided into two sections - typographical errors and substantive comments:

TYPOGRAPHICAL ERRORS

1) **Tentative Order, page 5, item number 8.**
This paragraph states that the South Bay Water Reclamation Plant began operation in December 2001. It has not yet begun operation, but we expect it will begin operation in March of 2002. Additionally, the effluent from this plant will discharge approximately 3.5 miles offshore through the South Bay Ocean Outfall, not one mile as is written here.

2) **Tentative Order, page 8, item number 16.**
The first sentence is difficult to understand as written. Suggested rewrite, "The City has implemented a reclamation program with a system capacity of 45 MGD of reclaimed wastewater with the addition of the South Bay Reclamation Plant. This meets the requirement for reclaimed water capacity of 45 MGD prior to the January 1, 2010 deadline."

3) **Tentative Order, check for consistency**
The Point Loma Wastewater Treatment Plant is abbreviated as both PLMWTP and PTWWTP. The first page states that it should be abbreviated as PLMWTP

4) **Tentative MRP, page 4, item 18 (line 15)**
Minor format correction regarding the apostrophe in "discharger's" (it's currently a box).

DIVERSITY
BRINGS US ALL TOGETHER

Environmental Monitoring and Technical Services Division • Metropolitan Wastewater
4918 North Harbor Drive, Suite 201 • San Diego, CA 92106-2359
Tel (619) 758-2300 Fax (619) 758-2309

5) **Tentative MRP, page 6, point 22, reporting schedule table**
Minor format correction under Receiving Waters Monitoring Report needs a space between "monitoring" and "report."

6) **Tentative MRP, Receiving Environment Monitoring, Receiving Water Sampling and Analyses Requirements, page 17, paragraph 3 (line 2)**
Delete "shall be monitored" following the parenthetical list of kelp stations – it's redundant to what is said prior to the parentheses.

7) **Tentative MRP, Receiving Environment Monitoring, Receiving Water Sampling and Analyses Requirements, page 17, paragraph 4 (line 3)**
Missing word – insert "contour" after 45-meter.

8) **Tentative MRP, Receiving Environment Monitoring, Receiving Water Sampling and Analyses Requirements, page 17, paragraph 4 (line 4)**
Change "200-foot contour" to "60-meter contour" for consistent use of metric terminology.

9) **Tentative MRP, Receiving Environment Monitoring, Benthic Monitoring Requirements, Fish Monitoring, page 21, paragraph 2 (line 1)**
Change "station" to "stations."

10) **Tentative MRP, last two pages, Briefing Papers for OWOW Review**
Perhaps these were inadvertently included?

11) **Fact Sheet, EFFLUENT LIMITATIONS, page 9, second paragraph**
The flow rate of 205 MGD should be 195 MGD.

SUBSTANTIVE COMMENTS:

1) **Tentative Order, section B.1.c (pg. 17) and section C.3.b (pg. 30)**
For consistency, the Order and the MRP requirement for Chromium throughout both documents should have the same footnote attached. This footnote states that "The discharger may, at its option, meet this requirement using a total chromium value." These two sections do not reference the footnote.

2) **Tentative Order, Section C.3.a, page 28
The values in the Water Quality Objectives table have been changed to reflect the new California Ocean Plan (COP). The silver values, however, did not change. The values in the new COP are 0.45, 1.8 and 4.5. Is it simply an oversight that these numbers were not changed?

3) **Tentative Order, Pretreatment Requirements, page 34, first paragraph.
The reporting deadline for the Annual Pretreatment Report was extended from March 1 to April 30. We need to extend it only to April 1. This would be consistent with other reporting deadlines in the Order.

4) **Tentative Order, Section F.9, Minimum Levels, page 42**
We request time to propose and implement an action plan for dealing with the technical problems and inconsistencies that arise when applying the new Ocean Plan standards for minimum levels to the samples required in this Order and MRP. We will need to interface closely with the RWQCB and the USEPA to develop methodologies and work through practical issues that arise. We request one year to implement the minimum level requirements.

5) **Tentative Order, Compliance Determination, page 46, item 13.**
We suggest adding Mysidopsis bahia to the list of test species and methods in order to have more than one species for which acute toxicity tests can be conducted.

The screening requirement for chronic toxicity states that the initial screening shall take place on the first three suites of tests. The language following that with respect to screening is ambiguous. We suggest in subsequent years that screening be reduced in frequency to once every other year and that subsequent screening periods may be limited to 1 month if those results are the same as the previous 3-month screening. Given that the acute toxicity requirement is semi-annual testing, we suggest the screening requirement for acute tests be limited to three tests at the beginning of the permit cycle, and that it not be required again for this permit.

6) **Tentative MRP. Section A.20, page 5**
We request to change the reporting frequency of the connection information from monthly to either quarterly or annually. Monthly reporting of that information is not particularly meaningful.

7) **Tentative MRP, page 6, item 22, reporting schedule table**
The kelp report, a combined effort of all ocean dischargers in Region 9, did not have a reporting deadline in previous permits. This report has historically been presented to the RWQCB as a group effort in October. Therefore, we would like the reporting deadline for this report extended to October 1, allowing for input from all of the participating agencies before it is submitted.

8) **Tentative MRP, page 6, item 22, reporting schedule table**
The reporting schedule listed does not match the reports or the dates that are required in the text portion of the MRP. The following change is suggested to maintain consistency with other portions of the MRP and the Tentative Order and the requested changes to reporting dates noted above:

REPORTS	Report Period	Report Due
MONTHLY REPORTS Influent and Effluent Solids Removal/Disposal Receiving Water Quality Report Tijuana Cross-Border Emergency Connection (when flowing)	Monthly	By the 1st day of the 2nd following month (e.g., March 1 for January)
QUARTERLY REPORTS Sludge Analysis Benthic Infauna Trawl Ocean Sediments	 January - March April - June July - September October - December	 June 1 September 1 December 1 March 1
SEMI-ANNUAL REPORTS Pretreatment Report	 January - June	 September 1
ANNUAL REPORTS Pretreatment Report (Provision A.19) Sludge Analysis QA Report Flow Measurement Outfall Inspection Receiving Waters Monitoring Report Kelp Report	 January - December	 April 1 April 1 March 30 July 1 July 1 July 1 October 1

9) **Tentative MRP, Receiving Environment Monitoring, Offshore Water Quality Stations, page 13 (table)**

Because of increased accuracy of GPS locations, small latitude/longitude corrections are needed for stations C4, C5 and C6 in the station location table. We have also included more accurate descriptions of these station locations. The updated coordinates and descriptions for these stations are in **BOLD** type:

Station	Depth (m)	N. Latitude	W. Longitude	Descriptor
C4	9	32° 39.95′	117° 14.98′	**Approx. 660 m (2200 ft) west of the Point Loma Lighthouse and 1600 m south of the treatment plant outfall pipe**
C5	9	32° 40.75′	117° 15.40′	**Approx. 800 m (2600 ft) seaward of the Point Loma treatment plant immediately south of the outfall pipe**
C6	9	32° 41.62′	117° 15.68′	**Approx. 890 m (2900 ft) seaward and perpendicular to a point 1260 m north of the outfall pipe**

10) **Tentative MRP, Receiving Environment Monitoring, Shore Stations, page 14 (table)**
We request that you drop shore stations D1, D2 and D3 from the shoreline monitoring program. These three stations are replicated in the International Wastewater Treatment Plant Monitoring and Reporting Program No. 96-50 as stations S12, S8 and S9. Those stations are sampled weekly as part of the monitoring required for the South Bay Ocean Outfall. Their inclusion in this permit amounts to double reporting of identical data.

11) **Tentative MRP, Receiving Environment Monitoring, Shore Stations, page 14 (table)**
Because of increased accuracy of GPS locations, a small longitude correction is needed for station D6. The updated coordinates for this station are in **BOLD** type:

Station	N. Latitude	W. Longitude	Description
D6	32° 41.92′	117° 15.**33**′	Approx. 1260 m (4150 ft) north of the outfall pipe at NOSC seawater pump station

12) **Tentative MRP, Receiving Environment Monitoring, Fish Trawl and Rig Fish Stations, pages 14-15 (table)**
Because of increased accuracy of GPS locations, small depth and latitude/longitude corrections are needed for several stations. The updated coordinates and descriptions for these stations are in **BOLD** type:

Station	Depth (m)	N. Latitude	W. Longitude
SD1	**60**	32° 46.40′	117° 18.60′
SD3	**60**	32° 41.76′	117° 17.30′
SD6	**60**	32° 39.47′	117° 16.85′
SD11	90	32° 40.**73**′	117° 19.**36**′
SD12	100	32° 40.**65**′	117° 19.**81**′

13) **Tentative MRP, Section D.2, page 16
We request to drop the oil and grease analysis for receiving waters. The methodology for this analysis has recently been restricted by the EPA, disallowing the infrared spectrographic method because of the freon extraction process that is required. The gravimetric method will have to be employed on future samples. This method is much less sensitive and will produce even less meaningful results than we have historically collected. The usefulness of these data using the spectrographic method was negligible. The loss of sensitivity with the gravimetric method will provide no useful information.

If you have questions or need more information about any of these requests, please contact myself or Lori Vereker, Assistant Deputy Director, at 758-2300.

Sincerely,

Alan C. Langworthy
Deputy Metropolitan Wastewater Director

LAV:lv

cc: Scott Tulloch
Lori Vereker
File

LESLIE E. DEVANEY
ANITA M. NOONE
LESLIE J. GIRARD
SUSAN M. HEATH
GAEL B. STRACK
ASSISTANT CITY ATTORNEYS

TED BROMFIELD,
SENIOR DEPUTY CITY ATTORNEY

OFFICE OF
THE CITY ATTORNEY
CITY OF SAN DIEGO

Casey Gwinn
CITY ATTORNEY

CIVIL DIVISION
1200 THIRD AVENUE, SUITE 1100
SAN DIEGO, CALIFORNIA 92101-4100
TELEPHONE (619) 533-5800
FAX (619) 533-5856

March 12, 2002

U.S. Environmental Protection Agency
Attention: Ms. Robyn Stuber
WTR-5, Region IX
75 Hawthorn Street
San Francisco, CA 94105-3901
Via Facsimile: (415) 744-1041

California Regional Water Quality
Control Board, San Diego Region
Attention: Mr. David Hanson
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340
Via Facsimile: (858) 571-6972

Dear Ms. Stuber and Mr. Hanson:

City of San Diego's Comments on
Tentative Order No. R9-2002-0025
NPDES Permit No. CA 0107409

This letter is a portion of the written comments of the City of San Diego ("City") regarding Tentative Order No. R9-2002-0025 (NPDES Permit No. CA0107409) for the discharge of treated wastewater from the E.W. Blom Point Loma Metropolitan Wastewater Treatment Plant, as issued by the California Regional Water Quality Control Board, San Diego Region ("Regional Board"), and the Region IX Environmental Protection Agency ("EPA") on February 11, 2002 ("Draft Permit"). The City very much appreciates the opportunity to provide these comments. These written comments will be supplemented by the oral comments that City staff will provide at the public hearing, currently scheduled for Wednesday, March 13, 2002.

In general, the Draft Permit is consistent with the City's application, and the City is very pleased with the limits included in the Draft Permit. The City does not object to compliance with the current limits.

It appears, however, that EPA has relied upon the Ocean Pollution Reduction Act of 1994, 33 U.S.C. § 1311(j)(5) ("OPRA") as authority for the Draft Permit. In the Fact Sheet supporting the Draft Permit, for example, EPA specifically relies on "Sections 301(h) and (j)(5) of the CWA." Fact Sheet at 6 ("Basis for Requirements"). Section 301(j)(5) of the Clean Water Act ("CWA") is the codified version of OPRA.

OPRA is inapplicable to the Draft Permit, and EPA may not rely upon OPRA for authority for the Draft Permit. OPRA currently has no legal effect whatsoever. It served its

purpose when it provided the City with a limited, one-time reopener of the original deadline under which city waste treatment facilities could apply for waivers from secondary treatment requirements. In order to explain this issue, it is necessary to briefly review some of the history of OPRA and its application to the Point Loma discharge.

History of OPRA and its Application to the Point Loma Discharge

Pursuant to Section 301(h) of the CWA, EPA may issue modified secondary treatment standards ("waivers") for certain ocean discharges by publicly owned treatment works ("POTWs"). The law originally required that waiver applications be filed by December 29, 1982, or in conformance with EPA regulations.1

On August 31, 1979, the City submitted an application to EPA for a Section 301(h) waiver for the Point Loma Wastewater Treatment Plant. EPA initially granted the waiver, but later reversed its decision and denied the request.

In 1988, EPA filed a claim entitled *United States of America, et al. v. City of San Diego*, Case No. CV-88-1101-B, against the City in an attempt to require the City to implement secondary treatment at Point Loma. The District Court, however, twice held that the discharge of wastewater from the deep ocean outfall at Point Loma did not adversely impair the marine environment, and that implementing secondary treatment standards at Point Loma constituted "wasteful overtreatment." *United States v. City of San Diego*, 1994 WL 521216, 38 ERC 1718, slip op. at *5-*6 (S.D. Cal. March 31, 1994); *United States v. City of San Diego*, 1991 WL 163747, 21 Env.L.Rep. 21,223 (S.D. Cal. Apr. 18, 1991).

On October 31, 1994, Congress enacted OPRA. The bill was passed with very little debate. *See* 103 Cong. Rec. H10944 (Oct. 5, 1994). OPRA provided the City with a limited one-time, 180-day window within which to apply for a Section 301(h) waiver. OPRA also imposed several conditions on the City's ability to file its initial application. As amended by OPRA, Section 301(j)(5) of the CWA provides in relevant part:

(5) Extension Of Application Deadline

(A) In general

In the 180-day period beginning on October 31, 1994, the city of San Diego, California, may apply for a modification pursuant to subsection (h) of this section of the requirements of subsection (b)(1)(B) of this section with respect to biological oxygen demand and total suspended solids in the effluent discharge into marine waters.

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1 The regulations promulgated under Section 301(h) are applicable to the vast majority of cities in the United States. *See* 40 C.F.R Subpart G, §§ 125.56, *et seq.*

(B) Application

An application under this paragraph shall include a commitment by the applicant to implement a waste water reclamation program that, at a minimum, will—

(i) achieve a system capacity of 45,000,000 gallons of reclaimed waste water per day by January 1, 2010; and

(ii) result in a reduction in the quantity of suspended solids discharged by the applicant into the marine environment during the period of the modification.

(C) Additional Conditions

The Administrator may not grant a modification pursuant to an application submitted under this paragraph unless the Administrator determines that such modification will result in removal of not less than 58 percent of the biological oxygen demand (on an annual average) and not less than 80 percent of total suspended solids (on a monthly average) in the discharge to which the application applies.

These conditions are collectively referred to hereafter as the "OPRA Conditions."

The City submitted its waiver application within the OPRA Conditions, and was granted the requested permit, with waiver, in November of 1995. Until 1999, the City believed that future permit applications would be considered under the normal Section 301(h) regulations, and not OPRA. This made perfect sense: the City had missed its original deadline for application under OPRA, and had been penalized with five years under an exceptionally strict statute in exchange for the reopener of the deadline. There was no indication that EPA would consider OPRA a permanent statute that imposes extraordinary limits on the City in perpetuity.

In 1999, the City learned that EPA was considering whether to apply the OPRA Conditions to the City's future permit applications. On December 13, 1999, the Mayor of the City, Susan Golding, requested EPA's formal position on this issue.

On February 17, 2000, EPA Regional Administrator Felicia Marcus responded by stating EPA's preliminary position that the City would be required to demonstrate compliance with the OPRA Conditions as a condition to all future permits. Letter from Felicia Marcus to Mayor Susan Golding (Feb. 17, 2000) at 1. In her letter, Ms. Marcus indicated that EPA's decision was not final, and that EPA would keep an open mind as to the applicability of OPRA to future discharges. *Id.*

In direct response to the issue of continuing applicability, the author of OPRA, Congressman Bob Filner, wrote to then EPA Administrator Browner on February 18, 2000, to "clarify the purpose, meaning, and intended effect of H.R. 5176 (OPRA)." Letter from Rep. Filner of Feb. 18, 2000 ("Filner Letter") at 1. The congressman quoted his and a colleague's remarks on the floor of the House and concluded:

> As the language of the bill and these statements indicate, H.R. 5176 was prepared, introduced and passed simply to give the City of San Diego a method to reapply, to receive its 301(h) waiver application. The five conditions in the bill were designed to demonstrate the City's commitment to environmental protection and confirm the City's commitment to water reclamation, a valuable source of water in the water-scarce area of Southern California. Once these conditions were demonstrated and completed, *my intent was to have all subsequent 301(h) waiver applications evaluated solely under the prevailing conditions of the Clean Water Act, since in so doing, all public dischargers would be evaluated under the same criteria applied to other cities and provided for in the Clean Water Act.* To force the City of San Diego to duplicate these conditions in every subsequent application was not the intent nor the purpose of H.R. 5176.

Filner Letter at 1-2 (emphasis in original).

On March 2, 2000, the City filed a complaint against EPA on the grounds that OPRA did not apply to the City's discharge from the Point Loma facility after the initial application. EPA defended the suit on the grounds that EPA had not yet reached a final decision. On March 13, 2001, the Ninth Circuit Court of Appeals confirmed that EPA's decision was not final. *City of San Diego v. Whitman*, 242 F. 3d 1097, 1102 (9th Cir. 2001). The City's lawsuit was therefore dismissed, *solely* on the grounds that EPA had not made a final decision, and therefore that the matter was not ripe for appeal.

Effect of Perpetual Application of OPRA

EPA's interpretation of OPRA would have a disastrous effect on the City's wastewater treatment program. If OPRA applies perpetually, as EPA argues it should, the City would be forced, ultimately, to attain secondary treatment standards to meet the conditions. Compliance would require early construction of at least one additional wastewater treatment facility, at a minimum estimated cost of $366 million, and increases in requested planning costs and site acquisition costs. These costs would be financed by unknown increases in sewer rates paid by the citizens of the City. The City would also be forced to retire and replace a minimum of 25 percent of its existing advanced primary facilities to make room for secondary treatment facilities. The improvements to Point Loma's state of the art advanced primary facilities are currently valued at $1.1 billion. Imposition of OPRA would make much of this work obsolete. All estimates show a significant reduction in capacity if Point Loma must be converted to secondary treatment

As discussed above, the City has demonstrated that these costs are unnecessary. The unusual oceanography, deep discharge, and enormous mixing zones near the City make secondary treatment unnecessary for the discharge from Point Loma. As discussed above, after hearing the expert testimony presented by the City and EPA on this point, a federal District Court twice held secondary treatment to be "wasteful overtreatment" if applied at Point Loma.

OPRA Only Applied During The Initial Permit Period

The only dispute between the City and EPA is a simple matter of statutory construction. The City believes that OPRA was intended to act as a one-time reopener, and that for permit applications filed thereafter, the City would act under the CWA Section 301(h) regulations, as do all other cities. The EPA's initial and nonfinal belief was that OPRA applies in perpetuity, permanently subjecting the City to standards more strict than any other city regulated by Section 301(h).

In determining whether the agency's interpretation is based on a permissible construction of the statute, the proper approach to is to begin with the express language of the statute. *Citizens Action League v. Kizer*, 887 F. 2d 1003, 1006 (9th Cir. 1989) ("In construing a statute, we look first to its plain meaning.") Where, as here, the language of the statute is plain and unambiguous, resort to legislative history is unnecessary. *Wintun Indians v. Wilson*, 64 F. 3d 1250, 1257 (9th Cir. 1994). If the statute is ambiguous, legislative history is an appropriate source of guidance as to the proper interpretation of a law. *Id.*

OPRA expressly applies only to EPA's initial approval of the City's 1995 application. 33 U.S.C. § 1311(j)(5). Nothing in OPRA provides EPA with any authority to promulgate rules and/or policies for the permanent, perpetual enforcement of OPRA. The plain language of the statute clearly limits its application to the City's 1995 application.

At the outset, one need only look to the title of OPRA to discern its limited temporal application. The title of OPRA is "*Extension of Application Deadline*," plain and simple. There is no dispute that the "Deadline" referred to in the title is the original December 29, 1982 date in the Clean Water Act for the submission of Section 301(h) waiver applications. 33 U.S.C. 1311(j)(1)(A). There is no suggestion in the title that OPRA was intended to do anything other than reopen the application period.

The text of OPRA is consistent with its title. Indeed, virtually every section of OPRA is limited in scope to the one and only permit application that was authorized by the statute. For example, Section (A) of OPRA permits the City to *apply* for a permit within the 180 days following October 31, 1994. 33 U.S.C. § 1311(j)(5)(A). Said another way, OPRA granted the City a limited window within which it would apply for a Section 301(h) waiver application, and that window closed by a date certain, April 29, 1995. EPA was then given in Section D of OPRA only one year within which it must announce a preliminary decision on the application that was authorized by OPRA. 33 U.S.C. § 1311(j)(5)(D). There are *no* other provisions in OPRA that refer to or otherwise govern any additional applications or, for that matter, any EPA review of any subsequent application.

The language of the OPRA Conditions is similarly limited. Sections (B) and (C) of OPRA establish the threshold conditions that must appear in the application. 33 U.S.C. §§ 1311(j)(5)(B), (C). The opening sentence of Section (B) makes clear that its two conditions (reclamation capacity and solids reduction) only apply to the "application under this paragraph," which, of course, is the application that must be filed no later than April 29, 1995 that is referred

to in Section (5)(A) of OPRA. The same is true with respect to Section (C), which limits the BOD condition to "an application submitted under this paragraph." Here again, the application referred to in this Section is the lone application authorized by OPRA. Simply put, the use of the singular article "an" when referring to "*an* application" in each of these Sections demonstrates that OPRA was only to be applied once. Even EPA concedes that OPRA does not contain any reference to future applications in any way. *See* Letter from Felicia Marcus to Mayor Susan Golding (Feb. 17, 2000) at p.1. Therefore, EPA's interpretation is therefore not a permissible interpretation of the plain language of the statute.

Further, subsequent legislative history supports the City's position that OPRA was a one-time reopener. In 1995 Congress rejected efforts to enact a permanent waiver for the City, finding instead that the City should have to reapply for renewal of its waiver like all other cities. *See* San Diego Coastal Correction Act of 1995, H.R. 1943, H.R. No. 192, 104th Cong., 1st Sess. (Jul. 18, 1995) at 13-14 (remarks of Rep. Mineta): "Last year's enacted bill [OPRA] authorized San Diego to apply for and receive a waiver *under the same terms as all other communities that have permits with waivers*" (emphasis added).

Furthermore, common sense dictates that OPRA cannot be applied in perpetuity. The limits in OPRA were based on a one-time snapshot for the City's 1995 permit renewal. OPRA is too rigid and lacks the flexibility necessary for long-term wastewater treatment planning, especially for a growing region of over 2.7 million ratepayers. EPA's application of the OPRA conditions to the City in perpetuity would make long-term planning impossible, as OPRA has no fixed standard of solids reduction. Congress could not have intended such an absurd result.

The EPA Need Not Force Resolution Of The OPRA Dispute In The Draft Permit

The disagreement between the City and EPA need not be resolved at this time. The Draft Permit is consistent with the City's permit application, which did not rely upon OPRA. The Draft Permit can be issued pursuant to the EPA's authority under Section 301(h) and the regulations promulgated there under at 40 C.F.R. Subpart G, §§ 125.56, *et seq.* ("Subpart G"). As they stand in the Draft Permit, the limits are consistent with sound science and the technical policies required by Section 301(h) and Subpart G. As such, EPA need not rely upon OPRA to justify the limits in the City's Draft Permit.

Since Section 301(h) and the NPDES regulations support the limits in the Draft Permit, there is no need at this time to determine whether OPRA applies in perpetuity to the Point Loma NPDES permit. This is an issue of statutory construction that *need not be decided at this time*. Where there is no need to construe a federal statute, the construction should be avoided. The avoidance of unnecessary interpretation of federal law is a longstanding rule of statutory construction. *See, e.g., In re Hubs Repair Shop, Inc.*, 28 B.R. 858, 862 (Bankr. N.D. Iowa 1983); *Siler v. Louisville & N.R. Co.*, 213 U.S. 175, 193 (1909) (preferable for a court to determine an issue on state grounds rather than federal).

Since the Draft Permit can be issued without reliance upon OPRA, the City urges EPA to issue the permit in this manner. If the EPA relies upon OPRA in the Draft Permit without need to do so, EPA will force litigation that need not take place at this time. This would be a waste of resources for both EPA and the City.

In order to implement the City's suggestion, the EPA could clarify that it is relying upon its authority under the non-OPRA sections of the CWA to issue the permit. The City would suggest the inclusion of the following language as a modification of the existing footnotes to implement this purpose:

> EPA recognizes that there is a dispute between EPA and the City over whether Section 301(j)(5) governs the renewal of the City's permit in perpetuity. Since the discharge limitations in this permit conform to the technical limits of Section 301(j)(5), this permit does not decide the legal issue of whether Section 301(j)(5) applies to the renewal of the City's permit in perpetuity.

Should EPA issue the Draft Permit based on its authority under the non-OPRA sections of the CWA (as it clearly may do in the current situation), neither EPA nor the City would be precluded from raising the issue in future litigation, if and when EPA chooses to apply OPRA to the Permit. This result is consistent with EPA's apparent intent in footnote 1 at page 8 of the Draft Permit (noting that the Draft Permit is issued without prejudice to the rights of either EPA or the City to address the applicability of OPRA in later legal proceedings).

The City appreciates this opportunity to provide comments on the Draft Permit, and hopes that its comments will assist EPA in drafting the final permit. The City looks forward to the opportunity to discuss its position during the initial public hearing on March 13, 2002.

Respectfully submitted,

CASEY GWINN, City Attorney

By Ted Bromfield

Ted Bromfield

Senior Deputy City Attorney

cc: Robert Moyer, EPA Senior Regional Counsel
via fax: (619) 235-4771
Scott Tulloch, Metro Wastewater Dept Director
via fax: (858) 292-6420
Alan C. Langworthy, MWWD Deputy Director
via fax: (619) 758-2309
Richard Mendes. City Utilities General Manager
via fax; (619) 236-6751

Item 7

DICK MURPHY
MAYOR

March 12, 2002

Chairman John Minan
Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Ms. Alexis Strauss
Director, Water Management Division
75 Hawthorne Street
San Francisco, CA 94105

Dear Chairman Minan, Ms. Strauss and Members of the Board:

Thank you for the opportunity to address you today on such an important matter as the operating permit for our Point Loma Wastewater Treatment Plant. Thank you for the diligence with which you are addressing this matter. We also appreciate the candor, professionalism and tremendous efforts your staff has displayed in their review of the volumes of technical data in our permit application.

I am certain that you all recall my inaugural State of the City address last year, in which I identified 10 goals for the City of San Diego. Goal Number 4 is **"cleaning up our beaches and bays"**. It is unacceptable to this City Council and me that our beaches and bays are polluted year after year.

