CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
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F 13a

ADDENDUM TO COMMISSION PACKET

FOR

ENERGY, OCEAN RESOURCES AND FEDERAL

CONSISTENCY DIVISION

FOR Friday, March 12, 2010

This addendum contains an update to the Staff Recommended Revised Findings for Item No. F 13a

CC-056-09, City of San Diego, Reissuance of Secondary Treatment Waiver

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Prepared March 9, 2010 (for March 12, 2010 hearing)

To: Coastal Commissioners and Interested Persons

From: Mark Delaplaine, Manager, Energy, Ocean Resources and Federal Consistency Division

Subject: STAFF REPORT ADDENDUM for Item F 13

Revised Findings, Consistency Certification CC-056-09, City of San Diego, Reissuance of Secondary Treatment Waiver

The Commission staff proposes changes to the proposed revised findings for the Commission's October 7, 2009 action on the City of San Diego's consistency certification for the reissuance of a secondary treatment waiver.

The most recently-published proposed revised findings are already in "tracked changes." For clarity, this addendum contains changes assuming that the previously-published changes were already made. [Proposed new language is shown in underline text; language to be deleted is shown in ~~strikeout~~ text.]

Executive Summary Findings, page 5, middle of the page, to page 6, make the following changes:

~~For the following reason, the project as proposed is not consistent with the requirements of Sections 30230 and 30231 of the Coastal Act. Despite the City's monitoring improvements, it is uncertain without further data that disposal of more than 50 billion gallons of sewage per year that has not been fully treated to secondary standards will have no adverse impacts. Moreover, g~~Gaps exist in the monitoring data, and a number of monitoring studies are incomplete at this time, including, in particular: (a) plume behavior monitoring, which will help characterize and assess the impacts of the discharges; and (b) the Deep Benthic Synthesis Study, which will evaluate ~~is needed to document whether there are gradual,~~ long-term adverse impacts on benthic organisms due to the loading of solids by the discharge. The final results of the plume behavior monitoring and deep benthic studies are not expected until Fall 2011 and mid-2010, respectively.

To conclude, monitoring work that is in progress but has not yet been completed, combined with the need to maintain~~, and where feasible, restore,~~ the biological productivity and the quality of coastal waters ~~in a manner that will maintain optimum populations of marine organisms~~, lead the Commission to find that the City needs to continue its ongoing efforts to ~~reduce the volume of not fully treated (to secondary levels) sewage discharged from the Point Loma plant by~~ investigat~~e~~ing ~~the potential for~~ greater wastewater reclamation and recycling ~~and implementing available options~~. Thus, ~~in order to bring the project into conformity with Sections 30230 and 30231 of the Coastal Act,~~ the following condition is needed:

Condition

Wastewater Reclamation and Recycling Opportunities Study. The City will return for a public hearing before the Coastal Commission in (approximately) two years when its study of Wastewater Reclamation and Recycling Opportunities1 is completed and the findings and recommendations have been documented in a report, and inform the Commission how, and to what extent, the City intends to implement the recommendations in the report or any alternatives to the recommendations in the report. If the City does not intend to implement the recommendations of the report, the City will provide an explanation of its reasoning to the Commission. As determined by the Commission, the City submitting the report and participating in any Commission hearings on the report shall constitute full compliance with this condition.

The above condition is required because, while the City has improved its monitoring efforts since the last Commission review in 2002, and the monitoring results that are available for the past seven years do not contradict the City's claim that the discharges comply with the applicable Clean Water Act tests, the City nevertheless needs to continue its ongoing efforts to ~~reduce the volume of effluent from the Point Loma plant by~~ investigat~~e~~ing the potential for greater wastewater reclamation and recycling ~~and implementing available options~~**,** in order to bring the project into conformity with ~~Sections 30230 and 30231 of~~ the Coastal Act. The Commission concludes that, ~~only~~ as conditioned, ~~would~~ the City's discharges under the renewal of the secondary treatment waiver 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.

Note – additional changes can be found below; however they are essential the same as the above changes, just in different locations in the document.

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[1] This study refers to the City's Cooperative Agreement with San Diego Coastkeeper and the San Diego Chapter of Surfrider Foundation, approved on February 18, 2009, described further in Footnote 2, page 6, above, and attached as Exhibit 15.

Condition Language, page 22, make the following changes:

Condition

Wastewater Reclamation and Recycling Opportunities Study. The City will return for a public hearing before the Coastal Commission in (approximately) two years when its study of Wastewater Reclamation and Recycling Opportunities2 is completed and the findings and recommendations have been documented in a report, and inform the Commission how, and to what extent, the City intends to implement the recommendations in the report or any alternatives to the recommendations in the report. If the City does not intend to implement the recommendations of the report, the City will provide an explanation of its reasoning to the Commission. As determined by the Commission, the City submitting the report and participating in any Commission hearings on the report shall constitute full compliance with this condition.

Water Quality, Marine Resources Findings, page 48, 2nd paragraph, make the following changes:

Nevertheless, ~~for the following reason, the project as proposed is not consistent with the requirements of Sections 30230 and 30231 of the Coastal Act. Despite the City's monitoring improvements, it is uncertain without further data that disposal of more than 50 billion gallons of sewage per year through the Pt. Loma ocean outfall that has not been fully treated to secondary standards will have no adverse impacts. Moreover,~~ gaps exist in the monitoring data, and certain monitoring studies are incomplete at this time, including:

Water Quality, Marine Resources Findings, page 49-50, make the following changes:

To conclude, due to the gaps in the monitoring, combined with the need to maintain, ~~and where feasible, restore,~~ the biological productivity and the quality of coastal waters ~~in a manner that will maintain optimum populations of marine organisms,~~ the Commission finds that the City needs to continue its ongoing efforts to ~~reduce the volume of partially treated sewage discharged from the Point Loma plant by~~ investigat~~e~~ing ~~the potential for~~ greater wastewater reclamation and recycling ~~and implementing available options~~. Thus, ~~in order to bring the project into conformity with Sections 30230 and 30231 of the Coastal Act,~~ the following condition is needed:

Condition

Wastewater Reclamation and Recycling Opportunities Study. The City will return for a public hearing before the Coastal Commission in (approximately) two years when its study of Wastewater Reclamation and Recycling Opportunities3 is completed and the

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2 This study refers to the City's Cooperative Agreement with San Diego Coastkeeper and the San Diego Chapter of Surfrider Foundation, approved on February 18, 2009, described further in Footnote 2, page 6, above, and attached as Exhibit 15.

3 This study refers to the City's Cooperative Agreement with San Diego Coastkeeper and the San Diego Chapter of

findings and recommendations have been documented in a report, and inform the Commission how, and to what extent, the City intends to implement the recommendations in the report or any alternatives to the recommendations in the report. If the City does not intend to implement the recommendations of the report, the City will provide an explanation of its reasoning to the Commission. As determined by the Commission, the City submitting the report and participating in any Commission hearings on the report shall constitute full compliance with this condition.

Thus, while the City has improved its monitoring efforts since the last Commission review in 2002, and the monitoring results that are available for the past seven years do not contradict the City's claim that the discharges comply with the applicable Clean Water Act tests, the City nevertheless needs to continue its ongoing efforts to ~~reduce the volume of partially treated sewage discharged from the Point Loma plant by~~ investigat~~e~~ing the potential for greater wastewater reclamation and recycling ~~and implementing available options~~, in order to bring the project into conformity with ~~Sections 30230 and 30231 of~~ the Coastal Act. The Commission therefore concludes that, ~~only~~ as conditioned, ~~would~~ the City's discharges under the renewal of the secondary treatment waiver would be consistent with the water quality and marine resources policies ~~(Sections 30230, and 30231)~~ of the Coastal Act.

Commercial Fishing/Recreation Findings, page 51, make the following changes:

For similar reasons as discussed in the water quality/marine resource section above, the Commission finds that City needs to make further progress on its ongoing monitoring efforts and continue its ongoing efforts to ~~reduce the volume of partially treated sewage discharged from the Point Loma plant by~~ investigat~~e~~ing the potential for greater wastewater reclamation and recycling ~~and implementing available options~~, in order to bring the project into conformity with the fishing and recreation policies of the Coastal Act. Recreational activities that might be affected by the Point Loma WTP discharge 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 water quality standard exceedances, they are unlikely to be related to the City's outfall discharges and more likely to be from land based nonpoint source runoff. Rare exceedances of bacteriological water quality standards in the kelp beds (0.5% of samples) are being addressed by installation of effluent disinfection facilities that were brought on line in September 2008 (see water contact recreation excerpt below). 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 is protected and other recreational concerns are met. EPA states the following concerning effects on recreational activities (including fish consumption):

Surfrider Foundation, approved on February 18, 2009, described further in Footnote 2, page 6, above, and attached as Exhibit 15.

Commercial Fishing/Recreation Findings, page 52, make the following changes:

Thus, while the City has improved its monitoring efforts since the last Commission review in 2002, and the monitoring results that are available for the past seven years do not contradict the City's claim that the discharges comply with the applicable Clean Water Act tests, the City nevertheless needs to continue its ongoing efforts to ~~reduce the volume of partially treated sewage discharged from the Point Loma plant by~~ investigat<u>e</u>~~ing the potential for~~ greater wastewater reclamation and recycling~~ and implementing available options~~, in order to bring the project into conformity with ~~Sections 30230 and 30231 of~~ the Coastal Act. The Commission therefore concludes that, as discussed above with respect to marine resources, and ~~only~~ as conditioned, ~~would~~ the discharges <u>would</u> 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.

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REVISED PROPOSED FINDINGS

ON CONSISTENCY CERTIFICATION

Consistency Certification No.	CC-056-09
Staff:	MPD-SF
File Date:	9/16/2009
3 Months:	12/16/2009
6 Months:	3/16/2010
Stay granted - 6 Mo. Period Ends:	3/31/2010
Commission Vote:	10/7/2009
Commission Action:	Conditional Concurrence
Hearing on Findings:	3/12//2010

APPLICANT: **City of San Diego**

PROJECT LOCATION: E.W. Blom Point Loma Wastewater Treatment Plant (WTP), City of San Diego, with ocean outfall discharge point 4.5 miles offshore of Point Loma, San Diego (Exhibit 1)

PROJECT DESCRIPTION: Reissuance of Secondary Treatment Waiver

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

COMMISSION ACTION: Conditionally Concur in the City of San Diego's Consistency Certification for the above-referenced federally-permitted activity

PREVAILING COMMISSIONERS: Commissioners Achadjian, Blank, Burke, Clark, Kram, Kruer, Sanchez, and Chair Neely

MOTION: See p. 21

SUBSTANTIVE FILE DOCUMENTS: See page 53.

Staff Recommendation: Adopt Proposed Findings in support of the Commission's October 7, 2009, action. Motion is on page 21.

PROCEDURAL NOTES: Adoption of the Revised Findings requires a majority vote of Commission members who both were on the prevailing side and who are present at the ~~December~~March, 12, 201009, Commission hearing at which these Revised Findings are presented, with at least three of the prevailing members voting. Only those Commissioners on the prevailing side of the Commission's action are eligible to vote on the revised findings. The staff recommendation, motion, and resolution are located starting on page 20 of this report. The remainder of this report is a revised version of the report presented to the Commission in October of this year, revised to reflect the Commission's October 7, 2009, action. Additions are shown in underlined text and deletions are shown in ~~strikethrough text~~.

EXECUTIVE SUMMARY

Under the federal 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 Regional Water Quality Control Board (RWQCB)) the authority to grant a waiver from otherwise applicable secondary treatment requirements for suspended solids (SS), biochemical oxygen demand (BOD), and pH. In this case, such a waiver would authorize the City of San Diego to continue to discharge effluent receiving less than full secondary treatment in terms of suspended solids (SS) and biochemical oxygen demand (BOD). Secondary treatment would result in removal of 85% of both SS and BOD. The City's proposed limits under the waiver would be 80% removal of SS and 58% removal of BOD. Secondary treatment waivers are jointly issued by EPA and the RWQCB, and the waivers need to be renewed every five years.

In reviewing past secondary treatment waiver and waiver renewal requests for the Cities of San Diego, Morro Bay, and Goleta, and Orange County,[1] the Commission has generally concurred with consistency certifications and found no conflict between such waivers and the applicable water quality and marine resource policies of the Coastal Act, especially when: (1) adequate monitoring is in place (stringent monitoring is required for dischargers receiving waivers); and (2) EPA and the appropriate RWQCB have determined that the discharger's effluent complies with the applicable Clean Water Act and Ocean Plan requirements. More recently, Morro Bay, Goleta, and Orange County have committed to upgrade to secondary, although interim waivers may still be needed before secondary treatment is fully

[1] See pages 17-1915 18 of this report for a fuller discussion of past Commission reviews of such waivers.

implemented. Thus, in California, the City of San Diego is the only municipal ocean discharger of wastewater that has not either achieved or committed to implementing full secondary treatment.

In its review of the City of San Diego's last renewal of its secondary treatment waiver (CC-10-02), the Commission initially objected to the City's consistency certification, on April 8, 2002. The Commission's action occurred prior to RWQCB action on the waiver, and the Commission identified three areas of concern that it believed needed to be addressed in order for the discharges to be consistent with applicable Coastal Act policies: (1) reductions in permitted levels of mass emissions; (2) meaningful commitments for water reclamation; and (3) additional monitoring provisions.

Acting two days later, the RWQCB adopted several of the Commission's recommendations; the RWQCB reduced the total permitted mass emission loadings by 6.7% in the NPDES permit, and separate from the NPDES permit: (a) requested annual reports from its staff on the City's progress towards implementing water reclamation; and (b) instructed its staff to review (and prepare for future RWQCB adoption) modifications to the monitoring program, including specific provisions for deep ocean receiving stations, human pathogens, and long term trends.

The City petitioned for review of the RWQCB action by the State Water Resources Control Board (SWRCB). The City also resubmitted its consistency certification to the Commission (CC-28-02). On August 15, 2002, the SWRCB ordered the mass emission limits to be returned to the originally-drafted level (i.e., eliminating the 6.7% reduction for the first four years). The SWRCB found that the RWQCB had failed to justify reducing the mass emission limits.

The City then clarified that the consistency certification that the City had resubmitted to the Commission was for the waiver as modified and ordered by the SWRCB. On September 9, 2002, the Commission concurred with this resubmitted consistency certification (CD-028-02). The Commission found:

> *Given the SWRCB analysis on the mass emission levels and the RWQCB measures to address water reclamation and future monitoring improvements, as well as the available monitoring evidence of the lack of adverse effects of past discharges on the marine environment and the continuation of the stringent monitoring throughout the term of the permit, 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.*

For the current submittal, EPA's independent Technical Evaluation determined that San Diego's discharges continue to meet the applicable Clean Water Act standards for a waiver. On June 10, 2009, the RWQCB approved the waiver (in adopting Tentative Order No. R9-2009-0001 and NPDES Permit No. CA0107409). EPA's and the RWQCB's analyses further document that the discharges would meet California Ocean Plan standards for at least the 5-year life of the permit.

When the Commission reviewed the City's waiver request in 2002, the Commission expressed the need for more comprehensive and greater regional extent of monitoring. Since 2002 the City's has greatly expanded its monitoring program, including extensive regional monitoring, as well as adding new efforts such as deep water monitoring in the underwater canyons in the greater project area. These newer efforts, which are further detailed on pages 8-136~~ 11~~, include: (1) Core Monitoring; (2) Strategic Process Studies; (3) Regional Monitoring; and (4) Plume Behavior Monitoring.

The Core Monitoring Program consists of five components: general water quality monitoring; bacteriological monitoring of shoreline, kelp bed, and offshore waters; sediment monitoring for grain size, chemistry, and benthic infauna community structure; monitoring for fish and megabenthic invertebrate communities, and contaminant body burdens of fishes; and monitoring of kelp bed canopy cover.

The Strategic Process Studies are designed to address specific research or management issues related to receiving water monitoring that are not addressed by core and regional monitoring elements; these studies are worked out in coordination with EPA and the RWQCB, on an annual basis.

The Regional Monitoring, also worked out in coordination with EPA and the RWQCB, is designed to maximize the efforts of all monitoring partners and scientific resources in the region, and is intended to provide a regional assessment of the impact of the discharge of municipal wastewater to the Southern California Bight, and to provide a more comprehensive picture of the ecological and statistical significance of monitoring results and determine cumulative impacts of various pollution sources.

In addition, in response to concerns over possible effects in the deep water canyons in the area, the City conducted a special monitoring study of the conditions of sediments and benthos in deep water (as deep as 542 meters) to look for potential impacts of the City's discharge. The concern expressed was that the canyons could be a major sink for the accumulation of sediments and other materials from a variety of point and non-point sources. In an effort to begin investigating such habitats, the City set up 16 monitoring stations for both the outfall, as well as the EPA designated disposal site (LA-5), at various depths in areas likely to be most susceptible to sediment accumulation. According to the RWQCB, the Preliminary summary report results indicate: " … no evidence of significant contaminant accumulation in these deeper habitats off San Diego that may have originated from the Point

Loma outfall, the LA-5 disposal site or other sources… [and that] [n]o chlorinated pesticides or PCBs were detected at any of the 16 sites." Final study results will not be available until 2010.

Finally, with respect to monitoring, the City has also commenced a detailed plume monitoring study, designed to "… determine the behavior and dispersion of the Point Loma outfall plume using state-of-the-art methodology and equipment." This plume study will:

> *… address two primary concerns of operating the ocean outfall in its current configuration: (1) possible effects to beach and near-surface water quality and (2) its risk to the coastal marine environment. This study addresses beach and surface water quality concerns by determining whether the wastewater plume surfaces and encroaches upon beaches, and if so, the frequency of such behavior. It also supports efforts to address ecosystem concerns by determining the frequency of spatial occurrence (i.e. the temporal footprint) of the plume thereby helping to spatially focus ongoing and future biological monitoring programs.*

The result of this plume study will not be available before fall~~mid~~-2011.

For the following reason, the project as proposed is not consistent with the requirements of Sections 30230 and 30231 of the Coastal Act. Despite the City's monitoring improvements, it is ~~unrealistic to assume~~ uncertain without further data that disposal of more than 50 billion gallons of sewage per year that has not been fully treated to secondary standards will have no adverse impacts. Moreover, gaps exist in the monitoring data, and a number of monitoring studies are incomplete at this time, including, in particular: (a) plume behavior monitoring, which will help characterize and assess the impacts of the discharges; and (b) the Deep Benthic Synthesis Study, which is needed to document whether there are gradual, long-term adverse impacts on benthic organisms due to the loading of solids by the discharge. The final results of the plume behavior monitoring and deep benthic studies are not expected until Fall 2011 and mid-2010, respectively.

