

**APPLICATION FOR RENEWAL OF
NPDES CA0107409 and
301(h) MODIFIED SECONDARY TREATMENT REQUIREMENTS
Point Loma Ocean Outfall**



**VOLUME I
EXECUTIVE SUMMARY**

Application for Renewal of NPDES CA0107409
&
301(h) Modified Secondary Treatment Requirements for
Biochemical Oxygen Demand and Total Suspended Solids

POINT LOMA OCEAN OUTFALL &
POINT LOMA WASTEWATER TREATMENT PLANT

Submitted under provisions of
Section 301(h) of the Clean Water Act



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November 2007
(updated)



***APPLICATION FOR RENEWAL OF NPDES CA0107409
&
301(h) MODIFIED SECONDARY TREATMENT REQUIREMENTS***

**CITY OF SAN DIEGO
POINT LOMA OCEAN OUTFALL**

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VOLUME I

EXECUTIVE SUMMARY

Volume I Summary: Volume I is the first of an eight-volume submittal by the City of San Diego in application for renewal of NPDES CA0107409 and 301(h) modified secondary treatment requirements for the Point Loma Ocean Outfall wastewater discharge. The City requests renewal of existing modified secondary treatment requirements for total suspended solids and biochemical oxygen demand. Volume I presents an executive summary of the findings of the eight-volume 301(h) application. As documented within the application, the Point Loma Ocean Outfall discharge complies with all applicable regulations and requirements established pursuant to Section 301(h) of the Clean Water Act.



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EXECUTIVE SUMMARY

PURPOSE

The Point Loma Wastewater Treatment Plant (Point Loma WTP) is a terminal treatment facility of the San Diego Metropolitan Sewerage System (Metro System). The discharge of treated wastewater from the Point Loma WTP to the Pacific Ocean is regulated by a joint National Pollutant Discharge Elimination System (NPDES) permit issued by the California Regional Water Quality Control Board, San Diego Region (Regional Board) and the U.S. Environmental Protection Agency (EPA). In accordance with provisions of Section 301(h) of the Clean Water Act, the existing five-year Point Loma NPDES permit establishes the following modified secondary treatment standards:

- a monthly average percent removal of total suspended solids (TSS) of 80 percent,
- an annual average biochemical oxygen demand (BOD) percent removal of 58 percent, and
- a TSS monthly average effluent limit of 75 milligrams per liter (mg/l).

The City of San Diego, as operator of the Metro System, requests renewal of the Point Loma NPDES permit and renewal of existing modified secondary treatment standards for BOD and TSS.

During the prior five-year NPDES permit period, the City complied with these BOD and TSS requirements by a significant margin. During 2006, for example, the Point Loma WTP effluent averaged a TSS concentration of 35 mg/l. Additionally, during 2006 the City achieved an average TSS percent removal of 88 percent and an average BOD percent removal of 65 percent.

In seeking renewal of NPDES requirements, the City does not request any increase in allowable flow rates, effluent concentration limits, or effluent mass emission limits established in the current Point Loma WTP NPDES permit.

METRO SYSTEM OVERVIEW

The Metro System collects and treats wastewater from the City of San Diego and 15 other cities and agencies within San Diego County. The City of San Diego owns and operates Metro System collection, treatment, and effluent disposal facilities.

Section 301(h) of the Clean Water Act recognizes that, in certain circumstances, secondary wastewater treatment may not be required in order to ensure a high level of protection for the ocean environment. Rather than relying solely on a "one size fits all" level of treatment, Metro System facilities and operations provide a high level of environmental protection for the Point Loma ocean discharge through the following four key elements:

- effective industrial and non-industrial control of toxics,
- wastewater treatment at multiple treatment facilities,
- a deep outfall ocean that discharges far offshore, and
- a comprehensive monitoring program that assesses effluent quality, receiving water quality, and impacts to marine aquatic life.

Source Control. The City has implemented an EPA-approved Urban Area Pretreatment Program that provides enhanced regulation and control of industrial and non-industrial sources of toxic pollutants. To limit the concentrations of industrial contaminants introduced to the Metro System, the City issues discharge permits, performs compliance monitoring and inspections of industrial discharges, reviews monitoring information, and enforces the permit provisions and state and federal industrial waste pretreatment regulations. The industrial source control program is administered by a staff of over 40 professionals that includes industrial waste specialists, technicians, laboratory personnel, and other support personnel.