In response to this problem, Council member Scott Peters and I formed the Clean Water Task Force. The Clean Water Task Force includes representatives from the environmental and business communities, regulators, water quality scientists and elected officials. The Clean Water Task Force is overseeing the City's aggressive implementation of the storm water permit adopted by this board last year. We are charting a course to reduce beach postings and closures 50% by the year 2004.

In addition, the City of San Diego has approved an annual sewer rate increase of 7 ½ % per year for the next four years. With this funding increase, the City will:

1. Triple the rate of replacing deteriorating sewer lines from 20 to 60 miles per year.
2. Televise and assess the interior of 1000 miles of aging sewer lines to prioritize replacement.
3. Clean the entire 3000 miles of sewer lines in the City of San Diego.

Our goal is to reduce sewer spills in the City 25% by the year 2004.

Regarding the modified permit for the Point Loma Wastewater Treatment Plant, the Environmental Protection Agency has reviewed years of technical monitoring data to determine that our advanced primary treatment achieves all state and federal water quality standards. To ensure the compliance is maintained in the future, the City will continue to conduct the rigorous ocean monitoring and scientific studies necessary.

In light of these findings, I cannot recommend that the region's taxpayers double their sewer rate to fund a $2 billion secondary treatment program that does nothing more than meet water quality standards our current system is already attaining. I have, instead, directed the City to spend its limited resources to stop harmful storm water runoff and sewer spills that cause beach closures and place the public health in jeopardy. Such programs are nothing less than smart investments in our health and the health of our environment.

In summary,

1. We agree with the assessment by the US EPA that the present treatment system has had no significant adverse impact on the ocean environment.
2. We also agree that the provisions of the draft modified permit, as proposed by your staff, will ensure that no negative impacts will occur in the future.
3. We strongly urge that you approve the tentative decision and draft permit recommended by your staff.

The public expects clean water. The Clean Water Act requires clean water. The City of San Diego will fulfill its obligations to the public and the law.

Best regards,

Dick Murphy
Mayor
City of San Diego

DM/rb

GM 3/13 David H
please include in the record of the Pt Loma NPDES permit hearing today

RWQCB Waiver Hearing Remarks For Councilman Scott Peters

Chairman Minan and members of the Regional Board and Ms. Straus, good morning and thank you for giving me the opportunity to speak before you today. For the record I am Scott Peters, Councilman from the City of San Diego's District One, which includes much of the coastline of our City. Since being elected I have been working closely with Mayor Murphy as Co-Chair of the Clean Water Task Force, to find creative strategies that will be effective in improving water quality at our area beaches. We have appreciated the participation and insight of your executive officer John Robertus on the Clean Water Task Force and look forward to his continued participation.

As the Mayor stated there has been new emphasis placed on water quality at the City of San Diego and we have taken bold, aggressive steps to improve water quality including a significant sewer rate increase to pay for a billion dollar capital program to repair and replace our aging sewer collection system. I would also add that we have just completed a 1.6 billion dollar upgrade to our treatment and disposal facilities, including a major commitment to water reclamation. Over the past decade we have lengthened our Pt Loma outfall, completed the North City Water Reclamation Plant, completed the Metro Biosolids Center, completely renovated the Pt Loma waste water facility to a state of the art chemically assisted advanced primary treatment facility and we recently finished the South Bay Water Reclamation Plant. Additionally we have enhanced our toxics control by enhancing the household hazardous waste program, opening a new collection center, and continuing our urban area pretreatment program for controlling industrial sources.

This Mayor and this City Council have shown their resolve to be good stewards of the environment. That is why I am here with Mayor Murphy to add my support to the

recommendations of the EPA and Regional Board Staff that the modified permit be granted to the City of San Diego.

As was discussed by EPA staff, the draft permit contains modifications authorized under 301(h) of the Clean Water Act. Such modifications have come to be known as "waivers". Unfortunately the word "waiver" gives the connotation that it is an escape clause or a loophole in the Clean Water Act, when in fact a modified permit is in complete compliance with the Act and assures that the discharge is receiving full treatment at a level that is protective of the environment. The modifications are not meant to be loopholes, but rather are an integral part of the Clean Water Act that recognize that in some cases secondary treatment may not be necessary to protect the environment. Each modified permit is taken on a case by case basis and is very site specific. A modified permit for one discharger does not have any bearing or precedence on the merits of a modified permit for another discharger. Each must be evaluated on its own merits and approved only after a rigorous technical evaluation.

There are nine findings that must be made for a discharger to receive a modified permit. Among these are that "the discharge meets State water quality standards." We are pleased that the EPA, through a rigorous technical evaluation, has found that we meet all nine criteria including the fact that our discharge meets State water quality standards. Because the EPA has found that the Point Loma Wastewater Treatment Plant meets all of these nine criteria, we support the recommendation of the EPA that this modified permit should be granted.

The Mayor and the City Council have shown their resolve to do what is necessary to ensure public health, preserve the environment and comply with the law. We support

the recommendations of your staff and look forward to continuing to work with you in the future.

Item 7

Presentation of Scott Tulloch
RWQCB
March 13, 2002

Good morning Chairman Minan, Ms. Strauss and members of the board. I am Scott Tulloch and I am the Director of the Metropolitan Wastewater Department of the City of San Diego. Also speaking for the City of San Diego today are the Honorable Mayor Dick Murphy and Councilmember Scott Peters. In addition Alan Langworthy, Deputy Director of our Environmental Monitoring and Technical Services Division, will be available to assist in answering any questions you may have.

I would like to begin my remarks by expressing the city's support for the EPA's tentative decision to renew the modified NPDES permit for the discharge through the Pt Loma Ocean Outfall. After a thorough review, the EPA's technical staff and scientific consultants have determined that the present treatment system complies with all state and federal standards and is protective of the public health and environment. Additionally, it meets the statutory requirements of section 301(h) of the Clean Water Act.

The draft permit that has been recommended by the EPA and your staff contains modifications to only two parameters, the Total Suspended Solids removal and Biochemical Oxygen Demand removal requirements, as authorized by the Clean Water Act. In the case of these two constituents the draft permit contains limits much more restrictive than are typically found in a modified NPDES permit. The State of California Ocean Plan contains Total Suspended Solids requirements and addresses the Biochemical Oxygen Demand issue through limitations on

oxygen depletion in the receiving water. The Pt Loma discharge is well within complete compliance with these state standards.

All other parameters and permit conditions are either the same or more stringent than a full secondary treatment permit. Toxics control is achieved by means of industrial source control and household hazardous waste programs. Because of the modified permit, San Diego is required to operate an enhanced toxics control program and by this means has demonstrated secondary equivalency with regard to toxics. The discharge has consistently achieved 100% compliance with all state and federal requirements and has had and will continue to have a significantly enhanced monitoring program to assure compliance in the future. This facility has won seven consecutive gold awards from the Association of Metropolitan Sewerage Agencies for this high level of compliance.

The combination of excellent toxics control, chemically assisted advanced primary treatment, a long deep ocean outfall and an extensive monitoring program has ensured that the Pt Loma discharge complies with all standards and protects the public health and environment.
In summary the US EPA and State RWQCB staff thoroughly reviewed the Pt Loma discharge and recommended a tentative decision and draft permit that confirms that there is no significant impact on the ocean and that the public health and environment are protected. The city concurs with this finding and agrees that the requirements of this permit will ensure continued protection in the future.

CPKelco

2025 E. Harbor Drive
San Diego, CA 92113-2123
(619) 595-5025
Fax: (619) 652-5352

SR
JM 3/12/02
Brian Kelly
Pls include in record
for Pt Loma permit
Hearing

SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD
2002 MAR 11 P 1:28

March 6, 2002

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Subject: Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego – Wastewater Treatment Plant Discharge to the Pacific Ocean

Dear Mr. Robertus:

CP Kelco strongly supports the U.S. Environmental Protection Agency's (EPA) Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System (NPDES) permit consistent with section 301(h) of the Clean Water Act (CWA), and to request the California Regional Water Quality Control Board (RWQCB) adopt the EPA's recommendations.

The EPA's tentative approval of modified standards suggests that the propagated balance of our ocean's indigenous population is not interfered with or disturbed by, the discharge dispersed to the waters through the Point Loma Ocean Outfall.

Scientific evidence clearly shows the City of San Diego's wastewater treatment is more than sufficient to protect the marine environment and the health of all San Diegans. As a member organization of the SAFE Treatment Coalition, CP Kelco took the extraordinary step of conducting an independent review of the City's monitoring data and analysis, which is contained in the Discharge Effects Science Panel report (January, 2002). Both, SAFE's independent report and, more significantly, the EPA's tentative decision, consistently support the City of San Diego's application. Further, they demonstrate any demand for a higher level of treatment at the plant, despite already being shown to be unnecessary, would impose a grossly unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers.

The permit proposed by the EPA provides for full protection of the public health and environment. By tentatively issuing this permit, the EPA and the RWQCB recognize what

CPKelco

2025 E. Harbor Drive
San Diego, CA 92113-2123
(619) 595-5025
Fax: (619) 652-5352

all-available scientific information confirms – our current system causes no environmental harm. Our San Diego waters are safe for humans and marine life.

Again, I support the EPA's tentative decision and urge you to do the same.

Sincerely,

A. J. Currie

Andrew Currie
Plant Manager

49TH DISTRICT, CALIFORNIA

COMMITTEES:
INTERNATIONAL RELATIONS
JUDICIARY
SMALL BUSINESS

Congress of the United States
House of Representatives
Washington, DC 20515–0548

1725 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-3906

DISTRICT OFFICES:
100 AVENIDA PRESIDIO, SUITE A
SAN CLEMENTE, CA 92672
(949) 496-2943

NORTH COUNTY GOVERNMENT CENTER
ANNEX BUILDING, SUITE 100
325 SOUTH MELROSE
VISTA, CA 92083
(760) 940-4390

March 12, 2002

John Robertus
Executive Officer
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Dear Mr. Robertus:

I am writing to support the U.S. Environmental Protection Agency's (EPA) Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System (NPDES) permit consistent with section 301(h) of the Clean Water Act (CWA), and to request the California Regional Water Quality Control Board (RWQCB) adopt the EPA's recommendations.

Scientific evidence has shown the City of San Diego's wastewater treatment is more than sufficient to protect the marine environment and the health of all San Diegans. The EPA's tentative decision, consistently supports the City of San Diego's application, and demonstrates any demand for a higher level of treatment at the plant, despite already being unnecessary, would impose a grossly unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers.

Regarding the applicability of 33U.S.C. § 13 11(j)(5) to this and future NPDES permits, the entire San Diego delegation sent a letter in collaboration with San Diego Mayor Dick Murphy and Metro Commission chair Jay Goldby, to EPA Administrator Christine Whitman, regarding our consensus interpretation that the 1994 Ocean Pollution Reduction Act -33 U.S.C. § 131 l(j)(5) - is not applicable.

In closing, the permit proposed by the EPA provides for full protection of the public health and environment. By tentatively issuing this permit, the EPA and the RWQCB recognize what all-available scientific information confirms - San Diego's current treatment and discharge system causes no environmental harm, and San Diego's waters are safe for humans and marine life.

Again, I support the EPA's tentative decision and urge you to do the same.

Sincerely,

Darrell Issa
Member of Congress

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STATE CAPITOL, ROOM 5050
SACRAMENTO, CA 95814-4800
TEL (916) 445-3952
FAX (916) 327-2188

DISTRICT OFFICE
1557 COLUMBIA STREET
SAN DIEGO, CA 92101-2934
TEL (619) 645-3090
FAX (619) 645-3094

SENATOR.ALPERT@SLN.CA.GOV

California State Senate

SENATOR
DEDE ALPERT
THIRTY-NINTH SENATORIAL DISTRICT
CHAIR
SENATE APPROPRIATIONS COMMITTEE

COMMITTEES
CHAIR, APPROPRIATIONS
AGRICULTURE AND WATER RESOURCES
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JUVENILE JUSTICE

JOINT COMMITTEES
CHAIR, MASTER PLAN FOR EDUCATION - KINDERGARTEN THROUGH UNIVERSITY

JR 3/12/02
Brian Kelly
file under in Record of pt. from Dedeing.

VIA FACSIMILE

March 11, 2002

Mr. John Robertus, Executive Officer
California Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Subject: Tentative Order No. R-92002-0025, NPDES Permit No. CAO 107409
City of San Diego - Wastewater Treatment Plant Discharge to the Pacific Ocean

Dear Mr. Robertus: John

As the member of the California Senate who represents most of the City of San Diego, I am pleased to address the Regional Water Quality Control Board. I would like to voice my support of the U.S. Environmental Protection Agency's tentative decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System permit. This permit is consistent with section 301(h) of the Clean Water Act.

Scientific evidence has confirmed that the City of San Diego's wastewater treatment is more than sufficient to protect the marine environment and the health of all San Diegans. The EPA's tentative decision consistently supports the City of San Diego's application. Further, it recognizes any demand for a higher level of treatment at the plant would impose a grossly unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers.

The permit proposed by the EPA provides for full protection of the public health and environment. By tentatively issuing this permit, the EPA and the RWQCB recognize what all available scientific information confirms - San Diego's current treatment and discharge system causes no environmental harm.

I respectfully request the Regional Water Quality Control Board adopt the EPA's recommendations.

Sincerely,

Dede

SENATOR DEDE ALPERT
39th District

Printed on Recycled Paper

Congress of the United States
House of Representatives
Washington, DC 20515

March 11, 2002

John H. Robertus
Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, # 100
San Diego, CA 92123

Subject: Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego – Wastewater Treatment Plant Discharge to the Pacific Ocean

Dear Mr. Robertus:

We strongly support the U.S. Environmental Protection Agency's (EPA) Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System (NPDES) permit consistent with section 301(h) of the Clean Water Act (CWA), and to request the California Regional Water Quality Control Board (RWQCB) adopt the EPA's recommendations.

The EPA's tentative approval of modified standards suggests that the propagated balance of our ocean's indigenous population is not interfered with or disturbed by, the discharge dispersed to the waters through the Point Loma Ocean Outfall.

Scientific evidence clearly shows the City of San Diego's wastewater treatment is more than sufficient to protect the marine environment and the health of all San Diegans. The EPA's tentative decision, consistently supports the City of San Diego's application, and demonstrates any demand for a higher level of treatment at the plant, despite already being shown to be unnecessary, would impose a grossly unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers.

Regarding the applicability of 33 U.S.C. § 1311(j)(5) to this and future NPDES permits, we sent a letter in collaboration with San Diego Mayor Dick Murphy and Metro Commission chair Jay Goldby, to EPA Administrator Christine Whitman. Please refer to the attached letter of September 12, 2001, regarding our consensus interpretation that the 1994 Ocean Pollution Reduction Act -- 33 U.S.C. § 1311(j)(5) --is not applicable.

In closing, the permit proposed by the EPA provides for full protection of the public health and environment. By tentatively issuing this permit, the EPA and the RWQCB recognize what all-available scientific information confirms – San Diego's current treatment and discharge system causes no environmental harm, and San Diego's waters are safe for humans and marine life.

Again, we support the EPA's tentative decision and urge you to do the same.

Sincerely,

Bob Filner

BOB FILNER
Member of Congress

Susan Davis

SUSAN DAVIS
Member of Congress

BF/mn
2069659

JMR 3/14 Forest H
This FAX time/date is too late for inclusion in the record of the Rt. Tomu permit hearing

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0078
(916) 319-2078
FAX (916) 319-2178

DISTRICT ADDRESS
1350 FRONT STREET, SUITE 6013
SAN DIEGO, CA 92101
(619) 234-7878
FAX (619) 233-0078

assemblymember.wayne@assembly.ca.gov

Assembly
California Legislature

HOWARD WAYNE
ASSEMBLYMEMBER, 78TH DISTRICT

CHAIR:
NATURAL RESOURCES
SELECT COMMITTEE ON
BIOTECHNOLOGY

MEMBER:
HEALTH
HOUSING AND COMMUNITY
DEVELOPMENT
JUDICIARY
WATER, PARKS AND WILDLIFE

March 13, 2002

Mr. John Robertus, Executive Officer
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Subject: Tentative Order No. R-92002-0025, NPDES Permit No. CAO 107409 for the City of San Diego - Wastewater Treatment Plant Discharge to the Pacific Ocean

Dear Mr. Robertus:

I write in support of the U.S. Environmental Protection Agency's (EPA) Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System (NPDES) permit consistent with section 301(h) of the Clean Water Act (CWA). I urge the California Regional Water Quality Control Board's utmost consideration to support the adoption the EPA's recommendations.

Scientific evidence demonstrates that the City of San Diego's wastewater treatment is sufficient to protect the marine environment and the health of San Diegans. The EPA's tentative decision consistently supports the City of San Diego's application and demonstrates that a demand for a higher level of treatment at the plant is unnecessary, and would impose an unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers.

The permit proposed by the EPA provides for the protection of public health and the environment. I respectfully request that the Regional Board support of EPA's tentative decision. If I may be of any assistance with this matter, please do not hesitate to call me at 619-234-7878.

Sincerely,

Howard Wayne

HOWARD WAYNE
Assemblymember
78th District

HW/gh

Printed on Recycled Paper

JR 3/12/02
Brian Kelley — please include in the hearing record for Pt. Loma permit.

INDUSTRIAL ENVIRONMENTAL ASSOCIATION

Leaders of Environmental Responsibility

March 6, 2002

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

2002 MAR 11 P 1:1
SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

Subject: Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego Wastewater Treatment Plant Discharge to the Pacific Ocean

Dear Mr. Robertus:

The Industrial Environmental Association strongly supports the U.S. Environmental Protection Agency's (EPA) Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System (NPDES) permit consistent with section 301(h) of the Clean Water Act (CWA), and to request the California Regional Water Quality Control Board (RWQCB) adopt the EPA's recommendations.

The EPA's tentative approval of modified standards suggests that the propagated balance of our ocean's indigenous population is not interfered with or disturbed by, the discharge dispersed to the waters through the Point Loma Ocean Outfall.

Scientific evidence clearly shows the City of San Diego's wastewater treatment is more than sufficient to protect the marine environment and the health of all San Diegans. The SAFE Treatment Coalition took the extraordinary step of conducting an independent review of the City's monitoring data and analysis, which is contained in the Discharge Effects Science Panel report (January, 2002). Both, SAFE's independent report and, more significantly, the EPA's tentative decision, consistently support the City of San Diego's application. Further, they demonstrate any demand for a higher level of treatment at the plant, despite already being shown to be unnecessary, would impose a grossly unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers.

The permit proposed by the EPA provides for full protection of the public health and environment. By tentatively issuing this permit, the EPA and the RWQCB recognize what all-available scientific information confirms – our current system causes no environmental harm. Our San Diego waters are safe for humans and marine life.

Again, I support the EPA's tentative decision and urge you to do the same.

Sincerely,

Patti Krebs

Patti Krebs
Executive Director

701 "B" Street • Suite 1445 • San Diego, CA 92101 • (619) 544-9684 • FAX (619) 544-9514

GIBSON, DUNN & CRUTCHER LLP

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333 South Grand Avenue Los Angeles, California 90071-3197
(213) 229-7000 (213) 229-7520 Fax
www.gibsondunn.com

tmchenry@gibsondunn.com

March 12, 2002

Direct Dial
(213) 229-7135

Client No.
R 43308-00001

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Re: *Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego – Wastewater Treatment Plant Discharge to the Pacific Ocean*

Dear Mr. Robertus:

These comments are submitted on behalf of International Specialty Products ("ISP"). ISP owns and operates facilities in the City of San Diego which use the wastewater treatment system for their manufacturing processes.

ISP supports the U.S. Environmental Protection Agency's ("EPA") Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System permit consistent with section 301(h) of the Clean Water Act and to request the California Regional Water Quality Control Board ("Regional Board") to adopt the EPA's recommendations.

ISP also fully supports the comments of the SAFE Treatment Coalition ("SAFE") with regard to the contents of the Tentative Decision and the draft discharge and monitoring permits. Scientific evidence clearly shows the City of San Diego's wastewater treatment system is more than sufficient to protect the marine environment and the health of all San Diegans. As a member organization of SAFE, ISP conducted an independent review of the City's monitoring data and analysis, which is contained in the Discharge Effects Science Panel report (January, 2002). Both SAFE's independent report and, more significantly, the EPA's Tentative Decision, consistently support the City of San Diego's application. Further, they demonstrate that any demand for a higher level of treatment at the plant, despite already being shown to be unnecessary, would

impose a grossly unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers including ISP.

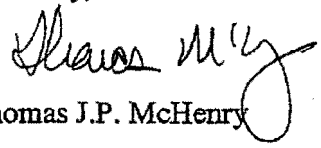
Further, ISP strongly supports the following revision of Footnote No. 1 on page 1 of the Tentative Decision in order to clarify EPA's intent and to avoid further litigation and uncertainty:

> The EPA recognizes that there is a dispute between EPA and the City of San Diego over whether Section 301(j)(5) governs the renewal of the City's permit in perpetuity. Since the discharge limitations in this permit conform to the technical limits of 301(j)(5), this permit does not decide the legal issue of whether 301(j)(5) applies to the renewal of the City's permit in perpetuity.

It is clear that because the City's application conforms to the technical limitations of the Ocean Pollution Reduction Act of 1994 ("OPRA"), it is unnecessary to decide the continuing or perpetual application of OPRA. Both sides simply desire to preserve their mutual rights as to the continuing applicability issue. To ensure that both positions are preserved against any claim of waiver, the existing footnote should be revised as suggested above. With this clarification, the revised footnote ensures no preemptive or preclusive effect form the issuance of this permit.

Again, ISP supports the EPA's Tentative Decision and urges you to do the same.

Sincerely,



Thomas J.P. McHenry

TJM/gdm

10580058_1.DOC

OH

Metro Commission

"Effectively Addressing Regional Wastewater Issues"

City of Chula Vista
City of Coronado
City of Del Mar
City of El Cajon
City of Imperial Beach
City of La Mesa

City of Lemon Grove
City of National City
City of Poway
County of San Diego
Otay Water District
Padre Dam MWD

March 1, 2002

Regional Water Quality Control Board
Attention: Mr. David Hanson
9174 Sky Park Court
San Diego, California 92123

Dear Mr. Hanson:

Enclosed for your record are Resolutions from both the Metro Commission and Joint Powers Authority regarding the waiver decision, adopted at our meeting of February 22, 2002.

If you have any questions, I can be reached at (619) 258-4720.

Sincerely,

Teri Basta

Teri Basta
Administrative Assistant

tb

SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD
2002 MAR -4 P 12: 51

Metro Commission

"Effectively Addressing Regional Wastewater Issues"

City of Chula Vista
City of Coronado
City of Del Mar
City of El Cajon
City of Imperial Beach
City of La Mesa

City of Lemon Grove
City of National City
City of Poway
County of San Diego
Otay Water District
Padre Dam MWD

RESOLUTION 2002-01

RESOLUTION OF THE SAN DIEGO METRO COMMISSION ENDORSING THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY'S TENTATIVE DECISION FOR THE NPDES PERMIT FOR THE CITY OF SAN DIEGO'S POINT LOMA WASTEWATER TREATMENT PLANT DISCHARGE TO THE PACIFIC OCEAN THROUGH THE POINT LOMA OCEAN OUTFALL

WHEREAS, on February 8, 2002, the United States Environmental Protection Agency issued Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego, and

WHEREAS, this Tentative Order was based on careful review by the Environmental Protection Agency of all available scientific evidence which indicates that the current system of treatment performed at the Point Loma Wastewater Treatment Plant causes no environmental harm to the ocean or shoreline environments, and

WHEREAS, the Environmental Protection Agency's evaluation of the current system of wastewater treatment found that this system fully protects the environment and the public health, and

WHEREAS, the NPDES permit proposed by the Environmental Protection Agency provides full protection of the public health and environment, and

WHEREAS, the expenditures necessary to upgrade the plant to an unneeded and unwarranted level of secondary treatment would impose an unnecessary financial burden on the rate payers of the participating agencies of the Metropolitan sewerage system, and

WHEREAS, it is the responsibility of the San Diego Metro Commission to proactively address wastewater issues in the San Diego region.

NOW THEREFORE, BE IT RESOLVED that for and on behalf of the citizens of this region, the San Diego Metro Commission declares their endorsement of and support for the Tentative Order issued by the Environmental Protection Agency for an NPDES permit for the City of San Diego's Point Loma Wastewater Treatment Plant to continue its discharge of treated wastewater to the Pacific Ocean at its present level of treatment.

PASSED AND ADOPTED at a regular meeting of the San Diego Metro Commission held on the 22nd day of February 2002, by the following vote, to wit:

AYES:	Cities of Coronado, El Cajon, La Mesa, Poway, County of San Diego, Padre Dam MWD
NOES:	None
ABSENT:	City of Lemon Grove, Otay Water District
ABSTAIN:	Cities of Chula Vista, Del Mar, Imperial Beach, National City

Jay Goldby, Chair

RESOLUTION 2002-01

**RESOLUTION OF THE
METRO WASTEWATER JOINT POWERS AUTHORITY
ENDORSING THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY'S
TENTATIVE DECISION FOR THE NPDES PERMIT FOR THE
CITY OF SAN DIEGO'S POINT LOMA WASTEWATER
TREATMENT PLANT DISCHARGE TO THE
PACIFIC OCEAN THROUGH THE POINT LOMA OCEAN OUTFALL**

WHEREAS, on February 8, 2002, the United States Environmental Protection Agency issued Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego, and

WHEREAS, this Tentative Order was based on careful review by the Environmental Protection Agency of all available scientific evidence which indicates that the current system of treatment performed at the Point Loma Wastewater Treatment Plant causes no environmental harm to the ocean or shoreline environments, and

WHEREAS, the Environmental Protection Agency's evaluation of the current system of wastewater treatment found that this system fully protects the environment and the public health, and

WHEREAS, the NPDES permit proposed by the Environmental Protection Agency provides full protection of the public health and environment, and

WHEREAS, the expenditures necessary to upgrade the plant to an unneeded and unwarranted level of secondary treatment would impose an unnecessary financial burden on the rate payers of the participating agencies of the Metropolitan sewerage system, and

WHEREAS, it is the responsibility of the Metro Wastewater Joint Powers Authority to proactively address wastewater issues in the San Diego region.

NOW THEREFORE, BE IT RESOLVED that for and on behalf of the citizens of this region, the Metro Wastewater Joint Powers Authority declares their endorsement of and support for the Tentative Order issued by the Environmental Protection Agency for an NPDES permit for the City of San Diego's Point Loma Wastewater Treatment Plant to continue its discharge of treated wastewater to the Pacific Ocean at its present level of treatment.