To conclude, monitoring work that is in progress but has not yet been completed, combined with the need to maintain, and where feasible, restore, the biological productivity and the quality of coastal waters in a manner that will maintain optimum populations of marine organisms, lead the Commission to find that the City needs to continue its ongoing efforts to reduce the volume of not fully treated (to secondary levels) sewage discharged from the Point Loma plant by investigating the potential for greater wastewater reclamation and recycling and implementing available options. Thus, in order to bring the project into conformity with Sections 30230 and 30231 of the Coastal Act, the following condition is needed:

Condition

Wastewater Reclamation and Recycling Opportunities Study. The City will return for a public hearing before the Coastal Commission in (approximately) two years when its study of Wastewater Reclamation and Recycling Opportunities[2] is completed and the findings and recommendations have been documented in a report, and inform the Commission how, and to what extent, the City intends to implement the recommendations in the report. If the City does not intend to implement the recommendations of the report, the City will provide an explanation of its reasoning to the Commission.

The above condition is required because, while the City has improved its monitoring efforts since the last Commission review in 2002, and the monitoring results that are available for the past seven years do not contradict the City's claim that the discharges comply with the applicable Clean Water Act tests, the City nevertheless needs to continue its ongoing efforts to reduce the volume of effluent from the Point Loma plant by investigating the potential for greater wastewater reclamation and recycling and implementing available options, in order to bring the project into conformity with Sections 30230 and 30231 of the Coastal Act. The Commission concludes that, only as conditioned, would the City's discharges under the renewal of the secondary treatment waiver 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.

~~Thus, the City has extensively improved its monitoring efforts since the last Commission review in 2002, and the monitoring results for the past seven years support the City's claim that the discharges comply with secondary treatment waiver requirements and California Ocean Plan standards, which contain policies comparable to the marine resource, fishing, and recreation protection policies of the Coastal Act. The stringent monitoring as required under Section 301(h) will be continued. The City has also upgraded its facilities, improved wastewater reclamation facilities, and maintained mass emission levels below the levels initially required recommended by the Commission and required by the RWQCB (prior to SWRCB reinstatement of the higher permit levels). Given all these factors and requirements, the City's discharges under the renewal of the secondary treatment waiver 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.~~

[2] This study refers to the City's Cooperative Agreement with San Diego Coastkeeper and the San Diego Chapter of Surfrider Foundation, approved on February 18, 2009, described further in Footnote 2, page 6, above, and attached as Exhibit 15.

STAFF SUMMARY AND RECOMMENDATION:

I. Staff Summary – Project Description and Background

A. Project Description. The City of San Diego ("City") 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 (WTP) and Outfall, which discharges 4.5 miles from Point Loma (Exhibit 1). The waiver would allow the discharge of wastewater receiving less-than-secondary treatment into the Pacific Ocean. The City has been operating under a "special exception" to the 301(h) program, granted when Congress amended the Clean Water Act by adding to it Section 301(j)(5). That section allowed the City to apply for a waiver after the deadline for such applications had passed (it also contained substantive requirements, which are discussed below). The City applied for the waiver and subsequent renewals in a timely manner, initially in 1995, and for renewals in 2001 and 2007.

The Point Loma WTP, which serves the 450 sq. mi. Metropolitan San Diego area,[3] is located near the southern tip of Point Loma, and discharges wastewater from the City of San Diego through the Point Loma ocean outfall (PLOO) at a distance 4.5 miles from shore, west of Point Loma, in approximately 100 meters of water. The outfall terminates with a wye (Y-shaped) diffuser with two 2,496 foot long diffuser legs. The diffuser has 416 discharge ports (208 on each leg) and the zone of initial dilution (ZID) extends 93.5 meters (307 feet) on either side of the PLOO diffuser legs. The RWQCB, with assistance from the SWRCB, has established a minimum initial dilution factor for this permitting effort of 204:1. The sewer system also includes two pump stations, two water reclamation plants (WRPs) (North City and South Bay WRPs), and the Metro Biosolids Center at Marine Corps Air Station Miramar (Exhibit 2). Existing wastewater flows in recent years (2005-2007) have been approximately 160-185 million gallons per day (MGD) (average flows). Projected flows for the year 2014 (the end of the 5-year permit) are estimated at 202 MGD. System capacities are 240 MGD (average) and 432 MGD (peak wet weather flow).

[3] The "Metro System" (Exhibit 2) includes the City and 15 participating agencies in the region. City flows account for 70% of the total flows.

The project service area and facilities are further described on pages 11-14 of EPA's Tentative Decision Document (Exhibit 12). This description notes a number of upgrades the City has made to the treatment system since the previous waiver was granted in 2002, including:

> *There have been improvements to Metro System facilities since the existing federal NPDES permit became effective in 2003. These include bringing the South Bay Water Reclamation Plant and recycled water users online within the service area of the South Bay Water Reclamation Plant and Ocean Outfall, and adding recycled water users within the North City Water Reclamation Plant service area. Figure A-2 presents a schematic of existing Metro System treatment and solids handling facilities which include the: Point Loma Wastewater Treatment Plant and Ocean Outfall, North City Water Reclamation Plant, South Bay Water Reclamation Plant and Ocean Outfall, and the Metro Biosolids Center. Waste solids from the South Bay Water Reclamation Plant (WRP) are conveyed to Point Loma WTP for treatment. Waste solids from Point Loma WTP and North City WRP are conveyed to the Metro Biosolids Center for dewatering and disposal.*

The City has also strengthened its monitoring program since the previous waiver was granted in 2002, including:

> ***D. Receiving Water Monitoring*** [4]
>
> ***1. Core Monitoring Program for Surface Water***
>
> *A monitoring program at the current discharge site has existed since 1991 and has focused on physical, chemical, and biological patterns in the region. The monitoring program underwent significant revision in 2003 to reallocate the level of effort that was in place at the time, in order to address crucial processes not addressed by earlier monitoring programs and provide a regional framework for interpreting discharge-related effects. The existing monitoring program reflects the principles expressed in the "Model Monitoring Program for Large Ocean Dischargers in Southern California" (SCCWRP, 2002). Since 2003, the following three components have constituted the Discharger's receiving water monitoring program: (1) Core Monitoring; (2) Strategic Process Studies; and (3) Regional Monitoring. These three components are needed to evaluate compliance with the permit, federal 301(h) decision criteria, and State water quality standards; and to assess the effects of the discharge on the marine environment.*

[4] Source: RWQCB Fact Sheet, pp. F-46 to F-49 (Exhibit 11) (Note: Monitoring stations are shown in Exhibits 3-5.)

There are five components to the Core Monitoring Program: general water quality monitoring; bacteriological monitoring of shoreline, kelp bed, and offshore waters; sediment monitoring for grain size, chemistry, and benthic infauna community structure; monitoring for fish and megabenthic invertebrate communities, and contaminant body burdens of fishes; and monitoring of kelp bed canopy cover.

a. General Water Quality

*The offshore and kelp bed water quality sampling program is designed to help evaluate the fate of the wastewater plume under various conditions and to determine if the water quality objectives contained in the Ocean Plan are being achieved in the receiving water. Salinity, temperature, density, pH, transmissivity, dissolved oxygen, and chlorophyll ~~a are~~ will be monitored throughout the entire water column quarterly at **[36 offshore stations] and five times per month**[5] at eight kelp bed stations. Ammonium ~~is~~will be monitored at those stations which are located within State jurisdictional waters, on a quarterly basis and at the same discrete depths specified for bacterial monitoring. General water quality monitoring requirements have been carried over from the previous Order.* [Emphasis added]

b. Microbiological

*Bacteria indicator sampling is required to help track the wastewater plume in federal and State offshore waters and evaluate compliance with recreational water quality standards in State waters within three nautical miles of the shoreline. In federal and State offshore waters, the nature and extent of primary contact recreational use in federal waters is noted and reported. **A grid of 36 offshore stations is monitored quarterly for enterococcus. Eight kelp bed stations and eight shoreline stations are monitored five times per month for enterococcus, total coliform, and fecal coliform.** At offshore and kelp bed stations, these parameters are monitored in the water column at fixed intervals. At shoreline stations, these parameters are monitored in the surf zone using grab samples. General microbiological monitoring requirements have been carried over from the previous Order.* [Emphasis added]

c. Sediment

*The physical and chemical properties of sediments and the biological communities that live in or on these sediments are monitored to evaluate potential effects of the PLOO discharge and compliance with narrative water quality standards in the Ocean Plan. The core sediment monitoring program is designed to assess spatial and temporal trends. **A core set of 12 to 22 stations are monitored twice each year, in January and July, using grab samples.** Twelve primary stations are located along the 98-meter depth contour and 10 secondary stations are located along the 88-meter*

[5] Emphasis added in bold. Number of stations missing in the draft permit text was inserted in brackets.

and 116-meter depth contours. The requirement for sampling at the secondary stations can be relaxed by the Regional Water Board and USEPA to allow the Discharger to participate in Bight-wide regional monitoring efforts. For sediment chemistry, monitored parameters include sediment grain size, metals, PCBs and chlorinated pesticides, and PAHs. Benthic community structure is evaluated using separate grab samples, in January and July. General sediment monitoring requirements have been carried over from the previous Order. [Emphasis added]

d. Fish and Invertebrate

Epibenthic trawls at four trawl zone stations are used to assess the structure of demersal fish and megabenthic invertebrate communities and to evaluate compliance with narrative water quality standards in the Ocean Plan. Chemical analyses of fish tissues are performed annually on target species collected at or near the four trawl and two rig fishing stations. Species targeted are representative of those caught by recreational and/or commercial fishery activities in the region. Liver tissue is monitored at trawl stations and muscle tissue is monitored at rig fishing stations to assess the uptake of pollutants in fish species commonly consumed by humans in the region. The tissues are analyzed for lipids, metals, PCBs, and chlorinated pesticides. General fish and invertebrate monitoring has been carried over from the previous Order.

e. Kelp Bed Canopy

Annual kelp bed surveys are intended to assess the extent to which the discharge of wastes may affect the aerial extent and health of coastal kelp beds. This monitoring effort is conducted with other ocean dischargers in the San Diego Region and covers the entire San Diego Region coastline, from the international boundary to the San Diego Region/Santa Ana Region boundary. In each annual survey, the aerial extent of the various kelp beds are photographed and compared to previous surveys; further investigation is required if significant losses are observed to persist for more than one year. Kelp bed monitoring has been carried over from the previous Order.

E. Strategic Process Studies and Regional Monitoring Requirements

In addition to Core Monitoring activities, the Discharger is required to conduct Strategic Process Studies and participate in Regional Monitoring activities coordinated by the Southern California Coastal Water Research Project (SCCWRP). Strategic Process Studies are an integral part of the permit monitoring program and differ from other elements of the monitoring program (e.g., core monitoring, regional monitoring, other permit special studies). They are intended to be short-term and are designed to address specific research or management issues related to receiving water monitoring that are not addressed by core and regional monitoring elements. The scope of special studies is determined by the Discharger, in coordination with the Regional Water Board Executive Officer and USEPA. Each

> *year, the Discharger is required to submit proposals for strategic process studies for the following year's effort.* ***Detailed scopes of work for each study are provided by the Discharger and approved by the Executive Officer and USEPA, prior to study implementation.*** [Emphasis added]
>
> *The intent of Regional Monitoring activities is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and best utilize the pooled scientific resources of the region. During these coordinated large-scale sampling efforts, the Discharger's sampling and analytical effort may be reallocated to provide a regional assessment of the impact of the discharge of municipal wastewater to the Southern California Bight. Anticipated modifications to the monitoring program will be coordinated so as to provide a more comprehensive picture of the ecological and statistical significance of monitoring results and determine cumulative impacts of various pollution sources. Under previous permits, the Discharger participated in regional monitoring efforts in 1994, 1998, 2003, and 2008. The Discharger provides its level of effort for Regional Monitoring for Executive Officer and USEPA approval, following the procedures and schedule established for approval of Strategic Process Studies.*

The City conducted a special monitoring study of the conditions of sediments and benthos in deep water (as deep as 542 meters) to look for potential impacts of the Point Loma WTP discharge. A summary of the results of the Deep Benthic Pilot Study is part of the City's NPDES application Attachment E (RWQCB files) Benthic Sediments and Organisms:

> ***Deep Benthic Pilot Study*** *Little is known about benthic conditions on the continental slope off southern California, although this region may be a major sink for the accumulation of sediments and other materials that may originate from a variety of point and non-point sources. In an effort to begin investigating such habitats as part of its enhanced ocean monitoring objectives for Valley located west of the City's monitoring region for the Point Loma outfall and an EPA designated disposal site. Sixteen sites were distributed at depths around 200, 300, 400 and 500m along four offshore transects and modified to target areas most susceptible to sediment accumulation. Sites were classified into three "classes" based on geographic location, sediment composition, and steepness of slope. Samples were collected at each site for assessment of both sediment quality (grain size, chemistry) and biotic (infaunal communities) conditions. Preliminary analyses of the sediment data have been completed (see below), while assessment of the associated infaunal communities is underway. The preliminary summary report for this project is included as Attachment E.4 of this appendix, while a final comprehensive report is expected to be completed by the end of 20~~08~~10.*[6]

[6] The City states that "No such report was prepared. Instead, this is (will be) included as part of the larger, more comprehensive Deep Benthic Synthesis Study expected to be completed in 2010."

> *As part of the DBPS, benthic sediments were analyzed for grain size, total organic carbon, total nitrogen, total volatile solids, sulfides, trace metals, pesticides, and PCBs. Bottom water conditions were characterized based on CTD data. Preliminary results show no evidence of significant contaminant accumulation in these deeper habitats off San Diego that may have originated from the Point Loma outfall, the LA-5 disposal site or other sources.* ***No chlorinated pesticides or PCBs were detected at any of the 16 sites.*** *Sediment chemistries were closely linked to grain size compositions. Sediments sampled from the axial valley of the submarine canyon where materials are most likely to accumulate were much coarser and had correspondingly lower concentrations of metals and organic enrichment than sediments collected from the alluvial plain of the canyon and nearby shelf slope. Alluvial and deep sediments were organically enriched leading to low oxygen concentrations in the overlying water.*[7] [Emphasis added]

Finally, with respect to monitoring, the City has also commenced a detailed plume monitoring study, designed to "… determine the behavior and dispersion of the Point Loma outfall plume using state-of-the-art methodology and equipment." In designing this study, the City acknowledges that:

> *The behavior of the Point Loma wastewater plume (wastefield) is not well known at present because it has not been purposefully mapped an adequate number of times to determine its behavior given the complex ocean conditions that exist off San Diego. Ocean conditions that force plume behavior off San Diego are known to vary seasonally and are affected by larger scale ocean circulation within the southern California borderlands, local wind patterns, and winds located as far south as southern Baja California.*

The City summarizes this plume study as follows:

> *The purpose of the present project is to determine the behavior and dispersion of the Point Loma outfall plume using state-of-the-art methodology and equipment. The goals of this project are to address two primary concerns of operating the ocean outfall in its current configuration: (1) possible effects to beach and near-surface water quality and (2) its risk to the coastal marine environment. This study addresses beach and surface water quality concerns by determining whether the wastewater plume surfaces and encroaches upon beaches, and if so, the frequency of such behavior. It also supports efforts to address ecosystem concerns by determining the frequency of spatial occurrence (i.e. the temporal footprint) of the plume thereby helping to spatially focus ongoing and future biological monitoring programs.*

[7] Note – Low oxygen conditions are typical of deep water sediments off Southern California.

> *The work outlined here involves tracking the wastefield using an autonomous underwater vehicle (AUV) and modeling plume behavior both in the near and far fields off Point Loma. The ultimate goal is to track plume behavior over the range of observed ocean conditions an adequate number of times to support the prediction of plume behavior given the same conditions observed in the future. The modeling effort consists of coupling an EPA standard near-field model that describes the footprint, mixing and rising of the buoyant plume within a kilometer or two of the outfall to a regional model of ocean circulation to estimate plume behavior in the far field (tens to over a hundred kilometers from the outfall). The end-product of this work will be a statistical description of plume behavior over the range of ocean conditions off Point Loma and a coupled dynamical model of plume behavior that would facilitate real-time prediction of plume dispersion based on ocean current and temperature data telemetered from a sensor array located over the outfall. In other words, possible plume surfacing events and shoreline incursions could be known in near real time.*
>
> *The work outlined here represents the second phase of work intended to determine plume behavior. The first phase, monitoring of ocean circulation and temperature profiles in the vicinity of the Point Loma outfall, began in 2006 as a collaborative effort between the City of San Diego Ocean Monitoring Program (Metropolitan Wastewater Department) and the Scripps Institution of Oceanography. The AUV and modeling work outlined below will be supported by ongoing observations of ocean currents and temperature as well as high frequency (HF) radar observations. High frequency radar supports estimation of surface current fields and is therefore useful for tracking sewage wastefields that have surfaced as well as possibly contaminated buoyant plumes from terrestrial surface runoff or outflows from rivers or bays.*

The result of this plume study will not be available before mid-2011.

For the 5 year term of the NPDES permit, the City proposes the following system improvements (EPA TDD, p. 14 (Exhibit 12)):

> *During the next 5-year permit cycle, the applicant has proposed the following improvements to the Metro System. Volume III, Large Applicant Questionnaire section II.A.2, of the application. These improvements are: (1) the ongoing program to bring additional recycled water users online to reduce dry-weather North City WRP flows discharged downstream to the Point Loma WTP and PLOO and South Bay WRP flows discharged to the SBOO; and (2) effluent disinfection provided by the installation and implementation (operation) of prototype effluent disinfection facilities at the Point Loma WTP. Prototype effluent disinfection facilities have been installed at the Point Loma WTP to allow the discharge to comply with recreational body-contact bacteriological standards throughout the water column (ocean surface*

to ocean bottom) in all State-regulated waters (within three nautical miles of the coast). The City will perform and complete follow-up studies to assess the need for refinements or modifications to prototype disinfection facilities or operations. The City is proposing to implement effluent disinfection at the Point Loma WTP to achieve a 2.1 logarithm (approximately 99%) reduction in pathogen indicator organisms using a 7 mg/l dose rate of a 12 percent sodium hypochlorite solution in the effluent channel. (For reference, 1 milligram per liter is 1 part per million.) The application projects that the sodium hypochlorite solution will be entirely consumed by effluent chlorine demand during outfall transport, allowing the Point Loma discharge to maintain a zero chlorine residual as the effluent enters the outfall diffuser. The City may propose future modification of the prototype disinfection facilities or operations based on additional studies and following approval by the Regional Water Board and EPA.[8]

As documented in Volume III, Large Applicant Questionnaire section II.A.3, of the application, the City has constructed 45 mgd of recycled water treatment capacity; during the period of the existing permit, the applicant has consistently achieved 80% removal of TSS and 58% removal of BOD; and reduced TSS mass emissions during the period of the 301(h) modification (in Tables II.A-3 and II.A-4 and Figure II.A-1, Volume III of the application). Except for a slight reduction in year five of the renewed permit, the City is not requesting any change in the mass emission rate effluent limits for TSS, the concentration effluent limit for TSS, or the percent removal effluent limits for TSS and BOD, from those in the existing permit (in Tables II.A-2 and II.A-5, Volume III of the application). "System-wide" percent removal is computed as specified in Addendum No. 1 to Order No. R9-2002-0025, NPDES No. CA0107409. Tables II.A-3 and II.A-4 include the contribution from South Bay WRP which is neither identified in amended Order No. R9-2002-0025, nor included in the computation of "system-wide" percent removal.