During 2006, the City conducted 770 scheduled inspections of industrial facilities and over 1500 unscheduled compliance sampling events. The City's laboratory conducted over 15,000 analyses of industrial discharge constituents during 2006, and reviewed and evaluated results from an additional 3000 discharger self-monitoring samples.

The City of San Diego also maintains a nonindustrial source control program. As one element of this program, the City regulates discharges from food establishments to limit the introduction of grease, fats, and oils into the Metro System. Since the program was initiated in 1990, the number of sewage spills related to grease obstructions has decreased by over 35 percent. A second key element of the City's nonindustrial waste control program is the Household Hazardous Waste Management Program. The Household Hazardous Waste Management

Program includes a public information and education element, programs to collect household hazardous waste, a "small generators" waste pick-up program, and a hazardous material incident response plan.

The City's source control program has been highly effective. Since inception of the source control program in 1982, concentrations of most metals in the Point Loma WTP influent have been reduced by approximately a factor of ten. In addition, only a few common toxic organic compounds are detected in the Metro System wastewater, and these compounds (when detected) are typically at or near applicable analytical detection limits. The Point Loma discharge complies with California Ocean Plan standards and federal water quality criteria by a significant margin.

Wastewater Treatment. Wastewater from the City of San Diego and other Metro System member agencies is collected in a regional sewerage system that stretches from Alpine to the Pacific Ocean and from Del Mar to the international border. The Point Loma WTP is the terminal facility of the Metro System that discharges to the Point Loma Ocean Outfall. The City also operates two additional secondary treatment facilities (North City Water Reclamation Plant and South Bay Water Reclamation Plant) that help reduce hydraulic and solids loads to the Point Loma WTP. At Point Loma, the wastewater undergoes screening through a 0.6 inch travelling screen, followed by aerated grit removal and chemically assisted sedimentation. During sedimentation, settleable and floatable particles are removed.

Outfall Discharge. The Point Loma Ocean Outfall is a key component of the Metro System treatment and discharge system. The outfall is one of the longest and deepest municipal wastewater outfalls in the world. The 23,472-foot-long outfall includes a Y-shaped diffuser with two 2,496-foot-long diffuser legs that each has 208 discharge ports engineered to achieve maximum dilution and mixing. Wastewater is discharged at a depth of approximately 310¹ feet at a distance more than 4.5 miles offshore. The length, depth, design, and location of the outfall protects ocean water beneficial uses through:

- diluting the discharged wastewater,
- maintaining a submerged plume,
- preventing the diluted discharge from impinging on areas in and near the Point Loma kelp bed, and
- preventing the accumulation of solids in and near the discharge zone.

¹ While this report describes the PLOO discharge depth as 310 feet, the actual discharge depth varies with tidal cycles. Due to the height of the diffuser pipe, the depths of the outfall diffuser ports range from 306 to 313 feet below mean lower low water. Maximum water depth in the vicinity of the diffuser is approximately 320 feet.

The outfall achieves a median initial dilution (dilution that occurs within minutes of discharge due to the momentum and buoyancy of the discharged flow) of 338 to 1, and a minimum month initial dilution of 204 to 1. Subsequent dilution and dispersion occurs as a result of ocean currents and oceanic mixing. Because of the length and depth of the outfall, discharged wastewater remains submerged below a depth of 100 feet more than 99 percent of the time; the diluted wastewater is typically confined below a depth of 180 feet. Ocean circulation is more than sufficient to supply the required dilution water to sustain this initial dilution.

Monitoring. The City implements a comprehensive monitoring program to ensure compliance with applicable water quality standards and to assess how the discharge may affect beneficial uses. The program is implemented by a professional staff of over 90 scientists (e.g., chemists, marine biologists, microbiologists, and toxicologists), boat operators, laboratory technicians, and other support personnel with an annual budget of approximately \$14 million. In addition to featuring influent and effluent monitoring, the ocean monitoring program assesses receiving water quality, seafloor sediment quality, the occurrence and distribution of marine benthic invertebrates and fishes, and the bioaccumulation of contaminants in fish tissues at a wide array of locations both near the outfall discharge site and at reference stations. The program operates two research/monitoring vessels that are equipped with state-of-the art equipment for the collection and subsequent analysis of deep-water ocean monitoring samples.

PROPOSED DISCHARGE IMPROVEMENTS

This application is based on an "improved" discharge, as defined by federal regulations established in Title 40, Section 125.58(g) of the *Code of Federal Regulations*.