PASSED AND ADOPTED at a regular meeting of the Metro Wastewater Joint Powers Authority held on the 22nd day of February 2002, by the following vote, to wit:

AYES:	Cities of Coronado, El Cajon, La Mesa, Poway, County of San Diego, Padre Dam MWD
NOES:	None
ABSENT:	City of Lemon Grove
ABSTAIN:	Cities of Del Mar, Imperial Beach

Jay Goldby, Chair

JR 3/12
David H
please include in the record of the hearing on the Pt. Loma N[illegible] permit (Original copy)

RESOLUTION NO. 2002-03

A RESOLUTION OF THE METRO WASTEWATER JPA ENDORSING THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S TENTATIVE DECISION FOR THE NPDES PERMIT FOR THE CITY OF SAN DIEGO'S POINT LOMA WASTEWATER TREATMENT PLANT DISCHARGE TO THE PACIFIC OCEAN THROUGH THE POINT LOMA OCEAN OUTFALL

WHEREAS, on February 8, 2002, the United States Environmental Protection Agency issued Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego; and

WHEREAS, this tentative order was based on careful review by the Environmental Protection Agency of all available scientific evidence which indicates that the current system of treatment performed at the Point Loma Wastewater Treatment Plant causes no environmental harm to the ocean or shoreline environments; and

WHEREAS, the Environmental Protection Agency's evaluation of the current system of wastewater treatment found that this system fully protects the environment and the public health; and

WHEREAS, the NPDES Permit proposed by the Environmental Protection Agency provides full protection of the public health and environmental; and

WHEREAS, the expenditures necessary to upgrade the plant to an unneeded and unwarranted level of Secondary Treatment would impose unnecessary financial burdens on the ratepayers of the Participating Agencies of the Metropolitan Sewerage System,

NOW, THEREFORE, BE IT RESOLVED, that for and on the behalf of the citizens of Poway, the City Council of the City of Poway hereby declare their endorsement of and support for the Tentative Order issued by the Environmental Protection Agency for an NPDES Permit for the City of San Diego's Point Loma Wastewater Treatment Plant to continue its discharge of treated wastewater to the Pacific Ocean at its present level of treatment.

PASSED, ADOPTED AND APPROVED by the Metro Wastewaster JPA Committee at a regular meeting this 22nd day of February, 2002.

Chair, Metro Wastewater JPA
Jay Goldby

ATTEST:

Secretary, Metro Wastewater JPA
James R. Howell

JR 3/14

Board H

OCEAN OUTFALL GROUP (OOG)

Jan D. Vandersloot, MD, Director
2221 E16 Street
Newport Beach, CA 92663
Phone: (949) 548-6326 Fax: (714) 848-6643 Email: JonV3@aol.com

This letter should be included in the record of the hearing for the Pt. Loma permit

March 11, 2002

John H. Robertus, Executive Officer
California Regional Water Quality Control Board,
San Diego, Region 9
9174 Sky Park Court, Suite 100
San Diego, California, 92123

Re: Board Meeting March 13, 2002
Agenda Item # 7. JOINT PUBLIC HEARING: NPDES Permit Renewal, City of San Diego, E.W. Blom Point Loma Wastewater Treatment Plant and Ocean Outfall. (Tentative Order No. R9-2002-0025, Draft NPDES Permit No. CA0107409)

Please Oppose Renewal of The San Diego 301(h) Waiver

Sent By Fax to (858) 571-6972

Dear Mr. Robertus, and San Diego Regional Water Quality Control Board Members,

My name is Jan Vandersloot, director of the Ocean Outfall Group (OOG), which is dedicated to ending the 301(h) waiver held by the Orange County Sanitation District. We have over 200 members and have been working very hard for over a year to get rid of the Orange County waiver. Our motto is "Do Us a Favor, Get Rid of the Waiver"

It is thus with considerable alarm that we find the state and federal regulatory agencies poised to approve the San Diego waiver. This is a mistake. It will set a precedent to approve the waivers that are still held in California, including Orange County, Goleta, and Morro Bay. These waivers were supposed to be temporary, with 5-year expiration dates. Public concern is strong enough that clean water and a clean ocean should be a given. We should not saddle our children with the burden of antiquated policies that condone inadequate sewage treatment. Our modern advanced society has the tools to do adequate sewage treatment before it is released into the ocean. We should use those tools.

I would look with considerable skepticism at the science of the sewage plume that was developed by the San Diego sanitation district. If it is anything like the science

developed by the Orange County Sanitation District, you will find it heavily biased towards retaining the waiver.

Of course there will be a cost to eliminating the waiver. However, there are only 36 out of 16,000 sanitation districts in the entire United States that still have the waiver. This means that 99.75% of all other sanitation districts pay the cost of full secondary treatment. Why should San Diego be any different?

Therefore, I respectfully request you deny the waiver application. If there is a plausible reason to treat San Diego differently from nearly every other sanitation district in the nation, please spell it out clearly so that this waiver will not be used as an excuse by Orange County to move ahead with its waiver request. However, we are already seeing a ripple effect from EPA's announcement that it intends to approve the San Diego waiver. The OCSD General Manager has already cited the EPA action as a reason for the OCSD Board of Directors to approve an extension of the Orange County waiver. This is precisely what we feared. The San Diego waiver will be used to justify the other waivers.

Here in Orange County, the public is becoming aroused to the detrimental effects of the waiver, but your action in San Diego may very well undermine our efforts. It's a matter of education. My guess is that most people in San Diego have not heard of the waiver. If they did, they would oppose it. People want a clean ocean. The waivers do not give us a clean ocean. Please "Do Us a Favor, Get Rid of the Waiver".

Thank you.

Sincerely,

Jan D. Vandersloot MD

Jan D. Vandersloot, MD

Jeffrey R. Stevens
2307 16th St.
Newport Beach, CA 92663
jeffstevens@adelphia.net
fax: (949) 548-2299

JR 3/12/02
Brian Kelley
pl include in record of Hearing on Pt Loma.

March 12, 2002
John H. Robertus, Executive Officer
California Regional Water Quality Control Board,
San Diego, Region 9
9174 Sky Park Court, Suite 100
San Diego, California, 92123

Re: Board Meeting March 13, 2002
Agenda Item # 7. JOINT PUBLIC HEARING: NPDES Permit Renewal,
City of San Diego, E.W. Blom Point Loma Wastewater Treatment Plant and Ocean Outfall.
(Tentative Order No. R9-2002-0025, Draft NPDES Permit No.
CA0107409)

Please Oppose Renewal of The San Diego 301(h) Waiver
Sent By Fax to (858) 571-6972

Dear Mr. Robertus, and San Diego Regional Water Quality Control Board Members,

My name is Jeff Stevens of the Ocean Outfall Group (OOG), which is dedicated to ending the 301(h) waiver held by the Orange County Sanitation District. We have over 200 members and have been working very hard for over a year to get rid of the Orange County waiver. Our motto is "Do Us a Favor, Get Rid of the Waiver"

It is thus with considerable alarm that we find the state and federal regulatory agencies poised to approve the San Diego waiver. This is a mistake. It will set a precedent to approve the waivers that are still held in California, including Orange County, Goleta, and Morro Bay. These waivers were supposed to be temporary, with 5-year expiration dates. Public concern is strong enough that clean water and a clean ocean should be a given. We should not saddle our children with the burden of antiquated policies that condone inadequate sewage treatment. Our modern advanced society has the tools to do adequate sewage treatment before it is released into the ocean. We should use those tools.

I would look with considerable skepticism at the science of the sewage plume that was developed by the San Diego sanitation district. If it is anything like the science developed by the Orange County Sanitation District, you will find it heavily biased towards retaining the waiver.

Of course there will be a cost to eliminating the waiver. However, there are only 36 out of 16,000 sanitation districts in the entire United States that still have the waiver. This means that 99.75% of all other sanitation districts pay the cost of full secondary treatment. Why should San Diego be any different?

Therefore, I respectfully request you deny the waiver application. If there is a plausible reason to treat San Diego differently from nearly every other sanitation district in the nation, please spell it out clearly so that this waiver will not be used as an excuse by Orange County to move ahead with its waiver request. However, we are already seeing a ripple effect from EPA's announcement that it intends to approve the San Diego waiver. The OCSD General Manager has already cited the EPA action as a reason for the OCSD Board of Directors to approve an extension of the Orange County waiver. This is precisely what we feared. The San Diego waiver will be used to justify the other waivers.

Here in Orange County, the public is becoming aroused to the detrimental effects of the waiver, but your action in San Diego may very well undermine our efforts. It's a matter of education. My guess is that most people in San Diego have not heard of the waiver. If they did, they would oppose it. People want a clean ocean. The waivers do not give us a clean ocean. Please "Do Us a Favor, Get Rid of the Waiver".

Sincerely,

Jeff Stevens, MLA, and family

Padre Dam Municipal Water District

Every Drop Counts!

10887 Woodside Avenue / P.O. Box 719003
Santee, CA 92072-9003
Telephone: 619-448-3111
FAX Administration: 619-449-9469
FAX Operations: 619-449-9537
http://www.PadreDam.org
E-mail: Customer@Padre.org

Board of Directors:
Jesse T. Dixon
Division 1
Augie Scalzitti
Division 2
Andrew J. Menshek
Division 3
Lex Boswell
Division 4
Dan McMillan
Division 5

March 11, 2002

Mr. David Hanson
California Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Subject: Tentative Order No. R9-2002-0025, NPDES Permit No. CA0107409 for the City of San Diego, E. W. Blom Point Loma Metropolitan Wastewater Treatment Plant Discharge to the Pacific Ocean through the Point Loma Ocean Outfall.

Dear Mr. Hanson:

Padre Dam Municipal Water District fully supports and recommends approval of the subject order and permit.

Padre Dam Municipal Water District contracts with the City of San Diego for treatment and disposal of wastewater and is currently relying on their services for flows of approximately 3 million gallons per day. In addition, we hold an NPDES permit and treat 2 million gallons per day of municipal wastewater at the Padre Dam Water Recycling Facility. In exercising our privileges under our permit, we are very aware of the high level of professionalism, scientific analysis, and scrutiny that go into analyzing permit applications and recommending discharge requirements. In our opinion, the requirements of the permit for the Blom Plant and Point Loma Outfall are commensurate with the information regarding the impacts to the environment from the discharge.

Thank you for this opportunity to comment.

Sincerely,

Augie Caires
General Manager

cc: Robyn Stuber, USEPA

SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD
2002 MAR 12 A 11: 23

RANDY "DUKE" CUNNINGHAM
51ST DISTRICT, CALIFORNIA

COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEES:
DEFENSE
LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION
DISTRICT OF COLUMBIA

PERMANENT SELECT COMMITTEE ON INTELLIGENCE

ASSISTANT MAJORITY WHIP

Congress of the United States
House of Representatives
Washington, DC 20515–0551

PLEASE RESPOND TO:
☐ 2459 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-0551
(202) 225-5452
(202) 225-2558 FAX

☐ 613 WEST VALLEY PARKWAY
SUITE 320
ESCONDIDO, CA 92025
(760) 737-8438
(760) 737-8132 FAX

E-MAIL VIA WEB SITE:
http://www.house.gov/cunningham/

March 11, 2002

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Subject: Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego – Wastewater Treatment Plant Discharge to the Pacific Ocean

Dear Mr. Robertus:

I am writing to support the U.S. Environmental Protection Agency's (EPA) Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System (NPDES) permit consistent with section 301(h) of the Clean Water Act (CWA), and to request the California Regional Water Quality Control Board (RWQCB) adopt the EPA's recommendations.

Scientific evidence has shown the City of San Diego's wastewater treatment is more than sufficient to protect the marine environment and the health of all San Diegans. The EPA's tentative decision, consistently supports the City of San Diego's application, and demonstrates any demand for a higher level of treatment at the plant, despite already being unnecessary, would impose a grossly unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers.

Regarding the applicability of 33 U.S.C. § 1311(j)(5) to this and future NPDES permits, the entire San Diego delegation sent a letter in collaboration with San Diego Mayor Dick Murphy and Metro Commission chair Jay Goldby, to EPA Administrator Christine Whitman, regarding our consensus interpretation that the 1994 Ocean Pollution Reduction Act – 33 U.S.C. § 1311(j)(5) – is not applicable.

In closing, the permit proposed by the EPA provides for full protection of the public health and environment. By tentatively issuing this permit, the EPA and the RWQCB recognize what all-available scientific information confirms – San Diego's current treatment and discharge system causes no environmental harm, and San Diego's waters are safe for humans and marine life.

Again, I support the EPA's tentative decision and urge you to do the same.

Sincerely,

Randy "Duke" Cunningham
Member of Congress

RDC/ttc

PRINTED ON RECYCLED PAPER

JM 3/12
David H — please include in the hearing record for the Pt. Loma NPDES permit hrng.

S.A.F.E. TREATMENT COALITION

Safe And Fair Environmental Treatment Coalition

BICCOM California

Industrial Environmental Association

SDAR San Diego Association of REALTORS

SDCAA

Metro Wastewater JPA

San Diego Regional Chamber of Commerce

san diego regional economic development corporation

March 13, 2002

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Subject: Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego - Wastewater Treatment Plant Discharge to the Pacific Ocean

Dear Mr. Robertus:

The Safe and Fair Environmental Treatment Coalition (SAFE) strongly supports the U.S. Environmental Protection Agency's (EPA) Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System (NPDES) permit consistent with section 301(h) of the Clean Water Act (CWA), and to request the California Regional Water Quality Control Board (RWQCB) adopt the EPA's recommendations.

The SAFE Treatment Coalition is a single issue public coalition of local community groups, businesses, labor, elected officials, scientists and individuals concerned about any effort to force San Diego to a higher level of sewage treatment than other similar cities are required to under the Clean Water Act (see attached Coalition Overview).

The EPA's tentative approval of modified standards suggests the propagated balance of our ocean's indigenous population is not interfered with or disturbed by, the discharge dispersed to the waters through the Point Loma Ocean Outfall. Scientific evidence clearly shows the City of San Diego's wastewater treatment is more than sufficient to protect the marine environment and the health of all San Diegans.

The SAFE Treatment Coalition took the extraordinary step of conducting an independent review of the City's monitoring data and analysis (see attached Discharge Effects Science Panel Report, January, 2002). In summary, the Science Panel found:

- The Point Loma Wastewater Treatment Plant's (PLWTP) permitted discharge does not impact the San Diego shoreline.

- Secondary treatment standards will not solve or reduce San Diego's beach and bay closures, because the closures appear to be caused by pollution from other sources.

- Extensive monitoring of the City's discharge has not found harmful impacts to the ocean environment.

Both, SAFE's independent report and, more significantly, the EPA's tentative decision, consistently support the City of San Diego's application. Further, they demonstrate any demand for a higher level of treatment at the plant, despite already being shown to be unnecessary, would impose a grossly unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers.

The permit proposed by the EPA provides for full protection of the public health and environment. By tentatively issuing this permit, the EPA and the RWQCB recognize what all-available scientific information confirms: San Diego's current system causes no environmental harm, and San Diego's waters are safe for humans and marine life.

Again, I support the EPA's tentative decision and urge you to do the same.

Sincerely,

Steve Zapotichny
Chair
SAFE Treatment Coalition

S.A.F.E. TREATMENT COALITION

Safe And Fair Environmental Treatment Coalition

DISCHARGE EFFECTS of the POINT LOMA WASTEWATER TREATMENT PLANT and OCEAN OUTFALL

&

REVIEW of the SIERRA CLUB ANALYSIS

by

S.A.F.E. TREATMENT COALITION

Discharge Effects Science Panel

January, 2002

Discharge Effects of the Point Loma Wastewater Treatment Plant and Ocean Outfall, and Review of the Sierra Club Analysis

TABLE OF CONTENTS

INTRODUCTION 1

BACKGROUND 1
- Table I: SAFE Treatment Coalition Positions 1
- Table II: Questions for Discharge Effects Science Panel's Review 1

DISCHARGE EFFECTS SCIENCE PANEL MEMBERS 2
- Paul K. Dayton, Ph.D. 2
- D. Craig Barilotti, Ph.D. 2
- Dale A. Glantz 2
- Charles T. Mitchell 2

FINDINGS & RECOMMENDATIONS 3
- DESP FINDINGS 3
- A. Review of S.A.F.E. Treatment Coalition Positions 3
  - 1. Cost Effectiveness 3
  - 2. No Harm 3
  - 3. Treat City Equally 4
- B. Review of Sierra Club Analysis 4
- DESP RECOMMENDATIONS 4

ADOPTION OF FINDINGS & RECOMMENDATIONS 4

INTRODUCTION

The Safe and Fair Environmental (SAFE) Treatment Coalition formed the Discharge Effects Science Panel for the purpose of reviewing and advising the SAFE Treatment Coalition's Executive Committee about the discharge effects of the City of San Diego's Point Loma Wastewater Treatment Plant (PLWTP) and Ocean Outfall. The Science Panel consisted of four experts in the field of marine ecology from both academia and professional services.

BACKGROUND

Since April 2000, the SAFE Treatment Coalition has a five-point position about upgrading the PLWTP to secondary treatment, based on the findings made in the *U.S. EPA v. City of San Diego* litigation, the 1994 Ocean Pollution Reduction Act, and the United States Environmental Protection Agency's 1995 decision to approve the City's secondary treatment waiver. The SAFE Treatment Coalition's position is:

TABLE I: S.A.F.E. Treatment Coalition Position

1. No Harm: Extensive scientific studies and monitoring demonstrate the City's treatment is safe for the ocean environment.
2. Author's Intent: City's position is consistent with the Federal law's intent as authored by Congressman Filner.
3. Treat City Equally: City's treatment standards should be the same as other cities with Clean Water Act waivers.
4. Rate Impact: San Diego metro region sewer rates could increase at least 150 to 300 percent for a $3 billion upgrade to secondary treatment.
5. Cost Effectiveness: Higher treatment standards do not address the cause of San Diego's beach and bay closures. Secondary treatment will raise City sewer rates and short change better solutions to beach and bay closures.

Although SAFE's position is based mostly on financial and legal issues, the most important point is that no harm is occurring to the ocean environment. Due to the City of San Diego's recent waiver submittal and the release of the Sierra Club's analysis of the City's monitoring reports, SAFE's Executive Committee convened a panel of marine ecology experts to provide peer review of the Sierra Club's analysis, to review SAFE's position, and to prepare for the EPA's forthcoming public hearing about their Tentative Decision. On May 30, 2001, the SAFE Executive Committee authorized the formation of the Discharge Effects Science Panel to consider the following questions:

TABLE II: Questions for Discharge Effects Science Panel's Review

1. Is the SAFE Treatment Coalition's position supportable based on the evidence by the City of San Diego and the analysis by the Sierra Club?
2. Are the positions in the Sierra Club's analysis accurate and complete?
3. Is the City of San Diego taking sufficient actions to determine future impacts and the appropriate amount of mass loading?

DISCHARGE EFFECTS SCIENCE PANEL MEMBERS

The SAFE Treatment Coalition is pleased to receive the volunteer participation of the following individuals as Science Panel members based on their expertise in the field of marine ecology, ocean monitoring and testing, and practical expertise with San Diego's kelp beds, which off Point Loma have the same water quality standards as required for human body contact.

- **Paul K. Dayton**, Ph.D., Professor of Marine Ecology, Scripps Institution of Oceanography

  Paul Dayton focuses on coastal habitats, which are some of the most over utilized, stressed, and disturbed areas in the world. His career has been driven by the belief that one must understand nature to protect it, and he has attempted to use analytical techniques of simplification, testing, and synthesis as an approach to understanding community organization. Paul's research specialty is benthic communities and coastal/estuarine environments. He has also been involved in projects focusing on kelp forests, global fisheries, and Antarctic ecosystems. He has devoted considerable time to the United States Marine Mammal Commission and to the University of California Natural System, which maintains approximately 30 reserves. Paul is also a widely sought speaker and he strives to provide sound science to support improved marine conservation policy.

- **Dr. D. Craig Barilotti**, Adjunct Biology Professor, San Diego State University, and Marine Resource Management Consultant, Sea Foam Enterprises.

  Craig's professional activities include: Technical Director in the design and implementation of a mitigation project to restore kelp for the California Coastal Commission under a contract with the Phillips Petroleum Company; Project Director of a contract to restore kelp beds in Santa Barbara County under the auspices of the California Department of Fish and Game; Principal investigator for a contract with the Marine Review Committee of the California Coastal Commission to study the effects of the San Onofre nuclear power plant on kelp beds; Expert witness on the effects of waste discharges on kelp bed habitats in the case *EPA v. City of San Diego* in Federal Court; Vice-Chair of the San Diego City Managers Water Conservation Committee; Co-Chair of San Diego Oceans Foundation forum on the Fate of the Point Loma Wastewater Treatment Plant; Chair of the City of San Diego Citizens Water/Sewer Review Committee; Chair of the Water Reclamation and Reuse Committee of the Metropolitan Sewer Task Force established to prepare a federally approved Facilities Plan for the greater San Diego area; and Vice Chair and Chair of the San Diego City Managers Water Conservation Committee.

- **Dale A. Glantz**, Senior Marine Biologist and Manager of Harvesting and Marine Resources; ISP Alginates Inc.

  Responsible for the continual assessment of California and Baja California's kelp resources through aerial and diving surveys, kelp forest research and restoration, and underwater and aerial photography. Also manages all of ISP Alginates' kelp harvesting operations throughout California.

- **Charles T. Mitchell**, president and senior scientist, MBC Applied Environmental Sciences.

  Founder and President of MBC with over 30 years' experience in directing and implementing environmental studies involving the monitoring and assessment of the effects of resource utilization on coastal environments from southern California to Alaska. He has published over 20 scientific papers, and is the senior author or editor on more than 600 major reports for industry, government, and academia. His major areas of expertise include fish ecology, habitat enhancement of coastal wetlands and kelp beds, fisheries, and artificial reef ecology.

  Mr. Mitchell has worked closely with clients and local, State, and Federal regulatory agencies. He is the designer and patent holder of a variety of marine sampling devices. Active in both the private and academic sector, he currently serves as an appointed member of the Biology Advisory Council at the California State University, Long Beach, is the past Chairman of the American Institute of Fisheries Research Biologist- Southern California District. Member of the California Department of Fish and Game's Scientific Support Team for the Upper Newport Bay Ecological Reserve, and a member of the Board of Directors of Pro Esteros, a bi-national organization for the preservation of Baja California's coastal wetlands. He has also served as an invited panelist on joint US and Mexican meetings on environmental issues facing Baja California.

FINDINGS & RECOMMENDATIONS

From May, 2001, through August, 2001, the Discharge Effects Science Panel reviewed numerous documents about the Point Loma Wastewater Treatment Program and the Point Loma Ocean Outfall. Reports provided to the Science Panel included:

1. City of San Diego, Metropolitan Wastewater Department, Environmental Monitoring and Technical Services Division, Ocean Monitoring Program. *Annual Receiving Waters Monitoring Report for the Point Loma Ocean Outfall, volumes* 1996 through 2000.

2. City of San Diego, Metropolitan Wastewater Department, Environmental Monitoring and Technical Services Division, Ocean Monitoring Program. *Quarterly Benthic and Trawl Monitoring Report*, January-March, 2001, and by request any other quarterly report.

3. City of San Diego. *Point Loma Ocean Outfall NPDES Permit Application and 301(h) Application for Modification of Secondary Treatment Requirements*, summary and technical portions, April, 2001.

4. Sierra Club. *Analysis of the Metals and Organic Loading Indicators in the Sediments of the Point Loma Ocean Outfall Area*, November 18, 2000.

During August 22, 2001, the Science Panel convened an all-day meeting at Scripps Institution of Oceanography to receive presentations from both the City of San Diego and the Sierra Club, and to draft their Findings and Recommendations. The City of San Diego's presentation was led by Alan Langworthy, Environmental Monitoring and Technical Services Division Deputy Director of the City of San Diego's Metropolitan Wastewater Department. Additionally, City of San Diego Technical Services Division staff Lori Vereker, Assistant Deputy Director, and Walter Konopka, Senior Chemist, participated in the City's presentation.

The Sierra Club's presentation was by Ed Kimura, Water Committee Chair of the Sierra Club's San Diego Chapter and author of the Sierra Club's November 18, 2000, analysis. Lori Saldana of the Sierra Club was present to assist. Doug Sain, S.A.F.E. Treatment Coalition's lead consultant, was the moderator and compiled this report. The presentations and question and answer periods lasted approximately four and a half hours. During the entire afternoon and as late as January 2002, the Science Panel developed and agreed unanimously to the following Findings and Recommendations:

DESP FINDINGS

A. Review of S.A.F.E. Treatment Coalition Position

1. <u>Cost Effectiveness</u>:

a. The Point Loma Wastewater Treatment Plant's (PLWTP) permitted discharge does not impact the San Diego shoreline.

b. Secondary treatment standards will not solve or reduce San Diego's beach and bay closures, because the closures appear to be caused by pollution from other sources.

c. Existing data suggests the incremental advantage of secondary treatment is negligible to the ocean environment.

d. The City of San Diego's Pretreatment/Source Control Program has provided significant treatment and discharge benefits with minimal costs to the City.

2. <u>No Harm</u>:

a. Extensive monitoring of the City's discharge has not found harmful impacts to the ocean environment.

b. Metal contaminants in the discharge are far below California State Ocean Plan standards.

c. The variations exhibited in metal contaminants and biological community structures are tightly coupled to grain size and total organic carbon (TOC). Relative to this type of variation the outfall has a negligible impact.

d. While there are some measurable outfall effects, spatial variability related to the outfall's effects is not greater than the natural variability.

e. Other human caused effects, such as dredge disposal and non-point sources, have a larger degrading impact on the ocean environment than the PLWTP's discharge.

3. Treat City Equally:

a. U.S. EPA regulations should be the same for the City of San Diego as for other cities with Clean Water Act waivers.

b. Safeguards are provided by the 301(h) five-year renewal program, which requires demonstration of discharge's negligible effects.

c. Future protection is provided by continuous monitoring and annual regulatory review.

B. Review of Sierra Club Analysis

1. The use of selective analysis is incomplete and could be drawing misleading conclusions, such as extrapolating the "analysis of sediment concentrations of the metals and organic indicators" with "whether or not the marine environment can remain healthy if these trends continue indefinitely with time."

2. The suggestion that TOC is related to metal concentrations is scientifically interesting but does not refer to ecological effects thresholds that should be of concern in the future.

3. Charts containing averages and trends need more rigorous analysis, because the averages and trends compound known variables that confuse the interpretation of the discharge's impact.

DESP RECOMMENDATIONS

1. To differentiate site specific changes from regional trends, some fixed monitoring stations should be added to the Random Sampling Program.

2. Deep ocean monitoring stations should be sited.

3. Support the City of San Diego's proposal to explore methods to evaluate the possible future ecological impacts of various solids mass loadings at the PLWTP at a maximum design flow rate of 240 mgd.

4. Encourage the U.S. EPA and State to fund an independent study allowing the City to experimentally increase current mass loadings in order to study possible future ecological impacts of various solids mass loadings at 240 mgd.

ADOPTION OF FINDINGS & RECOMMENDATIONS

The SAFE Treatment Coalition Executive Committee adopted all of the Discharge Effects Science Panel's Findings and Recommendations. Letters of commendation to the members of the Panel were approved, and this report was authorized for release to the public.