[8] For further background, the RWQCB Fact Sheet notes:

> *On November 13, 2007, the Discharger submitted a request to the Regional Water Board to initiate operation of prototype effluent disinfection facilities to achieve compliance with bacteriological water quality standards in State waters. On August 13 2008, the Regional Water Board approved modifications associated with operation of the Discharger's proposed prototype effluent disinfection facilities at Point Loma WTP. The Discharger's 2007 301(h) application is based on an improved discharge, as defined at 40 CFR 125.58(i), and incorporates effluent disinfection to achieve these standards prior to permit reissuance.*

EPA estimates past and projected (for the 5-year life of the permit) flows as follows (TDD Table 1):

Table 1. Actual and projected annual average and maximum daily/peak hour flows (mgd) for the Point Loma Ocean Outfall from 2001 through 2014.

Year	Observed Flows		Project Flows	
	Annual Average Flow[1]	Maximum Daily Flow	Projected Annual Average Flow[2]	Maximum Projected Peak Hour Flow[3]
2001	175	222	---	---
2002[4]	169	189	---	---
2003	170	223	---	---
2004	174	295	---	---
2005	183	325	---	---
2006	170	224	---	---
2007	161	206	---	---
2008	162[5]	233[5]	191	458[6]
2009	---	---	192	463[6]
2010	---	---	193	467[6]
2011	---	---	194	471[6]
2012	---	---	197	476[6]
2013	---	---	199	481[6]
2014	---	---	202	486[6]

[1] Data from monthly reports submitted to the Regional Water Board and EPA for 2001-2008. Maximum daily flow is the highest daily PLOO flow observed during the listed year.

[2] Average annual PLOO flow projections based on Metro System flow projections for long-term facilities planning. The flow projections for long-term facilities planning are conservative (overestimates that employ a factor of safety) to ensure that adequate future system capacity is maintained. Average annual PLOO flows will vary depending on hydrologic conditions, recycled water demands, and SBOO flows. These approximations are based on average annual recycled water use in the North City WRP service area of 7,210 AFY [Acre-Feet/Year] in 2008, 7,760 AFY by 2010, 8,260 AFY by 2012, linearly increasing beyond 2012 to 9,970 AFY (8.9 mgd) by 2027. Estimates are also based on combined South Bay WRP reuse and SBOO flows of 6,730 AFY in 2008, 6,930 AFY in 2010, 7,490 AFY in 2012, linearly increasing beyond 2012 to 8,850 AFY (7.9 mgd) by 2027. Estimates are also based on net annual Metro System flow reductions of 3.0 mgd from recycled water use from Padre Dam MWD, Santee WRP, and Otay Water District WRF.

[3] Maximum projected peak-hour wet-weather flow for a 10-year return period, per MWWD [Metropolitan Wastewater Dept.] System wide Planning Design Event Analysis for Peak Flows and Volumes - PS1 and PS2, April 24, 1997. Values assume that no recycled water use occurs during a wet weather event. Maximum projected peak-hour flows represent short-term peak flows for purposes of assessing the ability of Metro System collection facilities to handle short-term instantaneous peak flows. Actual maximum peak hour flows in any year are likely to be significantly less than this projected once-in-10-year event.

[4] South Bay WRP is brought online.

[5] Preliminary values for January 1 through September 30, 2008.

[6] The City is reassessing peak hour wet-weather flow projections. As part of this assessment, the City is evaluating the need to add equalization storage at Pump Station Nos. 1 and 2 (or implementing alternative peak-flow management options) to increase the ability of Metro System conveyance facilities to handle potential maximum instantaneous peak flows.

B. Treatment Levels. 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 and BOD:

(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%;**

pH: The effluent limits for pH shall be maintained within the limits of 6.0 to 9.0 pH units. (Note: the City is not seeking a waiver from this requirement.)

State water quality standards (i.e., the **California Ocean Plan) require removal of 75% of SS**. 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 average);

2. **58% removal of BOD** (annual average);

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).

33 U.S.C. § 1311(j)(5)(B) & (C).

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 [only applicable to San Diego discharges]	80% as 30-day average	58% as annual average	
Secondary	85% as 30-day average	85% as 30-day average	6-9

Thus, the City is requesting a variance from secondary treatment standards for BOD and SS. Under this waiver, the City's advanced primary system must remove 80% of SS, and 58% of BOD. The City's performance in recent years has achieved averaged removal rates of 89% for SS, and 68% for BOD. Recent suspended solids loadings have been less than 10,500 metric tons/yr. (see Table 9, pages 3~~72~~-3~~83~~). The City is not requesting a waiver of pH requirements.

B. Procedures. Secondary treatment waivers are reviewed by EPA and the RWQCB, with EPA retaining the final decision authority. Under the 301(h) waiver process, once the application is made, EPA performs an independent technical evaluation and, if the discharges meets all Clean Water Act 301(h) waiver requirements, EPA issues a tentative decision document (TDD). (EPA's TDD, issued December 2, 2008, is attached as Exhibit 12.) This is followed by RWQCB and Coastal Commission public hearings and actions (which can occur in either order), and after these and other agency reviews are finalized (including U.S. Fish and Wildlife Service and National Marine Fisheries Service reviews under the Endangered Species and Magnusen-Stevens Acts), EPA issues its final decision. On June 10, 2009, the RWQCB approved the waiver in its adoption of Tentative Order No. R9-2009-0001 and Draft NPDES Permit No. CA0107409. EPA can not grant the waiver until after the RWQCB approves a Draft NPDES permit and the Commission concurs with a consistency certification for the waiver (or (a) if the RWQCB objects, the State Water Resources Control Board approves the permit on appeal; and/or (b) if the Commission objects, the Secretary of Commerce overrides the Commission's objection on appeal).

C. History of San Diego Waiver. On September 27, 1995, after a Commission public hearing, and after which the Commission endorsed the staff's recommended approach, the Commission staff concurred with a previous submittal from the City of San Diego of a "No Effects" letter (in lieu of a consistency certification) for its first 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 reissuance.

On April 8, 2002, the Commission objected to the City's consistency certification for the City's waiver reissuance (CC-10-02). The Commission determined that the activity was not consistent with the California Coastal Management Program (CCMP), and that in order to bring the activity into conformance with the CCMP, the City would need to modify the activity. The Commission identified the following three areas of concern that needed to be addressed: (1) reductions in permitted levels of mass emissions; (2) commitments for water reclamation; and (3) additional monitoring provisions. More specifically, the Commission requested:

> *1. meaningful reductions in rates of annual mass emissions (i.e., the proposed EPA/RWQCB permit limitations of 15,000 metric tons (MT) per year for the first four years, and 13,599 MT for the fifth year, are set unrealistically high, compared to current discharges of approximately 9,000 MT/yr.);*
>
> *2. commitments for actual reclamation (as opposed to the requirements under the Ocean Pollution Reduction Act of 1994 (OPRA) to develop 45 MGD of reclamation capacity); and*
>
> *3. additional monitoring measures, consisting of:*
>
> *a. Extending the Coastal Ocean Dynamics Applications Radar (CODAR) monitoring developed at Imperial Beach to the Point Loma area.*
>
> *b. Adding a monitoring station in La Jolla Canyon.*
>
> *c. Incorporating remote sensing into the monitoring program.*

On April 10, 2002, the Regional Water Quality Control Board (RWQCB), San Diego Region, adopted modified permit conditions and addressed these three areas of Commission concern in the following manner:

(1) the RWQCB modified the permit to reduce total allowable mass emission loadings by 6.7%, from 15,000 metric tons per year (MT/yr.) to 13,995 MT/yr. for the first four years (with the fifth year remaining at 13,599 MT/yr.);

(2) the RWQCB requested annual reports from the RWQCB's Executive Officer on the City's progress towards implementing water reclamation, and noted that the RWQCB could impose future reclamation requirements if adequate progress is not forthcoming;

(3) the RWQCB instructed its staff to review and prepare for future RWQCB adoption modifications to the monitoring program, including specific provisions for deep ocean receiving stations, human pathogens, and long term trends.

In separate proceedings the City appealed both the Commission and RWQCB actions. The City also resubmitted its consistency certification to the Commission (CC-28-02). On May 8, 2002, the City appealed the Coastal Commission's consistency certification objection (CC-10-02) to the Secretary of Commerce. On May 9, 2002, the City petitioned for review of the RWQCB's NPDES permit action modifying the mass emission limits by the State Water Resources Control Board (SWRCB)[9]. The City and the Commission staff agreed to "stay" any further deliberations in the Secretary of Commerce appeal, pending Commission reconsideration of the matter once the SWRCB acted. On August 15, 2002, the SWRCB ordered the mass emission limits to be returned to the originally-drafted 15,000 MT/yr. (for the first four years). The SWRCB concluded that the RWQCB had "… failed to make findings, either in its order or during its deliberations, that justify reducing the mass emission limits for TSS from 15,000 metric tons per year to 13,995 metric tons per year in the waste discharge requirements." Accordingly, the City clarified that its resubmitted consistency certification was for the waiver as modified and ordered by the SWRCB. On September 9, 2002, the Commission concurred with this resubmitted consistency certification (CC-028-02).

Finally, for the current waiver, on August 13, 2009, the Commission objected to the City of San Diego's consistency certification (CC-043-09). In lieu of actively pursuing an appeal to the Secretary of Commerce, which is a procedure available to applicants who have submitted consistency certifications to which the Commission has objected, the City has elected to resubmit its consistency certification to the Commission. The Commission's Executive Director waived any applicable time requirements for such resubmittal.

D. Previous Commission Reviews of Other California Waivers. In 1979, and 1983-1985, the Commission reviewed a number of consistency certifications for secondary treatment waiver applications, under the federal consistency provisions of the Coastal Zone Management Act ("CZMA"), 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. 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 the CZMA and its administrative regulations. 16 USC § 1456(c)(3)(A); 15 CFR § 930.62(a).

[9] Only the first of the above RWQCB measures was an actual permit modification (i.e., the second and third measures were outside the scope of the permit).

Section 301(h) waivers are only valid for 5 years, although EPA commonly administratively extends the time during processing of renewal applications. Only a few of the initial round of waiver applicants continued to pursue waivers; by the mid-1990's the list was down to: Goleta, Morro Bay, and Orange County (CSDOC). On January 12, 2005, and January 8, 1997, the Commission concurred with Goleta's renewals (CC-13-02 and CC-126-96, respectively). On January 9, 2009, January 13, 1999, and January 12, 1993, the Commission concurred with Morro Bay's renewals (CC-007-06, CC-123-98 and CC-88-92, respectively). On March 10, 1998, the Commission concurred with Orange County's renewal (CC-3-98).

Morro Bay, Goleta, and Orange County have now all agreed to upgrade to secondary treatment, by 2012 (Orange Co.), 2014 (Goleta), and 2015 (Morro Bay). Goleta recently (May 29, 2009) submitted its latest (pending) waiver request (CC-032-09), as one more waiver is needed before it can fully implement secondary treatment. On July 17, 2002, Orange County agreed to pursue secondary treatment. Since 2004, Orange County has been operating under an EPA secondary permit and, because the plant does not yet achieve secondary treatment, a federal consent decree. EPA states that Orange County expects to meet the consent decree deadline for achieving full secondary treatment on or before December 31, 2012. Thus, the Commission should not expect to see any further Orange County consistency certifications for any more 301h waivers.

E. Applicant's Consistency Certification. The City of San Diego certifies that the proposed renewal of its 301(h) waiver by EPA complies with the federally approved California Coastal Management Program (CCMP) and will be conducted in a manner consistent with such program.

II. Staff Recommendation:

The staff recommends that the Commission adopt the following motion:

~~**MOTION**. I move that the Commission **concur** with the 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 waiver, finding that the waiver is consistent with the enforceable policies of the California Coastal Management Program.~~

MOTION. I move that the Commission **adopt** the revised findings in support of the Commission's action on October 7, 2009, concerning the City of San Diego's consistency certification for its continued operation of its Point Loma Wastewater Treatment Plant pursuant to a Clean Water Act section 301(h) secondary treatment waiver.

The staff recommends a **YES** vote on this motion. Passage of this motion will result in the adoption of revised findings as set forth in this staff report. The motion requires a majority vote of the members from the prevailing side present at the ~~December~~March 12, 201~~09~~, hearing, with at least three of the prevailing members voting. Only those Commissioners on the prevailing side of the Commission's action are eligible to vote on the revised findings.

The Commissioners voting on the prevailing side of the October 7, 2009, vote were: Commissioners Achadjian, Blank, Burke, Clark, Kram, Kruer, Sanchez, and Chair Neely.

RESOLUTION TO ADOPT REVISED FINDINGS:

The Commission hereby adopts the findings set forth below for its conditional concurrence with the above-referenced consistency certification, on the grounds that the findings support the Commission's decision made on October 7, 2009, and accurately reflect the reasons for it.

III. Commission Action:

On October 7, 2009, the Commission adopted the following motion:

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

The Commission's majority **YES** vote on this motion resulted in adoption of the following resolution:

Conditional Concurrence

The Commission hereby **conditionally concurs** with the consistency certification CC-056-09 made by the City of San Diego for the proposed waiver, finding that, if modified in accordance with the following condition, the project described therein would be consistent with the enforceable policies of the California Coastal Management Program.

Condition

Wastewater Reclamation and Recycling Opportunities Study. The City will return for a public hearing before the Coastal Commission in (approximately) two years when its study of Wastewater Reclamation and Recycling Opportunities[10] is completed and the findings and recommendations have been documented in a report, and inform the Commission how, and to what extent, the City intends to implement the recommendations in the report. If the City does not intend to implement the recommendations of the report, the City will provide an explanation of its reasoning to the Commission.

IV. Procedures

A. Conditional Concurrences. Section 15 CFR § 930.4 of the Federal Consistency regulations provides, in part, that:

> *(a) Federal agencies, applicants, persons and applicant agencies should cooperate with State agencies to develop conditions that, if agreed to during the State agency's consistency review period and included in a . . . Federal agency's approval under Subparts D, E, F or I of this part, would allow the State agency to concur with the Federal action. If instead a State agency issues a conditional concurrence:*
>
> > *(1) The State agency shall include in its concurrence letter the conditions which must be satisfied, an explanation of why the conditions are necessary to ensure consistency with specific enforceable policies of the management program, and an identification of the specific enforceable policies. The State agency's concurrence letter shall also inform the parties that if the requirements of paragraphs (a)(1) through (3) of the section are not met, then all parties shall treat the State agency's conditional concurrence letter as an objection pursuant to the applicable Subpart and notify, pursuant to §930.63(e), applicants, persons and applicant agencies of the opportunity to appeal the State agency's objection to the Secretary of Commerce within 30 days after receipt of the State agency's conditional concurrence/objection or 30 days after receiving notice from the Federal agency that the application will not be approved as amended by the State agency's conditions; and*
> >
> > *(2) The Federal agency (for Subpart C), applicant (for Subparts D and I), person (for Subpart E) or applicant agency (for Subpart F) shall modify the applicable plan, project proposal, or application to the Federal agency pursuant to the State agency's*

[10] This study refers to the City's Cooperative Agreement with San Diego Coastkeeper and the San Diego Chapter of Surfrider Foundation, approved on February 18, 2009, described further in Footnote 2, page 6, above, and attached as Exhibit 15.

conditions. The Federal agency, applicant, person or applicant agency shall immediately notify the State agency if the State agency's conditions are not acceptable; and

(3) The Federal agency (for Subparts D, E, F and I) shall approve the amended application (with the State agency's conditions). The Federal agency shall immediately notify the State agency and applicant or applicant agency if the Federal agency will not approve the application as amended by the State agency's conditions.

(b) If the requirements of paragraphs (a)(1) through (3) of this section are not met, then all parties shall treat the State agency's conditional concurrence as an objection pursuant to the applicable Subpart.

B. Right of Appeal. Pursuant to 15 CFR Part 930, Subpart H, and within 30 days from receipt of notice of a Commission conditional concurrence to which the City does not agree, the City may request that the Secretary of Commerce override this objection. In order to grant an override request, the Secretary must find that the proposed activity for which the City submitted a consistency certification is consistent with the objectives or purposes of the Coastal Zone Management Act, or is necessary in the interest of national security. A copy of the request and supporting information must be sent to the California Coastal Commission and the Environmental Protection Agency. The Secretary may collect fees from the City for administering and processing its request.

~~III~~V. Findings and Declarations:

The Commission finds and declares as follows[11]:

A. Water Quality/Marine Resources

1. Regulatory Framework. EPA and the applicable RWQCBs 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) is implemented by EPA regulations set forth in 40 CFR Part 125, Subpart G.

[11] These findings also hereby incorporate by reference Section I of the Staff Summary and Recommendation in which these findings appear, which section is entitled "Staff Summary – Project Description and Background."

Section 301(h) of the Clean Water Act provides that an NPDES permit that 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) (quoted in full below), 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 (summarized below).

While the State of California (through the SWRCB and RWQCBs) administers the NPDES permit program and issues permits for most 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 by the Regional Administrator of EPA. Prior state (i.e., SWRCB or RWQCB) concurrence with the waiver is also required.

Section 307(f) of the federal CZMA (16 USC § 1456(f)) specifically incorporates all Clean Water Act-based requirements into the California Coastal Management Program (CCMP). Commission consistency certification review and concurrence is required for 301(h) waiver applicants, because EPA NPDES permits are listed in California's Coastal Management program as federal licenses or permits for activities affecting land or water uses in the coastal zone. In reviewing the proposed discharges, the Commission relies on the Clean Water Act and its implementing regulations, the California Ocean Plan, the Coastal Act (Chapter 3 policies), and California 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. <u>Clean Water Act/Section 301(h)</u>. 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 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 previous 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. …

In addition, as discussed on page ~~14~~16, Section 301(j)(5) of the Clean Water Act provides procedural and substantive requirements enabling the City of San Diego (only) to apply for a waiver and specifying that discharges must meet the following tests: 80% removal of TSS (monthly average); 58% removal of BOD (annual average); 45 MGD of water reclamation capacity by the year 2010; and reduction of TSS during the 5-year period of permit modification.