The California Ocean Plan establishes bacteriological standards for body-contact recreation at beaches, coastal waters, kelp beds, and other areas where body-contact recreation is designated by the Regional Board as a beneficial use. The current Point Loma NPDES permit does not require effluent disinfection, as the discharge is miles offshore from the coastal and kelp bed areas where body contact recreation (e.g. diving, swimming, surfing, sailboarding, etc.) occurs.

The Point Loma Ocean Outfall discharges beyond the three-nautical-mile-limit of State-regulated waters, and discharged wastewater is rarely transported within this three-mile limit. All but a few of the more than 10,000 bacteriological samples collected during recent years at the edge of the three-mile limit demonstrate compliance with applicable state and federal water quality body-contact recreational standards. The infrequent instances of outfall-related elevated bacteriological concentrations occurred primarily on or near the seafloor near the edge of the three-mile limit.

The City achieves complete compliance with Ocean Plan bacteriological water contact standards in coastal areas and kelp beds where such water contact recreation occurs.

In renewing the Point Loma NPDES permit, however, the City recognizes that regulators may choose to apply the Ocean Plan water-contact bacteriological standards (previously only applied to the shore zone and kelp bed) throughout the entire depth of the ocean water column within the three nautical mile limit of State-regulated waters.

The City has determined that a reduction of Point Loma WTP effluent bacteriological indicator organisms by 2.1 logarithms (approximately 99 percent) would prevent the outfall ocean discharge from causing exceedence of Ocean Plan recreational bacteriological body-contact recreational standards throughout the water column (from water surface to ocean bottom) within the three-mile-limit of State-regulated waters. The City proposes to implement effluent disinfection at the Point Loma WTP to achieve this 2.1 logarithm reduction in indicator organisms.

The City has designed and installed prototype effluent disinfection facilities at the Point Loma WTP that are based on injection of a sodium hypochlorite solution in the effluent channel and use of the outfall itself to provide contact time for bacteria reduction. This prototype disinfection system incorporates existing sodium hypochlorite facilities at the Point Loma site.

The City has submitted a request to the Regional Board to initiate operation of the prototype disinfection facilities. The City will initiate effluent disinfection at the Point Loma WTP upon receipt of Regional Board approval. As documented in studies presented herein, the outfall would provide sufficient contact time to achieve the reduction in indicator organisms, and all chlorine residual in the outfall would be consumed prior to the effluent exiting the outfall diffuser ports. Effluent toxicity tests of disinfected Point Loma WTP effluent show that the disinfected effluent will comply with applicable toxicity standards. The disinfected effluent will also comply with Ocean Plan standards for chlorinated byproducts.

ORGANIZATION OF APPLICATION

This application evaluates the effectiveness of the City of San Diego's source control program, treatment facilities, ocean discharge facilities, and monitoring program in protecting San Diego's ocean environment and applicable state and federal regulations. This application for modification of secondary treatment requirements has been prepared in accordance with Title 40,

Part 125, Subpart G of the *Code of Federal Regulations*, as promulgated in the *Federal Register* by EPA on August 23, 1994. This application is also prepared in accordance with the *Amended Section 301(h) Technical Support Document* published by EPA in September 1994. This application consists of the following volumes:

Volume I - Executive Summary. The Executive Summary presents an overview of the key elements of the City's ocean discharge system and summarizes findings presented in the 301(h) renewal application.

Volume II - NPDES Application. Volume II presents an overview of the basis of the 301(h) application, applicable state and federal NPDES application forms, and an analysis of how the discharge complies with federal antidegradation regulations.

Volume III - Large Applicant Questionnaire. Volume III of the submittal package follows the format established in the Large Applicant Questionnaire within Appendix B of Title 40, Part 125, Subpart G of the *Code of Federal Regulations*. Text responses to individual questions are presented with supporting tables and graphics.

Volume IV through Volume VIII - Technical Appendices. Volumes IV through VIII of the application present 21 technical appendices that support responses to questions of the Large Applicant Questionnaire.

PROTECTION OF THE OCEAN ENVIRONMENT

Comprehensive oceanography, marine biology, engineering, and other scientific studies have been performed to assess whether the Point Loma discharge adequately protects San Diego's ocean environment. These studies have also evaluated whether the discharge complies with Ocean Plan water quality standards and 301(h) requirements established within the *Code of Federal Regulations*. The following sections summarize the results and conclusions developed in the comprehensive studies presented within this application to renew NPDES and 301(h) requirements.