JM 3/12
David H. — please include in record of the hearing for Pt Loma NPDES permit

San Diego Bay Council

A coalition of environmental organizations dedicated to protection and restoration of San Diego coastal waters

March 12, 2002

State of California
Regional Water Quality Control Board
San Diego, Region
9174 Sky Park Court, Suite 100
San Diego, CA, 92123

Subject: NPDES Renewal Permit, City of San Diego, E.W. Blom Point Loma Wastewater Treatment Plant and Ocean Outfall

Dear Chair Minan and Members of the Board:

The San Diego Bay Council is dedicated to the protection of our coastal waters. We have given careful consideration to the short and long term consequences of the renewal permit on human health and the marine ecosystems. In the short term we are not opposed to the biochemical oxygen demand (BOD_5) and total suspended solids removal rates, as they are the same as the current permit. However, from the long-term view to protect our coastal waters, we cannot support this renewal permit without significant improvements to the ocean monitoring and reporting program. The reasons for this position and our recommendations are listed below:

1. The projected mass emissions provided on page 10 of the U.S. Environmental Protection Agency Tentative Decision on the subject permit renewal shows an increase in the annual mass emission rate from 8,888 metric tons in year 2000 to 14,100 metric tons in 2001, then increasing annually to 14,600 metric tons in 2005 thereafter decreasing to 13,599 metric tons in 2006. The reason for this large incremental increase is not given in the Tentative Decision. The conclusion that the applicants proposed discharge will satisfy the CWA sections 301(h) and (j)(5) and 40 CFR 125, Subpart G is based partly on the analysis of the receiving waters monitoring data presented in this Decision. However, the analysis does not take into consideration the increased mass loading due to the applicant's projected mass emissions. We believe this to be a serious defect in this analysis.
2. The Ocean Pollution Reduction Act (PL 103-431) that allowed the initial 301(h) waiver from secondary treatment for the Pt. Loma Wastewater Treatment Plant has the objective to reduce the mass emissions by requiring the City of San Diego to achieve a system capacity of 45,000,000 gallons per day of reclaimed wastewater by January 1, 2010. The City has achieved this requirement. The Tentative Decision does not expressly take into consideration in their analysis the beneficial effects of diverting reclaimed water from the treatment plant including reduced mass emissions.
3. Page 19 of the Tentative Decision discusses the models used by the City and EPA in 1994 to determine the deposition rate of solids around the outfall. After 5 years of plant operations and the availability of ocean monitoring data, EPA does not provide analysis to validate the estimates of the deposition rates of the solids using actual data. EPA discusses the "zone of initial dilution" but does not provide any estimates of the physical extent of this zone. In our view it is essential to have a fate and transport modeling validated by actual ocean data in order to provide reliable and useful estimates on the impacts of the discharge from the outfall.

4. The City ocean monitoring report notes that toxic matter from the LA 5 disposal site is being detected at the ocean monitoring stations closest to this site. We recommend that measures be taken to assure that the LA 5 disposal site is properly managed.
5. We were able to only spot check the Tentative Decision analysis of the ocean monitoring data to see if future trends in the contamination levels were being addressed. We were disappointed. Here are two examples:
   - Page 21 states that there appears to be no spatial or temporal trends in the total organic carbon (TOC). We disagree. Examination of the TOC at stations going in a northerly direction from the outfall: E17, E20, E21, E23, E25 and B8 all show slight increasing trends in the TOC values starting from year 1996 to 2000. See Figure 1. Examination of the TOC at all other stations do not show any discernable trends.
   - Page 21 states that the biochemical oxygen demand (BOD_5) shows no apparent increase during the period of discharge. We do not agree. Figure 2 depicts the distribution of the BOD levels at all stations for years 1996, 1999 and 2000. The shift in the distribution average value is evident between 1996 and 1999. While the average for year 2000 is less than 1999, the shape of the distribution shows a shift towards higher values compared to 1996.
6. The biological impact of the discharge analysis starting on page 25 of the Tentative Decision does not address the impacts on wildlife. We refer to marine mammals and birds. Both feed on the fishes. The bioaccumulation of the toxic material in the fishes and the effects on the reproductive and general health of these species has not been presented
7. Episodic events such as the El Niño and La Niña can make significant changes to the sediment quality through resuspension and subsequent transport. These events can also modify the distribution of the sediment size, phi. The Tentative Decision ignores these transient effects on the sediment quality and the subsequent effects on the marine life.
8. The Tentative Decision uses the Benthic Response Index (BRI) in determining the impacts on the benthic species. As the BRI has only been recently developed by SCCWRP, has it undergone peer review?
9. Page 39 begins the discussion on the impact of discharge on recreational activities. The total and fecal coliform and enteroccous are used at the indicators of the pathogens discharged from the outfall. The shortcomings of these indicators are well known. The fact other pathogens such as viruses have longer lifetimes in the ocean environment means that the absence of the indicator bacteria does not mean the absence of the longer-lived pathogens. The potential transport of these pathogens shoreward towards the kelp beds used by scuba divers and areas frequented by those in sailboats where they are exposed to water spray poses human health risks. The statement that the density stratification traps the plume below the depth of the kelp beds is only true during the times during non-isothermal water conditions. During the cooler months, near isothermal water conditions exist. The Tentative Decision does not consider these conditions and the probable impacts to human health. There are other conditions such as upwelling of the nutrients and potentially contaminated sediments transported from the deeper waters toward the shore.
10. The Monitoring and Reporting Program needs to be improved in several areas.
    - Improved monitoring methods to detect health-threatening pathogens are needed.
    - Increase the in-water information (more samples, more sites). Integrate the water monitoring program with the remote sensing program.
    - We recommend remote sensing of various types to sample a larger coastal area in order to determine the cumulative impacts of the discharges from the Pt. Loma and South Bay Ocean Outfalls as well as the discharges from the Mexican treatment plants. Correlations of the remote sensing data and the in-water monitoring data will serve to improve the effectiveness the ocean monitoring program.

11. There should be deep-ocean monitoring to determine the discharge impacts on the marine ecosystems at these deeper depths. For example, the San Diego 1999 Annual Receiving Waters Monitoring Report on page 36 notes the existence of a sediment trap in the La Jolla submarine canyon. This raises the question of the impact of the trapped sediment and the potential for bearing high level of contaminants on the marine life.
12. An independent, qualified body should conduct annual reviews of the ocean monitoring data. Currently, this is conducted only once every five years. These reviews will provide information on the health of the marine ecosystem on a more, timely basis.
13. The data in the monthly, quarterly, and annual monitoring reports should be made available to the public in electronic form. Currently, only hard copies are available for review at the RWQCB office. Conducting detailed reviews without resorting to expensive copying of these reports is not possible. Furthermore, analysis of the large amount of data being gathered requires that the data be in electronic format to be processed by computers.

Thank you for this opportunity to present our views on this renewal permit.

Sincerely,

Marco Gonzalez
Surfrider Foundation

Bruce Reznik
San Diego BayKeeper

Laura Hunter
Environmental Health Coalition

Ed Kimura
Sierra Club
San Diego Chapter

Jim Peugh
San Diego Audubon Society

Figure 1

Stations with Increasing TOC trends
Years 1996 to 2000

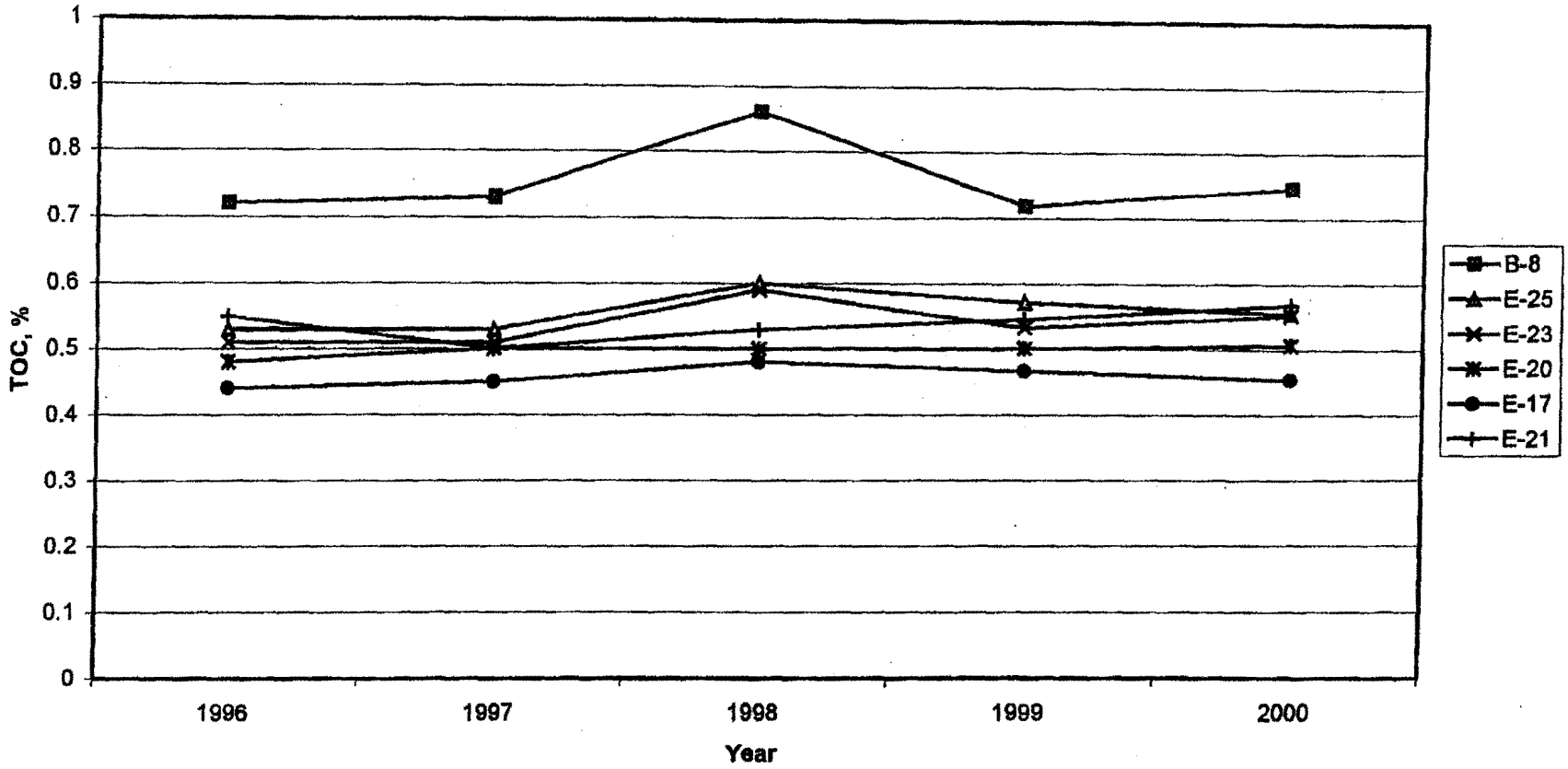
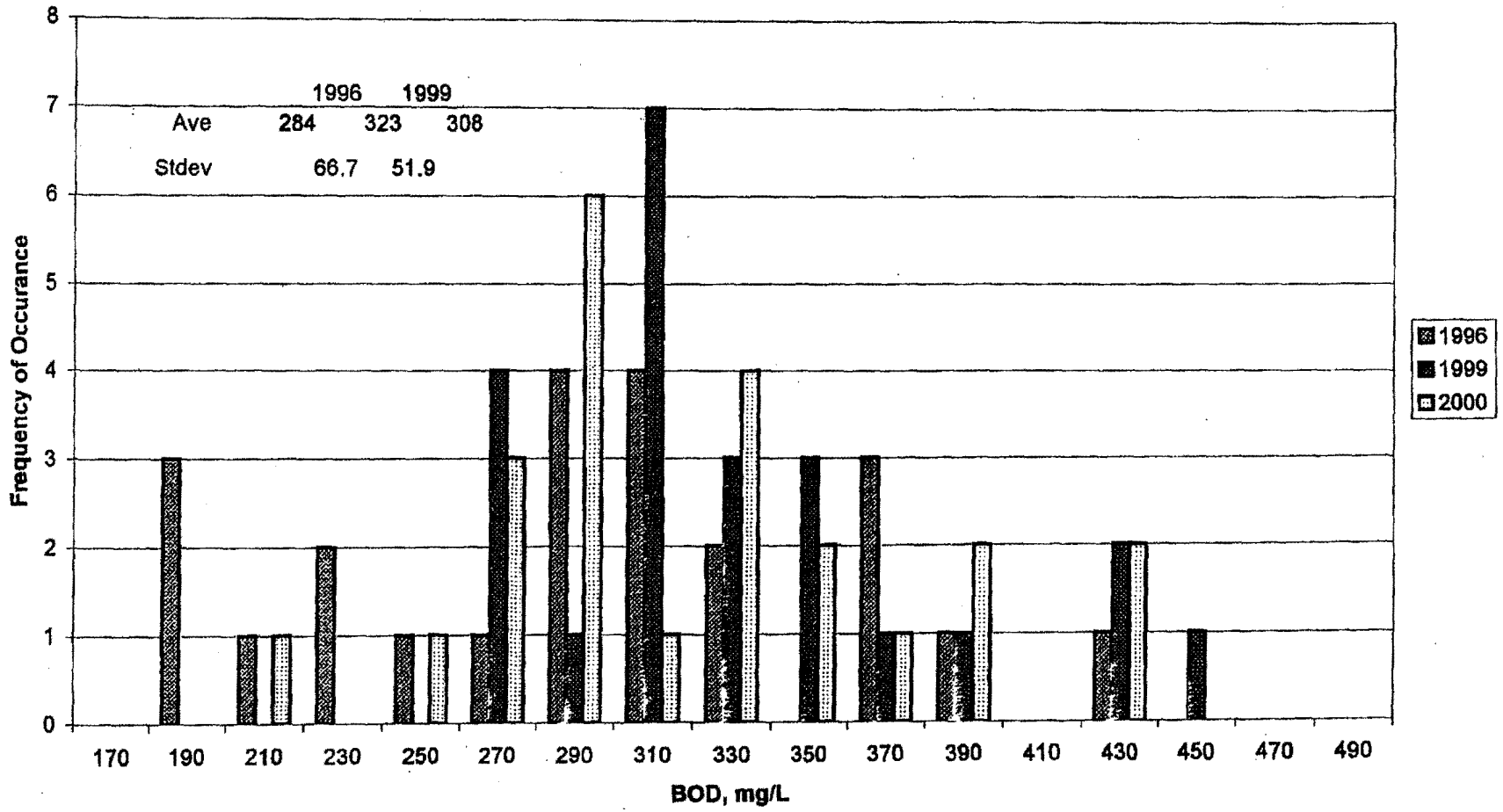


Figure 2

Frequency Distribution, BOD in Sediments
Years 1996, 1999, 2000



SAN DIEGO REGIONAL CHAMBER OF COMMERCE

EMERALD PLAZA
402 West Broadway, Suite 1000
San Diego, California 92101-3585
Tel 619.544.1300
Fax 619.234.057
www.sdchamber.org

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

2002 MAR 12 A 11:25

JR 3/12
Brian Kelley
Please include in record of Pt. Loma hearing

March 11, 2002

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board,
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

RE: Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego – Wastewater Treatment Plant Discharge to the Pacific Ocean

Dear Mr. Robertus:

The San Diego Regional Chamber of Commerce strongly supports the U.S. Environmental Protection Agency's (EPA) Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System (NPDES) permit consistent with section 301(h) of the Clean Water Act (CWA), and urges the California Regional Water Quality Control Board (RWQCB) to adopt the EPA's recommendations.

The EPA's tentative approval of modified standards suggests that the propagated balance of our ocean's indigenous population is not interfered with or disturbed by the discharge dispersed to the waters through the Point Loma Ocean Outfall.

Extensive scientific studies and monitoring demonstrate that the City's wastewater treatment and discharge are more than sufficient to protect the marine environment and the health of all San Diegans. The Safe And Fair Environmental Treatment Coalition (S.A.F.E.), which the Chamber is a member of, conducted an independent review of the City's monitoring data and analysis, which is contained in the Discharge Effects Science Panel report (January, 2002). Both S.A.F.E.'s independent report and, more significantly, the EPA's tentative decision consistently support the City of San Diego's application and demonstrate that an expensive upgrade to secondary treatment at a potential cost of $3 billion is unwarranted and would provide no noticeable benefit to the ocean environment.

The permit proposed by EPA provides for full protection of the public health and environment. Water quality is an important issue for the Chamber, its 3,200 members and their employees. In this case, scientific evidence demonstrates that higher treatment standards would result in no environmental benefit for our ocean environment. Consequently, it would make no sense to impose a grossly unfair economic burden on the City of San Diego and its nearly two million ratepayers.

Therefore, on behalf of the Chamber, I urge you to support the EPA's recommendations.

Sincerely,

Eugene Mitchell

Eugene Mitchell
Vice President, Public Policy

EM:av

san diego regional economic development corporation

JR 3/12
Brian Kelley — please include in Pt Loma hearing record.

2002 MAR 12 A 11:26
SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

March 11, 2002

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Subject: Tentative Order No. R-92002-0025, NPDES Permit No. CA0107409 for the City of San Diego – Wastewater Treatment Plant Discharge to the Pacific Ocean

Dear Mr. Robertus:

On behalf of the San Diego Regional Economic Development Corporation I want to voice our organization's strong support for the U.S. Environmental Protection Agency's (EPA) Tentative Decision to grant the City of San Diego a modified National Pollutant Discharge Elimination System (NPDES) permit in a manner consistent with section 301(h) of the Clean Water Act (CWA), and to request the California Regional Water Quality Control Board (RWQCB) adopt the EPA's recommendations.

The information contained in the EPA's tentative approval clearly shows the City of San Diego's wastewater treatment methods are more than sufficient to protect the marine environment and the health of all San Diegans. For that reason we urge you and the Board to approve the permit. Moreover, as has consistently been shown, any demand for a higher level of treatment at the plant, would impose a grossly unfair economic burden on the City, its participating agencies, and the nearly two million affected ratepayers *while leading to no net environmental benefit.*

The permit proposed by the EPA provides for full protection of the public health and environment. By tentatively issuing this permit, the EPA and the RWQCB recognize what all-available scientific information confirms – San Diego's treatment system causes no environmental harm.

Thank you for the opportunity to communicate with you on this most important matter.

Sincerely,

W. Erik Bruvold
Vice President and Director of Quality of Life Issues

401 B Street
Suite 1100
San Diego
CA 92101
619.234.8484
619.234.1935 fax

Item 7

SIERRA CLUB, SAN DIEGO, COMMENT TO DRAFT DISCHARGE PERMIT

A. OBJECTIONS

Objection 1. The mass emissions limitations on total suspended solids (tss), from 15,000metric tons per year, through 12/31/05, to 13,599 mt/yr, by 1/1/06, are grossly excessive and must be substantially reduced. As it stands, they violate the Clean Water Act (CWA) and is based on facts that are either erroneous or concealed.

Objection 2. Failure of the draft permit to require the discharger to reclaim and reuse any part of its wastewater violates Federal and State law, ignores existing reclamation reuse facilities, and disregards the direct effect such reuse has on reducing tss mass emmissions into the ocean.

B. SUGGESTED REVISIONS

Revision 1. The first year (2002) mass emissions of tss should be 10,200 mt/yr (the actual tonnage for 2001) and decline to 8,800 mt/yr by January 1, 2006.

Revision 2. The discharger should be required to achieve a reclamation reuse volume of 25 mgd, by January 1, 2006, thereby enabling it to achieve an annual mass emmissions reduction of 1,400 metric tons by that year.

C. EXPLANATION

1. Mass emissions of suspended solids(tss)

a) (violation of the CWA's OPRA provision)

While the draft permit mass emmissions requirement of 15,000 mt/yr, through 12/31/05, decreasing to 13,599 mt/yr on the following day (1/1/06), purports to comply with Section 301(J)(5) of the CWA (hereinafter "OPRA") (Facts doc., pages 3&8), actually, it grossly violates that law. As the draft permit correctly states (Facts, page 3), OPRA requires the discharger to achieve..."4. A reduction of tss into the ocean during the permit modification period" Far from requiring a reduction during this renewal period, the draft permit's period limitations of from 15,000mt/yr to 13,599 mt/yr is from 50% to 33.3% higher than the discharger's actual me total during 2001 (10,200 metric tons). Moreover, the discharger's me totals have averaged about 10,000 mt/yr for each of the past four years. Nowhere in the draft permit documents is there any mention of this current and prior year data. The omission is especially troubling because the underlying data is on file with this Regional Board and the annual me tonnage totals could easily have been discovered by one telephone call to the City's Metro Wastewater Department.

b) (violation of the CWA's primary statutory goal)

The primary goal of the Clean Water Act is the "steady reduction of pollutants discharged into receiving waters." This goal is expressed in the Act, in its legislative history, and by various appellate decisions. (see "Summary of Law", attached hereto as "APPENDIX C")

The permission given this discharger to significantly increase, rather than decrease, the worst of its effluent

pollutants represents an inexplicable error by the Federal agency expressly charged with enforcing the Act. Moreover, it represents a glaring oversight by the State agency given primary responsibility--under both Federal and State laws--for protecting the quality of our near-shore ocean. (Note. Because the Point Loma plant does not disinfect its effluent, 15%-20% of all viruses and pathogens that go into Metro toilets is discharged through the outfall, riding piggyback on the suspended solids.)

c) (inflated influent flow projections) The draft permit documents state that "EPA based its mass emission calculations on 1995-2000 concentrations and discharger's projected end of permit flow of 195 mgd, dry-season, monthly average." (Facts, page 2) This projection is 20 mgd higher than the actual 2001 daily average of 175 mgd and apparently was inflated to justify a higher me limitation. The inflation is obvious when the current flow volume is compared with the declining flow trend over the past eleven years. Had investigators at either EPA and/or the Regional Board looked at the Point Loma plan flow data for 2001 and prior years (filed with the Board on a monthly basis), they would have discovered facts the discharger takes pains to conceal. Instead of increasing with population over time, influent flows have actually decreased by 15 mgd since 1989 (-7.9%). (see the Flow Chart at APPENDIX A)

The discharger has repeatedly argued that the steady increase in its population supports its future flow projections. But, this overlooks the effects of conservation and is belied by the current and past mass emission and influent flow data. Indeed, while the City's population increased by nearly 17%, between 1989 and 1999, Point Loma's influent flows decreased by nearly 8% during the same period (see Population chart at APPENDIX B).

The discharger has consistently inflated its flow projections. It did so in its application for the first waiver permit, in 1995. Now, it has done so, again, and again, there is no mention of the actual flows--current or past--in the draft permit documents. The failure of both agencies to ascertain the "actual" tss mass emissions and influent flows is profoundly disturbing.

d) (The 80% tss removal basis for the me limitations disregardsthe the Point Loma facility's actual performance)

The second basis cited by the draft permit documents for setting high tss mass emissionslimitations is the OPRA requirement that the discharger must remove "not less than 80% of tss" in the Point Loma effluent (Facts, page 3). Nowhere in the draft documents is mention made of the actual tss removal levels for the past four years--which have hovered between 84% and 85%. Since the discharger has been consistently removing tss at above 84%, basing the mass emissions limitation on an 80%removal makes no sense and nowise justifies the permit's excessive me levels. (Note. OPRA does not mandate an 80% removal level, but only prohibits a lesser percentage.)

e) (suggested revision)

By adopting the suggested revision, the 2002 me limitation for tss will be 10,200 mt/yr and the 2006 limitation will be 8,800.

The first year limit is the actual tss discharge for 2001, while the 2006 limit of 8,800 mt/yr reflects a 1,800 metric ton me reduction the discharger can achieve by reclaiming and reusing just 25 mgd of its influent flow (see section 2(b), infra).

The "declining mass emmissions" requirement in OPRA (CWA Section 301(J)(5)(#4) was obviously intended to achieve the primary goal of the Act, to reduce pollutant discharges into receiving waters. The suggested permit revision complies with both OPRA and the Act's purpose, while the draft permit complies with neither.

2. Failure to require any water reclamation and reuse

a) (Reclamation reuse is mandated by Federal and State law and the discharger's own ordinance)

The Clean Water Act, Federal Court decisions, California's Constitution and Water Code, and the City of San Diego's reclamation reuse ordinance, all mandate that as much of the discharger's wastewater, as is practicable, must be reclaimed and applied to beneficial uses. (See "Summary of Law" attached, hereto, as "Appendix C".)

The absence of any reclamation reuse requirement in the draft permit is troubling. Especially so is the concurrence in this of the Regional Water Board. Both under the CWA and California law, the latter agency has primary authority and responsibility to not only protect the near-shore ocean quality, but also to prevent the waste of water resources. It must be as obvious to administrators, as it is to the Sierra Club, that every gallon of treated wastewater that is discharged, rather than reused, is a gallon wasted.

(Note. The only mention of reclamation reuse in the draft permit documents is a "Reclamation Report" requirement that could not be more vacuous. Only the discharger's plan to increase its water reclamation is to be reported, in 2002 and 2005, and no reuse intention need be reported. Indeed, in the parenthetical sentence that concludes this reporting provision, EPA and the Regional Board display an indifference to water reclamation and reuse that is unconscionable: "(This is not a requirement for the discharger to actually reclaim wastewater or reuse reclaimed water.)" (Permit, page 56(h)(8))

b) (The inverse relationship between reclamation reuse and mass emission discharges)

It is irrefutable that, for each 1 mgd of wastewater the discharger diverts from its Point Loma facility and outfall to reclamation reuse, there is a corresponding reduction in the facility's influent flow and effluent mass emissions. Thus a diversion of 1 mgd reduces flow by 1/175(2001 daily average). It also will reduce the me by the same decimal (i.e., .006). Applying this decimal to 10,200 metric tons (tss total for 2001), each 1 mgd diversion reduces the me by 61 tons. Finally, a diversion by this discharger of just 25 mgd into reclamation reuse would reduce its annual me discharges by over 1,400 mt/yr.

c) (Discharger can achieve a 25 mgd diversion t o reclamation reuse during this modification period)

The discharger currently operates a 30 mgd water reclamation plant, called "North City" and will commence operating a 7 mgd reclamation plant, called "South Bay" during this modification period.

NORTH CITY: The discharger is currently reusing approximately 7 mgd of reclaimed water from this facility, marketing it through a "backbone delivery system" for irrigation and other uses. the sludge is pumped to the City's sludge-disposal facility for full disposal. The draft permit makes no mention of this ongoing reuse, nor its effect in lowering the discharger's mass emissions tonnage.

The draft permit documents also make no mention of the discharger's planned "Potable Reuse Project", which has been approved to reclaim and reuse an additional 20 mgd of the effluent from this facility. This project has already been approved by all pertinent State and Federal agencies, but was shelved three years ago by the then City Council for political reasons.