EPA's Tentative Decision Document dated December 2, 2008, evaluates the City's compliance with each of the above nine criteria (see EPA conclusions below). EPA's tentative decision is that the discharges meet each of the above criteria and the NPDES permit is eligible for reissuance. In addition, the RWQCB has evaluated the City's discharges and determined that they would comply with the applicable California Ocean Plan, other California requirements, and NPDES permit limitations.

b. California Ocean Plan. 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) [note: the asterisks (*) below refer the reader to Ocean Plan definitions in its Appendices (Exhibit 9)]:

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

Both the SWRCB and the California Department of Health Services (DHS) have established standards to protect water contact recreation in coastal waters from bacterial contamination. Subsection a of this section contains bacterial objectives adopted by the SWRCB for ocean waters used for water contact recreation. Subsection b describes the bacteriological standards adopted by DHS for coastal waters adjacent to public beaches and public water contact sports areas in ocean waters.

…

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.*

1. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.*

…

E. Biological Characteristics

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

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

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

F. Radioactivity

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

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 or areas that existing marine laboratories use as a source of seawater.

3. Maximum protection is provided to the marine environment.

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.*

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 10.

c. Coastal Act Policies. 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 and RWQCBs; Section 30412 provides (in relevant part):

> *(a) In addition to Section 13142.5 of the Water Code, 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 this section. The commission shall not, 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, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out this division.*

Finally, Section l3l42.5 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 an independent technical evaluation analyzing San Diego's compliance with the 301(h) Clean Water Act requirements and other criteria discussed above. This tentative evaluation, dated December 2, 2008 (Exhibit 12), includes the following EPA findings:

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 the statutory and regulatory criteria:

1. *The applicant's proposed discharge will comply with primary treatment requirements. [CWA section 301(h)(9); 40 CFR 125.60]*

2. *The applicant's proposed 301(h)-modified discharge will comply with the State of California's water quality standards for natural light and dissolved oxygen. (A modification for pH is not requested.) The applicant has sent a letter to the San Diego Regional Water Quality Control Board (Regional Water Board) requesting determination that the proposed discharge complies with applicable State law*

including water quality standards. In 1984, a Memorandum of Understanding was signed by EPA Region 9 and the State of California to jointly administer discharges that are granted modifications from secondary treatment standards. The joint issuance of a NPDES permit which incorporates both the federal 301(h) variance and State permit requirements will serve as the State's certification/concurrence that the modified discharge will comply with applicable State law and water quality standards. A draft 301(h)-modified permit has been jointly developed by the Regional Water Board and EPA Region 9. [Section 301(h)(1); 40 CFR 125.61]

3. *The applicant has demonstrated it can consistently achieve State water quality standards and federal 304(a)(1) water quality criteria beyond the zone of initial dilution. [CWA section 301(h)(9); 40 CFR 125.62(a)]*

4. *The applicant's proposed discharge, alone or in combination with pollutants from other sources, 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. [CWA section 301(h)(2); 40 CFR 125.62(b), (c), (d)]*

5. *The applicant has a well-established monitoring program and has demonstrated it has adequate resources to continue the program. The applicant has proposed no changes to its existing monitoring program. EPA Region 9 and the Regional Water Board will review the applicant's existing monitoring program and revise it, as appropriate. These revisions will be included in the 301(h)-modified permit, as conditions for monitoring the impact of the discharge. [CWA section 301(h)(3); 40 CFR 125.63]*

6. *The applicant has sent a letter to the Regional Water Board requesting determination that the proposed discharge will not result in any additional treatment requirements on any other point or nonpoint sources. The adoption by the Regional Water Board of a NPDES permit which incorporates both the federal 301(h) variance and State permit requirements will serve as the State's determination, pursuant to 40 CFR 125.59(f)(4), that the requirements under 40 CFR 125.64 are achieved. [CWA section 301(h)(4); 40 CFR 125.64]*

7. *The applicant's existing pretreatment program was approved by EPA Region 9 on June 29, 1982, and remains in effect. [CWA section 301(h)(5); 40 CFR 125.66 and 125.68]*

8. *The applicant has complied with 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 Region 9 and the Regional Water Board in August 1996. This program was approved by the Regional Water Board on August 13, 1997 and EPA on December 1, 1998. [CWA section 301(h)(6); 40 CFR 125.65]

9. *The applicant will continue to develop and implement both its existing nonindustrial source control program, in effect since 1985, and existing comprehensive public education program to minimize the amount of toxic pollutants that enter the treatment system from nonindustrial sources. [CWA section 301(h)(7); 40 CFR 125.66]*

10. *There will be no new or substantially increased discharges from the point source of the pollutants to which the 301(h) variance applies above those specified in the permit. [CWA section 301(h)(8); 40 CFR 125.67]*

11. *The applicant has sent letters to the U.S. Fish and Wildlife Service and NOAA National Marine Fisheries Service requesting determinations that the proposed discharge complies with applicable federal and State laws. The applicant has prepared a letter to the California Coastal Commission requesting a determination that the proposed discharge complies with applicable federal and State laws; this request will be transmitted to the California Coastal Commission after the 301(h) modified permit is adopted by the Regional Water Board. The issuance of a final 301(h)-modified permit is contingent upon receipt of determinations that the issuance of such permit does not conflict with applicable provisions of federal and State laws. [40 CFR 125.59]*

12. *In its operation of the Point Loma WTP, the applicant will continue to: achieve a monthly average system-wide percent removal for TSS of not less than 80 percent and an annual average system-wide percent removal for BOD of not less than 58 percent; and has implemented a water reclamation program that will result in a reduction in the quantity of suspended solids discharged into the marine environment during the period of the 301(h) modification. To ensure compliance with this requirement, EPA Region 9 is imposing permit conditions slightly different than those proposed by the applicant. In addition, the applicant has constructed a system capacity of 45 mgd of reclaimed water, thereby meeting this January 1, 2010 requirement. [CWA section 301(j)(5)]*

CONCLUSION

EPA Region 9 concludes that the applicant's proposed discharge will satisfy CWA sections 301(h) and (j)(5) and 40 CFR 125, Subpart G.

EPA's TDD further states:

APPLICATION OF STATUTORY AND REGULATORY CRITERIA

A. Compliance with Federal Primary Treatment, California Ocean Plan Table A, and CWA section 301(j)(5) Requirements

…

1. Total Suspended Solids

To comply with the… [applicable] requirements, the applicant has proposed the following effluent limits for total suspended solids:

TSS: (1) The monthly average system-wide percent removal shall not be less than 80% percent (computed in accordance with Addendum No. 1 to Order No. R9-20020025, NPDES No. CA0107409).

(2) The monthly average treatment plant effluent concentration shall not be more than 75 mg/l.

(3) The annual treatment plant loading to the ocean shall not be more than 15,000 metric tons per year during years one through four of the permit and not more than 13,598 metric tons per year during year five of the permit. Compliance calculations for these loadings are not to include contributions from: Tijuana, Mexico, via the emergency connection; federal facilities in excess of solids contributions received in calendar year 1995; Metro System flows treated in the City of Escondido; South Bay Water Reclamation Plant flows discharged to the South Bay Ocean Outfall; and emergency use of the Metro System by participating agencies over their capacity allotments.

Describing the plant's SS removal rates for the term of the previous waiver, the TDD states:

Table 4. Monthly average and annual average effluent concentrations for total suspended solids (mg/l) at Point Loma WTP.

Month	2002	2003	2004	2005	2006	2007
January	40.5	41.0	46.4	38.0	35.7	36
February	46.6	42.2	43.7	39.0	36.8	34
March	40.9	39.9	43.6	35.6	36.8	33
April	41.7	41.1	43.5	38.2	37.9	29
May	42.5	45.8	42.0	40.2	35.1	26
June	46.5	43.7	44.0	45.1	33.6	25
July	51.9	44.1	43.7	46.9	37.2	31
August	46.0	41.4	43.1	41.0	37.1	34

September	39.0	39.9	44.8	41.9	30.6	41
October	39.4	41.3	37.5	43.0	31.7	43
November	42.4	40.5	37.9	39.2	33.9	35
December	44.5	43.3	41.9	38.5	32.5	41
Annual Average	43.5	42.0	42.7	40.6	34.9	34
Maximum Month	51.9	43.3	46.4	46.9	37.9	43
Minimum Month	39.0	39.9	37.5	35.6	30.6	25

Table 5. Monthly average and annual average percent removals for total suspended solids (%) at Point Loma WTP.

Month	2002	2003	2004	2005	2006	2007
January	85.6	86.1	85.1	84.5	87.4	86.7
February	82.1	85.4	85.1	84.5	87.5	87.9
March	84.9	85.9	85.0	85.1	86.6	88.9
April	85.2	85.8	84.9	85.7	86.1	90.9
May	85.3	84.4	85.3	85.1	87.6	91.6
June	84.6	84.9	85.5	84.3	87.7	92.6
July	83.7	84.9	85.4	83.3	86.8	91.4
August	84.3	85.6	85.5	86.1	86.7	90.8
September	86.5	85.5	84.8	85.8	89.8	87.7
October	86.3	84.5	87.2	84.7	89.7	86.5
November	85.4	84.9	85.5	86.5	88.8	88.7
December	84.3	84.9	84.7	86.8	88.7	85.4
Annual Average	**84.9**	**85.2**	**85.3**	**85.2**	**87.8**	**89.1**
Maximum Month	86.5	86.1	87.2	86.8	89.8	92.6
Minimum Month	82.1	84.4	84.7	83.3	86.1	85.4

[Emphasis added]

Describing reclamation improvements, the TDD states:

> *To comply with the CWA section 301(j)(5) requirement to implement a wastewater reclamation program that will result in a reduction in the quantity of suspended solids discharged by the applicant into the marine environment during the period of the 301(h) modification, the applicant has brought online the 30 mgd North City WRP and the 15 mgd South Bay WRP and, as part of its "improved" discharge, has*

committed to bring additional recycled water users online to reduce dry-weather flows to both the South Bay Ocean Outfall and Point Loma WTP and Ocean Outfall. Evidence for reductions in the quantity of suspended solids discharged by the applicant during the period of the 301(h) modification are provided in the application (Volume III, Figure II.A-1) which shows the actual reduction in Point Loma WTP effluent mass emissions for total suspended solids from 1995 through 2007. The application also provides projections for total suspended solids loadings from the Point Loma WTP during the period of the proposed 301(h) modification (Appendix III, Table II.A-21).

Describing past and projected future discharge and emission flow rates, the TDD states:

Table 9. Point Loma WTP actual and projected flows (mgd) and total suspended solids loadings (MT/year) during the terms of the existing and proposed permits.

Year	Actual Annual Average Discharge[1]	Actual TSS Mass Emissions[1,2]	Projected Annual Ave. Discharge	Projected TSS Mass Emissions
1995	188	11,060	---	---
1996	179	10,718	---	---
1997[3]	189	10,255	---	---
1998[4]	194	10,627	---	---
1999	175	9,130	---	---
2000[5]	174	9,036	---	---
2001	175	10,256	---	---
2002[6]	169	10,184	---	---
2003	170	9,862	---	---
2004	174	10,300	---	---
2005	183	10,229	---	---
2006	170	8,248	---	---
2007	161	7,588	---	---
2008	---	---	191	11,400
2009	---	---	193	11,500
2010	---	---	194	11,800
2011	---	---	195	11,700
2012	---	---	197	11,800
2013	---	---	199	11,900
2014	---	---	202	12,100

[1] Flow and mass emissions data from annual reports submitted to the Regional Water Board and EPA for 1995-2007.

[2] Annual mass emissions (converted to units of metric tons per year) are computed as the annual average of monthly mass emissions presented in annual reports submitted to the Regional Water Board and EPA for 1995-2007. The above-listed annual values (computed from monthly averages) may vary slightly from the annual values presented in the summary sheets within the annual reports, which are computed on the basis of average flow and effluent total suspended solids concentrations.

[3] North City WRP is brought online.

[4] Metro Biosolids Center is brought online.

[5] International Boundary and Water Commission International Wastewater Treatment Plant is brought online and Tijuana wastewater flows to Metro System are terminated.

[6] South Bay WRP is brought online.

Describing the plant's BOD removal rates for the term of the previous waiver, the TDD states:

> ***2. Biochemical Oxygen Demand***
>
> *To comply with federal primary treatment and CWA section 301(j)(5) requirements for biochemical oxygen demand, the applicant has proposed the following effluent limit:*
>
> *BOD: The annual average system-wide percent removal shall not be less than 58 percent (computed in accordance with Addendum No. 1 to Order No. R9-2002-0025, NPDES No. CA0107409).*
>
> *EPA reviewed influent and effluent data for Point Loma WTP provided in Volume IV, Appendix A, of the application. The data for biochemical oxygen demand are summarized, as follows.*
>
> *As shown in Table 12* [EPA TDD, p. 30], *the monthly average percent removals for biochemical oxygen demand meet the federal primary treatment requirement.*
>
> *In contrast to the federal primary treatment requirement, the percent removal requirement for biochemical oxygen demand specified under CWA section 301(j)(5) is applied on a "system-wide" basis and computed in accordance with the existing permit.*
>
> *Table 13. Monthly average and annual average system-wide percent removals for biochemical oxygen demand (%).*

Month	2002	2003	2004	2005	2006	2007
January	65	67	62	62	65	67
February	61	65	64	62	66	68
March	67	63	62	60	63	69

April	66	61	64	61	63	71
May	69	61	65	60	64	71
June	70	61	64	59	62	73
July	68	62	63	60	60	72
August	69	64	60	62	64	72
September	71	66	61	63	67	72
October	68	65	66	60	69	70
November	65	67	63	63	67	71
December	68	66	62	63	66	69
Annual Average	67	64	63	61	65	70
Maximum Month	71	67	66	63	69	73
Minimum Month	61	61	60	59	60	67

As shown in Table 13, the annual average system-wide percent removals for biochemical oxygen demand meet the CWA section 301(j)(5) requirement of not less than 58 percent.

Describing attainment of water quality standards for TSS and BOD, the TDD states:

Under 40 CFR 125.61(a) which implements CWA section 301(h)(1), there must be a water quality standard applicable to the pollutants for which the modification is requested; under 125.61(b)(1), the applicant must demonstrate that the proposed modified discharge will comply with these standards. The applicant has requested modified requirements for total suspended solids, which can affect natural light (light transmissivity) and biochemical oxygen demand which can affect dissolved oxygen concentration.

1. Natural Light

…

Under its existing NPDES permit, the City conducts the required quarterly monitoring for light transmittance, throughout the water column, at a grid of 33 offshore stations located along the 98, 80 and 60 meter contours. EPA evaluated the applicant's monitoring results from October 2003 through October 2007. As shown in Table B-1 and Figure A-5, long-term averages and standard deviations for percent transmissivity at different water depths at the near-ZID boundary and nearfield stations (F30, F29, F31) are similar to those observed for the same water depth, at farfield stations located on the 98 meter contour. Long-term averages for percent transmissivity are lower and more variable at water depths closer to the surface and at the bottom, in comparison to water depths below the euphotic zone which are frequented by the drifting wastefield. Generally, percent transmissivity is lower at stations closer to the coast, due to shoreline influences and sediment resuspension at the bottom.

Based on this evaluation, EPA concludes that the Point Loma discharge does not result in a significant reduction in natural light in areas within the wastefield where initial dilution is completed.

2. Dissolved Oxygen

…

Table 15. Predicted worst-case dissolved oxygen (DO) depressions (mg/l) and percent reductions (%) performed by San Diego (1995) and EPA (1995).

Sources of Potential Oxygen Demand	San Diego	EPA
DO depression upon initial dilution (and % reduction)	0.05 (<1%)	0.08 (1.7%)
DO depression due to BOD exertion in the farfield (and % reduction)	0.14 (2.4%)	0.23 (5.9%)
DO depression due to steady-state sediment oxygen demand (and % reduction)	0.045 (1.7%)	0.16 (4.7%)
DO depression due to abrupt sediment resuspension (and % reduction)	0.077 (2.4%)	0.12 (3.5%)

…

Based on the model predictions and receiving water monitoring results, EPA concludes it is unlikely that the dissolved oxygen concentration will be depressed more than 10 percent from that which occurs naturally outside the initial dilution zone, as a result of the wastewater discharge.

Describing attainment of Other Water Quality Standards and Impact of the Discharge on Shellfish, Fish and Wildlife; Public Water Supplies; and Recreation, the TDD states:

1. Attainment of Other Water Quality Standards and Criteria

40 CFR 125.62(a) requires that the applicant's outfall and diffuser be located and designed to provide adequate initial dilution, dispersion, and transport of wastewater such that the discharge does not exceed, at and beyond the zone of initial dilution, all applicable State water quality standards. Where there are no such standards, individual 304(a)(1) aquatic life

criteria and human health criteria must not be exceeded by the discharge. For this review, the applicable water quality standards and criteria are analyzed in four categories: pH, toxics, whole effluent toxicity, and sediment quality.

a. pH

…

Based on the model predictions and receiving water monitoring results, it is unlikely that pH will be depressed more than 0.2 units from that which occurs naturally outside the initial dilution zone, as a result of the wastewater discharge. Also, EPA expects that technology based effluent limits for pH will be met by the applicant.

b. Toxics and Whole Effluent Toxicity

…

In accordance with the existing permit, the applicant conducted sensitivity screening using Atherinops affinis (topsmelt), Haliotis rufescens (red abalone), and Macrocystis pyrifera (giant kelp) and concluded that the red abalone and giant kelp were the most sensitive organisms for chronic toxicity testing. EPA's review of the 52 red abalone larval development test results from June 2003 through 2007 shows no exceedance of the chronic toxicity objective using the minimum monthly initial dilution value of 204:1. EPA's review of the 60 giant kelp germ tube length test results from June 2003 through 2007 shows one exceedance (December 19, 2005) of the chronic toxicity objective which is a very low failure rate. In response to the exceedance, the City conducted accelerated toxicity testing as required by the existing permit; these follow-up toxicity tests demonstrated compliance with the objective. The applicant reports that concentrations of toxic inorganic and organic constituents in the Point Loma WTP effluent at the time of the noncompliant toxicity test were at normal values and the cause of the toxicity is unknown. The existing permit limit is 205 TUc and the critical effluent concentration is 0.49 percent effluent.