Compliance with Ocean Plan Standards and Federal Criteria. The Point Loma effluent is routinely analyzed for several hundred physical/chemical, toxic inorganic, and toxic organic constituents. Analysis of data for the prior NPDES permit period (2002-2006) demonstrates that the Point Loma discharge achieved compliance with California Ocean Plan:

- effluent standards,
- receiving water standards for the protection of aquatic habitat, and
- receiving water standards for the protection of human health.

In addition, the discharge meets all applicable federal water quality criteria for the protection of human health and meets all federal water quality criteria for the protection of aquatic species.

Physical Oceanography. As part of the design of the extended Point Loma ocean outfall, comprehensive oceanographic studies were conducted. These studies assessed regional and local ocean currents, temperature and salinity profiles (density stratification), and tidal and wind effects. The outfall is sited at the edge of the mainland shelf. Beyond the outfall diffusers, the ocean bottom significantly increases in depth. The rapidly increasing depth allows for maximum dispersion of particles before contacting bottom sediments. Ocean currents off the coast of Point Loma are generally longshore, but localized and variable cross-shore flow also occurs.

Density stratification (due to temperature and salinity) represents a key factor influencing vertical mixing within the ocean. Waters off the coast of Point Loma are density stratified for much of the year, with peak stratification occurring during the late summer. As a result of this density stratification, discharged Point Loma effluent is typically trapped in deep waters and is prevented from rising to the surface.

Fate of Discharged Solids. Upon initial dilution, effluent suspended solids are mixed with marine particles entrained in the ambient receiving waters. Typical natural concentrations of suspended solids in ocean waters range from several mg/l to over 10 mg/l. The Point Loma outfall discharge adds approximately 0.1 mg/l to this background concentration in the immediate vicinity of the outfall discharge. This small increment typically represents only 1 or 2 percent of the ambient TSS in the immediate discharge zone, and most of this small increment is organic and subject to decay and uptake. Small particles not taken up by organisms are dispersed by ocean currents and quickly become unrecognizable above the ambient background concentration.

As part of the City's 1995 301(h) application, comprehensive computer modeling was used to evaluate particle deposition and sediment accumulation on the sea floor. Due to a series of compounding and overly conservative modeling assumptions, the 1995 modeling projected a small degree of particle accumulation near the outfall. Inspections of the discharge zone by remotely operated vehicles in the ensuing 12 years demonstrate that no visible solids accumulation has occurred at or near the outfall. Sediment data collected since 1994 demonstrate that no trends in sediment chemistry or deposition have been observed since the outfall was placed in operation that would degrade² marine life. Data collected since 1994

² As defined in the Ocean Plan, degradation is determined by comparing the waste field and reference sites for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting normal species by undesirable plant and animal species. Per the Ocean Plan definition, degradation occurs if there are significant differences (the Ocean Plan defines a "significant difference" as a statistically significant difference in the means of two distributions of results at a 95 percent confidence interval) in any of the following three major biotic groups: demersal fish, benthic invertebrates, or attached algae.

demonstrate that concentrations of trace organics in the sediments are less than the corresponding analytical detection limits. Sediment metals concentrations in and near the outfall discharge zone continue to be near background concentrations. Further, sediment BOD concentrations near the outfall continue to be within the range typically seen along the coast of Point Loma.

Dissolved Oxygen Depression. Wastewater discharged through the Point Loma outfall contains biodegradable organic matter. The organic material exerts a demand on dissolved oxygen as it is naturally broken down in the marine environment. To ensure protection of the marine environment, the Ocean Plan requires that wastewater discharges not cause ambient dissolved oxygen concentrations to be depressed more than 10 percent. To achieve compliance with this requirement, it necessary to either remove biodegradable material from the discharge or to disperse the oxygen-demanding particles through a highly efficient ocean outfall. The Point Loma discharge relies on both of these strategies for protecting the environment.

As confirmed by monitoring data collected since 1994, the Point Loma outfall discharge does not adversely impact receiving water dissolved oxygen. Under maximum (worst case) conditions, the Point Loma discharge is computed as depressing ambient dissolved oxygen concentrations by 0.14 mg/l or less. The monitoring data confirm that the Point Loma discharge does not discernibly affect receiving water dissolved oxygen. Dissolved oxygen concentrations in the outfall area remain high and are within the range of natural dissolved oxygen concentrations that occurred prior to construction of the outfall. Additionally, dissolved oxygen concentrations in the outfall vicinity are within the range of natural dissolved oxygen concentrations that occur at control reference stations. The Point Loma discharge thus complies with Ocean Plan dissolved oxygen requirements by a wide margin.