SOUTH BAY: This reclamation facility is expected to commence operations in the next year or two and the discharger has announced that virtually all of its initial 7 mgd capacity will immediately be marketed for reuse. This facility is described in the draft permit, but it is said to have no effect on reducing mass emissions. Since no sludge disposal facility now exists to serve this plant, we are told, its sludge must be conveyed back to the Point Loma plant for disposal. No reason is given that explains why this South Bay sludge cannot be conveyed to the City's sludge-disposal facility, at Miramar, through the same pipeline that now takes the Point Loma sludge there.

d) (The suggested revision is readily achievable, will reduce mass emissions during this permit period, and achieve compliance with applicable laws)

By failing to require any reclamation reuse whatsoever, the draft permit violates the California Constitution and other applicable Federal and State laws cited in Appendix C. Article Ten, Section Two, of the California Constitution provides as follows: "The general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with the view to the reasonable and beneficial use thereof..."

This discharger currently has approximately 7 mgd of reclamation reuse of the 30 mgd capacity at its North City facility. It will soon have an additional 7 mgd of reclamation reuse upon completion of its South Bay facility. Further, the discharger could, if it wished, achieve an additional 20 mgd of reclamation reuse at North City, by merely implementing its, State certified, "Potable Reuse Project".

If the City does nothing more, it will be diverting away from Point Loma and reusing at least 14 mgd of its wastewater during this modification period. Because of this, its tss mass emissions will decline by approximately 816 mt/yr. If it made the political

decision to implement its shelved Potable Reuse Project, the discharger would further reduce its me by 1,100 mt/yr.

C. CONCLUSIONS

As it stands now, the draft permit violates anti-pollution provisions of the CWA. Most clearly, it violates requirement #4 of OPRA by setting the first years of the renewal period at a level 50% higher than the 2001 total of 10,200 metric tons. Then, the draft seeks to soften the error by lowering the 2006 level to 13,599 mt/yr, still leaving tss mass emissions one-third higher than currently.

By adopting the suggested revisions of the San diego Sierra Club, the agencies will (1) bring the mass emissions limitations into compliance with the Act,(2) significantly reduce the discharge of non-disinfected effluent into the ocean, and (3) achieve a significant level of water conservation that complies with the Constitution and Water Code of California.

Robert L. Simmons, Member, Executive Committee
Sierra Club, San Diego
P.O. Box 19932
San Diego, CA 92159
(619) 464-0325 (fax) same (e-mail) rls@acusd.edu

SIERRA CLUB COMMENT TO CITY DRAFT PERMIT RENEWAL APPENDIX A & B

I. Point Loma Wastewater Flows, 1990- 2000

1990: 186 MGD (204,600 AFY(3)
2000: 174 MGD (191,400 AFY)

Wastewater Flow decline, 1990-2000: 12 MGD (13,200 AFY)
Percentage decline: 6.4%

II. INCREASED CITY OF SAN DIEGO POPULATION, 1990-2000 (4)

January, 1990: 1,085,000.
January, 2000: 1,277,000.
Increase in City population, 1990-2000: 192,000.
Percentage increase: 17.6%

III. THE PRIMARY CAUSE OF THE DECLINING WASTEWATER VOLUME: Mandatory Indoor Plumbing Conservation (City, 1992-98)5)

1. Low-flow Toilet, Urinal & Showerhead Replacements
   Estimated Voluntary Rebate Program Savings: 7,000 AFY (6.4 mgd)
   Estimated Compelled Toilet Replacement Savings: 14,500 AFY (13.1 mgd)
   Total Estimated Reduction by Plumbing Conservation: 21,500 AFY (19.5 mgd)

(footnotes) (1) indoor use comprises approximately 60% of total consumption

(2) The source of the wastewater volume data is the Regional Water Quality Control Board, San Diego Region

(3) "afy" means acre feet per year and is the standard measure of water supply, while "mgd" means million gallons per day and is the standard measure of wastewater volume

(4) The source of the population data is the San Diego Area Government (SANDAG)

(5) The source of the City's plumbing conservation ordinance

SIERRA CLUB COMMENT TO NPDES DRAFT PERMIT
APPENDIX C.

Summary of Laws Requiring Reclamation Reuse

(a) Relevant Federal Law

The Federal "Clean Water" Act mandates wastewater reclamation and re-use to the maximum feasible extent, to conserve water and achieve a steady reduction in pollution discharges into the ocean.

The "Clean Water" Act, 33 U.S.C. 1251, et. seq. (hereinafter "Act") ordains a policy of reclaiming waste water and beneficially re-using it (hereinafter "recycling") to both conserve water and reduce pollution discharges into receiving waters. Relative to the latter purpose, the clear and expressed intent of the Act is to steadily reduce and eventually eliminate all polluting discharges into navigable waters. 33 U.S.C. 1251(a)(1); Chevron U.S.A., Inc. v. Hammond, 726 F.2d 483, 489, (9th Cir. 1984).
(NOTE. Other supporting case authorities omitted for this purpose.)

The only practicable way a municipal discharger can satisfy this pollution reduction requirement is by implementing a steadily growing program to recycle its waste water. Recognizing this cause and effect relationship, the Act imposes a recycling duty on the EPA Administrator:

"...(T)he Administrator shall conduct, on a priority basis, an accelerated effort to develop, refine, and achieve practical application of...methods for reclaiming and recycling water and confining pollutants so they will not migrate to cause water or other environmental pollution..." 33 U.S.C. 1255(d)(2).

With these Act provisions in mind, the U.S. District Court for New Jersey held that the "Clean Water" Act requires water recycling in order to achieve a reduction in waste water effluent volumes to the maximum extent feasible, stating "the Clean Water Act was intended to encourage the use of treated waste water - through recycling or reclamation - rather than the mere discharge of the waste water into another body of water." Township of Parsippany-Troy Hills v. Costle, 503 F.Supp 314, 327 (N.J. 1979); aff'd 639 F.2d 776 (3d. Cir. 1980).

In its order renewing respondent's NPDES permit in 1990, this Regional Board expressly required the City to comply not only with all conditions contained in the permit itself, but also to comply with all provisions of the CWA and California's Water Code. (Board Permit Order 90-32, provision 2, at p. 28.)

In a recent Southern District of California "Clean Water" Act case, Federal Judge, Brewster, affirmed the Act's policy concerns with conserving water and the prudent use of waste water in the following Conclusion of Law:

"The reduction of unnecessary consumption of water and the

prudent use of waste water in sewage treatment systems are goals of the Act." Conclusion of Law Four, 6/22/91, EPA Administrator v. City of San Diego and Sierra Club, Intervenor, 88-1101 (RMB), citing Act sections 1251 (B) and (G), and 1254 (O).

Title 33 U.S.C. 1251(b) provides, in pertinent part:

"It is the policy of Congress to...plan the development and use (including restoration, preservation, and enhancement) of land and water resources."

Section 1251(g) provides, in pertinent part:

"Federal agencies shall cooperate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate, pollution in concert with programs for managing water resources."

(b) RELEVANT STATE LAW

California's "Prudent Use" Laws

Unique among the States, California has elevated its policy requiring all water resources be beneficially used to a constitutional mandate. Article Ten, Section Two, of the California Constitution provides as follows:

"The general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with the view to the reasonable and beneficial use thereof..."

This section imposes a "rule of reasonable use" on all waters of the state. The California Constitution goes on to state that the right to water "does not and shall not extend to the waste and unreasonable use or unreasonable method of use...of water."

Subsequent to this enactment, several important Water Code sections were adopted to implement and enforce it.

California Water Code sections 100 and 275 reemphasize the constitution's prohibition of waste or unreasonable use of water. Section 275 mandates that the Board take all steps necessary to prevent such waste or unreasonable use. Section 100 mandates that careful use of California's water resources is "in the interest of the people and for the public welfare." Cal. Water Code ^U 100 (West 1995). These code sections impose a duty upon the Board to take affirmative action in preventing the waste of water and promoting the public welfare and the future of California's water supply.

In recent years, the California legislature has plainly indicated its belief that waste water reclamation and beneficial re-use are required for the prudent use and conservation of water resources mandated by the Constitution. Water Code Section 13142.5(e) expressly applies to the State's coastal zone and to this case, providing:

"Adequately treated reclaimed water should, where feasible, be made available to supplement existing surface and underground supplies and to assist in meeting future water requirements of the

coastal zone..."

As if to make clear the nexus between California's reclaimed water policy mandates and municipal discharge programs such as respondent's, this Board, in "The Matter Of The Sierra Club, San Diego Chapter," Order No. WQ 84-7, 1984 WL 19064.6 (Cal. St. Wat. Res. Bd. (7/18/84), stated the following at page 6:

"In the future, in this case and in all other cases where an applicant in a water-short area proposes a discharge of once-used waste water into the ocean, the report of the discharge should include an explanation WHY THE EFFLUENT IS NOT BEING RECLAIMED FOR FURTHER BENEFICIAL USE. This is consistent with State policy, established by the Legislature in Water Code Section 13142.5(e)."

As recently as 1992, this Board confirmed the link between recycling and the prudent use/waste of water mandates. In decisional order #1630 ("Interim Bay-Delta Standards") appears this language:

"Wherever practicable, all agencies should reduce imported water demands by maximizing water reclamation re-use."

Other Water Code provisions reinforce complainant's position that failure to recycle waste water, where feasible, is a prohibited waste of a water resource.

Chapter 6 of the Water Code, entitled "Waste Water Re-Use", provides that the public interest requires the maximum re-use of waste water. Cal. Water Code ^U 461 (West 1994).

Chapter 7.5 of the Water Code, entitled "Water Recycling Act Of 1991", establishes goals for statewide reclaimed water re-use. Pursuant to section 13577, 700,000 acre feet per year ("afy") must be recycled by the year 2000, and 1,000,000 afy must be recycled by the year 2010.

Water Code Sections 13550 and 13551, as amended, require public and private entities to use reclaimed water for irrigation, industrial, and agricultural uses under conditions of availability, quality and cost, conditions that could be fully met by the City of San Diego. These statutes proclaim that the use of potable domestic water for irrigation, in lieu of reclaimed water, is a waste or unreasonable use of water under the California Constitution.

The intent of the California legislature to force expansion of waste water recycling is vividly shown by its steady enlargement of mandated uses. Water Code Section 13553 requires use of reclaimed water for toilets and urinals in all non-residential structures.

Water Code Sections 13555.2 and 13555.3, effective January 1, 1993, were added to the reclamation and re-use statute. These new provisions require dual plumbing in all new construction within metropolitan San Diego and in many other regions of the State, to accommodate reclaimed water. Under these provisions, all outdoor irrigation in new residential developments, and all new commercial and industrial structures, must use reclaimed water when it is available.

CITY OF SAN DIEGO WATER RECYCLING ORDINANCE

(c) Relevant Local Law

Expressing a recognition that San Diego's 90% dependence on imported potable water dictated an aggressive water reclamation and re-use program, San Diego city Council adopted a Water Reclamation ordinance in 1989 (#64.081, et. seq.). Among other things, the ordinance announced a goal of wastewater recycling (reclaiming and re-using) 70,000 acre feet per year (afy) of its Metro wastewater by the year 2010. The ordinance also mandated use of reclaimed water in place of potable water throughout the City and imposed criminal and civil penalties for violations.

Robert L. Simmons
Member, Executive Committee, Sierra Club, San Diego
Professor of Law, USD (ret)
Member, Advisory Committee, California Reuse Foundation
P.O. Box 19932
San Diego, CA 92159
(619) 464-0325 (fax) same
(E-mail) rls@acusd.edu

STATE OF CALIFORNIA -- THE RESOURCES AGENCY

GRAY DAVIS, *Governor*

CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
FRANCISCO, CA 94105-2219
E AND TDD (415) 904-5200

RECORD PACKET COPY

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Addendum

Date: **March 21, 2002**

To: **Commissioners and Interested Persons**

From: **Peter Douglas, Executive Director**
Mark Delaplaine, Federal Consistency Staff

Subject: **Consistency Certification CC-10-02, City of San Diego Secondary Treatment Waiver Renewal**

Attached is a transcript of the California Regional Water Quality Control Board, San Diego Region, March 13, 2002, initial public hearing (Tentative Order No. R9-2002-0025 and draft NPDES Permit No. CA0107409).

STATE OF CALIFORNIA

REGIONAL WATER QUALITY CONTROL

BOARD SAN DIEGO REGION

Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, California
Wednesday, March 13, 2002

JOINT PUBLIC HEARING
ITEM 7

(Reporter's Transcript of Proceedings)

JOINT PUBLIC HEARING: NPDES Permit Renewal, City of San Diego, E.W. Blom Point Loma Wastewater Treatment Plant and Ocean Outfall. The San Diego Regional Water Quality Control Board and the U.S. Environmental Protection Agency will convene a joint public hearing to obtain information from the public and interested parties on Tentative Order No. R9-2002-0025. (Tentative Order No. R9-2002-0025, Draft NPDES Permit No. CA0107409)

REPORTED BY: GRACE A. VERHOEVEN CSR NO. 11419

PARK AVENUE DEPOSITION SERVICE (800) 447-3376

STATE OF CALIFORNIA

REGIONAL WATER QUALITY CONTROL BOARD

SAN DIEGO REGION

9174 Sky Park Court, Suite 100

San Diego, California 92123

Information: (858) 467-2952

CALNETs: (8) 734-2952

APPEARANCES

BOARD MEMBERS:
JOHN MINAN, CHAIRMAN - Water Quality
GARY STEPHANY, Vice Chair - Undesignated (Public)
LAURIE BLACK - Water Quality
JANET KELLER - Recreation/Wildlife
TERESE GHIO - Industrial Water Use
RICHARD WRIGHT - County Government
VICKIE BUTCHER - Water Supply
ERIC ANDERSON - Irrigated Agriculture

EXECUTIVE STAFF:
JOHN H. ROBERTUS, Executive Officer
LORI COSTA, Executive Assistant

STATE BOARD STAFF COUNSEL:
JORGE LEON

WATERSHED BRANCH
MICHAEL McCANN, Supervising Engineer

ALSO PRESENT:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
ALEXIS STRAUSS, Director, Water Division

1 I N D E X

2

3 SPEAKER PAGE

4 Alexis Strauss 7
Terry Fleming 12
5 David Hanson 21
Scott Tulloch 26, 84
6 Mayor Dick Murphy 29
Councilmember Scott Peters 35
7 Andrew Shogren 39
Jay Goldby 41
8 Ron Miller 43
Peter MacLaggan 44
9 David McKinley 45
Robert Simmons 46
10 Erik Bruvold 51
Steve Zapoticzny 53
11 Ed Kimura 55
Stephanie Pacey 59
12 Jim Peugh 60
Bruce Reznik 63
13 Marco Gonzalez 67
Paul Dayton 73
14 James McDonald 74
Larry Porter 77
15 Doug Korthof 79

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1 SAN DIEGO, CALIFORNIA; WEDNESDAY, MARCH 13, 2002

2 9:45 A.M.

3

4 ITEM 7

5 CHAIRMAN MINAN: This brings us to Agenda Item 7,
6 which is a joint hearing by the Regional Board with the
7 representatives from the Federal EPA. This is not an
8 action item. This is an item for the receipt of
9 information, oral and written. I would remind participants
10 today that the notice indicates that written testimony is
11 to be submitted by the close of business today.
12 And I would just at this point like to
13 indicate that the context of this hearing is based on the
14 Clean Water Act requirement that publicly-owned treatment
15 works that are discharging to the ocean comply with
16 secondary treatment standards. Those standards are defined
17 in the Code of Federal Regulations.
18 There is an opportunity for an applicant
19 discharger to apply for a waiver from those standards.
20 The waiver proceeds under Section 301(h) of the Federal
21 Clean Water Act. The USEPA has exclusive jurisdiction over
22 the issuance of waivers. The state's interest in this
23 matter, of course, is that the waters of the state may be
24 affected by those discharges. So that's the reason why we
25 are having a joint hearing with the Federal USEPA today.

1 Before introducing Alexis and allowing her
2 to make some procedural comments, I would also like to
3 indicate that the procedure that we will be following is
4 that the representatives of the staff from the USEPA will
5 be given the opportunity to begin the proceeding. It's my
6 understanding that they will take approximately 10 minutes.
7 That will be followed by the Regional Board
8 staff presentation, approximately 10 minutes. I understand
9 that the city will require approximately 20 minutes. And
10 the city's presentation will be begun by Mayor Murphy, who
11 we welcome at this time, followed by Councilman Scott
12 Peters. And then their staff will be given the opportunity
13 to make further comments and address the Board.
14 Following the city presentation will be the
15 opportunity for public comments. I would like to limit the
16 public comments to 4 to 5 minutes. To the extent that
17 there is organized presentations, I would ask that the
18 organized presentations be made. And I will permit some
19 additional time to be allocated to groups for organized
20 presentations.
21 Following the public comment period, there
22 will be the opportunity for the city to summarize its
23 position followed by Regional Board staff and EPA staff,
24 at which point we will close the hearing on this agenda
25 item. A decision is scheduled for April 10th which is at

1 our next meeting. As I understand it, representatives of
2 the Federal EPA will be available at that time as well as,
3 of course, our staff.
4 At this point -- Mr. Stephany, you had a
5 question?
6 MR. STEPHANY: Not a question, but at this time
7 before we get started, I feel like I need to make a
8 disclosure. Even though we're not voting today, eventually
9 we will be voting on the permit. Many years ago wearing a
10 different hat I actually testified on behalf of the city
11 against the EPA when the EPA was suing the city.
12 This was prior to a waiver. So I have
13 testified against EPA on the waiver process at some point
14 in time. I don't feel it will make any difference in my
15 voting now. This was probably 10 years ago.
16 AUDIENCE MEMBER: It was 1991, sir.
17 MR. STEPHANY: Anyway, I just felt like I needed to
18 make a disclosure at this point in time so that it doesn't
19 come up later on.
20 CHAIRMAN MINAN: I appreciate your candidness in
21 this matter. I will at this point swear all people who
22 will be giving testimony today because this is a factual
23 presentation. So if I could ask those of you who are
24 prepared to give testimony on this agenda item to stand and
25 raise your right hand.

1 Do you swear that the testimony that you are
2 providing the Board today and the EPA is truthful, the
3 whole truth of the matter, and nothing but the truth under
4 penalty of law? If you do, indicate "I do."
5 STANDING AUDIENCE: I do.
6 CHAIRMAN MINAN: Thank you. At this point, I would
7 like to give my colleague from the USEPA the opportunity to
8 make whatever procedural comments she would like to make.
9
10 ALEXIS STRAUSS,
11 MS. STRAUSS: Good morning, I'm Alexis Strauss.
12 I am Director of the EPA's Water Division. Our office is
13 in San Francisco. And I am joined here today by three
14 colleagues: our attorney, Bob Moyer; staff person, Terry
15 Fleming, beside him; and our manager, Janet Hashimoto.
16 This public hearing regarding the City of
17 San Diego's Federal National Pollutant Discharge
18 Elimination System Permit -- which from now on we can refer
19 to as NPDES -- and state Waste Discharge Requirements is
20 now open.
21 This hearing, as Chairman Minan had stated,
22 is being held jointly by the U.S. Environmental Protection
23 Agency and by the California Regional Water Quality Control
24 Board to receive your comment on these jointly-proposed
25 actions.

1 I've been authorized by our regional
2 administrator, Wayne Nastri, to serve as the presiding
3 officer for today's hearing. At EPA I serve as the Water
4 Division director.
5 This hearing is being held pursuant to state
6 law and under Part 6, Part 25, and Part 124 of the Code of
7 Federal Regulations. The purpose of this hearing, of
8 course, is to accept public comments on a draft Federal
9 NPDES Permit and on the state's Waste Discharge
10 Requirements, or WDRs, which incorporate EPA's tentative
11 decision to grant a variance from secondary treatment under
12 Section 301(h) of the Clean Water Act to the City of
13 San Diego for the Point Loma Ocean Outfall.
14 As you most likely know, treated municipal
15 wastewater is discharged into the Pacific Ocean through the
16 Point Loma Ocean Outfall beyond the 3-mile state waters
17 limit to federal waters. Therefore, we at EPA have a
18 primary regulatory responsibility for this discharge.
19 In 1984 a Memorandum of Understanding was
20 signed between the EPA and the State of California to
21 jointly issue and administer discharges that are granted
22 variances from secondary treatment requirements, which are
23 commonly called the 301(h) variances. Under California's
24 Porter-Cologne Water Quality Control Act, the California
25 Regional Water Quality Control Board issues the Waste

1 Discharge Requirements or WDRs.

2 Public notice of our tentative decision to

3 grant the applicant a 301(h) variance and the EPA and the

4 Regional Water Quality Control Board's joint proposal to

5 issue a draft 301(h) modified NPDES permit incorporating

6 federal requirements and state Waste Discharge Requirements

7 and public notice of this hearing were given on

8 February 11th of this year by publication in the San Diego

9 Union Tribune.

10 Copies of this public notice were mailed to

11 people on the Regional Board's general mailing list and on

12 EPA's 301(h) mailing list. This notice provided that

13 public comments on the draft permit incorporating the

14 301(h) tentative decision would be accepted through the

15 close of this public hearing today.

16 If you will make comment at today's hearing,

17 please fill out the speaker request card, as you may

18 already have done, and pass it to Ms. Costa or Mr. Coe.

19 And these cards will be provided to Chairman Minan who will

20 call your name.

21 You may also today submit written comments

22 for the administrative record. Please submit them to

23 Robyn Stuber of the USEPA or David Hanson of the Regional

24 Board staff here in San Diego. Written comments need to be

25 submitted to us by today. You may already have done so.

1 And if so, it's not necessary for you to repeat those
2 comments. Both written and oral communications receive
3 equal consideration from all of us.
4 After the close of the hearing and comment
5 period, EPA and the Regional Board will review and respond
6 to all written comments and to all oral comments received
7 today. We at the EPA and the Regional Board will not make
8 a decision on the proposed draft permit until all comments
9 submitted during the comment period have been considered.
10 The purpose of this hearing is to hear your
11 comments. We will not be engaging in a dialogue on the
12 merits of the issues themselves today, and those of us here
13 cannot commit to whether EPA or the Regional Board, to any
14 specific decision on the draft 301(h) modified permit.
15 Rather, it's our shared purpose to use this time to hear
16 and consider your comments.
17 EPA and the Regional Board may decide to,
18 one, issue the permit, issue the draft permit as the final
19 permit; or, two, modify the draft permit; or, three, deny
20 the permit application. Also, as part of this process we
21 at EPA will either, one, issue a final 301(h) decision; or,
22 two, deny the applicant's request for a 301(h) variance.
23 Each person from whom we receive written
24 comments will be given notice of the EPA and Regional Board
25 decision. If you haven't submitted written comments but

1 you'd like to receive notice of our decision, please add
2 your name to the attendance list for today's meeting in the
3 back.
4 After a final permit may be issued, a
5 petition may be filed with the EPA and the Environmental
6 Appeals Board to review any condition of the permit
7 decision. Only persons who file written comments on the
8 draft permit or who make oral comments at this hearing may
9 file a petition. Otherwise, any such petition for
10 administrative review may be filed only to the extent of
11 the changes from the draft to the final permit decision.
12 Petitions to the Environmental Appeals Board
13 must be filed within 33 days following receipt of the final
14 permit decision and must meet the requirements of Title 40,
15 Section 124.19 of the Code of Federal Regulations.
16 A copy of the transcript of today's hearing
17 is available for your inspection and copying at either
18 EPA's office in San Francisco -- which may not be
19 convenient -- or at this Regional Board office. Anyone who
20 wishes to purchase a copy of the transcript should please
21 make arrangements directly with our stenographer following
22 the hearing.
23 This concludes what I wish to say as the
24 hearing officer for the USEPA. We appreciate the level of
25 interest that you've shown and look forward to your

1 comments. And with that, may I turn it back to you,
2 Chairman Minan. We have two brief staff presentations as
3 you noted.
4 CHAIRMAN MINAN: Thank you. At this point, I would
5 like to move towards the presentations. As I understand
6 it, EPA is prepared to give the first presentation.
7 MS. STRAUSS: This will be Terry Fleming.
8 CHAIRMAN MINAN: Mr. Fleming, if you would state
9 your name for the record and affiliation, please.
10
11 TERRY FLEMING,
12 MR. FLEMING: Sure. My name is Terry Fleming.
13 I am with USEPA in San Francisco. Good morning to all.
14 I was the staff person that was assigned to review the
15 city's 301(h) application and prepare the tentative
16 decision document.
17 The last time I spoke to the Board on the
18 city's application was about 5 years ago, a little over
19 5 years ago. At that time, the discharge out the pipe had
20 recently begun to discharge. And while we had 3 years of
21 predischarge baseline data, we only had one year of actual
22 data to evaluate the impacts. What's changed since then is
23 now we have an additional 5 years of data to evaluate the
24 impacts.
25 And so what I'd like to do -- I don't have

1 time to show you all the analyses that we did, but what I'd
2 like to do is walk you through the process that led to our
3 tentative decision.
4 So the first slide is the 301(h) criteria.
5 And in its broadest terms, the 301(h) criteria are designed
6 to assure that the proposed variance will not affect water
7 quality, to protect aquatic resources and recreational
8 uses, to make sure that there are provisions to remove
9 toxics, and to make sure there's an adequate monitoring
10 program which we can use to assess compliance and assess
11 the impact of the discharge.
12 So what is the city requesting? The city is
13 requesting that the existing variance from secondary
14 treatment for the removal requirements for TSS, total
15 suspended solids, and BOD, biochemical oxygen demand, be
16 renewed.
17 Under secondary treatment, the removal
18 requirements are 85 percent for both TSS and BOD on a
19 30-day average. Under the draft permit, which is the same
20 as the current permit, the city is required to move
21 80 percent of their total suspended solids on a monthly
22 average, and 58 percent of their BOD on an annual average.
23 In practice, the city has been removing
24 about 86 percent of their TSS on a monthly basis, and about
25 60 percent of their BOD on a monthly average. Next slide.

1 I'd like to talk a little bit about BOD. As
2 you may have noticed in the previous overhead, the State of
3 California, the Ocean Plan, does not have a requirement for
4 BOD removal. Rather, we rely on the dissolved oxygen
5 standard that is in the California Ocean Plan which
6 basically requires that the dissolved oxygen concentration
7 to ambient waters not be depressed more than 10 percent as
8 a result of the discharge. So how do we evaluate that?
9 Next slide, please.
10 We basically look at the 10 years of data
11 that the city has been collecting at 19 stations, water
12 quality stations, where they've sampled for dissolved
13 oxygen at multiple depths. They do this on a monthly basis.
14 And simply put, our assessments show us that there is no
15 dissolved oxygen problem off the coast of San Diego.
16 We also do worst case assessments using
17 models to evaluate what might happen under extreme
18 conditions, and the worst case predictions are well within
19 the 10 percent threshold specified in the California Ocean
20 Plan.
21 Now, to deal with toxics, we evaluate toxics
22 against the permit limits that are in the permit that are
23 based on the water quality standards that are in the
24 California Ocean Plan. There are more than 80 toxicants
25 that are identified in the California Ocean Plan, and they

1 monitor those on a minimum of a monthly basis; the metals
2 on a weekly basis, the organics on a monthly basis.
3 And our assessment is that concentrations in
4 both influent and effluent have decreased dramatically over
5 the 30 years. The concentrations in the effluent are low
6 relative to the permit limits. And the concentrations in
7 the receiving water are meeting water quality standards.
8 If you could show the next slide just for a
9 second. And part of that reduction is really due to the
10 pretreatment requirements that the city has and the way
11 they deal with it. So this slide shows the reductions in
12 metals loadings to the city's system as a result of their
13 pretreatment program. Go back to the previous slide for a
14 second.
15 We don't stop monitoring just because they
16 are below. We have continuing monitoring in the permit for
17 influent and effluent to evaluate trends to see if things
18 are going higher or lower. And we have established some
19 performance-based effluent limits which act as triggers to
20 let us know when things are getting high or not. Next
21 slide, please.
22 In the receiving water, one of the first
23 things we look at is the sediments. We want to find out
24 whether or not concentrations in the sediments are
25 increasing, whether there's a buildup of contaminants in

1 the sediments around the outfall.