EPA reviewed these acute toxicity data, along with the summary results for acute toxicity provided in Volume III, Large Applicant Questionnaire section III.B.7, of the application to determine if any test results exceeded the Table B acute toxicity objective of 0.3 TUa (= 100/LC50). In accordance with the existing permit, the applicant conducted sensitivity screening both using Atherinops affinis (topsmelt) and Mysidopsis bahia (shrimp) and concluded that the shrimp was the more sensitive organism for acute toxicity testing. EPA's review of the 11 test results from June 2003 through September 2007 shows no exceedance of

the acute toxicity objective, using the minimum monthly initial dilution value of 20.4:1 for acute toxicity. The existing permit limit is 6.5 TUa and the critical effluent concentration is 15.5 percent effluent.

…

EPA concludes that the modified discharge will attain applicable water quality standards and criteria for toxics and whole effluent toxicity, based on the very low rates of effluent excursions above water quality objectives for toxics and chronic toxicity. Consistent with State policy, appropriate requirements for toxics and whole effluent toxicity will be included in the permit. Water quality based effluent limits will be established for all California Ocean Plan Table B parameters where effluent data show the reasonable potential to exceed water quality objectives for toxics and whole effluent toxicity. The effluent will be monitored for all Table B parameters and other priority pollutants following the regular schedule set in the existing permit. The results of the effluent monitoring program will be evaluated against the annual mass emission benchmarks to protect the Point Loma WTP headworks and achieve permit compliance with water quality standards.

In accordance with 40 CFR 125.62, EPA concludes that the modified discharge will allow for the attainment or maintenance of water quality which assures protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.

c. Sediment Quality

…

Organic Indicators

Concentrations of total organic carbon, total volatile solids, total nitrogen, biochemical oxygen demand, and sulfides are measured as indicators of organic enrichment in sediments. Total organic carbon and total volatile solids represent more direct measurements of carbon imported as fine particulate matter.

Total Organic Carbon. … The… data do not suggest an outfall related effect. Figure E.5-2 in Volume IV, Attachment E.5, of the application summarizes percent total organic carbon in sediments for the San Diego Coastal region during the period of the discharge (1994-2000 and 2001-2006).

Total Volatile Solids. … The… data do not suggest an outfall-related effect. Figure E.5-3 in Volume IV, Attachment E.5, of the application summarizes percent total volatile solids in sediments for the San Diego Coastal region during the period of the discharge (19942000 and 2001-2006)

Total Nitrogen. … The… data do not suggest an outfall-related effect. Figure E.5-4 in Volume IV, Attachment E.5, of the application summarizes percent total nitrogen in sediments for the San Diego Coastal region during the period of the discharge (1994-2000 and 2001-2006).

Biochemical Oxygen Demand. … The…data suggest that a small amount of organic enrichment is occurring close to the outfall diffuser.

Sulfides. … The… data suggest that a small amount of organic enrichment is occurring close to the outfall diffuser. Figure E.5-5 in Volume IV, Attachment E.5, of the application summarizes sulfide concentrations in sediments for the San Diego Coastal region during the period of the discharge (1994-2000 and 2001-2006).

Modeling predictions indicate that deposition and accumulation rates associated with the Point Loma Ocean Outfall are not likely to have negative effects on benthic communities beyond the zone of initial dilution. Monitoring results for sediment parameters associated with organic enrichment suggest a mixed picture relative to the potential for biological effects close to the outfall diffuser. Only biochemical oxygen demand and sulfides are elevated at near-ZID station E14; sulfides are variably elevated at nearfield stations E17 and E11. However, as described below, monitoring results for biological indicators of organic enrichment lead EPA to conclude that significant effects on the benthic macrofauna community are not occurring in areas beyond the zone of initial dilution. EPA also concludes that the modified discharge complies with applicable California Ocean Plan water quality objectives for chemical characteristics of marine sediments.

Trace Metals and Toxic Organics

…

Based on this review, EPA concludes that the chemical characteristics in sediments beyond the zone of initial dilution are not changed by the modified discharge such that toxic substances in Table B of the California Ocean Plan are increased to levels which would degrade indigenous biota.

3. Impact of the Discharge on Shellfish, Fish, and Wildlife

…

a. Phytoplankton

…

EPA concludes that total suspended solids and nutrient materials in the Point Loma discharge will not result in a significant change in the productivity or standing stock of phytoplankton, will not cause natural light to be significantly reduced beyond the initial dilution zone, and will not cause objectionable aquatic growths or degrade indigenous biota.

b. Benthic Macrofauna

…

Based on the evidence described in this section, EPA concludes that conditions beyond the zone of initial dilution are not degraded in compliance with the California Ocean Plan and support an ecological community which exhibits characteristics similar to those of nearby, healthy communities existing under comparable but unpolluted environmental conditions.

c. Demersal Fish

…

EPA concludes there are no apparent spatial or temporal trends in the total number of fish species or abundances of fishes that suggest an outfall-related impact.

Describing additional requirements for improved discharges, the TDD states:

H. Increase in Effluent Volume or Amount of Pollutants Discharged

…

The City must also implement a wastewater reclamation program that, at minimum, will result in a reduction in the quantity of suspended solids discharged into the marine environment during the period of the modification.

…

Table II.A-21 in Volume III of the application provides projections for Metro System flow and mass loads for total suspended solids and biochemical oxygen demand, in one year increments, through 2027. This table also provides flow and total suspended solids load projections for the PLOO discharge. Table 30 summarizes these projections for the term of the proposed permit (2009/10 through 2013/14).

Table 30. Point Loma Ocean Outfall flows (mgd) and total suspended solids loadings (MT/yr) projections for long-term facilities planning during the term of the proposed permit and proposed total suspended solids mass emission effluent limits.

Year	Projected Annual Average Discharge	Projected TSS Mass Emissions	Proposed TSS Mass Emission Effluent Limits
2009	193	11,500	15,000
2010	194	11,800	15,000
2011	195	11,700	15,000
2012	197	11,800	15,000
2013	199	11,900	15,000
2014	202	12,100	13,598

> *The applicant's projections in Table 30 and proposed effluent limits in Table 29 satisfy the applicable requirements. Based on Table 30, EPA believes that a total suspended solids mass emission rate of 12,100 metric tons per year would be achievable during all five years of the proposed 301(h) modification. During this period, EPA recognizes that reductions in mass emissions resulting from increased water reclamation are likely to be seasonal and anticipates the potential for corresponding higher mass emission rates during wet weather months. In the future, the City needs to pursue additional water reclamation and reuse projects, including those which demand a year-round supply of reclaimed water so as to maintain long-term compliance with this decision criterion.*

3. RWQCB Evaluation of San Diego's Discharges. On June 10, 2009, the RWQCB adopted "Tentative Order No. R9-2009-0001 and Draft NPDES Permit (Order/Permit) No. CA0107409; Waste Discharge Requirements and NPDES Permit 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." The RWQCB's Order/Permit contains a detailed description of the discharge system, numerous limitations and discharge requirements, monitoring, reporting and compliance requirements, reopener provisions, and a determination that compliance with the Order's/Permit's conditions would enable the RWQCB to the find the discharges in compliance with applicable federal and state water quality standards. The Order/Permit states (p. 5):

> *The Regional Water Board's certification/concurrence that the discharge will comply with water quality standards for the pollutants which the 301(h) variance is requested (40 CFR 125.61) (i.e., TSS and BOD5). The joint issuance of a NPDES permit which incorporates both the 301(h) variance and State waste discharge requirements will serve as the State's concurrence ….*

The full text of the Order/Permit, as well as the RWQCB's Responses to Public Comments, can be found at the following link at the RWQCB's website:
http://www.waterboards.ca.gov/sandiego/board_decisions/tentative_orders/

4. Commission Conclusion. The ~~information submitted by the~~ City of San Diego maintains that~~, along with~~ the supporting analysis and information from EPA and the RWQCB~~,~~ support its ~~the City's~~ certification that its continued discharge from the Point Loma WTP under a secondary treatment waiver would not be inconsistent with the Coastal Act's water quality and marine resource protection provisions, or with any of the other applicable standards. EPA's independent Technical Evaluation determined that San Diego's discharges meet the applicable Clean Water Act standards for a waiver. Based on EPA's analysis including a review of plant performance and modeling efforts performed since 2002, the discharges from the outfall do 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.

Specifically with respect to the results of the City's benthic monitoring, any documented changes to the benthic community that were identified in the monitoring were limited to a very small area, and those changes did not appear to be a consequence of, and certainly did not demonstrably result from, the reduced treatment level permitted by the secondary treatment waiver. In addition, and as noted above, when the Commission reviewed the City's waiver request in 2002, the Commission expressed the need for more comprehensive and greater regional extent of monitoring. Since 2002 the City's has greatly expanded its monitoring program, including extensive regional monitoring, as well as adding new efforts such as deep water monitoring in the underwater canyons in the greater project area.

The only benthic samples showing deviation from reference conditions or reduction of biodiversity were within the physically disturbed area directly adjacent to the end of the outfall. In this area the outfall splits into two legs each 760 meters (m) long and with a total of 208 diffuser ports. Benthic organisms in this area are impacted by physical factors (cement pipes, base rock, turbulent water flow), as well as changes to water salinity due to the discharge, and these changes to the benthic community would result even if the discharge was treated to secondary standards.

The Clean Water Act requires that the discharge must meet receiving water body water quality standards after initial turbulent mixing at the end of the outfall, and for the Point Loma Ocean Outfall this "zone of initial dilution" (or ZID) has been identified as an area surrounding the diffuser legs that extends no more than 100m from the outfall (Exhibits 6-8). Monitoring by the City of San Diego has shown that the discharge does achieve receiving water quality standards at the boundary of the ZID. One area of concern has been that about 5% of bacteria samples in the kelp beds that lie between the end outfall and the shoreline exceed the states recreational standard for beaches promulgated by Assembly Bill 411 (the Beach Water Quality Act). While these standards mandated by AB411 for heavily used-beaches (more than 50,000 users per year) are not strictly applicable to kelp beds, they provide a conservative benchmark, and achievement of that benchmark motivated the City to initiate chlorination of the discharge in late 2008.

While the receiving waters at the end of the outfall typically achieve water quality standards, concerns have been expressed that there may be adverse impacts to the benthic (sea floor) environment surrounding the outfall. Exhibit 6 provides an overview of the area sampled annually for benthic conditions, covering an area about 25 km by 10 km (250 km^2). For benthic community data, the Benthic Response Index (Smith, 2001) is commonly used in the Southern California Bight as a way to express levels of impacts to benthic communities by divergence of the community from reference conditions.

The two following exhibits (Exhibits 7 & 8) show progressively smaller areas, with the former (Exhibit 7) showing only about 2% (5 km^2) of the total area sampled and the latter (Exhibit 8) showing the ZID, which is only about 0.3 km^2. The sequence of Exhibits clearly shows that the only two sample locations where the benthic community differed from the reference community were within 100 m of the outfall diffuser. These two locations are out of a total of 100 sample locations. One of the samples in the ZID exhibited barely enough deviation to qualify as a "marginal deviation

from reference" (25.8 in a range of 25-34), and the other showed just enough deviation to place it in the range for "biodiversity loss" (34.5 in a range of 34-44). While a loss of biodiversity over a large area would in fact conflict with Coastal Act policies, the Commission finds that a small loss of biodiversity in an area of 0.3 km^2 directly adjacent to the outfall structure does not constitute an impact that would be inconsistent with the requirements of Sections 30230 and 30231 to sustain biological productivity, to maintain healthy populations of all species of marine organisms, and to protect the biological productivity and the quality of coastal waters, through, among other means, minimizing the adverse effects of waste water discharges.

Looking at the health of populations over the area where the plume might have a measurable effect, loss of a particular species within the small area of the ZID does not indicate that healthy biological populations of those species are not maintained in the receiving waters of the discharge. This finding is supported by EPA's conclusion that the discharge:

> *… will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures […] the protection and propagation of a balanced, indigenous population (BIP) of shellfish, fish and wildlife, and allows recreational activities, in and on the water".*

The clear intent of the Coastal Act marine resource protection policies is that marine populations should not be either reduced or increased to the detriment of the biological community or to human uses of the populations (e.g., for commercial, recreational, scientific, or educational purposes as listed in Section 30230). While a measurable decrease in diversity and an increase in the number of organisms occurs in a small area within the ZID, no evidence is available to suggest that this has adversely impacted the benthic or pelagic organisms outside of the ZID to the extent that the continued discharges would be inconsistent with Section 30230 or 30231.

With regard oxygen reduction in receiving waters, the Commission notes that the plant's Biochemical Oxygen Demand (BOD) reduction is the primary reason the Point Loma treatment plant does not achieve secondary standards (as SS reductions are very close to if not at secondary treatment levels). The plant only reduces BOD by 68%, rather than of the 85% reduction secondary treatment would achieve. The BOD standard is intended to measure the reduction of organic materials to prevent them from providing excess substrate (food) to microbial organisms in natural waters. A high level of BOD in the effluent would typically favor rapid growth of microbial organisms and a depression in the dissolved oxygen of the receiving waters as those microbes breakdown the organic materials. This can have a significant adverse effect on aquatic organisms in the receiving water and as well as other water quality problems (odors, poor water clarity, etc.). In waters with restricted circulation (rivers, estuaries, lakes), the low dissolved oxygen (DO) can significantly change the health biological community. In the case of the Point Loma discharge, the treatment process reduction of BOD by 68% and the rapid initial dilution of the discharge with well-oxygenated ocean water do not result in measurable depression of receiving water DO and do not violate state standards.

The California Ocean Plan standard for effluent impacts on dissolved oxygen 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." Water quality measurements required by the NPDES permit have not shown any consistent measurable depression of DO related to the Point Loma discharge while monitoring at 8 kelp bed monitoring stations 5 times per month and 26 offshore stations 4 times per year. Modeling of worst case DO depression was conducted by USEPA and RWQCB in 1995. The results showed that the worst case of stirring up bottom sediments near the outfall would result in a short term depression of DO of up to 3.5%, lower than the California Ocean Plan limit of 10% for DO depression.

Finally, the RWQCB's Order and NPDES Permit further document and assure (through conditions) that the discharges would meet California Ocean Plan standards. Moreover, the stringent monitoring as required under Section 301(h) will be continued. In addition, the City has upgraded its facilities since the waiver was originally granted, including adding wastewater reclamation facilities and reducing total mass emission levels.

Nevertheless, for the following reason, the project as proposed is not consistent with the requirements of Sections 30230 and 30231 of the Coastal Act. Despite the City's monitoring improvements, it is uncertain without further data ~~unrealistic to assume~~ that disposal of more than 50 billion gallons of sewage per year through the Pt. Loma ocean outfall that has not been fully treated to secondary standards will have no adverse impacts. Moreover, gaps exist in the monitoring data, and certain monitoring studies are incomplete at this time, including:

- Sediment Mapping (Phase 1 results due Spring 2010; Phase 2 sampling expected summer 2011, progress reports due December 2010 and December 2011)
- Bight-wide Deep Benthic Monitoring (The City will send its data to the Southern California Coastal Water Research Project (SCCWRP) for inclusion in the Southern California Bight Regional Monitoring Program Deep Benthic Monitoring Study on March 31, 2010, progress reports due December 2010 and December 2011)
- Deep Benthic Synthesis Study (draft report for publication due Fall 2010, progress reports due December 2010 and December 2011)
- Original outfall benthic survey (draft report due Fall 2011, progress reports due December 2010 and December 2011)
- Plume Behavior (progress reports due December 2010 and December 2011)
- Emerging Contaminants (e.g., endocrine disruptors) (City is in yr.-5 of a 6 year study) (progress reports due December 2010 and December 2011)
- Kelp Forest Monitoring Analysis (City is in the second phase of a 3-phase study, results of 2006-2010 project due Fall 2010; progress reports due December 2010 and December 2011)

The plume behavior monitoring in particular is needed to better understand and characterize the potential dispersion and influence of the wastewater plume under different oceanic and climactic conditions. The City acknowledges that reports cited by Heal the Bay in its critique of the plume

monitoring (Heal the Bay letter dated October 2, 2009)(Exhibit 13) "…point out areas where additional information is needed to assess regional conditions and makes [sic] subsequent recommendations for enhanced monitoring" (City letter dated October 6, 2009) (Exhibit 14). The City describes Phase 2 of this monitoring as follows:

> *Phase 2 (2009-10): utilizing an autonomous underwater vehicle equipped with sensors that can detect the plume; knowledge of actual plume behavior in response to circulation features will be used to model near and far-field mixing and movement of the plume; final report due Fall 2011*

In addition, information on sediment chemistry, and the density and distribution of benthic organisms in sediment samples collected from depths below 200m, is needed to respond to Commission concerns about the impacts of the suspended solids loading on deep benthic organisms. Initial data from the 2006 Deep Benthic Pilot Project and other regional surveys did not find elevated levels of toxic chemicals in sediments at depths from 200 to 500m; however the results of the benthic organism analyses and from additional deep water samples have not been published. The Deep Benthic Synthesis Study will bring all of this data together and is scheduled to be completed in mid-2010.

To conclude, due to the gaps in the monitoring, combined with the need to maintain, and where feasible, restore, the biological productivity and the quality of coastal waters in a manner that will maintain optimum populations of marine organisms, the Commission finds that the City needs to continue its ongoing efforts to reduce the volume of partially treated sewage discharged from the Point Loma plant by investigating the potential for greater wastewater reclamation and recycling and implementing available options. Thus, in order to bring the project into conformity with Sections 30230 and 30231 of the Coastal Act, the following condition is needed:

Condition

Wastewater Reclamation and Recycling Opportunities Study. The City will return for a public hearing before the Coastal Commission in (approximately) two years when its study of Wastewater Reclamation and Recycling Opportunities[12] is completed and the findings and recommendations have been documented in a report, and inform the Commission how, and to what extent, the City intends to implement the recommendations in the report. If the City does not intend to implement the recommendations of the report, the City will provide an explanation of its reasoning to the Commission.

Thus, while the City has improved its monitoring efforts since the last Commission review in 2002, and the monitoring results that are available for the past seven years do not contradict the City's claim

[12] This study refers to the City's Cooperative Agreement with San Diego Coastkeeper and the San Diego Chapter of Surfrider Foundation, approved on February 18, 2009, described further in Footnote 2, page 6, above, and attached as Exhibit 15.

that the discharges comply with the applicable Clean Water Act tests, the City nevertheless needs to continue its ongoing efforts to reduce the volume of partially treated sewage discharged from the Point Loma plant by investigating the potential for greater wastewater reclamation and recycling and implementing available options, in order to bring the project into conformity with Sections 30230 and 30231 of the Coastal Act. The Commission therefore concludes that, only as conditioned, would the City's discharges under the renewal of the secondary treatment waiver be consistent with the water quality and marine resources policies (Sections 30230, and 30231) of the Coastal Act.