Beneficial Uses. Beneficial uses that occur off the coast of Point Loma include recreation, fishing, and the support of marine habitat. Key water-contact recreational activities include swimming, tidepooling, wading, snorkeling, surfing, diving, and sailboarding. Non-contact recreational activities include fishing, sailing, power boating, and whale watching.

Water contact recreational activities are primarily limited to immediate shoreline or kelp bed. As noted, the Point Loma outfall complies with water contact recreation bacteriological standards in these areas, and recreational activities are not impaired by the discharge. No current federal, state, or local restrictions on recreational activities exist within the Point Loma outfall discharge area.

While water-contact recreation occurs in the shore areas and kelp beds, no known water contact recreational use occurs outside State-regulated waters.

Sediments. Sediment conditions were analyzed based on a total of 372 pre- and post-discharge samples collected at 12 outfall and reference stations. The sediment sampling data demonstrate that contaminant concentrations in the Point Loma outfall discharge area are not sufficient to degrade marine life. While levels of arsenic, chromium, copper, iron, nickel, and zinc increased in the outfall region upon implementation of the extended outfall discharge, these initial increases were not sustained. Although small increases in sulfide and BOD concentrations have occurred at stations nearest the outfall diffuser, these increases do not affect sediment quality to the point that it degrades resident marine biota.

Benthic Infauna. Point Loma benthic infauna communities were analyzed based on 743 pre- and post-discharge samples collected at 12 outfall and reference stations. After 13 years of discharge from the extended Point Loma outfall, monitoring results show that a balanced indigenous population is maintained beyond the designated outfall Zone of Initial Dilution (ZID). Key species parameters such as infaunal abundance, species diversity, Benthic Response Index, and the numbers and populations of indicator species are maintained within the limits of variability that typify natural benthic communities of the Southern California Bight.

Benthic communities near the outfall continue to be dominated by ophiuroid-polychaete-based assemblages that are prevalent within the Southern California Bight. Although individual species populations have varied over time, overall infaunal community structure off Point Loma has remained relatively stable from year to year in terms of number of species, number of individuals, and dominance. Values for these parameters in the outfall area are similar to elsewhere in the Southern California Bight. In spite of this overall stability, several trends are evident from comparing pre-discharge and post-discharge conditions. First, there has been a general increase in the total abundance and number of benthic infauna species since the discharge was initiated. The increase in species richness is most pronounced nearest the outfall, contrary to what would be expected if environmental degradation were occurring. Increases in infaunal abundance were also generally accompanied by decreases in dominance, another pattern contrary to known pollution effects.

Although some changes in benthic assemblages have appeared in the Point Loma receiving waters, these assemblages are still similar to those present prior to discharge. The assemblages are also similar to natural indigenous communities within the Southern California Bight.

Demersal Fish and Megabenthic Invertebrates. Demersal fish and megabenthic invertebrate communities were analyzed based on 186 pre- and post-discharge otter trawls. Analyses of temporal and special patterns did not reveal any distinct effects of the outfall discharge on fish or invertebrate communities. The distribution of fish species and populations remained with the

range of natural variability for the Southern California Bight, and no changes in community structure were detected in the immediate outfall area that corresponded to the initiation of the wastewater discharge. Finally, the lack of physical abnormalities and indicators of disease such as fin rot, lesions and tumors suggest that fish populations have remained healthy off Point Loma.

Balanced Indigenous Population (BIP). Regulations promulgated pursuant to Section 301(h) of the Clean Water Act require that modified 301(h) discharges result in the maintenance of a balanced indigenous population (BIP) beyond the boundary of the zone of initial dilution (ZID).

Benthic species, demersal fish, and sediment chemistry samples collected during 2001-2006 continue to demonstrate that a BIP of benthic infaunal organisms and demersal fishes exists beyond the Point Loma outfall ZID. There is conclusive evidence that benthic communities near and beyond the ZID boundary and at reference sites are similar to those observed prior to discharge and to natural indigenous communities characteristic of the southern California continental shelf. For example, community structure parameters such as total abundance, diversity, dominance, and abundances of individual species have showed similar patterns of change throughout the monitoring region. Remote vehicle television observations in the areas around and offshore of the Point Loma outfall have also documented little visible sedimentation within and beyond the ZID.