2 There are no numeric standards for toxics in

3 sediments right now. So what we end up doing is comparing

4 these things to threshold values that we find in the

5 literature, and we try to compare them to background

6 concentrations from the area. If you can show the next

7 slide.

8 The city has been collecting sediment

9 contaminants from around the outfall for the last 10

10 years -- 3 years prior to discharge and the last 7 years

11 since then -- at a grid of stations. And we use that to

12 sort of look for spatial and temporal trends which might

13 indicate that there's an outfall effect.

14 We also compare this to results from

15 regional surveys. The city has been collecting every year

16 samples from a number of stations selected randomly. We

17 use this to give us some perspective as to the

18 concentrations that are around the outfall. I don't expect

19 you to memorize these, but this gives you a broad view of

20 what we're doing. Can you go back to the toxics slide,

21 please.

22 So what does our assessment show? Our

23 assessment shows that there is some organic enrichment

24 around the outfall, stationed close to the outfall. But we

25 see very little evidence of contaminant buildup around the

1 outfall.

2 The contaminant concentrations are low

3 relative to the background concentrations, and the

4 concentrations are well below any sediment toxicity

5 thresholds that we see in the literature. Next slide,

6 please.

7 This is just a slide to show that the

8 biochemical oxygen demand concentrations in the sediments

9 are fairly low throughout. The numbers go from 200 to

10 about 400, which are the types of concentrations that we

11 see around the outfall. So we don't see any increase.

12 Also in the receiving water what we need to

13 do is sort of look at the effects on the benthic community.

14 Again, there is no numeric standard for benthic community

15 impacts. The Ocean Plan asks us to make sure there's no

16 degradation of benthic communities.

17 The way we assess this is we look at a

18 number of benthic indices. Some common ones are the

19 infaunal trophic index and the benthic response index. And

20 we also compare the results to those regional results that

21 you saw before. The monitoring is fairly similar. We have

22 23 fixed stations which are sampled on a quarterly basis,

23 and then the random samples which are sampled every year.

24 Our assessment is basically that we see a

25 pattern of higher abundance and higher species witnessed

1 near the outfall. But the values are within the range of
2 expectations that we see from other places. The benthic
3 indices that we use can pick up outfall patterns, but they
4 still indicate that there's a healthy community around the
5 outfall.
6 Let me just show the infaunal trophic index
7 results. What this slide shows is the stations along the
8 outfall depth gradient. E-14 is the station that is right
9 at the Y of the outfall, and then they extend outward on
10 either side left or right. The bars in the white are
11 essentially the predischarge numbers, and the shaded bars
12 are the post-discharge numbers.
13 Numbers above 75 are pretty typical of a
14 healthy community. We see that there's some interannual
15 variability in the numbers. We see that maybe there's a
16 slight depression at E-14. But other than that, it looks
17 like we have a pretty healthy benthic community in and
18 around the outfall.
19 If you want to compare this to more
20 regional-type stuff -- you can show the next slide -- these
21 are the results from the regional surveys, about 160, 200
22 samples that were taken. And what I've done is boxed-in
23 the area that corresponds to the outfall depth. And,
24 again, the numbers are between 75 and 95 which are similar
25 to the numbers that we saw around the outfall. So that's

1 how we sort of lead to the conclusion that things are okay
2 around the outfall. Can I have the next slide.
3 Again, we have to interpret narrative
4 standards in the Ocean Plan. The way we do that is
5 comparisons of before and after, and comparisons of spatial
6 trends. The city's monitoring program, they have eight
7 stations that they monitor on a quarterly basis, and then
8 twice a year selected fish they analyze for toxic buildup
9 in the fish tissue.
10 Our assessments show us that there are no
11 temporal or spatial trends in the fish communities. We
12 don't see any spatial trends in toxic buildup in fish
13 tissue, or temporal trends for that matter. The fish
14 tissue concentrations that we do see are similar to
15 background concentrations and generally are low relative to
16 human health risk screening levels. Go to the next slide.
17 And this is just to show the stations that the city
18 samples quarterly.
19 The city has a fairly-extensive monitoring
20 program to look at bacterial impacts. They monitor the
21 area around the outfall. They monitor the area in the kelp
22 beds, and they also monitor the shoreline stations. If I
23 could just have the next slide, please.
24 This is the distribution of the samples.
25 Bacteria are measured in the offshore not for compliance

1 purposes, but to identify the location of the plume. The
2 California Ocean Plan criteria apply to the kelp beds and
3 the shoreline samples.
4 Our assessment indicates that the offshore
5 plume is generally trapped at depth. Our review of five
6 years' worth of data from the kelp bed stations shows that
7 the city is in 100 percent compliance with the Ocean Plan
8 standards for bacteria. And although we do see occasional
9 high values on the shoreline, there is very little evidence
10 to suggest that these exceedences are related to the
11 outfall. This is supported by physical oceanographic
12 modeling, by the kelp bed monitoring we see no hits, and
13 the fact that the kelp bed is in between the outfall and
14 the shoreline. The next slide, please.
15 As you can see, the city has a fairly
16 extensive monitoring program which generates a tremendous
17 amount of data that we can use to evaluate compliance and
18 assess impacts.
19 I hope that I've given you an appreciation
20 for the types of analyses that are in the tentative
21 decision document. Our analysis is based on the complete
22 10-year data set that indicates that all water quality
23 standards and beneficial uses are being protected.
24 Based on this analysis or these analyses,
25 EPA tentatively concluded that the proposed discharge meets

1 the 9 301(h) criteria, as well as other applicable
2 requirements, and that the renewal of the variance is
3 warranted.
4 So I want to thank you for your time and
5 consideration. I'd be happy to entertain any questions
6 from the Board if you have any, or I can turn it over to
7 David. Thank you.
8 CHAIRMAN MINAN: Any questions? Thank you,
9 Mr. Fleming. It's my understanding that, Mr. Robertus, you
10 will now call the staff person to make the Regional Board
11 presentation.
12 MR. ROBERTUS: Mr. Chair, at this time David Hanson
13 is prepared to make the staff presentation.
14
15 DAVID HANSON,
16 MR. HANSON: Mr. Chairman, members of the public,
17 my name is David Hanson; that's H-a-n-s-o-n. I am an
18 engineer for the Publicly-Owned Treatment Works Compliance
19 Unit.
20 In your agenda packets, you have the
21 following items. You have Tentative Order No. 2002-0025
22 and draft NPDES permit and the associated Monitoring and
23 Reporting Program. You have a fact sheet explaining the
24 basis for those permit requirements. You also have USEPA's
25 tentative decision document, a copy of the Ocean Pollution

1 Reduction Act, which I'll refer to as OPRA, a City of
2 San Diego Metropolitan Wastewater facility location map,
3 and you have comments that have been received, actually,
4 through this morning in three separate packages.
5 The purpose of my presentation is to outline
6 for you how the key state and federal requirements for
7 protection of water quality are implemented in the
8 tentative order and draft 301(h) modified NPDES permit to
9 assure that the applicant's discharge will continue to meet
10 all the criteria outlined by Terry Fleming.
11 The following limits for TSS and BOD are
12 specified in the Ocean Pollution Reduction Act. For TSS
13 the permit requires that monthly average concentration not
14 exceed 75 milligrams per liter, and that the mean monthly
15 percent removal not be less than 80 percent, and that the
16 annual mass emissions be less than 15,000 metric tons per
17 year for the first 4 years of the permit term, and not more
18 than 13,599 for the final year of the 5-year permit term.
19 The 80 percent removal requirement for TSS
20 is more stringent than the 75 percent requirement in the
21 California Ocean Plan. For BOD the permit requires that
22 the mean annual percent removal not be less than
23 58 percent. There are no concentration limits for BOD in
24 the permit.
25 Although there are no major changes to the

1 existing permit, there are minor changes which I'd like to
2 mention to you, and they include, first, recalculation of
3 the water quality-based effluent limits in accordance with
4 the recently-adopted 2001 California Ocean Plan. This
5 resulted in limits equal to or more stringent than those in
6 the existing permit.
7 Furthermore, we included findings that
8 described new facilities added to the Metro system since
9 adoption of the current order. And that includes the
10 North City Water Reclamation Plant, the South Bay Water
11 Reclamation Plant, and Metro Biosolids Center.
12 Minor changes to the tentative Monitoring
13 and Reporting Program include specified calculation method
14 for determining systemwide compliance with the TSS and BOD
15 removal rate requirements, and requirements that the city
16 participate in a regional remote sensing program to further
17 investigate the fate and transport of effluent from the
18 Point Loma and South Bay Ocean Outfalls, runoff and other
19 various coastal sources.
20 As a result of public comment and further
21 review of sources contributing to the Metro system, the
22 following additional changes to the permit and Monitoring
23 and Reporting Program are being considered. We're
24 considering adding findings and requirements to address
25 potential increases in pollutant loading resulting from

1 industrial and nonindustrial runoff diversion to the
2 sanitary sewer system.
3 We're also considering a short-term special
4 study for influent and effluent monitoring of pesticides
5 such as diazinon and chlorpyrifos -- which I should mention
6 the city already voluntarily monitors for -- and the
7 herbicide, clopyralid, which has recently been the subject
8 of public discussion due to its detection in recycled green
9 waste. Detailed permit language regarding these proposed
10 additional items will be presented to the Board in an
11 errata sheet at the April 10th 2002 hearing.
12 As mentioned earlier, you have been
13 provided copies of public comments received as of this
14 morning. USEPA and Regional Board staff will collect all
15 written and verbal comments received as of the close of
16 business today -- if that's when we're closing the comment
17 period -- and will prepare responses and make changes to
18 the permit as deemed appropriate. Copies of all comments
19 and Regional Board staff responses will be provided to you
20 prior to the April 10th 2002 hearing, along with any errata
21 sheets describing any proposed changes and/or corrections
22 to the draft permit, fact sheet, and Monitoring and
23 Reporting Program.
24 I would like to recommend at this time that
25 the public comment period be closed as of close of business

1 today for this item in order to give staff and the Board
2 adequate time to consider and respond to comments prior to
3 April 10th.
4 In closing, I'd like to express what a
5 pleasure it has been to work with USEPA staff, including
6 Janet Hashimoto, Terry Fleming, and Robyn Stuber. That
7 concludes my presentation. I am available for questions.
8 CHAIRMAN MINAN: Thank you, Mr. Hanson. The notice
9 that we published indicates that it will be closed as
10 you've suggested. Are there any questions of Mr. Hanson?
11 Thank you.
12 MR. ROBERTUS: Mr. Chair, excuse me. To clarify,
13 the notice says it is closed up to the end of the hearing.
14 So it's not the close of business, it will, in fact, be at
15 the close of this hearing that the public comment will be
16 closed.
17 CHAIRMAN MINAN: That is correct. The notice
18 indicates that written comments will be accepted up to the
19 end of the March 13, 2002 hearing. If we get into kind of
20 a constructional question as to whether it's the hearing
21 today or whether or not it's the close of the agenda item,
22 we can make this a serious legal question to make Mr. Leon
23 work for his supper.
24 MR. LEON: I'm sorry, I was asleep. I very much go
25 along with the interpretation Mr. Robertus has given which

1 is the close of the hearing. Otherwise, you might have
2 somebody come in at 4:55 P.M. this afternoon attempting to
3 submit further supplemental documents. So I would support
4 Mr. Robertus's interpretation.
5 CHAIRMAN MINAN: It's the close of the agenda item.
6 MR. LEON: The close of the hearing on this matter
7 today.
8 CHAIRMAN MINAN: Right. Thank you. At this time,
9 I would like to now give the city representatives the
10 opportunity to address the Board and EPA. And I'd like to
11 begin -- I guess I'll begin with you, Mr. Tulloch. I was
12 prepared to recognize Mayor Murphy, but...
13
14 SCOTT TULLOCH,
15 MR. TULLOCH: With your indulgence, sir, we had a
16 slightly different sequence than the one that you had noted
17 earlier. Good morning, Chairman Minan, Ms. Strauss,
18 members of the Board. I'm Scott Tulloch; that's
19 T-u-l-l-o-c-h. I'm the Director of the Metropolitan
20 Wastewater Department of the City of San Diego.
21 Also speaking for the City of San Diego
22 today are the Honorable Mayor Dick Murphy and Councilmember
23 Scott Peters. In addition, Alan Langworthy, deputy
24 director of our Environmental Monitoring and Technical
25 Services Division will be available to assist in answering

1 any questions you may have.

2 I would like to begin my remarks by

3 expressing the city's support for the EPA's tentative

4 decision to renew the modified NPDES permit for the

5 discharge through the Point Loma Ocean Outfall.

6 After a thorough review, the EPA's technical

7 staff and scientific consultants have determined that the

8 present treatment system complies with all state and

9 federal standards and is protective of the public health

10 and environment. Additionally, it meets the statutory

11 requirements of Section 301(h) of the Clean Water Act.

12 The draft permit that has been recommended

13 by the EPA and your staff contains modifications to only

14 two parameters: the total suspended solids removal and

15 biochemical oxygen demand removal requirements as

16 authorized by the Clean Water Act.

17 In the case of these two constituents, the

18 draft permit contains limits much more restrictive than are

19 typically found in a modified NPDES permit. The State of

20 California Ocean Plan contains total suspended solids

21 requirements and addresses the biochemical oxygen demand

22 issue through limitations on oxygen depletion in the

23 receiving water.

24 The Point Loma discharge is well within

25 complete compliance with these state standards. All other

1 parameters and permit conditions are either the same or
2 more stringent than a full secondary treatment permit.
3 Toxics control is achieved by means of industrial source
4 control and household hazardous waste programs.
5 Because of the modified permit, San Diego is
6 required to operate an enhanced toxics control program, and
7 by this means has demonstrated secondary equivalency with
8 regard to toxics.
9 The discharge has consistently achieved
10 100 percent compliance with all state and federal
11 requirements, and has had and will continue to have a
12 significantly-enhanced monitoring program to assure
13 compliance in the future. This facility, the Point Loma
14 Wastewater Treatment Plant, has won seven consecutive gold
15 awards from the Association of Metropolitan Sewerage
16 Agencies for this high level of compliance.
17 The combination of excellent toxics control,
18 chemically-assisted advanced primary treatment, a long,
19 deep ocean outfall, and an extensive monitoring program has
20 ensured that the Point Loma discharge complies with all
21 standards and protects the public health and environment.
22 In summary, the USEPA and Regional Water
23 Quality Control Board staff thoroughly reviewed the
24 Point Loma discharge and recommended a tentative decision
25 and a draft permit that confirms that there is no

1 significant impact on the ocean, and that the public health
2 and environment are protected. The city concurs with this
3 finding and agrees that the requirements of this permit
4 will ensure continued protection in the future.
5 I would now like to introduce the Mayor of
6 the City of San Diego, the Honorable Dick Murphy.
7 MR. STEPHANY: Scott, before you leave, could you
8 fill out a card for us. You didn't fill out a speaker
9 slip.
10 MR. TULLOCH: I'll certainly do that.
11
12 MAYOR DICK MURPHY,
13 MAYOR MURPHY: Good morning, I am San Diego Mayor
14 Dick Murphy. Good morning, Chairman Minan, Ms. Strauss,
15 and members of the Board. We had Scott go first because
16 his presentation was more exciting than mine.
17 There's two other preliminary comments, I
18 really think the city council should consider adopting your
19 procedure of swearing-in all of the witnesses before they
20 testify. That's a great idea.
21 And, finally, I just wanted to thank
22 Marco Gonzalez for endorsing the re-election of
23 Scott Peters and myself. I would only point out to
24 Marco that we raised sewer fees, not taxes. He must have
25 been listening to the Proposition E people.

1 First of all, let me thank you for the
2 opportunity to address you on this important matter of the
3 operating permit for the Point Loma Wastewater Treatment
4 Plant. I thank you for your diligence with which you have
5 addressed this matter. We appreciate the candor,
6 professionalism, and tremendous effort your staffs have
7 displayed in their review of volumes of technical data in
8 our permit application.
9 Now, I know all of you have kept copies of
10 my State of the City Address, made videos of it, and have
11 reviewed it. I would just remind you that I set 10 goals
12 for the City of San Diego, and goal No. 4 is to clean up
13 our beaches and bays. And it is unacceptable to this city
14 council, to me, and our city staff to continue to have
15 beaches and bays that are polluted year after year.
16 And in response to that problem,
17 Councilmember Scott Peters -- who is going to talk next --
18 and I formed the Clean Water Task Force with which you are
19 somewhat aware. The Clean Water Task Force includes
20 representatives from both the environmental and business
21 communities, regulators, water quality scientists, elected
22 officials.
23 The Clean Water Task Force is overseeing the
24 city's implementation of the Storm Water Permit adopted by
25 this board last year. We are charting a course to reduce

1 beach postings and closures 50 percent by the year 2004.
2 And we had a significant decrease in postings and closures
3 during 2001 due to such things, as Mr. Robertus referred
4 to, as finding a major polluter at an RV dump station that
5 we have been able to stop in Mission Bay.
6 In addition, the City of San Diego has
7 approved an annual sewer fee increase of 7 1/2 percent for
8 the next 4 years. And with that funding, the city is doing
9 at least three things. It is tripling the rate of
10 replacing deteriorated sewer lines from 20 to 60 miles per
11 year. We are televising and assessing the interior of
12 1,000 miles of aging sewer lines to prioritize replacement,
13 and we are cleaning the entire 3,000 miles of sewer lines
14 in the city.
15 Our goal is to reduce sewer spills by
16 25 percent by the year 2004, and we had a substantial
17 reduction just in 2001 of sewer spills. And while it was
18 34 percent, I would point out that the amount of rains had
19 some effect on that, and there are some variables that we
20 can't control. So I don't want to claim victory yet, but
21 we certainly made some progress.
22 So let me then turn to the modified permit
23 for the Point Loma Wastewater Treatment Plant. The
24 Environmental Protection Agency has reviewed years of
25 technical monitoring data to determine that our advanced

1 primary treatment achieves all state and federal water
2 quality standards. And to ensure that compliance is
3 maintained in the future, the city will continue to conduct
4 the rigorous ocean monitoring and scientific studies
5 necessary.
6 In light of those findings, I cannot
7 recommend that the region's taxpayers double their sewer
8 rate to fund a $2 billion secondary treatment program that
9 does nothing more than meet water quality standards our
10 current system is already attaining.
11 I have instead directed that the city should
12 spend its limited resources to stop harmful storm water
13 runoff and sewer spills that are causing beach closures and
14 placing the public health in jeopardy. Such programs are
15 smarter investments in our health and in our environment.
16 So in summary, we agree that the assessment
17 by the USEPA, that the present treatment system has no
18 significant adverse impact on the ocean environment; two,
19 we also agree that the provisions of the draft modified
20 permit as proposed by staff will ensure that no negative
21 impacts will occur in the future; and, three, we strongly
22 urge that you approve the tentative decision and draft
23 permit recommended by staff.
24 The public expects clean water, the Clean
25 Water Act requires clean water, and the City of San Diego

1 will fulfill its obligations to both the public and the
2 law. Thank you very much.
3 CHAIRMAN MINAN: Thank you, Mayor Murphy. I'd just
4 like to make sure that Mayor Murphy's letter becomes part
5 of the record. You submitted a letter, we've got a copy?
6 MAYOR MURPHY: Yes. The ad lib about Marco Gonzalez
7 is not in there. Let me next introduce San Diego City
8 Councilmember Scott Peters who co-chairs the city's Clean
9 Water Task Force and is an expert on a lot of environmental
10 issues, Councilmember Peters.
11 MR. PETERS: Thank you. Good morning, Mr. Chairman
12 Minan, members of the Regional Board, and Ms. Strauss.
13 MR. STEPHANY: Excuse me, Scott. Before the mayor
14 leaves, can I make a comment to the mayor since he's
15 leaving?
16 MR. PETERS: Sure. He promised to listen to what I
17 said, and then we're taking off.
18 MR. STEPHANY: I'm sorry, your honor, but in past
19 meetings we have made some comments to Scott. I'm sure
20 they got back to you, but I'd like to make sure that you
21 have heard them.
22 We think what you're doing at the city, you,
23 Scott, and others, is very admirable compared to what was
24 going on in the past. However, we don't want you to feel
25 that -- because I also know that you have a lot of pressure

1 from a lot of different sources to spend money on different
2 things. When you talk about the 25 percent in the year
3 2004 creating better sewer lines and stuff, some of us on
4 the Board don't feel that that's ambitious enough. And so
5 when you look at it, it's going to take another 20 years to
6 get all your lines back in to where they're not going to
7 break.
8 I just want to make sure that you know that
9 this board is putting pressure on your staff, that don't
10 let that time line slip if you can at all avoid it. And I
11 know there's other roads and trash and everything else that
12 you have to worry about, but water is very important. You
13 stated it as your goal, and I realize that. But I just
14 want you to hear it from us that the time line is still
15 kind of slow.
16 MAYOR MURPHY: Two quick responses. First of all,
17 the actual sewer spill reduction in 2001 was 34 percent.
18 However, the sewer spill reductions that went to receiving
19 waters was essentially unchanged. So we're trying to
20 exceed the 25 percent. We're certainly not there yet.
21 Secondly, you promise not to complain about
22 any potholes in your neighborhood if we meet all these
23 goals?
24 MR. STEPHANY: I promise.
25 CHAIRMAN MINAN: Thank you, Mayor.

1 MAYOR MURPHY: I am going to be in the back waiting
2 for Scott if anything else comes up in the next couple of
3 minutes, but then I've got an 11 o'clock that I have to be
4 at.
5 CHAIRMAN MINAN: Councilman Peters.
6
7 COUNCILMEMBER SCOTT PETERS,
8 MR. PETERS: Thank you again for the opportunity to
9 be here today. For the record, I am Scott Peters. I am
10 the city council representative for District 1 which
11 includes the northern coastline of the City of San Diego.
12 Since being elected, I've been working
13 closely with Mayor Murphy as co-chair of the Clean Water
14 Task Force to find creative strategies that can be
15 effective in improving water quality at our area beaches.
16 And I want to acknowledge and appreciate the
17 participation and insight of John Robertus on the Clean
18 Water Task Force and look forward to his continued
19 participation which has been invaluable for communication
20 and for progress.
21 As the mayor stated, there has been new
22 emphasis placed on water quality at the City of San Diego.
23 We have taken aggressive steps to improve water quality,
24 including a significant rate increase to pay for a billion
25 dollar capital program to repair and replace our aging

1 sewer collection system.

2 Now I want to acknowledge Mr. Stephany's

3 comments that this is not a problem that started just a few

4 years ago, and I really think we're trying to come away

5 from 30 years of neglect with a real program that will

6 work.

7 I'll also just state that the city just

8 completed a $1.6 billion upgrade to the treatment and

9 disposal facilities, including a major commitment to water

10 reclamation. Over the past decade, we've lengthened the

11 Point Loma Outfall, completed the North City Water

12 Reclamation Plant and the Metro Biosolids Center,

13 completely renovated the Point Loma Wastewater facility to

14 a state-of-the-art chemically-assisted advanced primary

15 treatment facility, and recently finished the South Bay

16 Water Reclamation plant.

17 Additionally, we've improved toxics control

18 by enhancing the Household Hazardous Waste Program, opening

19 a new collection center, and continuing our urban area

20 pretreatment program for controlling industrial sources.

21 I wanted to acknowledge what you said. It

22 is one of the major jobs that the mayor has identified for

23 the city. It's the one he has tasked me with being his

24 partner on. And we're going to do everything we can to

25 stay on task and make sure that we achieve those goals and

1 maybe even exceed them.

2 So I came here today with Mayor Murphy to

3 add my support to the recommendations of the EPA and the

4 Regional Board staff that the modified permit be granted to

5 the City of San Diego.

6 As Mr. Fleming explained, the draft permit

7 contains modifications authorized under Section 301(h) of

8 the Clean Water Act. Those modifications have come to be

9 known as waivers. Unfortunately, the waiver has the

10 connotation of an escape clause or a loophole in the Clean

11 Water Act. When, in fact, a modified permit is in complete

12 compliance with the act and assures that the discharge is

13 receiving full treatment at a level that is protective of

14 the environment.

15 Modifications are not meant to be loopholes,

16 but are an integral part of the Clean Water Act that

17 recognize that in some cases secondary treatment may not be

18 necessary to protect the environment. And, in fact, the

19 modification provisions of Section 301(h) are just as much

20 a part of the Clean Water Act as strict liability or

21 citizen suits or anything else.

22 Each modified permit is taken case by case

23 and is very site specific. A modified permit for one

24 discharger does not have any bearing on, nor does it create

25 a precedent for a modified permit for another discharger.

1 Each must be evaluated on its own merits, and can be
2 approved only after a rigorous technical evaluation.
3 There are 9 findings, as you heard, that
4 must be made for a discharger to receive a modified permit.
5 Among these are that the discharge meet state water quality
6 standards. We're pleased that EPA, after a rigorous
7 technical evaluation, has found that the city meets all
8 9 criteria including that the city's discharges meet state
9 water quality standards.
10 Because the EPA has found that the Point
11 Loma Wastewater Treatment Plant meets all these 9 criteria,
12 we support the recommendation of EPA that this modified
13 permit be granted. Mayor Murphy and our city council have
14 shown our resolve to do what is necessary to ensure public
15 health, preserve the environment, and comply with the law.
16 We support the recommendations of your staff
17 and look forward to working with you in the coming months
18 and into the future. Thank you very much.
19 CHAIRMAN MINAN: Thank you, Councilman Peters.
20 Mr. Tulloch?
21 MR. TULLOCH: Chairman Minan, this concludes our
22 formal presentation. I'll remain available with other city
23 staff to answer any questions you may have, and we
24 appreciate the opportunity to make a summation at the end
25 of public testimony.