~~Thus, based on the available monitoring evidence of the lack of adverse effects of past discharges on the marine environment at current and projected (for the life of the NPDES permit) discharge levels, with the continuation of the stringent monitoring throughout the term of the permit, as conditioned by the RWQCB, the Commission concludes that the City's discharges would be consistent with the water quality and marine resources policies (Sections 30230 and 30231) of the Coastal Act.~~

B. Commercial Fishing/Recreation

Section 30230 of the Coastal Act, quoted in full on page ~~26~~31, 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.*

For similar reasons as discussed in the water quality/marine resource section above, the Commission finds that City ~~'s~~ needs to make further progress on its ongoing monitoring efforts and continue its ongoing efforts to reduce the volume of partially treated sewage discharged ~~less than secondarily treated wastewater~~ from the Point Loma plant by investigating the potential for greater wastewater reclamation and recycling and implementing available options, in order to bring the project into conformity with the fishing and recreation policies of the Coastal Act.~~over the past five years are sufficient to enable a determination that commercial/recreational fishing and other recreational resource protection policies will not be violated by the City's proposed discharges.~~ Recreational activities that might be affected ~~impacted~~ by the Point Loma WTP discharge 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 water quality standard exceedances, they are unlikely to be related to the City's outfall discharges and more likely to be from land based nonpoint source runoff. Rare exceedances of bacteriological water quality standards in the kelp beds (0.5% of samples) are being addressed by installation of effluent disinfection facilities that were brought on line in September 2008 (see water contact recreation excerpt below). 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 is protected and other recreational concerns are met. EPA states the following concerning effects on recreational activities (including fish consumption):

> ***4. Impact of the Discharge on Recreational Activities***
>
> …
>
> ***a. Bioaccumulation and Fish Consumption***
>
> …
>
> *Based on this review of fish liver and muscle tissues, EPA finds that the improved modified discharge will comply with California Ocean Plan water quality objectives for biological characteristics of ocean waters. EPA concludes that the improved modified discharge will allow for the attainment or maintenance of water quality which allows for recreational activities (fishing) beyond the zone of initial dilution.*
>
> ***b. Water Contact Recreation***

…

The 2007 application is based on an improved discharge, as defined at 40 CFR 125.58(i), and incorporates effluent disinfection to achieve these California Ocean Plan standards in State waters prior to permit reissuance. On November 13, 2007, the City submitted a request to the Regional Water Board to initiate operation of prototype effluent disinfection facilities to achieve compliance with bacteriological water quality standards in State waters. On August 13, 2008, the Regional Water Board approved modifications associated with operation of the City's proposed prototype effluent disinfection facilities at Point Loma WTP. The City began adding sodium hypochlorite to the effluent discharge on September 3, 2008.

Based on this review, EPA finds that the improved modified discharge will meet bacterial water quality standards in State waters. EPA also finds that federal waters are not required to achieve the 304(a)(1) water quality criteria for bacteria because federally-defined primary contact recreational activities are not occurring in waters beyond 3 nautical miles. The reissued permit will require the City to record and report any primary contact recreational activities observed in federal waters, during offshore water quality monitoring surveys. The Regional Water Board and EPA conduct routine reviews of the City's discharge monitoring reports to assess compliance with the existing permit and water quality standards. EPA concludes that the improved modified discharge will allow for the attainment or maintenance of water quality which allows for recreational activities beyond the zone of initial dilution, including, without limitation, swimming, diving, picnicking, and sports activities along shorelines and beaches.

Thus, while the City has improved its monitoring efforts since the last Commission review in 2002, and the monitoring results that are available for the past seven years do not contradict the City's claim that the discharges comply with the applicable Clean Water Act tests, the City nevertheless needs to continue its ongoing efforts to reduce ~~less than secondarily treated wastewater~~ the volume of partially treated sewage discharged from the Point Loma plant by investigating the potential for greater wastewater reclamation and recycling and implementing available options, in order to bring the project into conformity with Sections 30230 and 30231 of the Coastal Act. The Commission therefore concludes that, ~~In reviewing the City's previous waiver (CC-028-02), the Commission found that the City's discharges addressed all applicable commercial/recreational fishing and other recreational concerns. The monitoring results since that time support the same conclusion that the Commission previously reached, and similar monitoring will be maintained for the period of this continuing waiver. Therefore,~~ as discussed above with respect to marine resources, and only as conditioned, ~~by the RWQCB,~~ would the discharges be ~~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.

~~I~~VI. SUBSTANTIVE FILE DOCUMENTS:

1. RWQCB Tentative Order No. R9-2009-0001 and Draft NPDES Permit No. CA0107409; Waste Discharge Requirements and NPDES Permit 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

2. EPA Tentative Decision, City of San Diego WTP Outfall, Environmental Protection Agency, Region IX, December 2, 2008.

3. Consistency Certifications No. CC-043-09, CC-28-02 and CC-010-02 (City of San Diego, secondary treatment waiver), and related RWQCB/SWRCB Orders: (1) SWRCB Order WQO-2002-0013 (SWRCB/OCC FILE A-1477), City of San Diego; (2) RWQCB Tentative Order No. R9-2002-0025 and draft NPDES Permit No. CA0107409, City of San Diego; and (3) RWQCB Order No. 95-106 and NPDES Permit No. CA0107409, City of San Diego.

4. Morro Bay, Goleta, and Orange County Consistency Certifications for secondary treatment waiver renewals, CC-88-92 and CC-123-98, and CC-007-06 (City of Morro Bay), CC-13-02 and CC-126-96 (Goleta Sanitary District), and CC-3-98 (County Sanitation Districts of Orange County (CSDOC)).

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

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

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

8. Smith, R.W., et. al., Ecological Applications, Vol. 11, No. 4 (Aug., 2001), 1073-1087.

VII~~X~~. Exhibits (Note: In the interest of saving paper, the Exhibits listed below are available on request, and can be found electronically at this link: ~~attached~~

a. **CC-056-09 (City of San Diego Point Loma Wastewater Treatment Plant,** San Diego Co.)**):**

1. Area Map/Outfall
2. Metro Sewer System
3. Sediment Monitoring & Mapping Stations
4. Regional Monitoring Stations
5. Deep Benthic Monitoring Stations

6. Benthic Monitoring Results – large scale
7. Benthic Monitoring Results – medium scale
8. Benthic Monitoring Results – small scale
9. California Ocean Plan, Definitions
10. California Ocean Plan, Tables A and B and Water Quality Objectives
11. RWQCB Fact Sheet – Monitoring Requirements
12. ~~Smith, R.W., et. al., Ecological Applications, Vol. 11, No. 4 (Aug., 2001), 1073-1087.~~ EPA Tentative Decision (TDD), December 2, 2008 (without appendices)
13. Heal the Bay letter to CCC, dated October 2, 2009
14. City of San Diego letter to CCC, dated October 6, 2009
15. Cooperative Agreement, City of San Diego, San Diego Coastkeeper and San Diego Chapter of Surfrider Foundation, dated February 17, 2009

Note: the EPA's TDD Appendices can be found at these two EPA website links: http://www.epa.gov/region09/water/npdes/pdf/ca/SanDiego/SanDiegoFigures-A1-A55.pdf and http://www.epa.gov/region09/water/npdes/pdf/ca/SanDiego/SanDiegoTables-B1-B27.pdf

Appendix A (attached): Transcript of Commission discussion from October 7, 2009 hearing.

STATE OF CALIFORNIA

COASTAL COMMISSION

CERTIFIED COPY

CITY OF SAN DIEGO SECONDARY TREATMENT WAIVER OFFSHORE OF SAN DIEGO COUNTY OF SAN DIEGO	Consistency Certification No. 056-09

REPORTER'S TRANSCRIPT OF PROCEEDINGS

Wednesday
October 7, 2009
Item No. 21.a.

Oceanside City Council Chambers
300 North Coast Highway

Appendix A

Transcript. pp. 76-123

39672 WHISPERING WAY
OAKHURST, CA 93644

PRISCILLA PIK
Court Reporting Se
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CHAIR NEELY: All right, thank you, staff.

Let's bring it back to the Commission, and to Commissioner Kruer.

[**MOTION**]

COMMISSIONER KRUER: Thank you, Madam Chair, for the interest of everybody, and the hour, I would like to start out by making a motion.

I move that the Commission concur with the City of San Diego's Consistency Certification, and would ask for a "Yes" vote.

COMMISSIONER CLARK: Second.

CHAIR NEELY: We have a motion by Commissioner Kruer, seconded by Commissioner Clark. The maker and seconder are recommending a "Yes" vote.

Would you like to address your motion?

COMMISSIONER KRUER: Yes, I would, Madam Chair, thank you.

I am, for one Commissioner, I am glad to have this second hearing again, and see again more data presented today. One of the concerns that I have for the Commission and everything, is that I believe there is a tremendous amount of data that has been done with the extensive monitoring, and everything that been done on this waiver.

I, for one, would like to avoid, if possible, and elicit the support of the Commission to concur on this

project, because I think that it could just create a much further delay in the process in an appeal to the Secretary of Commerce. I don't think that is a good way to do. And, I think that the City of San Diego, it is not that they have done everything right, et cetera, but I think in the recent years they have made a lot of progress, and I think the data is very clear that they meet the standards under the *Clean Water Act*.

There is a whole host of entities who have reviewed the science that surrounds the Point Loma application, and all found that the discharge has no adverse impacts to the marine environment.

I was trying to find out the other day, in looking back at some of the people who have reviewed this, and looked at this Point Loma discharge, and including in the review were people like Dr. Paul Lindon, Blasker Professor of Environmental Science and Engineering at the University of California San Diego, and director of the UCSD campus wide environmental and sustainable initiative; Dr. Lisa Shaffer, Assistant Director at Scripps Institute of Oceanography; Dr. Paul Dayton a specialist in kelp ecology; Dr. Douglas Bartlett, a specialist in microbiology at the Scripps Institute of Oceanography; Dr. Ed Parnell, specialist in general oceanography at the Scripps Institute of Oceanography; Dr. Linda Rasmussen, a specialist in physical

oceanography at the Scripps Institute of Oceanography; and Dr. Richard Gersberg, a professor of public health and microbiology and head of the Occupation Environmental Health Division at the San Diego University, San Diego State University School of Public Health. Dr. Gersberg also serves as director of the San Diego State University Coastal and Marine Institute.

The EPA, they recommended, after a year of approval, their recommendation of approval, after one year exhaustive study and review. The Regional Water Quality Control Board, we are very blessed in San Diego to have a very high quality environmental Regional Water Quality Control Board, and they really weighed in on this, and after an extensive period of time, and discussion, and reviewing the data, they came to a unanimous approval.

Then, we have the Coastal Commission, itself, staff, and also the federal consistency portion of the staff, and Dr. Jack Gregg, our water quality expert, I think the staff has done an excellent job on this, and I think they are telling us that the data is there to support concurrence, and that was their recommendation.

I think that the local environmental groups, the Sierra Club in San Diego, the Surfriders, and the Coast Keepers, and I find it extraordinary, and I said this in August, which surprised me, is that Marco Gonzalez, I think

in his testimony today was right on about how you really get more bang for the buck, and more progress by concurring and extending the waiver.

You know, if this Commission does decide today, tonight, to concur with that, they have got to come back anyway in five years, and you have all of this monitoring. I think staff has pointed that out. You could stop them and say, you are not going to get there by 2020. And, you know, it would be good to -- I think that is very, very important.

I am concerned about making some of the public members -- I would like to hear from the city on, maybe, their commitment to get there. I am not sure, if you put a requirement on it, because a requirement on a concurrence, a Federal Consistency Determination, is a conditional approval, and that could create an appeal, also, to the Secretary of Commerce.

But, I think the city is getting there, and has made substantial progress. I know I was here the last time one was approved -- and I think Commissioner Wan was -- and it was an extensive discussion. And, I just think that it is very important that, at this point, we trust the process, we trust the science, we trust the data, we trust the scientists, and I think that there is no question in my mind, as one person, and I tell you this, that the data does support concurrence, under the law that the Congress set up

for waivers.

And, to my friends who said, you know, this is the last waiver, the City of San Diego is the largest city, and to me that is irrelevant. I don't think Congress said whether you are a large city, small city, or what, if you met certain requirements to qualify for the waiver, I think that is the important thing.

And, I will stop there, because of the length of time, and the lateness of the evening, and thank you, Madam Chair, for letting me make the motion.

CHAIR NEELY: Thank you, Commissioner Kruer.

Commissioner Clark.

COMMISSIONER CLARK: Thank you, Madam Chair, I fully endorse all of the comments by our immediate past chair, who is the maker of the motion here.

I do have a question for the City of San Diego.

CHAIR NEELY: All right.

COMMISSIONER CLARK: If we could call on the City of San Diego.

CHAIR NEELY: Could we have a representative from the city? Thank you, Mayor.

COMMISSIONER CLARK: Mayor Sanders.

MR. SANDERS: I didn't hire Jim for his golden tongue, but he is an incredible operator of our public utility, so I'll take it.

COMMISSIONER CLARK: I, too, like my colleague who made the motion, Commissioner Kruer, was incredibly impressed with not only the testimony by the City of San Diego, EPA, today, but also by some of the local environmental groups, and coalitions, including the testimony, in particular, by Marco Gonzalez, where he -- and my question is coming to you based on this -- where he indicated that the approach this time was to collaborate and work towards a final solution, and, then, in their mind it is reclamation.

But, I think the important thing that he conveyed to us is that they believe that they have an agreement with the City of San Diego for a comprehensive study to look into what is the best plan for the future, for the elimination. And, as he indicated, complete elimination of discharge into the ocean, as a whole.

Do you have that sort of meeting of the minds, an agreement for this kind of comprehensive study?

MR. SANDERS: Well, I think you need to go back, and we have committed $11.1 million for the portable reuse with the state, so that we get the public health certification. We have committed at least $2 million to this study.

I met with Bruce and with Marco, and their study was something that we didn't have to do, but we felt -- I felt that it made sense for the long term best solution for the City of San Diego.

If we can get to secondary level by reducing the BOD and TSS by not putting that load on our system, then it certainly makes sense to intercept that before it gets into the system.

And, I think the ultimate goal for all of us is to make sure that we are not harming any marine life, which we don't believe we are now, but we can be assured of, when we achieve those points.

So, I have made a commitment to them over the next two years to study this so that they can give us a plan, so that we can cost it out, and start working on solving the issue before it becomes a waiver issue.

I would prefer not to be in front of you in five years -- though, I won't be --

COMMISSIONER KRUER: Lucky you.

MR. SANDERS: -- I would prefer no mayor be in front of you in five years. We believe that with what we are doing right now, and with this new study, and with better uses of our recycled water that we can eliminate the need to ask for a waiver, because we will be meeting all secondary sources.

COMMISSIONER CLARK: So, I take it, from your answer, which was fairly comprehensive, but inclusive of, again, the rationale of why you believe the waiver is there, that the representations by Mr. Gonzalez and his colleague

was correct, that you will collaborate on this study?

MR. SANDERS: Absolutely.

COMMISSIONER CLARK: Okay, thank you.

MR. SANDERS: And, you know all of them, and they can be a tremendous pain in the head, when you don't work with them. And, you would probably know before us, and that is one reason that benefits us to collaborate, but it also because they are smart, and committed, and we are also.

COMMISSIONER CLARK: Right, okay, and I thank you very much.

MR. SANDERS: You're welcome.

COMMISSIONER CLARK: So, to my "second" I, too believe that they have met the test under the standard of review, consistency with their Local Coastal Plan, and the policies of Chapter 3 of the *Coastal Act*.

I think, on the record today, we have clear evidence that the City of San Diego, in terms of what they have done with respect to incremental improvement, using advance chemical treatment, extensive studies by multiple bodies -- as Commissioner Kruer indicated -- have indicated no significant adverse impact to the marine biology, that the enhanced monitoring program that staff had focused on is there, in place, including deep water monitoring, and fall out.

I believe that the body of evidence to us demands

support for this waiver.

Thank you.

CHAIR NEELY: Thank you.

We have a motion, and a "second" and they are recommending a "Yes" vote.

We have a few more comments, Commissioner Mirkarimi.

COMMISSIONER MIRKARIMI: Thank you, Madam Chair, may I bring back the honorable mayor from San Diego, please.

CHAIR NEELY: Yes, Jerry Sanders.

COMMISSIONER MIRKARIMI: Mr. mayor, just a few random questions, and you may want to defer to some of the others within your city government.

Your comment just now about you may not be here in five years --

MR. SANDERS: Well, I can guarantee that I won't be. I have term limits, so.

COMMISSIONER MIRKARIMI: We know the same.

Wouldn't it be better then, in order to underscore the commitment in collaboration, to make that sort of a binding condition, just in case that your successor may not feel the same as you, based on the commitment for the goals towards secondary objectives by the year 2020, so that part of any kind of agreement that has been blessed here really is very bright-lined about what that commitment should be, in

case for some unforeseen reason, something should disrupt your intentions?

MR. SANDERS: Well, you know, I can understand what you are asking. We have put forward a rate case two years ago, increasing our rates $1.4 billion to repair our water and waste water systems. We have, as you have seen, decreased spills dramatically over the last 3 years. We have increased everything that we have done monitoring all of those things, and we are replacing all of our cast iron pipes, and we are meeting all of the federal consent decrees and state consent decrees, that is our goal.

Before the end of my term, we will also go into another rate case, where we will have to determine what the amount of the increase would be to complete all of the construction, including some of the construction we are talking about right now.

Under 218, I can't make an obligation for the future. I can't, without council vote, either. I can only tell you that my intentions are to continue down this road, because we don't have that long before it is absolutely necessary.

COMMISSIONER MIRKARIMI: Right, and in so -- I mean, that, to me, seems to be, you know, an important issue for some folks, because if it didn't pass, I think what would also loom on the horizon would be the intervention by the

Secretary of Commerce, and then if there were conditions attached towards this commitment, that in itself as what was, I think, intimated, could also trigger an appeal to the higher ups in this question.

So, I am trying to nail down that if there is some multi-lateral sort of understanding that this is a plan that needs to happen, but yet from an environmental perspective, and others, they would really like to see a more vigorous commitment that is deliverable, held accountable, and binding on the secondary by the years 2020. What then, could we do to attach that particular sort of commitment?

MR. SANDERS: Well, you know, I think we are all held accountable. You are an elected, I am an elected, anybody who is going to be elected in the future is going to be held accountable by the voters, and that is the account-ability that is placed on this system.