Organic and contaminant loading of sediments is not evident in the discharge vicinity. Further, the ZID boundary is characterized by a non-degraded benthic infaunal community that is representative of indigenous species and populations living under natural conditions. Key community factors such as abundance, diversity, benthic response index (BRI), and patterns of key "indicator" species are being maintained within the limits of variability that typify naturally-occurring regional benthic communities of southern California's outer continental shelf.

Endangered/Threatened Species. A number of threatened or endangered species may contact the waters off the coast of Point Loma, but only deep-diving species (e.g. marine mammals) have the potential for any short-term contact with the discharged wastewater. The proposed 301(h) discharge is not projected to discernibly affect any threatened or endangered species.

The discharge is also concluded as not adversely impacting kelp, birds, fish, and plankton. The discharge has demonstrated consistent compliance with Ocean Plan standards and federal water quality criteria for the protection of aquatic habitat and marine life.

CONCLUSIONS

Requirements governing the modification of secondary treatment standards are established in Title 40, Section 125 of the Code of Federal Regulations. As summarized in Table EX-1 (page EX-13), the Point Loma discharge system conforms to each of these 301(h) requirements. The City's source control, treatment, ocean discharge, and monitoring system represents a cost-effective means for protecting human health and San Diego's ocean environment.

The attached application for renewal of NPDES CA0107409 demonstrates that maintaining the existing modified 301(h) requirements for TSS and BOD provides for full protection of the ocean environment and beneficial uses. This NPDES renewal application documents that:

- The Point Loma outfall discharge achieved 100 percent compliance with concentration, percent removal, and mass emission limits for BOD and TSS established in the current Point Loma NPDES permit.
- The proposed improved discharge meets the statutory requirements of Section 301(h) of the Clean Water Act.
- During 2002-2006, the Point Loma outfall discharge complied with applicable receiving water standards and federal water quality criteria for the protection of beneficial uses. The proposed improved discharge will continue to meet these standards and criteria.
- The existing TSS and BOD concentration and percent removal limits established in the current Point Loma NPDES permit are consistent with maintaining the existing high quality of ocean waters off the coast of Point Loma.
- The Point Loma outfall provides a high degree of initial dilution, effectively disperses the discharged wastes, and maintains the dilute waste field more than 100 feet below the ocean surface 99 percent of the time.
- Proposed discharge improvements (effluent disinfection at the Point Loma WTP) will allow for compliance with California Ocean Plan body contact recreational standards throughout all depths in all State-regulated waters.
- A balanced indigenous population of fish, shellfish, and wildlife currently exists and will continue to be maintained beyond the zone of initial dilution.
- The Point Loma outfall discharge does not create any discernible negative impacts on beneficial uses, fishing, habitats of special significance, recreation, or public water supplies, and the proposed improved discharge will add a further degree of protection to beneficial uses.

- The discharge does not and will not result in visible deposition of sedimentary material in the vicinity of the outfall.
- No trends in sediment chemistry or deposition have been observed since the outfall was placed in operation that would degrade marine life.
- The City of San Diego industrial waste source control program has been effective in reducing and controlling the discharge of toxic constituents to the sewer system.
- Mass emissions of TSS have been reduced during the period of 301(h) modification.
- The City continues efforts to market recycled water produced at the 30 mgd North City Water Reclamation Plant and 15 mgd South Bay Water Reclamation Plant.

For these reasons, the Point Loma discharge is an acceptable and appropriate candidate for renewal of modified secondary treatment requirements in accordance with Section 301(h) of the Clean Water Act.

**Table EX-1
Summary of Compliance with 301(h) Criteria**

301(h) Requirement	Compliance Demonstrated in City of San Diego 301(h) Application?
Discharge must comply with applicable state and federal water quality standards and criteria at and beyond the zone of initial dilution	Yes
Discharge must not impact public water supplies	Yes
A balanced indigenous population (BIP) of fish and wildlife must exist beyond the ZID	Yes
Discharge must not contribute to destruction of areas of critical habitat	Yes
Discharge must not interfere with migratory pathways	Yes
Discharge must not result in accumulation of toxic pollutants which adversely affect biota within the ZID	Yes
Discharge must not contribute to stimulation of phytoplankton blooms	Yes
Discharge must not lead to restrictions on recreational activities	Yes
Discharge must have monitoring program to provide data to evaluate the impact of the discharge	Yes
Discharge must not adversely affect other point or non-point discharges	Yes
Discharge must have an approved pretreatment program	Yes
Discharger must submit a nonindustrial source control program	Yes

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