1 CHAIRMAN MINAN: I would remind you to make sure
2 that we get a speaker slip so that we can keep track of
3 that. Thank you.
4 That concludes the discharger/city's
5 presentation. I would like to now move to public comment.
6 The first speaker I'd like to recognize is a
7 representative from Congressman Filner's office,
8 Mr. Shogren.
9
10 ANDREW SHOGREN,
11 MR. SHOGREN: Good morning, my name is Andrew
12 Shogren, S-h-o-g-r-e-n. I'm the district director for
13 Congressman Bob Filner.
14 Good morning, Honorable Chair, and
15 chairpersons. I bring a letter of support signed --
16 which is also included in your backup -- that is signed
17 by both Congressman Bob Filner and Congresswoman Susan
18 Davis.
19 I won't read the letter verbatim, but the
20 letter strongly supports the United States Environmental
21 Protection Agency's tentative decision to grant the City of
22 San Diego a modified National Pollutant Discharge
23 Elimination System Permit.
24 The EPA's tentative approval of modified
25 standards suggests that the propagated balance of our

1 ocean's indigenous population is not interfered with or
2 disturbed by the discharge dispersed to the waters through
3 the Point Loma Ocean Outfall.
4 Scientific evidence clearly shows the City
5 of San Diego's wastewater treatment is more than sufficient
6 to protect the marine environment and the health of all
7 San Diegans. The EPA's tentative decision consistently
8 supports the City of San Diego's application and
9 demonstrates any demand for a higher level of treatment
10 at the plant despite already being shown to be unnecessary
11 would impose a grossly unfair economic burden on the city,
12 its participating agencies, and the nearly 2 million
13 affected ratepayers.
14 In closing, the permit proposed by EPA
15 provides for full protection of the public health and
16 environment. By tentatively issuing this permit, the EPA
17 and the Regional Water Quality Control Board recognize that
18 all available scientific information confirms San Diego's
19 current treatment and discharge system causes no
20 environmental harm, and San Diego's waters are safe for
21 humans and marine life. Again, we support the EPA's
22 tentative decision and urge you to do the same. Thank
23 you.
24 CHAIRMAN MINAN: Thank you, Mr. Shogren.
25 Mr. Jay Goldby?

1 JAY GOLDBY,

2 MR. GOLDBY: Good morning to the EPA, to the
3 Regional Water Quality Control Board. My name is Jay
4 Goldby. I am the chair of the Metropolitan Wastewater
5 Commission, the Metropolitan Wastewater Joint Powers
6 Authority, and a member of the Poway City Council.
7 The JPA and Metro Wastewater Commission
8 represent the County of San Diego, the cities of
9 Chula Vista, Coronado, Del Mar, El Cajon, Lemon Grove,
10 La Mesa, National City, Poway, and Imperial Beach, and the
11 water districts of Otay Mesa and Padre Dam.
12 The commission and the JPA have passed a
13 resolution, as have most of the city, supporting the EPA's
14 tentative order for the issuance of the NPDES permit for
15 the Point Loma Treatment Plant.
16 That probably should be enough to be said,
17 but I'd like to make some other comments as well. I'm not
18 a scientist. I'm here representing over 700,000 people who
19 have a critical interest in the quality of the water of
20 San Diego.
21 Because I'm not a scientist, I have to rely
22 on the analysis from those who are most qualified to
23 provide such analysis and evaluation of data. It's evident
24 to me from what we've heard this morning in addition to all
25 the testimony that the bodies that I represent have heard

1 for well over a year that the discharge provides no
2 significant impact on the ocean environment.
3 (Whereupon, Board Member Laurie Black exits
4 the hearing room.)
5 What puzzles me are the different
6 conclusions from the same data from those who are objective
7 and are equally qualified and without prejudice. Now, I
8 would suggest that to presume that the impact on the ocean
9 environment by the Point Loma Wastewater Treatment Plant,
10 that there is no impact would not be objective.
11 However, the question before you as it was
12 before us was whether the discharge has a significant
13 impact on the total ocean environment as well as on the
14 immediately adjacent waters and beach environment.
15 Our conclusion, as it appears the conclusion
16 of the EPA and the Regional Water Quality Control Board, is
17 that there is no significant impact. And it is with that
18 confidence and that certainty that I and the 700,000 people
19 who we represent want to support the tentative order and
20 look forward to another 5 years of continuing efforts to
21 improve our ocean environment. Thank you.
22 CHAIRMAN MINAN: Thank you, Mr. Goldby. Grace, how
23 are you doing? We'll take a 10-minute recess to allow our
24 stenographer to recharge her hands and paper.
25 (Whereupon, a brief recess was taken.)

1 CHAIRMAN MINAN: Thank you. I would at this point
2 like to reconvene our joint public hearing on the renewal
3 of the draft NPDES permit for the Point Loma Treatment
4 Plant. And to the extent that you have conversations, it
5 would be helpful so that we don't have noise interference
6 that you continue your conversations outside of the hearing
7 room.
8 The next public speaker is Mr. Ron Miller.
9 And I would ask you, to the extent that you can, to limit
10 your comments to 3 to 4 minutes. And, of course, we're
11 happy to receive any written materials that you might have.
12
13 RON MILLER,
14 MR. MILLER: Thank you, Chairman, and members of
15 the Board. My name is Ron Miller; that's M-i-l-l-e-r.
16 I'm here today on behalf of the Industrial Environmental
17 Association, also known as the IEA.
18 The members of the IEA -- Well, actually,
19 I'm here to summarize a letter submitted to Mr. John
20 Robertus on March 6th. And in that letter, the IEA members
21 strongly support EPA's tentative decision to grant the
22 City of San Diego a modified NPDES permit. We also request
23 that the Regional Board adopt the recommendations of the
24 EPA.
25 We believe that the scientific evidence

1 clearly shows that City of San Diego's wastewater treatment
2 is sufficient to protect marine environment and human
3 health. To summarize it further, basically, we urge the
4 Regional Board to adopt EPA's recommendations. Thank you.
5 CHAIRMAN MINAN: Thank you, Mr. Miller, and we have
6 a copy of that letter.
7 MR. MILLER: Thank you.
8 CHAIRMAN MINAN: Mr. Peter MacLaggan?
9
10 PETER MacLAGGAN,
11 MR. MacLAGGAN: Thank you, Mr. Chairman, and
12 members of the Board. My name is Peter MacLaggan. The
13 last name is spelled M-a-c-L-a-g-g-a-n. I am before you
14 today representing the San Diego Regional Chamber of
15 Commerce. We strongly support the recommendations
16 contained within the EPA tentative decision.
17 The basis for our position is that the
18 scientific evidence and the ongoing monitoring activities
19 of the City of San Diego clearly support the conclusion
20 that the beneficial uses off the coast of San Diego are
21 being fully protected, environmental health is fully
22 protected, public health is fully protected, and that the
23 city continues to be in compliance with the provisions of
24 the Ocean Plan and the bacteria criteria for the kelp beds.
25 We concur with EPA'S recommendation that

1 reissuance of the waiver is warranted, and we urge the
2 Regional Board to take action consistent with those
3 recommendations. Thank you for the opportunity to address
4 you this morning.
5 CHAIRMAN MINAN: Thank you, Mr. MacLaggan.
6 Mr. David McKinley?
7
8 DAVID McKINLEY,
9 MR. McKINLEY: Good morning, I'm David McKinley,
10 M-c-K-i-n-l-e-y. I'm environmental manager at
11 International Specialty Products in San Diego,
12 2145 East Belt Street.
13 We at International Specialty Products have
14 a special cause to be concerned about the city's wastewater
15 discharge from the Point Loma Treatment Plant. You see,
16 the entire reason that our business is located in San Diego
17 is to harvest the rich renewable kelp beds located off the
18 Point Loma -- directly out from the Point Loma Treatment
19 Plant.
20 And we process the kelp into food
21 ingredients that are sold around the world. So in a way,
22 our company is the canary in the coal mine. We are very
23 sensitive to the ocean water quality, especially right off
24 of the Point Loma Treatment Plant.
25 So I'm here as environmental manager of my

1 company to testify that the current advanced primary
2 treatment performed at Point Loma Treatment Plant and the
3 deep ocean outfall is a very good system that we fully
4 support. A waiver from secondary treatment for
5 San Diego's Point Loma Treatment Plant is fully
6 appropriate. Requiring secondary treatment at Point Loma
7 would just be a foolish waste of resources.
8 Therefore, we fully support the renewal of
9 the City of San Diego's 301(h) waiver which will allow the
10 Point Loma Treatment Plant to continue to operate as an
11 advanced primary treatment plant. Thank you.
12 CHAIRMAN MINAN: Thank you, sir. Mr. Robert
13 Simmons?
14
15 ROBERT SIMMONS,
16 MR. SIMMONS: Good morning, Mr. Chairman. I'm
17 Robert Simmons, S-i-m-m-o-n-s, member of the executive
18 committee of the Sierra Club. Members of the Regional
19 Board, Ms. Strauss, members of EPA staff, Sierra Club has
20 no objection to the reissuance of the waivered permit, but
21 we do strongly object to two aspects of this proposed
22 permit and urge appropriate revisions.
23 The Sierra Club was involved during 7 years
24 in the '90s with litigation in federal court with EPA, the
25 state, and the city on these issues. And while we

1 ultimately prevailed, we have no wish to go down that road
2 again.
3 I've submitted a detailed explanation of the
4 two objections that we made to you today, and that includes
5 not only an explanation, suggested revisions, but in
6 addition to that, a 5-page legal summary of the sections of
7 the federal and state laws and relevant federal court
8 decisions that support our position in this case.
9 Objection No. 1, that is, the most important
10 of the environmental restrictions or limitations from this
11 discharger are the mass emissions limitations. Mass
12 emissions, of course, most of you know is the total tonnage
13 in metric tons of suspended solids that are not removed,
14 but indeed are discharged into the ocean.
15 The mass emissions permitted under this
16 draft of 15,000 metric tons is 50 percent higher than the
17 actual mass emissions last year and in the previous years
18 during the first of the waiver periods. It clearly and
19 directly violates the most significant element of OPRA
20 Statute 1311(j), but in addition to that, it clearly
21 violates the early Sections 1251 and 1254 of the Clean
22 Water Act that state the primary goal of the Clean Water
23 Act which is, quote, a steady reduction in pollution
24 discharges into receiving waters.
25 Since I negotiated OPRA in '94 on behalf of

1 the Sierra Club, I'm very familiar with the terms of it.
2 And from an environmental standpoint, the most important of
3 OPRA terms is No. 4 which requires a reduction in mass
4 emissions of suspended solids during the 5-year waiver
5 period.
6 The jump of 50 percent from last year's
7 total mass emissions, which were 10,200 metric tons, the
8 jump to 15,000 metric tons in this permit is not only
9 inexplicable, but you don't have to be a lawyer to see that
10 it clearly violates not only the OPRA term, but the basic
11 terms in the act itself. Why? What's the explanation?
12 Well, it's hard to understand there's no
13 mention that I can see in any of the permit documents of
14 the actual mass emissions of 10,200 last year nor prior
15 years, no mention; which is certainly strange considering
16 that data is filed in this very building.
17 How is it explained? There's no explanation
18 anywhere in the permit documents of why the agencies, yours
19 and EPA agencies, believes that the jump to 15,000 metric
20 tons does not violate the act, no explanation of that at
21 all. The only explanation is a factual one saying, Well,
22 we base that 15,000 on the city's estimate of flows in
23 2006. City of San Diego estimates the flows in 4 years
24 from now as 195 MGD.
25 Well, no one in the staff, your staff or the

1 EPA staff, must have looked at what the flows actually are
2 at Point Loma. 195 MGD in 4 years is 20 MGD higher than
3 the actual flows which last year was only 175 MGD. And had
4 any staff person troubled themselves to look at prior data,
5 they will see that contrary to the city's claim that
6 population increases will inevitably drive up the flows,
7 the facts are just the contrary. Over the last 10 years,
8 flows have declined by 8 percent even though population has
9 increased 17 percent. And the reason for that is the
10 required plumbing conservation statewide and within the
11 city.
12 The second objection is there's no mention
13 whatsoever of any required reclamation or reuse of that
14 reclaimed water, none; no requirement that the city reclaim
15 any of its wastewater or reuse any of the water that it
16 does reclaim. The only mention is a very strange white
17 flag that's waved in the general condition section in which
18 parenthetically there is the statement that nothing here
19 requires the dischargers to reclaim any of its wastewater
20 or re-use any wastewater that it does reclaim.
21 Well, I've given you the citations. That's
22 totally wrong. Not only does the Clean Water Act require
23 reclamation, but Judge Brewster in our federal court in
24 1992 in the conclusion of law that I've cited says that,
25 says that the Clean Water Act requires not only the

1 conservation of water, but the prudent use of wastewater.
2 This Board has preeminent authority and
3 responsibility not only to monitor the quality of the
4 offshore ocean, but also to enforce water requirements of
5 the State of California Constitution. You know
6 Article 10, Section 2 provides that there must be not only
7 conservation of water within the state, but prohibits the
8 nonprudent use of water within the state.
9 You've got at least half a dozen Water Code
10 Sections that require the reuse of reclaimed water
11 including one Section at 13000 that says within the coastal
12 zone there should be instead of discharge and waste of
13 water, there should be its application of beneficial uses.
14 1984 the State Board in a Sierra Club case
15 said that hereafter all discharges should be required to
16 explain why they're not reusing rather than discharging
17 their wastewater, and yet not a word.
18 Finally, the agencies need to recognize the
19 clear relationship between wastewater reclamation and
20 reuse, and a reduction in mass emissions into the ocean.
21 Reclamation reuse is not a strategy, as important as that
22 is for supplementing water supply, ladies and gentlemen,
23 you must recognize. But so far in this permit, it's
24 totally unrecognized that every MGD of wastewater that's
25 diverted away from Point Loma into reclamation reuse, every

1 MGD that's diverted to reuse reduces the mass emissions of
2 solids discharged into the ocean by 50 times, 50 times.
3 There's no mention of the 14 MGD of reuse
4 the city will have during this permit period; 7 at North
5 City and 7 at South Bay. There's no mention in this
6 document that that will reduce mass emissions by 800 metric
7 tons. Where is the justification to jump it up to 15,000
8 metric tons?
9 And in addition to that, the city has a
10 potable reuse program that's been approved by all health
11 authorities, all the state and federal agencies, that is
12 collecting dust now by a political decision not to
13 implement it that would reuse an additional 20 MGD.
14 So I ask you and thank you for your efforts.
15 CHAIRMAN MINAN: Thank you, Mr. Simmons. Mr. Erik
16 Bruvold?
17
18 ERIK BRUVOLD,
19 MR. BRUVOLD: Chairman, EPA, and members of the
20 Board, my name is Erik Bruvold, B-r-u-v-o-l-d. And I'm
21 here on behalf of the San Diego Regional Economic
22 Development Corporation today. Our organization is the
23 only regionwide economic development entity with
24 responsibility to work with companies and jurisdictions to
25 create a more prosperous regional economy and enhance San

1 Diego's quality of life.

2 On behalf of our organization, I want to

3 urge and voice our strong support for the USEPA's tentative

4 decision to grant the City of San Diego a modified NPDES

5 permit in a manner consistent with Section 301(h) of the

6 Clean Water Act. The information contained in the EPA's

7 tentative decision clearly shows that the City of

8 San Diego's wastewater treatment methods are more than

9 sufficient to protect the marine environment and the health

10 of all San Diegans.

11 Indeed, that finding is consistent with over

12 15 years of science and research and the ongoing monitoring

13 program that have shown the treatment methods at Point Loma

14 work to benefit all of San Diego. For that reason, we urge

15 you to approve the permit and move forward.

16 But, moreover, it consistently has been

17 shown any demand for higher level of treatment at the plant

18 that would move San Diego to a level of secondary treatment

19 would both, A, not lead to a net improvement in the

20 environment; and, B, put an unfair economic burden on the

21 city, its participating agencies, and nearly 2 million

22 affected ratepayers. Indeed, a number of tentative studies

23 and engineering documents have shown that the cost of

24 moving to secondary treatment could be well in excess of

25 $2 billion with, again, no net environmental benefit.

1 Again, we'd like to encourage you to adopt
2 the tentative permit as shown. And, again, thank you for
3 the opportunity to communicate with this board.
4 CHAIRMAN MINAN: Thank you, sir, for your
5 testimony. Mr. Steve Zapoticzny?
6
7 STEVE ZAPOTICZNY,
8 MR. ZAPOTICZNY: Good morning, Chairman Minan,
9 members of the Board, and Ms. Strauss. My name is Steve
10 Zapoticzny; that's Z-a-p-o-t-i-c-z-n-y. I am here this
11 morning representing the Safe Treatment Coalition, the Safe
12 and Fair Environmental Treatment Coalition as chairman,
13 and also CP Kelco as their director of environmental
14 safety and health.
15 The Safe Treatment Coalition strongly
16 supports the EPA's tentative decision to grant the City of
17 San Diego a modified NPDES permit, and request the Regional
18 Quality Control Board to do the same.
19 The Safe Treatment Coalition is a
20 single-issue public coalition of local community groups,
21 businesses, labor, elected officials, scientists, and
22 individuals concerned about any effort to force San Diego
23 to a higher level of sewage treatment than other similar
24 cities are required to under the Clean Water Act.
25 As we've heard several times this morning,

1 and especially from EPA, scientific evidence clearly shows
2 that the City of San Diego's wastewater treatment is more
3 than sufficient to protect the marine environment and the
4 health of all San Diegans. The Safe Treatment Coalition
5 took the extraordinary step of conducting an independent
6 review of the city's monitoring and analysis, and I believe
7 you have a copy of that. All board members have a copy.
8 It was dated January 2002.
9 In summary, the science panel found the
10 Point Loma Treatment Plant's permitted discharge does not
11 impact the San Diego shoreline. The secondary treatment
12 standards will not solve or reduce San Diego's beach and
13 bay closures because the closures appear to be caused by
14 pollution from other sources, and we heard more details
15 earlier this morning from Mayor Murphy on that issue.
16 Extensive monitoring of the city's discharge has not been
17 found harmful to the ocean environment.
18 Both Safe's independent report, and more
19 significantly, EPA's tentative decision consistently
20 support the City of San Diego's application. Further, they
21 demonstrate any demand for a higher level of treatment at
22 the plant despite already being shown to be unnecessary
23 would impose a grossly unfair economic burden on the city,
24 its participating agencies, and the nearly 2 million
25 affected ratepayers. We heard numbers this morning of over

1 $2 billion. That may be a very conservative number, but it
2 would be a very expensive move forward to go to secondary
3 treatment.
4 The permit proposed by the EPA we feel
5 provides for full protection of the public health and
6 environment. By tentatively issuing this permit, EPA and
7 the Regional Water Quality Control Board recognize what all
8 available scientific information confirms: San Diego's
9 current system causes no environmental harm, and San
10 Diego's water are safe for humans and marine life.
11 Again, I support the EPA's tentative
12 decision and urge you to do the same, and thank you for
13 allowing me to appear this morning, Chairman.
14 CHAIRMAN MINAN: Thank you. Mr. Marco Gonzalez?
15 MR. GONZALEZ: Mr. Minan, I believe we submitted
16 some slips in an order. We're going to have Ed Kimura
17 start off our organized -- semi-organized presentation.
18 CHAIRMAN MINAN: Okay. Yes, I see it. Ed Kimura?
19
20 ED KIMURA,
21 MR. KIMURA: Thank you, Mr. Chairman, Ms. Strauss,
22 and members of the Board. My name is Ed Kimura. That's
23 spelled K-i-m-u-r-a. I'm speaking on behalf of the
24 Bay Council. Thank you for this opportunity to provide
25 comments on the renewal permit.

1 Bay Council is a coalition of environmental
2 groups dedicated to the protection and restoration of our
3 coastal waters. The Surfrider Foundation, the San Diego
4 Baykeeper, the San Diego Audubon Society, Environmental
5 Health Coalition, and the Sierra Club are signatories to
6 the comment letter on this renewal permit that I just
7 submitted to you today.
8 We have considered the short-term impacts,
9 meaning less than 5 years, and the long term impacts, more
10 than 5 years, of the effluents from the Point Loma
11 Treatment Plant on human health and the marine environment.
12 In the short-term, the duration of the new
13 permit, we accept the principal terms of the waiver, and
14 that is the biochemical oxygen demand and the TSS, total
15 suspended solids. These remain unchanged from the OPRA
16 requirements in the expired permit. With this exception,
17 however, we cannot support the renewal permit without
18 significant improvements to the ocean Monitoring and
19 Reporting Program. And I'll explain some of those in just
20 a few words here.
21 First, I would like to summarize, really,
22 two concerns: the EPA analysis and the need for major
23 improvements in the elements of an ocean monitoring
24 program. The time that we have been allowed to review the
25 permit was really inadequate for us to allow an in-depth

1 review of the EPA analysis.

2 The EPA analysis, in our view, is somewhat

3 disappointing because it is very difficult to read and

4 gather substantial information from the charts that were

5 being presented. The scales were so small that I really

6 couldn't determine what the predictions might be.

7 And this is one of the other concerns that

8 we have if we look at it from the long-term effects, we

9 need to know fairly soon how these trends are taking place

10 in the ocean, and we really need a solid database to do

11 that. Therefore, we think we need to have new types of

12 data, expanded sampling sites, necessary to estimate these

13 long-term effects.

14 And here are some of the key elements that

15 we need to significantly improve the Monitoring and

16 Reporting Program: first, new monitoring to detect health

17 threatening pathogens including parasites and viruses. We

18 heard the description today that there are no bacterial

19 flows coming from the plant that we can detect from the

20 kelp beds, but the lifetimes of these viruses are much

21 longer. And so at this stage of the game, the absence of a

22 bacteria does not indicate an absence of a health

23 threatening pathogen.

24 Secondly, we need to increase the sampling

25 sites and integrate the water monitoring program with a

1 following third item, and that's the remote sensing
2 monitoring. We need to have these tied together. And
3 there are various types, some of which are already being
4 implemented, to sample a large area in the South Bay, the
5 Point Loma Outfalls, as well as the effluents coming from
6 Mexico, the flows from the Tijuana River and the urban
7 runoff.
8 A fourth item, we need to add deep ocean
9 monitoring. At the present time, there's very little
10 information of the ocean environment much deeper than,
11 let's say, 350 feet. And the outfall is right off of the
12 shelf, and there are some sediment traps that I think the
13 ocean monitoring report mentioned. And if that's taking
14 place, are we accumulating some of these mass emissions
15 into the sediment traps?
16 And, fifth, we need to require an
17 independent qualified body to review and prepare annual
18 reports on the status of the ocean monitoring. This is
19 very important because we need to, again, get not only the
20 independent, but information on a timely basis rather than
21 waiting on a 5-year cycle, which I think if we continued on
22 this path, we really need to get this information sooner
23 rather than later that there is a problem occurring.
24 And then, finally, we need to provide --
25 We're asking you to provide the data to the public in

1 electronic form. I've been conducting a lot of analysis on
2 my own, and it's very, very time consuming to take the data
3 that comes out in the ocean monitoring reports and
4 transcribe that by hand into my computer to analyze. And
5 if we had it in electronic form, that would certainly cut
6 down the amount of time.
7 Well, those are my remarks today. Thank you
8 very much.
9 CHAIRMAN MINAN: Thank you, Mr. Kimura.
10 Ms. Stephanie Pacey?
11
12 STEPHANIE PACEY,
13 MS. PACEY: Hi, my name is Stephanie Pacey; that's
14 P-a-c-e-y. I'm the associate attorney with San Diego
15 Baykeeper, and I just have a few comments to make.
16 My first concern is the 50 percent jump in
17 mass emissions. That's hard to accept. It isn't necessary
18 and should be significantly lower. That being said, we
19 only have 5 years of data that we're working from. We
20 can't possibly make reliable conclusions from that limited
21 information.
22 To the extent that the city would have us
23 believe that final conclusions can be made is ridiculous.
24 Monitoring needs to be significantly improved and
25 performed for a much longer period of time before it is

1 considered conclusive.

2 Another issue I'd like to address is

3 reclamation. What's the point of reclaiming 45 million

4 gallons of water if it's not being put to beneficial use?

5 That program should be developed and implemented as soon as

6 possible.

7 Finally, I'd like to touch on the absence in

8 the tentative decision of the impacts on wildlife. Marine

9 mammals and birds both feed on the fish. The

10 bioaccumulation of the toxic material in the fish and the

11 effects on the reproductive and general health of these

12 species need to be addressed. Thank you.

13 CHAIRMAN MINAN: Thank you. Mr. Jim Peugh?

14

15 JIM PEUGH,

16 MR. PEUGH: Hi, I'm Jim Peugh, Coastal Wetlands

17 Conservation Chair of the San Diego Audubon Society. Peugh

18 is P-e-u-g-h, the most difficult way you can think to spell

19 it.

20 The 301(h) permit must not be issued if the

21 proposed discharge will adversely impact threatened or

22 endangered species. You all know that, I'm sure.

23 The evaluation, you know, the monitoring

24 plan looks at plankton, shellfish, and fish. There are

25 lots of fish-eating birds and lots of marine mammals that

1 eat those fish. Obviously, it's great to concentrate on
2 those. Those are the bottom of the food chain. That's the
3 easiest place to find things because they tend to be local
4 to the area, and we know a lot about them.
5 But I want to remind you that the way we
6 discovered that DDT had impacts on the food chain was we
7 discovered that birds that eat fish were having problems,
8 and then we started looking into what was in the fish. So
9 it wasn't found the obvious way of analyzing fish tissue.
10 It was found the more complicated way of animals that were
11 foraging on fish.
12 I think that there's a real weakness -- not
13 a weakness, it's good that we're concentrating on those,
14 and we really need to do that. But, also, the plan needs
15 to look -- sort of as Stephanie implied -- at sort of
16 general ocean health. And in particular, we know that
17 birds and marine mammals directly eat these fish. So some
18 level of monitoring needs to be done on these higher parts
19 of the food chain.
20 We also know that conceivably something to
21 the effect that people are getting sick, you know, maybe
22 you can trace back what problems are. Again, we don't
23 disagree that shellfish, plankton, and fish are a good
24 place to start, but we want you to look at the -- you know,
25 besides looking at a microscope of this problem, you need

1 to stand back and look at the whole problem at the same
2 time. And we think that the monitoring plan fails to do
3 that.
4 We also would like more of a thought about
5 cumulative impacts with respect to other sources of
6 pollution. We know that there's urban runoff that's going
7 to interact with what comes out of the ocean outfall. Stuff
8 from airborne pollution is deposited into the ocean.
9 There's ocean dumping not far away, and there are other
10 treatment plant outfalls.
11 One could say, well, they don't physically
12 mix, but that's not the only way things can interact. We
13 know that wildlife forages near all of them and is affected
14 by all those sources. So we hope that, again, in stepping
15 back a little bit and looking at this problem from a larger
16 scale, as well as with a microscope, that you look at
17 cumulative impacts from other sources.
18 And also cumulative impacts over time,
19 someone before mentioned long-term impacts. People that
20 said that since we haven't seen any impact from the
21 discharge now, that there is none. We don't know if
22 there's some impacts that we haven't noticed that will be
23 more noticeable in the future. We don't know if there are
24 impacts that are collecting that we just haven't gotten to
25 a level of detection.