COMMISSIONER MIRKARIMI: That is a good politician answer. It really is. I mean, as one --

MR. SANDERS: I am learning, I used to be like --

COMMISSIONER MIRKARIMI: I appreciate it, I appreciate that. I have stood where you stand, and so I get that, I get that, but it wasn't quite the answer, but anyway, I appreciate that.

CHAIR NEELY: Thank you, Commissioner.

Anything else?

COMMISSIONER MIRKARIMI: Just one other thing, and maybe to -- Mr. Mayor, maybe I can ask this to your Mr. Barrett, your public works person, if that is okay.

MR. SANDERS: Public utility.

COMMISSIONER MIRKARIMI: You know, I am just trying to understand the math on this, and the math on this, as I was listening to, I think a very solid presentation, but that on the 140 millions gallons per day, at 365 days a year, the aggregate outflow would be a 51-billion gallons that goes into the region.

And, then, based on the $31 million spent in ocean monitoring, the city is saying, the applicant is saying that there is no impact, or no adverse impact within the standards of review that are before you, is that correct?

MR. BARRETT: We are not saying there is no impacts, sir. We are saying there is no adverse impacts.

COMMISSIONER MIRKARIMI: And, I hear that, and I am not contesting that, per se, but it is just a little hard to believe in one respect, but I get it, because of under the certain parameters, in other words, the testing, I think, is conducted, you know, I get where one is arriving at that conclusion.

When was the onset of testing the methodology of what marine life was there, when did that testing begin? what year?

MR. BARRETT: I would have to defer to staff, but I do want to point out that one of the comments that the Commission staff had made is that there are a number of studies that remain in process.

And, I think the city has continued with the scientific community to try and continue to improve the methodology we are using, the sampling techniques, but baseline was established prior to the extension of the outfall.

Alan, do you want to come up?

Do you want to pursue this?

COMMISSIONER MIRKARIMI: Yes, just a little bit, and I am learning as we are going along here, too, in case we are every faced with something like this again.

CHAIR NEELY: Could you state your name for the record, sir.

MR. LANGWORTHY: Alan Langworthy, from the public utilities department of the City of San Diego.

And, to your question about when the testing began, monitoring of some kind has been going on for years, back into the 1960s. But, with this particular outfall, there was, actually, a baseline monitoring that was done prior to -- the outfall was extended, to give you a little history here. It used to go out about 2.5 miles, and now it goes out 4.5.

Prior to that extension there was a considerable amount of baseline monitoring done to get conditions prior to the discharge at that point.

COMMISSIONER MIRKARIMI: And, so, what is the baseline? because I was looking at other data, in terms of what fish kill population has been, in the certain region, and what catch populations have been, within a certain region.

So, I am looking for some causal, as to what you were then determining as to be the original populations effected, and what is not?

MR. LANGWORTHY: And, we have to be a little careful here --

COMMISSIONER MIRKARIMI: Right.

MR. LANGWORTHY: -- because more than that outfall is effecting that particular ocean --

COMMISSIONER MIRKARIMI: And, I agree --

MR. LANGWORTHY: -- area, and so --

COMMISSIONER MIRKARIMI: -- what your benchmarks are?

MR. LANGWORTHY: So, I think your Dr. Parnell talked about, you know, discharges coming up in the San Diego Bay. There are storm water discharges, things coming out of the San Diego River, so there are a lot of things going on in that environment, and that creates a little degree of

difficulty in sorting all of those things out.

But, I think, in generalities, I would say exactly what was found when the analysis was done by the EPA, and by the Regional Board, and by independent scientists who have looked at the data, that basically there has not been a significant change in what has gone on out there pre- and post-discharge -- there hasn't been an adverse impact pre- and post-discharge.

COMMISSIONER MIRKARIMI: And, just remind me, on the pre-discharge, what year are we looking at? or period of time?

MR. LANGWORTHY: Well, the discharge began from the new outfall, in about November of 1993, so the pre-discharge would have been the years before that.

COMMISSIONER MIRKARIMI: All right.

And, then, on the current side, how does it travel? I know that we are talking seasonal current, but the flow goes in which direction?

MR. LANGWORTHY: Well, we say it has a, generally, net northerly current, but it kind of -- you are correct, based on what is going on in the ocean, it kind of sloshes back and forth.

COMMISSIONER MIRKARIMI: Right.

MR. LANGWORTHY: But, it has a net northerly direction.

COMMISSIONER MIRKARIMI: So, in certain areas, we have the Humboldt current, so I am wondering in which pattern, based on the season, does it go in a circular pattern? or is it traveling out and then south, or outward and then north?

MR. LANGWORTHY: The surfers would give you a good idea in San Diego on that, because we have sometimes what they call south swells, when things are coming up from the south.

COMMISSIONER MIRKARIMI: Right.

MR. LANGWORTHY: You know, depending on the storms coming from the south, but generally, it is heading in a northerly direction for most of the time.

And, understand, that this discharge at the depth it is, and with the topography of the ocean, in that location, you know, the falloff, the outfall goes right to the edge of the continental shelf there. It is fairly trapped by the physical nature of the ocean at that location, and because of the thermalclines in that area.

The extended outfall is actually designed in order to trap it out there, into the deep ocean currents, where it would move away from the shore, and northerly.

COMMISSIONER MIRKARIMI: Thank you, appreciate it.

CHAIR NEELY: Thank you.

Commissioner Wan.

COMMISSIONER WAN: I have a couple of questions for the staff.

We know that San Diego does not meet the water quality standards for BOD, the federal standards. I mean, they meet the state standards that were set specifically for San Diego. So, my question for you is since we are reviewing this under our federal jurisdiction, shouldn't the federal standards that normally apply?

CHAIR NEELY: Counsel.

COMMISSIONER WAN: How does the state law supersede the federal standards.

CHIEF COUNSEL SCHMELTZER: Yes, it is the state coastal management program that --

COMMISSIONER WAN: Okay.

CHIEF COUNSEL SCHMELTZER: -- is the standard. That is what has been approved under our federal authority.

COMMISSIONER WAN: I understand that the CCMP is our standard of review, but there is also a very specific issue here, under the *Clean Water Act*. We have to review this under --

CHIEF COUNSEL SCHMELTZER: But, we don't review under the *Clean Water Act*.

COMMISSIONER WAN: Okay, good, okay, fine.

Okay, then the next question, the next couple of questions and comments deal with this recycling program. The

city hasn't set any goals or milestones. They have committed to a study, and that is not a commitment to recycle, or to implement that study. That is a commitment to study it, and if you listen to what -- the gentleman who spoke before the mayor, and I don't remember -- that's right, please, whatever your name is -- made it very clear that there is no commitment here to actually implement the recycling.

And, even if you listened to the mayor, he talks about his commitment and the commitment to the study. So, my -- one of the things that you, Mr. Delaplaine, said early on, was that the study will be done in about two years, and if the Commission wanted to they could have a workshop, and we could deal with this. I am just wondering why, if the study is going to be done in two years, that there isn't something in the conditions of approval that doesn't place a requirement on the city that in two years that they come back and set measurable goals for recycling?

No, I asked my staff the question.

COASTAL PROGRAM MANAGER DELAPLAINE: I see that the Commission could have a condition that says the city shall return. I don't think that you can ask them to include it today, milestone, as to what that is, but in terms of having them return to the Commission, certainly a condition like that, it would be hard for me to believe that the city wouldn't be able to agree to something like that, and say, we

will be --

COMMISSIONER WAN: And, that is what I am saying. I am not saying that you set the specific milestones and go now, but that in two years, when the study, recycling study is done, that they come in, and they, at that point, must come back to the Commission and set those goals. I don't know what they will be, but that they actually set them, real meaningful goals, and I think this gets at what Commissioner Mirkarimi --

COMMISSIONER MIRKARIMI: Right.

COMMISSIONER WAN: -- was saying.

COMMISSIONER KRUER: I would accept that modification to my motion. I think it is a good idea, Commissioner Wan.

CHAIR NEELY: Let's see if staff will include it with the staff recommendation.

COASTAL PROGRAM MANAGER DELAPLAINE: If the city will agree on the record to do that, you wouldn't have to make it a condition, so you could ask them, or you could adopt that as a condition, as well.

CHAIR NEELY: Can we call up someone from the city, please.

MR. SANDERS: We would be happy to share the results of the study, and what our plans are in two years.

COMMISSIONER WAN: That is not what we are saying.

MR. SANDERS: Well, I know, but that is as far as I am willing to go.

COMMISSIONER WAN: And, if that doesn't tell everybody sitting out in the audience, what we are dealing with here, in terms of whether --

MR. SANDERS: That is not fair, that is not fair at all.

COMMISSIONER WAN: Let me finish my statement. You were asked whether or not you would --

MR. SANDERS: And, I want to qualify my statement with the fact that I don't know what the study will say. I have no idea. And, as an elected official, I can't commit us to something I don't even know what it is in two years. I am happy to come back in two years, and tell you what we have done, and how we have worked with the community, and what our plan would be.

But, I am not willing to make a commitment to that, and I don't think it is prudent to do that.

COMMISSIONER WAN: Okay.

Yes, Mr. Douglas.

CHAIR NEELY: Thank you, sir.

EXECUTIVE DIRECTOR DOUGLAS: Well, I think the point is, that what you are looking for -- and I can understand the mayor's position, too -- is that once this study is done, that they come back to the Commission, present

the study, and then explain how they are going to --

COMMISSIONER WAN: Implement it.

EXECUTIVE DIRECTOR DOUGLAS: -- implement it.

They may come back and say the study is infeasible, its recommendations are not feasible, that that doesn't work. That is something that the Commission could then address.

But, to ask them, at this point, to commit to implement whatever the study comes up with, I think that is not reasonable. But, coming back, presenting it, and then having them explain how they are going to proceed, I don't see that that is a problem.

CHAIR NEELY: Commissioner Kruer --

COMMISSIONER WAN: I thought --

CHAIR NEELY: -- do you --

COMMISSIONER KRUER: I agree with what Commissioner Wan was saying, and that was the motion. I was prepared to amend the motion --

CHAIR NEELY: Modifying it?

COMMISSIONER KRUER: -- to adopt that, is to come back and share it with the Commission, just like Director Douglas is doing, and I don't see where that would be a problem for the City of San Diego.

CHAIR NEELY: So, I think there is a modification to the motion, and does the "seconder" agree?

Commissioner Clark.

COMMISSIONER CLARK: Yes, I do, and the reason that I do is because the question I asked, when I was the "second" on the original motion, about the study, I think it is important for it to get back to us, in terms of the results. So, this puts it into play.

CHAIR NEELY: Thank you.

Commissioner Wan.

COMMISSIONER WAN: Okay, this just tells me that I need to go on to deal with why I don't believe that the city is entitled, frankly, to a waiver, and whether you are ever going to get real meaningful reclamation out of the city, it is a question in my mind.

Our standard for review is the *Coastal Act*. Last time we initially conditionally approved this waiver, and with it, in that approval, we requested an increase in monitoring. I am not sure that we got all of the specifics to every station that we asked for. I didn't have all of the details, but I remembered some of it, I don't remember absolutely every -- where we were -- we were pretty specific as to where we wanted the additional monitoring stations, okay.

We also discussed our concerns about the lack of information, as to where the plume was, and frankly, both the study by Scripps in 2004, and by the University of California

San Diego in 2007, just two years ago, concluded that the monitoring program is not sufficient to track the effluent plume.

In other words, they don't know fully where the effluent plume is. If you do not know where the plume goes, you have no way of knowing the impacts. If, in spite of that, the monitoring does show some impacts -- and I am going to defer to Mark Gold, who does have a lot of experience in the scientific end of this, and agree with him.

Sections 30230 and 31 are specific to this issue. They state that marine resources shall be maintained, enhanced, and where feasible restored, and that you shall maintain healthy populations of all species of marine organisms, and I emphasize the all. I am in agreement with Heal the Bay and the NRDC on this, because the EPA indices are very broad and general, and the specific issues of the populations and what is there, and what is not there is extremely important. I am not going to go into the details that Dr. Gold went into.

The city, on this permit issue, had said that they now commenced a study to determine the detailed plumes, and that that will be ready -- the results of that study will be ready in 2011. That is one of those studies that you listed as ongoing.

But, you know, at this point we are giving them a

waiver based on presumably evidence, and if we don't have the evidence of where the plume is, I am not sure, again, how we monitor this, if they are first doing the study to determine what the effects, you know, where the plume is.

They also are supposed to be reducing the emissions, and this one was very, very interesting to me. In 2002, this Commission asked that the emissions be reduced from 15,000 metric tons, to 9,000 metric tons, because at that time the record indicated that the city had actually only admitted between 9,000 and 10,000 metric tons in the preceding few years.

However, the Water Board sent it back and set it back to 15,000. Now, this level is, again, been set at 15,000 for the first four years, and 13,600 for the last year, because in order to get a waiver, you have to commit to reduce -- you have to have a reduction, so they are reducing from 15,000 to 13,000, okay.

If you look at the table from 1995 to -- and this is in the staff report -- to 2007, the highest level which was in 1995 was 11,060 metric tons, and it drops so that in 2006 it was 8,248, and then in 2007, it was 7,588, which was the last year that you have.

Even the city's estimates for upcoming years only goes up to a maximum of 12,100 in 2014. So, why is the limit being set at 15,000? This doesn't meet the intent of the

law, that you are supposed to be reducing the emissions. Obviously, if you set the level artificially high, and then you reduce it in the 5th year, okay, they are not actually, in fact, reducing the emissions, as the intent of the law is.

And, this is one of the things we asked for back in 2002, and we didn't get it then, and we are apparently not going to get it now.

So, I have concerns about the plume, and where it is, and how you know what its impacts are? the TSS emissions? the impacts on biodiversity? and the issue of reclamation? Presumably, we are allowing them to not go to full secondary, and if anybody really believes that not going to full secondary has relatively the same impacts as secondary, I do think you need to look at the case of Hyperion, as that was the argument that they used for many, many years, and when they finally stopped, it made a huge difference.

But, these are all areas that I don't believe that they are meeting their requirements. They aren't meeting their requirements under our jurisdiction, relative to bio-diversity, health of marine organisms, and water quality.

CHAIR NEELY: Thank you, Commissioner.

Commissioner Sanchez.

COMMISSIONER SANCHEZ: Thank you, I would -- well, first of all, I want to clarify the motion on the floor at this time is to adopt staff's recommendations, and come back

in two years, after the results of the studies have been received, to discuss the results? is that right? that is the motion on the floor at this time.

EXECUTIVE DIRECTOR DOUGLAS: And, that is my understanding, and what they are going to do about implementing it. That is my understanding.

COMMISSIONER SANCHEZ: Okay, all right.

I wanted to make sure that was there, because I do believe that it is something that we should do, is to discuss reasonable goals for achieving secondary levels, secondary levels.

Now, we are here on a waiver. There is not compliance. I am embarrassed for the region that we do have the only waiver, but I had, based on discussions, I believe that there was true commitment to get there another way, that it was -- for this margin -- and this is how it was described -- margin makes sense to use to commit funds to something that would actually benefit the region in several ways.

The last comment that was made before the Commission began their deliberations, got me to wondering whether or not there are any commitments? I am hearing that -- what I heard was that there is no commitment at all to ever go to secondary, none.

So, what was offered was, but we are working with the environmental community to achieve secondary. That is

what I heard, as what I heard in both meetings that I had, ex partes, and that is what I began to hear at the beginning of the presentation, and then towards the end of the presentation, there was a practically complete withdrawal, saying no we don't have this commitment, we can't make this commitment.

Well, we are elected officials, and we know that we do have difficulties in achieving laws, the *Clean Water Act* even for Oceanside, but we deal with it, and we know that it is important, as coastal cities knowing that we have to deal with everything that is behind us, and how sometimes it feels unjust, but we do it, because it is required.

So, I do support what is being said here, that we come back in two years, or after the studies are done, and that we discuss their results and see how we can achieve these, reasonably achieve secondary levels.

And, I think at that, working together we can do that, the community can do that, and that is what I am hearing.

Thank you.

CHAIR NEELY: Thank you.

Commissioner Blank.

COMMISSIONER BLANK: Thank you, Madam Chair, I just have a couple of questions.

I guess I want to thank the staff and probably the applicant, as well. You know, I think, compared to the last

time we had this hearing, there is certainly a lot more information in front of us, for this Commissioner to make a decision, and I think, given the size of this project, and how long it is going to last, and as Commissioner Mirkarimi mentioned, 50 billion gallons of effluence pumped a year, us spending the time on this is very worthwhile, and the staff and applicant spending their time, giving us the data at this time that we didn't get the last time, is appreciated.

So, some questions for the staff. It says on page 6 of the staff report that the flows have been between 160 and 185 million gallons a day, in '05 to '07, and in 2014 it is about 200 million gallons a day, but the letter from the city, of October 6, said the flows are 140 to 160 million gallons a day -- that is a 33 percent difference, between your math, and theirs. Can somebody just help me understand, is that the city just kind of fit the lowest possible number, and you took the average?

I didn't ask the city yet, I asked the staff, and I guess the staff can ask the city, if they would like to connect the two. That is not just a rounding error, that is one third.

COASTAL PROGRAM MANAGER DELAPLAINE: Generally, and this gets to the issue that Commissioner Wan raised, as well, the mass emissions, but the way the permits are written, you know, we discussed that with the Regional Board

and with EPA, and I can't say that I fully understand it, but they use numbers that are way higher than existing levels, and how they write their permits is not an issue --

COMMISSIONER BLANK: So, you took the permit number, and the city is claiming the actual number? is that what I am hearing?

COASTAL PROGRAM MANAGER DELAPLAINE: Right, and there should be a chart in the report that shows the actual flows, and I would hope that they --

COMMISSIONER BLANK: Okay, I was just trying to find out what the city is claiming, you believe is accurate? I just want to be clear.

COASTAL PROGRAM MANAGER DELAPLAINE: I would imagine that it is accurate.

COMMISSIONER BLANK: Okay, so the staff report, at least on page 6, is probably a bigger number than the city is using.

COASTAL PROGRAM MANAGER DELAPLAINE: Those are the permitted numbers.

COMMISSIONER BLANK: Ah, thank you, I think that was Commissioner Wan's point, thank you.

For our counsel, I am just trying to understand the difference for us, as the Commission, what is the legal definition of no adverse impacts, versus no impacts? I mean, I think it is clear that 50 billion gallons a year has some

impact, and I am just trying to understand the legal definition, which I think I am trying to understand as a Commissioner, and I need to find adverse impact, or not adverse impact?

CHIEF COUNSEL SCHMELTZER: Yes, you need to find adverse impact --

COMMISSIONER BLANK: Can you help us? And, maybe I am just the only Commissioner who doesn't understand the distinction between impact and adverse impact.