1 So I'm really concerned with people that are
2 eager to say that there's been no impact with 5 years of
3 data; therefore, there are no impacts and let's just
4 eagerly move along.
5 We applaud the city council's broad
6 investments and efforts to clean up our waters. However,
7 we all know that politicians change, and 4 or 8 years from
8 now that can be totally different. We hope that the
9 monitoring program will be adequate to clearly indicate
10 whether there's problems in the future that we can deal
11 with them.
12 And also I'm really concerned with the
13 15,000 tons of total suspended solids. We know that in the
14 acronym "NPDES," "DE" is "discharge elimination." We know
15 that in "OPRA," the "R" is "reduction." I don't see how
16 this 15,000 tons of total suspended solids, you know, way
17 above what's needed, fits in with either of those acronyms.
18 Thank you.
19 CHAIRMAN MINAN: Thank you, Mr. Peugh. Mr. Reznik?
20
21 BRUCE REZNIK,
22 MR. REZNIK: Good morning, again. I am Bruce
23 Reznik Executive Director of San Diego Baykeeper. Thanks
24 for the opportunity to speak on this issue.
25 It's obviously a critical issue for

1 San Diego and not just for San Diego, but statewide as
2 waivers are coming up in various places throughout
3 California. I think it's important to say just in
4 principal we are not supportive of waivers. I think they
5 set a bad precedent that they're not sufficiently
6 protective and that -- as Jim just alluded to -- they take
7 the "E" out of NPDES.
8 With that said, what we're talking about
9 here or what my testimony is going to be about is what we
10 think is minimally needed in this instance. You've heard
11 basically everything I'm going to be touching on. The
12 first is no increase in mass emissions.
13 The main thing I'm going to be focusing on
14 is monitoring. It's something that relates to what I spoke
15 to this morning with the sediments and something that
16 concerns us a great deal. One of the issues of the
17 testimony I've heard so far, the two issues that kind of
18 jumped out at me is you have this concept that we have
19 enough data and that we can make conclusions from that
20 data.
21 We've had our experts look at it in the
22 environmental community and outside folks, and we just
23 don't feel that's the case that we have enough data as it
24 stands, that we have enough monitoring stations, that we're
25 looking at the right things, including you've heard a lot

1 of discussion on human and land-based pathogens and marine
2 mammals and those impacts and the studies that are going on
3 statewide looking at those types of things.
4 So we think we need at a minimum additional
5 monitoring. We can't continue to use the ocean as a
6 dumping ground without really understanding the full
7 impacts and jumping to conclusions. It's unconscionable
8 and we think it's illegal.
9 Second, and, again, this relates directly to
10 what is going on with the sediment issue, this needs to be
11 independent. And by "independent," I don't mean an
12 Orwellian-named group doing the monitoring. We mean
13 controlled by this regional board, controlled by EPA.
14 It is just simply a bad idea to let groups
15 with a vested interest continue to monitor, to do their own
16 monitoring, to conduct their own studies, to do their own
17 study designs. It's classic "fox guarding the henhouse."
18 It isn't working on the sediment issue; it won't work here.
19 We need resources brought in-house, and then you guys, the
20 Regional Board/EPA, are the ones conducting those studies
21 using those independent groups overseeing them and working
22 with the study, design, and developing the protocols.
23 It's the only way to ensure -- and it also
24 reduces the burden, first of all, on the environmental
25 community because we're going to have a lot more faith and

1 not have to expend our own resources doing independent. It
2 also eases the burden on your own staff and your own
3 organizations.
4 Right now there's a scrambling of resources
5 trying to analyze multimillion-dollar studies being
6 undertaken by the shipyards. There is not the expertise,
7 the experience, or the resources on your own staff to do
8 that. So bring the resources in-house that the city is
9 saving on not doing secondary treatment, and do independent
10 studies.
11 The other thing that we would add on the
12 studies, we don't know all the studies that need to happen.
13 It's an issue of process. What I'm asking is that the
14 environmental community sit at the table early on in
15 developing the process for those studies that are going to
16 be undertaken and the monitoring that's going to be
17 undertaken.
18 The last thing that I would ask because it's
19 one of the things that's been brought up that kind of got
20 my goat was the concept that it's going to be a $2 billion
21 proposition to get to secondary. Again, we've had experts
22 look at it, and we think that's an absurd figure. And
23 maybe as part of this permit you can have an independent
24 group of economists look at what it would really take to
25 get secondary treatment in San Diego. Thank you very much.

1 CHAIRMAN MINAN: Thank you, Mr. Reznik. Mr. Marco
2 Gonzalez?
3
4 MARCO GONZALEZ,
5 MR. GONZALEZ: Thank you, Mr. Chairman, members of
6 the Board, Ms. Strauss, and your staff. My name is Marco
7 Gonzalez; that's G-o-n-z-a-l-e-z. I'm here as a member of
8 the Bay Council, attorney for San Diego Baykeeper, and
9 Chairman of the San Diego County Chapter of the Surfrider
10 Foundation.
11 I'm going to try not to just echo the
12 concerns of my colleagues who came before you, but I would
13 like to say that the letter submitted by Mr. Simmons and
14 the rather eloquent statements he made are wholeheartedly
15 supported by the entire Bay Council. We have over the last
16 couple -- few months, really, met on this subject, and we
17 have come to consensus within the environmental community
18 on these positions.
19 But this raises another issue. You know,
20 last fall we were under the impression that this permit in
21 draft form was going to be issued sometime in the late fall
22 or very early winter. We recognized that the city and EPA
23 were involved in litigation over the last number of years,
24 but most specifically over the last year and half, over the
25 interpretation of OPRA and whether it would apply to this

1 permit renewal process.

2 That being said, we really didn't know the

3 deal that was being struck in response to the 9th

4 Circuit's ruling on the matter. In essence, we didn't know

5 if the permit was going to come down with an aggressive

6 interpretation of OPRA, whether it was going to be a

7 mimicking of the OPRA standards, as it turned out to be, or

8 whether it was going to be some sort of a wholesale walk

9 away from the standards that were created then.

10 That being said, we understand that these

11 hearings and approval or consideration of this permit is

12 being driven by court orders to some extent. But

13 nonetheless, as an environmental community, we have not had

14 the time in which to respond to what, in our opinion, is

15 one of if not the most important permit to the citizens of

16 San Diego County. To whatever extent we could extend the

17 comment period an additional 30 days, we would really

18 appreciate that.

19 Moving on to more substantive measures, I

20 would echo the sentiments of my colleagues that the

21 wholesale jump to 15,000 metric tons of TSS disposal is

22 wholly unjustified on the record. It seems to me that by

23 reading the TDD issued by the EPA is that it's based upon

24 what the city has said they could achieve in the past, what

25 they have achieved in the past, and the projected flows

1 that we expect to be coming out of the outfall over the
2 next 5 years.
3 As Mr. Simmons pointed out, if we go back
4 and actually look at the numbers, well, first of all, not
5 only does the city tend to overestimate its growth, as --
6 SANDAG was found to have done recently -- but they
7 overestimate their flows. And, in fact, if you look at
8 growth rate and flows, as Mr. Simmons pointed out, we've
9 seen a reduction.
10 Therefore, what we would like to see is a
11 permit that reflects what the city can really achieve.
12 8,888 metric tons of solids being discharged are the last
13 numbers that I have seen. Why are we allowing them an over
14 50 percent increase without giving us some sort of
15 scientific validation for that? We want to know where you
16 came up with that number.
17 And quite frankly, if this was a deal that
18 was struck in response to the litigation, and if everybody
19 is laying their cards face down so that we can fight this
20 fight on more substantive grounds in 5 years, just let us
21 know that so that we can sit there with you.
22 Moving on to what I feel are the really
23 important parts of this... You know, OPRA required
24 45 million gallons a day of water reclamation. Where is
25 the beneficial reuse of this water? What good does it do

1 any of us to reclaim the water if we're just going to take
2 that treatment level and throw it right back into the pipe?
3 And a very interesting nuance of this, let's
4 look at what happens to the MGD that isn't beneficially
5 reused, because clearly there is a small portion that is
6 being piped out into the community for reuse. After water
7 is treated to secondary standards, that is, the water
8 that's not going to be reused and treated to tertiary
9 standards, that secondarily treated water is pumped back
10 into the system along with the raw sewage and treated once
11 again at the Point Loma Treatment Plant.
12 In essence, the secondarily treated water is
13 used to dilute the raw input into Point Loma, thereby, in
14 my opinion, reducing the reductions that are able to occur
15 at that plant. If you took that secondarily treated water
16 and discharged it by some other mechanism out one of the
17 outfalls without co-mingling it with the raw sewage that's
18 entering into the Point Loma Treatment Plant, you wouldn't
19 have the dilution of that raw sewage.
20 And, in fact, you would have the treatment
21 system at Point Loma affecting a more dense stream, and
22 hopefully removing more of those solids. It's all going to
23 be co-mingled when it gets out into the deep ocean. Let's
24 give as much treatment to the raw sewage as we can.
25 On the issue of monitoring, just as we did

1 in the South Bay with our lawsuit against the International
2 Boundary Water Commission, we looked at the staff on board
3 at the city, and we don't find a Ph.D. in physical
4 oceanography. We don't find that on your staff. We don't
5 see the Regional Water Board or the EPA conducting the
6 types of assessments that we would get out of an expert out
7 of Scripps or some other similarly poised academic body.
8 We think that in order to truly understand
9 the fate and transport of the plume and the discharges from
10 this outfall, you really need to go back to the well of
11 academia and find people who are going to assess the city's
12 current monitoring program, advise you independently of the
13 pitfalls of that program, or perhaps just the windows where
14 the data just doesn't fill in, and then have Dave Hanson
15 and your staff go back to the city and craft a monitoring
16 program which provides for an additional physical
17 monitoring, whether it's remote sensing or something
18 similar to the CODAR study which is going to be implemented
19 in the South Bay through a grant and a partnership with the
20 City of Imperial Beach.
21 That being said, I think that we have to
22 take care that there is an antidegradation standard and a
23 standard also in the Clean Water Act and under the waiver
24 provision that we not negatively impact the ocean
25 environment in the area surrounding the discharge. The

1 trends that will truly determine whether these standards
2 are being met are not 3-year, 5-year, or really even
3 10-year trends. These are long-term trends that are going
4 to have to be studied at every level for a long time.
5 Therefore, I would echo what Jim said and
6 that is that just because we haven't seen the impact yet,
7 it doesn't mean that something isn't going on there. We
8 really have to be giving the monitoring program a very
9 strong look at the minute trends because once they reach a
10 certain point and bloom up, it's going to be a lot harder
11 to fix it after the fact.
12 In conclusion, I'd just like to reiterate
13 what Bruce said, and that is to our compatriots in Orange
14 County and Goleta and all over the state who are dealing
15 with the waiver issue, clearly we have a different
16 situation here because of OPRA. Clearly we have a
17 different situation because our outfall extends 4 1/2 miles
18 out and 310 feet deep. But that being said, the notion of
19 a waiver is something that we should all abhor.
20 The cost estimates to come up to secondary
21 treatment in Orange County are $300- to $400 million. The
22 cost to build the Hyperion Treatment Plant in Los Angeles
23 with all the bells and whistles was $1 billion.
24 That being said, I would carefully
25 reconsider the cost estimates being put forward by the

1 city, and at some point in the near future I would go back
2 to the citizens of San Diego and ask where would they like
3 their money spent. And I think they would like their money
4 spent on a deep ocean outfall with discharges that meet
5 secondary requirements, if not in the next 5 years,
6 certainly at that time. Thank you.
7 CHAIRMAN MINAN: Thank you, Mr. Gonzalez. Mr. Paul
8 Dayton?
9
10 PAUL DAYTON,
11 MR. DAYTON: Good morning, I'm Paul Dayton. I'm a
12 professor at Scripps Institution of Oceanography. I am a
13 benthic ecologist, and I am here to address my work in the
14 kelp forest where we have some 30 years' worth of baseline
15 data. We collect the baseline data very carefully because
16 we really are studying anomalies, and we have to have
17 something to contrast the anomalies with.
18 So we have been focusing on anomalies.
19 We've been looking very carefully for effects and impacts
20 and anomalies that might relate to the outfall, and we
21 haven't seen any trace or any hint of any outfall anomalies
22 in the parameters that we studied in the kelp forest.
23 I am a benthic ecologist, and I also am
24 concerned with just sea bottoms of all sorts. And I think
25 that the monitoring program that we have here has produced

1 perhaps arguably for that deep water habitat the best sort
2 of big picture of a benthic habitat in the world.
3 It's a really excellent description of a
4 community that most of us can't dive on and most of us
5 can't study. So I have also been just looking at the
6 annual reports and keep track of them out of academic
7 interests, and I have not seen any impact that would
8 discredit the waiver.
9 Where you have a sewer outfall it certainly
10 might have some impacts, but I haven't seen any impacts
11 that I can actually trace to the outfall with my level of
12 knowledge. Certainly, there's nothing there that would
13 argue against continuing the system as it stands. Thank
14 you very much.
15 CHAIRMAN MINAN: Thank you, sir. Mr. James
16 McDonald?
17
18 JAMES McDONALD,
19 MR. McDONALD: Good morning, ladies and gentlemen.
20 My name is James McDonald, M-c-D-o-n-a-l-d. Although I am
21 a member of several environmental organizations and am a
22 former federal EPA regional enforcement chief, I am
23 appearing here today in my own right.
24 San Diego has some of the nation's finest
25 physical water assets, assets that you would think the city

1 would go all out to protect and enhance. But that's not
2 the case. Instead, it has a history of dragging its feet
3 or just trying to get by, of doing as little as possible
4 when it comes to water quality.
5 The permit before you today is a perfect
6 example. Rather than accepting a permit reflecting at
7 least the degree of treatment of other large ocean
8 dischargers, the city wants to continue its old ways of
9 getting by with as little as it can.
10 The city has always operated that way even
11 though it now professes to a new environmental outlook as
12 far as protecting water quality goes. Let's face it,
13 San Diego is in a time warp. When I first started working
14 in the field of water pollution control years ago, many
15 dischargers felt that dilution was the solution to
16 pollution. That was espoused to allow its proponents to
17 get by with little, and in some cases, no treatment of its
18 waste.
19 The Clean Water Act was enacted to overthrow
20 that concept. Nevertheless, San Diego persists in pursuing
21 that outmoded concept instead of diligently wanting to
22 actually enhance and protect the receiving waters of its
23 wastes.
24 Where does that leave San Diego? Well, it
25 leaves it as the largest city in the United States without

1 secondary treatment of its waste. That's quite a
2 distinction. No. 1, that's the legacy it wants to continue
3 today. It wants to perpetuate the rejected concept of
4 dilution is the solution to pollution.
5 Although I know this is a pro forma hearing
6 and chances are that there will be no rejection of the
7 waiver, I nevertheless urge you to reject San Diego's
8 outmoded thinking and to bring the city up to a level of
9 treatment commensurate with that of other large cities
10 throughout the United States.
11 I say bring San Diego kicking and screaming
12 into the 21st century. It steadfastly refuses to do so by
13 itself. And what I heard today from the federal and state
14 regulatory agencies was really most disappointing. It was
15 essentially a pleading by those regulatory agencies of the
16 city's case for a waiver. I think it's a job of a
17 regulatory agency to show the benefits of upholding the
18 secondary treatment requirement of the Clean Water Act, not
19 to plead the city's case for a lower treatment standard or
20 waiver.
21 The state and federal agencies, really,
22 ladies and gentlemen, seem to have it backwards. That
23 concludes my testimony, and thank you very much.
24 CHAIRMAN MINAN: Thank you, Mr. McDonald. You
25 have, obviously, an enthusiastic supporter or supporters.

1 Mr. Tom McHenry?

2 MR. McHENRY: Mr. Chairman, I'll rely upon my

3 written comments. Thank you.

4 CHAIRMAN MINAN: Thank you, sir. Mr. Larry Porter?

5

6 LARRY PORTER,

7 MR. PORTER: Mr. Chairman, Board members, and staff

8 from the EPA, and members of the public, my name is Larry

9 Porter. I'm a proud member of the Ocean Outfall Group, and

10 we are a group of concerned citizens who have been having a

11 discussion with the Orange County Sanitation District now

12 for about a year and a quarter in regards to its waiver

13 from the full secondary treatment standards. Now they are

14 discharging half primary and half secondary.

15 (Whereupon, Board Member Ghio exits the

16 hearing room.)

17 And I am here today to share with you some

18 of the things that we have come to learn about sewage

19 treatment and what it means to the environment. I may

20 reiterate some of the things that have been said, but it's

21 most important.

22 You have heard today about bacteria.

23 Bacteria is not the only element that is discharged. There

24 are viruses, there are pharmaceuticals, there are hormones,

25 there are endocrine disruptors, and there are chemical

1 compounds that once they go into the pipe together, they
2 combine into new chemical compounds that man has no idea
3 what will transpire into the environment into which they
4 are discharged. In Newport Beach and in Huntington Beach
5 if you are going to join the junior lifeguards, it is
6 mandatory that you get a hepatitis A shot.
7 The monitoring program, I assume, is the
8 same for San Diego as it is for Orange County. It can't
9 even come close to describing the environment in which the
10 discharge is taking place. It is intermittent at best. It
11 is not even close to being a scientific endeavor, of being
12 conclusive as to what is going on in the environment.
13 In Orange County there's no consideration
14 whatsoever for the migratory pelagic animals, i.e., the
15 whales. Is this like the issue of smoking where for so
16 long it was considered, no, smoking is not harmful to one's
17 health, that what we throw out our pipes and how we
18 callusly disregard the level and the constituents of our
19 waste, that it will not come back and bite us and harm us?
20 Is this not the very same?
21 So thank you for letting me share some
22 things that we have come to learn and that we now have
23 6 cities who have adopted resolutions against this waiver.
24 And just yesterday there has been a momentous adoption
25 against the waiver held by the Orange County Sanitation

1 District by the City of Irvine and the Irvine Ranch Water
2 District. And one can read between the lines and,
3 therefore, the Irvine Company.
4 Thank you very much. The public outcry in
5 Orange County is growing and growing. Whenever we talk to
6 people about what is going out that pipe, they say, my God,
7 that can't be true. What kind of a civilization are we
8 living in? Thank you.
9 CHAIRMAN MINAN: Thank you, Mr. Porter. Mr. Doug
10 Korthof?
11
12 DOUG KORTHOF,
13 MR. KORTHOF: That's correct. Doug Korthof, I live
14 in Seal Beach, K-o-r-t-h-o-f. I'm an ordinary citizen, and
15 like most people I found out about these waivers about a
16 year ago. And like most people, I'm appalled.
17 I want to put things into perspective here.
18 San Diego has the second largest waiver in the country.
19 There's only 36 waivers remaining. 208 were originally
20 granted, as you well know. Waivers have been lost. All
21 the other cities, all the other major cities, all the other
22 districts, 16,000 of them, perform a minimum of full
23 secondary treatment.
24 As the Irvine Ranch Water District said,
25 secondary treatment is not enough. We need to go beyond

1 that. You guys and us in Orange County and Goleta,
2 Morro Bay are not even to that basic minimum standard. As
3 they said, we're not talking here about upgrading from a
4 Buick to a Cadillac. We're talking about going from
5 walking to driving at all.
6 This issue concerns the ocean, and we have a
7 sacred obligation -- I'll repeat that -- a sacred
8 obligation as people on the coast to safeguard the ocean.
9 By the square-cube law, the amount of area along the coast
10 increases as a linear area, and in the interior it's
11 square. So there's much less area along the coast. The
12 coast is a critical zone of value to everybody in the
13 entire community, and it must be protected.
14 Orange County Sanitation District said there
15 was no problem. They said it would cost a billion dollars.
16 They said the plume stays off shore. They said there's a
17 barrier of clean water. It turns out monitoring studies,
18 no matter how comprehensive, can never do an adequate
19 enough job. It would take hundreds of millions or perhaps
20 tens of billions of dollars to begin to do an adequate
21 study of benthic and oceanic currents.
22 Secondly, the cost estimates evaporated. It
23 turns out that all the things they said about cost
24 evaporated down to maybe a few cents a day. The plume
25 stays off shore. Well, the tests have shown now -- they

1 have to admit it, they knew it since 1987 -- that the plume
2 comes ashore in Orange County.
3 They said there was a barrier. It turns out
4 the barrier of clean water only protects against the
5 surface transport, and it doesn't protect against low fecal
6 content which migrates inshore and then accumulates along
7 the shore.
8 So the entire house of cards collapsed under
9 scrutiny, and it would collapse here. And someone needs to
10 say that because you need to hear it, that this waiver
11 needs to be denied. Is San Diego unique? No, San Diego is
12 just another district that's trying to duck its
13 responsibilities. There's 36 of them. Some of them have
14 an excuse like Anchorage, Alaska. San Diego and Orange
15 County don't. If you have an excuse, it's that there's a
16 problem with implementation.
17 We need to have a general goal of restoring
18 and healing our ocean, our fish, our rivers, our watersheds
19 to get back to where we once were. We need to adopt this
20 as a credos saying, "This is what our job is, our goal."
21 Words are not enough. In Orange County we
22 can start right now because we have the money. We're a
23 rich county. In Goleta and Morro Bay there may be a
24 problem because they have to hook to Santa Barbara.
25 In San Diego you need to deny the waiver

1 right now and generate a plan. Put first things first. Put
2 that plan, that goal of a clean ocean first. Deny the
3 waiver and say practical matters means that we'll have to
4 devise an implementation and phasing plan to get there.
5 But right now we need to take the position against the
6 waiver and deny the waiver.
7 Whatever you do to get there to that
8 position, maybe like in Los Angeles you have to go through
9 a process of building a plant... Now, it's been said that
10 there is life at the end of the outfall. I would suggest
11 to you that if the effluent is so good for the ocean,
12 maybe you're suggesting it's such a great thing that all
13 these studies supposedly show, that it's such a great
14 thing.
15 Are you seriously suggesting that all the
16 other plants along the ocean, which are also situated along
17 deep ocean currents, all of them should tear out their
18 sewage treatment plants? Maybe sewage is really good.
19 Maybe we should just let it flow down the streets. No,
20 that's clearly bizarre.
21 We need to implement not only full secondary
22 treatment, we need to look at the environment we're in is
23 like a spaceship. There's too many people to allow us to
24 live within our own detritus. As you all know, the petri
25 dish experiment shows that in the long run, your quality of

1 life degrades unacceptably when you live in your own waste
2 material.
3 There must be a limit to where this has to
4 stop, and where it stops is right here. Deny the waiver.
5 You can do it today, and when you come to this decision,
6 and the people expect you to do it. All the testimony you
7 have heard by people making excuses and saying that we need
8 more studies and it goes on and on, it doesn't need more
9 studies. The studies were done in 1972. The studies are
10 there.
11 Secondary treatment is a minimum, full
12 treatment, as much treatment as we can possibly do to keep
13 the detritus of the land on the land and to preserve the
14 ocean to what it once was. We don't know the damage that
15 we are doing. The damage that is happening to the ocean
16 now will be the legacy we'll leave to our children and your
17 children and your descendants, too.
18 I'll ask you now, deny this waiver. It's
19 your responsibility; it's your duty. Thank you.
20 CHAIRMAN MINAN: Thank you, sir. I have no more
21 public speaker slips on this agenda item; therefore, I will
22 close this agenda item.
23 I'm sorry, you're absolutely right. Scott,
24 you had some closing comments. And I think, staff, you're
25 entitled to make closing comments.

1 SCOTT TULLOCH,

2 MR. TULLOCH: Scott Tulloch, City of San Diego.

3 I'd like to reiterate our appreciation for the work done by

4 the EPA and Regional Water Quality Control Board staffs for

5 their efforts in reviewing the vast amounts of technical

6 data.

7 What the City of San Diego is about is not

8 whether or not to protect the environment, but how to do

9 it. We believe that the draft permit will ensure

10 protection of the environment, and we urge you to adopt it.

11 We are committed to take all necessary actions to ensure

12 compliance with the conditions in the permit. We're also

13 committed to doing the monitoring and necessary scientific

14 studies to ensure that the public health and environment

15 are protected in the future.

16 We currently comply with the monitoring

17 program that's laid out to us by the Regional Board staff

18 and the EPA. We submit the results of that. We take

19 samples someplace out there every week, and we submit those

20 results monthly to both the Board and the EPA every year

21 annually. We don't wait every 5 years, but annually we

22 analyze those results, those samples, and provide that

23 analysis to the EPA and the Board.

24 If the EPA and the Board decide over the

25 course of the next month or any time in the future that

1 there is additional monitoring that would benefit all of us
2 in knowing what's happening out there and what the trends
3 are, we stand ready to do that. And that concludes our
4 remarks. Thank you very much.
5 CHAIRMAN MINAN: Thank you, Mr. Tulloch.
6 Mr. Hanson, closing comments or thoughts for the Board at
7 this point?
8 MR. HANSON: I have no additional comments, but I
9 would like to say that we will thoughtfully consider all
10 the written and oral comments received here today and
11 provide you with our responses for you to consider at the
12 April 10th hearing.
13 CHAIRMAN MINAN: Thank you. Mr. Fleming?
14 MR. FLEMING: I have no formal comments. The only
15 thing I'd like to --
16 CHAIRMAN MINAN: Would you speak into the
17 microphone so it can be picked up for the record.
18 MR. FLEMING: I have no formal comments. My goal
19 was to present an overview of the 301(h) decision document
20 and to listen to comments. So I want to thank everyone
21 that had comments today.
22 CHAIRMAN MINAN: I think this -- Oh, I'm sorry,
23 Dr. Wright.
24 MR. WRIGHT: I wonder if we could get copies of his
25 presentation. The transparencies I thought were very good

1 of Mr. Fleming.

2 CHAIRMAN MINAN: Any other comments? This closes

3 this agenda item, and this closes, also, the period for the

4 submission of written testimony according to the notice.

5 At this point, Ms. Strauss, do you have any

6 comments that you would like to share with the public?

7 MS. STRAUSS: No. Thank you, Chairman Minan.

8 CHAIRMAN MINAN: That concludes this agenda item.

9 (Whereupon, agenda Item 7 was concluded

10 at 11:55 A.M.)

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1 REPORTER'S CERTIFICATE

2

3 STATE OF CALIFORNIA)
)
4 COUNTY OF LOS ANGELES)

5

6 I, Grace A. Verhoeven, a Certified Shorthand
7 Reporter within the County of Los Angeles, State of
8 California, do hereby certify:
9 That the said hearing was taken down by me in
10 shorthand at the time and place therein stated and was
11 thereafter reduced to print by Computer-Aided Transcription
12 under my direction;
13 I further certify that I am not of counsel or
14 attorney for either of the parties hereto or in any way
15 interested in the event of this cause and that I am not
16 related to either of the parties thereto.

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18

19

20 Witness my hand this _____ day of
21 _____, 2002

22

23 _____
GRACE A. VERHOEVEN

24

25