CHIEF COUNSEL SCHMELTZER: Well, an impact could be positive, or --

COMMISSIONER BLANK: Well, we could agree that something that is in the ocean isn't positive, so what is the adverse impact?

CHIEF COUNSEL SCHMELTZER: Well, but, you asked what the difference is, and --

COMMISSIONER BLANK: Okay.

CHIEF COUNSEL SCHMELTZER: -- the impact could be either a positive or an adverse impact --

COMMISSIONER BLANK: Right.

CHIEF COUNSEL SCHMELTZER: -- and in this case, it is specified by the law that it be adverse, and so we need some evidence of an adverse impact, and the way that the city has looked for that is by doing monitoring, as both this Commission, and the Regional Board, and EPA have required

them to do monitoring.

COMMISSIONER BLANK: Correct, so as a Commissioner then, for adverse impact, I have to ascertain between the staff data, the EPA data, the Regional Water Quality data, and the city data, that which right now, all of them, have been consistent in telling me that there is no adverse impact, and are you suggesting that I have to go with that data, when I make my decision on whether there is an adverse impact, or not?

CHIEF COUNSEL SCHMELTZER: Yes, we are looking at the evidence in the record in making our decision.

COMMISSIONER BLANK: Thank you.

And, then, now it is time for Mr. Barrett, I have a couple of questions for you, or Mr. Langley, from the public works department, either one.

So, and this is just some technical questions, and so whoever can do it about chemicals and discharge, I guess as of last year you now use sodium hypochloride [sic.] for bacterial disinfection --

MR. LANGWORTHY: Right.

COMMISSIONER BLANK: -- and does that go out into the effluent discharge into the ocean?

MR. LANGWORTHY: Well, that was a permit --

CHAIR NEELY: Would you give your name, for the record, please, sir.

MR. LANGWORTHY: Sorry, my name is Alan Langworthy, and I am with the public utilities department of the City of San Diego.

CHAIR NEELY: Thank you.

MR. LANGWORTHY: Okay, that change was made in conjunction with the EPA and --

COMMISSIONER BLANK: Correct.

MR. LANGWORTHY: -- the Regional Water Quality Control Board, and the Regional Board actually modified the permit in August of 2008 for us to do that. At that time, all of the information was reviewed, in terms of how it would work, and what the results would be before the Regional Board made its decision, and in fact, chlorine, itself, does not go out, there might be some minor byproducts --

COMMISSIONER BLANK: Well, what are the byproducts of chlorine in the ocean?

MR. LANGWORTHY: There could be a number of things that the chlorine has reacted with in the waste water, but what the Regional Board determined when they approved the permit modification was that it would be completely in compliance with all of the regulations.

And, our testing, both pilot testing before we initiated the chlorination and the testing in the plant we have done since we initiated it, since the Regional Board authorized that to be done, has found us completely in

compliance with all of our permit requirements, and including toxicities.

COMMISSIONER BLANK: But, this was after the EPA analysis?

MR. LANGWORTHY: Well, the --

COMMISSIONER BLANK: That is, if you started this last August, and the EPA analysis per staff was when? for, from looking at Exhibits 9 and 12, Exhibit 12, which is the EPA analysis?

Staff, when was that?

COASTAL PROGRAM MANAGER DELAPLAINE: Well, it is over a year old.

COMMISSIONER BLANK: Over a year old, okay.

COASTAL PROGRAM MANAGER DELAPLAINE: Yes.

COMMISSIONER BLANK: So, just a couple more questions, you also use chemically assisted treatment to reduce the TSS, correct?

MR. LANGWORTHY: Yes, we do.

COMMISSIONER BLANK: And, is that ferric oxide? or synthetic polymers? or hydrogen peroxide? which one.

MR. LANGWORTHY: Ferric chloride.

COMMISSIONER BLANK: I'm sorry?

MR. LANGWORTHY: Ferric chloride, that is iron, right.

Technically, the same thing as we use in our

drinking water.

COMMISSIONER BLANK: Right.

MR. LANGWORTHY: And, it provides a very polymer of some kind, very small amount of that.

COMMISSIONER BLANK: And, that just kind of coagulates the --

MR. LANGWORTHY: That coagulates and falls out with the solids.

COMMISSIONER BLANK: Great, and how many gallons a day are you used, about?

MR. LANGWORTHY: Oh, boy --

COMMISSIONER BLANK: Hundreds? thousands?

MR. LANGWORTHY: -- oh, not thousands, at all. I would have to do a quick calculation. We are dosing it at bout 35-parts per million of that, of the ferric chlorides, and the polymer is less than a part per million.

COMMISSIONER BLANK: Correct, and is that skimmed with the solids? or discharged into the ocean?

MR. LANGWORTHY: It settles out with the salts.

COMMISSIONER BLANK: And, so you don't discharge any of that into the ocean?

MR. LANGWORTHY: There may be a small increase in the iron amount, but that would be very minimal --

COMMISSIONER BLANK: Okay.

MR. LANGWORTHY: -- very minimal, so as --

COMMISSIONER BLANK: I am almost done.

And, Exhibit 9 in the staff report lists the standards for heavy metals, and Exhibit 12 of the EPA analysis says there is heavy metals in the sewage effluent, but the EPA standards -- and maybe this is for the staff -- talks about their concentration, both fish liver and fish muscle, which I guess is the standards for seeing whether it is in compliance? do I read that right?

MR. LANGWORTHY: Do you want me to answer that?

COMMISSIONER BLANK: Or, do you know --

MR. LANGWORTHY: We do two tests --

COMMISSIONER BLANK: Okay.

MR. LANGWORTHY: -- required in the permit, required by EPA and the Regional Board. We look at some of the fish where we look at the muscle tissue --

COMMISSIONER BLANK: Right.

MR. LANGWORTHY: -- okay, and that is because that is what you consume when you eat it --

COMMISSIONER BLANK: Right.

MR. LANGWORTHY: -- and that is the sport fish, when --

COMMISSIONER BLANK: And, the other is the fish liver?

MR. LANGWORTHY: We look at fish livers, yes. We look at the two things, and those are compared with the

standards, and that was reviewed by the EPA, and by the Regional Board, and found to be in compliance.

COMMISSIONER BLANK: Well, when I read the EPA thing, it said the mercury was exceeded, is that your understanding from the fish muscle?

MR. LANGWORTHY: There may have been some found there, but it didn't exceed any standard that caused it to cause any kind of an adverse effect.

COMMISSIONER BLANK: Okay, thank you.

So, let me just summarize -- and thank you for your forbearance, fellow Commissioners -- I heard some comments also from the public that I just want to address personally, and not as a Coastal Commissioner, but as a citizen of California.

I heard people talk about jobs, the economy, and whether this will be appealed, and that is a concern to me, but as a citizen of California, just as it is to the others who raised these issues, because let me be clear, as important as they are to me, that is not the standard of review that I think our counsel is telling me that I have to use when I put my hat on as a Coastal Commissioner.

I care deeply about those things, as well, I have a different standard, and I think, as staff counsel has pointed out, my standard is whether the waiver is consistent with the two sections found in the *Coastal Act*, the marine

resources Section 30230 and the biological productivity Section 30231.

You know, given my job is to take all of the evidence as presented, then use my best judgment to ascertain between the applicants, the appellants, the scientific data, on all sides.

I think the testimony in front of me, and that of Exhibit 12 and the staff report, along with the staff's analysis have convinced me that there is enough data to say that this waiver will be in compliance of the *Coastal Act*.

Thank you.

CHAIR NEELY: Thank you, Commissioner.

Commissioner Kram.

COMMISSIONER KRAM: Thank you, I think most of my questions were answered by Commissioner Mirkarimi and Commissioner Blank's questions.

I really am satisfied that there is adequate monitoring here. I really believe the data is clear that they meet the *Clean Water Act* and the California Ocean Plan, and the staff has done a really, really, thorough job.

The support for this from so many different coastal groups is important, and I think that I would support extending the waiver, and I would urge our other Commissioners, too.

Thank you.

CHAIR NEELY: Thank you.

Commissioner Stone.

COMMISSIONER STONE: Thank you.

I don't think the question here, as has been presented by the City of San Diego, unfortunately, is whether they deserve the waiver, or not, and it is interesting that to articulate deserving a waiver when what they have shown is that they deserve it by having done the things that we would expect an agency like that to do, anyway, and that is to improve water quality, that it be responsible to the flow through their system, and out, to manage the breaks in the system, and constantly be reducing the amount of solids of impactful, sort of, products on the ocean.

What I am interested in is the work that has been done by Coast Keeper, Sierra Club, and to work with the City of San Diego, and look to the future, and that, coming into this hearing, was fairly persuasive to me.

But, I am concerned that the tone that has been taken, the change in the tone, as I perceived throughout this hearing, and the lack of commitment, and I think what we are left with, and what the city has been claiming is the infeasibility of meeting the secondary standards, because of the cost of improving the facility there, at Point Loma.

But, yet, on the other hand, they are willing to put in an investment into reclamation, which I do agree is

the right way to do with this, without any specific commitments. And, there is some indication from the city that if they do proceed with the reclamation, that they could reduce the DOD numbers, and probably reduce then the total solids numbers. So, in a way, whether or not we grant the waiver, they should still be on the same path to meeting secondary standards.

And, putting this much, even this much water into an ocean system, even treated to secondary standards, is not necessarily the best for the health of the ocean system, to begin with, but that is what EPA, the Cal EPA, that is what the agencies have decided that is an acceptable level, and that is something that we can work with.

So, what I am really wrestling with, with granting the waiver and with what the evidence is before us, is the amount of water, the quality of that water, the understanding of where that water is going, and how it is interacting, really, within the marine environment, and whether or not San Diego has an ultimate commitment to either get to the secondary standards by affirmative action nearer term, or by working with reclaimed water systems further down the line, but either way, we are ending up with, hopefully, being much -- having an agency then that is much more responsible to the ocean system, overall.

I would hope that if they do come back in two

years, and talk about what the study is and what their commitments are, that there will be a very specific plan to get to appropriate levels, and obviate, really, the need for a waiver.

But, I am not sure we are necessarily going to see that, and if they say in that time that it is infeasible to implement something in the reclaimed water area to improve their system, to effect the standard, that same argument we are getting now, that it is really infeasible to build towards that solution, which I think, ultimately, puts us in a great dilemma.

I guess my inclination, and really because of the work of the environmental groups in San Diego County, is to give them the chance to do that, but I do that with some trepidation, because I don't know -- I am concerned, that if we grant the waiver, now, we are losing our leverage to make sure that those standards ultimately get met.

I mean, well, yes, we will probably see it in five to seven years from now, but if the City of San Diego comes back to us, back before this Commission, in five to seven years from now, asking for a continued waiver, then no progress has been made, and we are not, then, preserving, protecting, and managing the coast, really, and that is our responsibility at this point.

CHAIR NEELY: Thank you, Commissioner.

Commissioner Burke.

COMMISSIONER BURKE: I have been back and forth in my own mind on this issue about five times in the last five minutes, so every time someone speaks I go in a different direction, but I think that Commissioner Sanchez and Commissioner Blank kind of brought me into the major focus.

If a study is brought back in two years, because we will still be here, hopefully, in two years, God willing, then you have the ability to deal with it in a different kind of manner.

But, Commissioner Wan made a lot of excellent points, and it is interesting that this debate was not this lively at the original hearing, but I think I am ending up, is I am going to agree with you, and say, you know, they should be given the waiver, have them bring the study back in two years, and then if there is not some real movement, as Supervisor Stone says, then we have to deal with it in a more direct and drastic manner.

CHAIR NEELY: Thank you.

Commissioner Achadjian.

COMMISSIONER ACHADJIAN: Thank you, Madam Chair. I want to move it forward with a very simple question to staff. I know where we are heading, I think, and in following Dr. Burke, I should know better, but I am getting to be in the same shoes.

The city comes back in two years, if everything goes forward here tonight, and the final result is that it is not infeasible, what is our authority? what kind of authority do we have to deal with that kind of an input from them.

COASTAL PROGRAM MANAGER DELAPLAINE: Under the federal consistency regulations there is a reopener clause that allows you to find that a project has changed, and that if it is no longer consistent then you can take an action to make such a finding, and request that EPA take some remedial action, such as to ask them to enforce certain provisions, if you would like, but the Commission has a reopener provision that allows them to question whether a project is still consistent with what was originally found.

COMMISSIONER ACHADJIAN: Regardless of how accountable we can hold them, or can be held as elected officials rather than politicians, there is a way for us, with authority, to say it comes to a stop, and this is how we move forward, from that point on? am I correct?

EXECUTIVE DIRECTOR DOUGLAS: I think we would have to ask counsel to step in. I mean, the reopener is a significant handle that this Commission has, but the question is really, they are going to come back with a study, they are going to tell us how they are going to implement it, and I think there has to be some sort of trigger --

COMMISSIONER ACHADJIAN: Right.

EXECUTIVE DIRECTOR DOUGLAS: -- that would allow a reopener.

COMMISSIONER ACHADJIAN: Is the trigger up to us at that point?

CHIEF COUNSEL SCHMELTZER: Yes, it would come back in two years, and we could use that reopener at that point.

COMMISSIONER ACHADJIAN: Thank you, then that answers my concern, thank you.

CHAIR NEELY: Thank you.

Commissioner Shallenberger.

COMMISSIONER SHALLENBERGER: Yes, a question to staff, first of all I just want to bring our attention to 30230 says,

"Marine Resources shall be maintained, enhanced and where feasible restored."

We are not talking about that, and it goes on, and then 30231 talks about the biological productivity and the quality of coastal water, streams, wetlands, et cetera, to maintain optimum populations of marine organisms for the protection of human health and shall be maintained -- and then it goes on.

We have not been talking at all about maintaining optimum populations here, and yet we keep hearing that it is the *Coastal Act* which is our standard of review. Several years ago, there was a very credible and well respected

report that came out -- forgotten the name of it, but Leon Panetta was the chair of it, funded by the Peugh Foundation, I believe, which basically found that our oceans are unraveling. They are in a very bad state, and we know that from both that report, we know it that the big fish are disappearing, we know, as cited earlier, that around the Farallones whales are -- a lot of marine mammals are surviving on krill, and not fish. I mean, it isn't okay to say that we are not going to -- that we are going to stand by and allow it to continue to unravel, that is not the standard of the *Coastal Act*.

And, yet, it seems to me that if this weren't before us at all, and if San Diego and all of the -- if we didn't have a secondary waiver before us, we couldn't -- well, let me put it the other way. Since the secondary waiver is before us, we are no longer limited to just those three effluent that the water act looks at, the DOD, total suspended solids, and acidity, because the *Coastal Act* does not limited us to that.

So, if we look at them not having a secondary standard, I don't understand why we absolutely are not concerned about pharmaceuticals that are going in the water, about all of the other chemicals, which now come under our purview because we are not, by finding this, we are not finding that they are maintaining optimum populations of

marine organisms.

So, I think Commissioner Wan puts some very important things on the record about scientifically why this waiver isn't defensible, in my opinion -- elementary, if you don't know where the plume is, how can you know where the impact is? and everybody admits they don't know where the plume is.

So, I just know that I am a little worried, but I don't want to have this before us for a third time, just because people don't like the outcomes of our vote. But, this is not consistent with the *Coastal Act*, and it is not consistent with the *Coastal Act* because there has been no proof -- I mean, even the city is saying no adverse impact. That is not our standard. Our standard is to maintain optimum populations of marine organisms, and nobody has shown that.

Our oceans are unraveling, and this, if we grant this waiver, will just be one more part of the continued unravel, and to say that -- when San Diego says, well, we don't know how much is runoff, because we also have ag runoff, and we have other cities, and we have that, that is not relevant to our decision of whether or not this meets the *Coastal Act* standards, and I don't believe it does.

CHAIR NEELY: Thank you.

All right, let's call for the vote, would the

clerk please call the roll.

COMMISSIONER SANCHEZ: Point of clarification, what exactly is the motion on the floor.

EXECUTIVE DIRECTOR DOUGLAS: The motion is to approve the staff recommendations with the modification made by the maker of the motion that the city comes back in two years and reports to the Commission how they intend to implement the studies' recommendations relative to reclamation of the effluent before it gets to Point Loma.

COMMISSIONER SANCHEZ: So, in that, it is implied that the Commission believes that secondary can be achieved?

EXECUTIVE DIRECTOR DOUGLAS: No, well, not really. That is not what is being said. But, that is what the city thinks could happen, that be intercepting effluent before it gets into the plant --

COMMISSIONER SANCHEZ: Right, secondary levels, not --

EXECUTIVE DIRECTOR DOUGLAS: That's right secondary levels.

COMMISSIONER SANCHEZ: That is what I meant.

EXECUTIVE DIRECTOR DOUGLAS: And, that study will come back, including their telling you how they are going to implement it.

All right.

CHAIR NEELY: Thank you, and now can we have the

clerk call the roll? or Mr. Douglas? are you doing that? okay.

SECRETARY MILLER: Commissioner Blank?

COMMISSIONER BLANK: Yes.

SECRETARY MILLER: Blank, yes.

Commissioner Burke?

COMMISSIONER BURKE: Yes.

SECRETARY MILLER: Burke, yes.

Commissioner Clark?

COMMISSIONER CLARK: Yes.

SECRETARY MILLER: Clark, yes.

Commissioner Kram?

COMMISSIONER KRAM: Yes.

SECRETARY MILLER: Kram, yes.

Commissioner Kruer?

COMMISSIONER KRUER: Yes.

SECRETARY MILLER: Kruer, yes.

Commissioner Mirkarimi?

COMMISSIONER MIRKARIMI: No.

SECRETARY MILLER: Mirkarimi, no.

Commissioner Sanchez?

COMMISSIONER SANCHEZ: Yes.

SECRETARY MILLER: Sanchez, yes.

Commissioner Shallenberger?

COMMISSIONER SHALLENBERGER: No.

SECRETARY MILLER: Shallenberger, no.

Commissioner Stone?

COMMISSIONER STONE: No.

SECRETARY MILLER: Stone, no.

Commissioner Wan?

COMMISSIONER WAN: No.

SECRETARY MILLER: Wan, no.

Commissioner Achadjian?

COMMISSIONER ACHADJIAN: Yes.

SECRETARY MILLER: Achadjian, yes.

Chair Neely?

CHAIR NEELY: Yes.

SECRETARY MILLER: Chair Neely, yes.

The vote is 8, 4.

CHAIR NEELY: Eight, four, and the waiver passes, the Commission concurs with the consistency certification made by the City of San Diego for the proposed waiver.

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[Whereupon the hearing concluded at 7:45 p.m.]