CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000 SAN FRANCISCO, CA 94105-2219 VOICE AND TDD (415) 904-5200





STAFF REPORT AND RECOMMENDATION

ON CONSISTENCY CERTIFICATION

Consistency Certification No.	CC-123-98
Staff:	MPD-SF
File Date:	9/17/98
3 Months:	12/17/98
6 Months:	3/17/99
Commission Meeting:	1/12-15/99

City of Morro Bay and Cayucos Sanitary District APPLICANT:

PROJECT Morro Bay-Cayucos Wastewater Treatment Plant, City of Morro **LOCATION:** Bay, San Luis Obispo County, and offshore waters (Exhibit 1)

PROJECT **DESCRIPTION:** Reissuance of Secondary Treatment Waiver

FEDERAL AGENCY AND **PERMIT:**

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

SUBSTANTIVE FILE **DOCUMENTS:**

See page 16.

EXECUTIVE SUMMARY

Under the Clean Water Act, wastewater discharges from publicly owned treatment works (POTWs) are required to receive at least secondary treatment. However, Clean Water Act Section 301(h), sometimes referred to as the "ocean waiver" provision of the Clean Water Act, gives the EPA Administrator (with the concurrence of the RWQCB (Regional Water Quality Control Board)) the authority to grant a waiver from otherwise applicable secondary treatment requirements. Such a waiver would authorize the City to continue to

discharge effluent receiving less than full secondary treatment in terms of suspended solids, biochemical oxygen demand, and pH. The waivers need to be renewed every five years.

Ł

On January 12, 1993, the Commission concurred with the previous submittal from the City of Morro Bay/Cayucos (hereinafter referred to as City of Morro Bay, or Morro Bay) of a consistency certification for the renewal of its EPA-issued secondary treatment waiver (CC-88-92). In reviewing past waiver renewal request for Morro Bay and other dischargers (i.e., Goleta and Orange County), the Commission has found applicable Coastal Act policies to be met when adequate monitoring is in place and when EPA and the appropriate RWQCB have determined a discharger's effluent to comply with the applicable Clean Water Act and Ocean Plan requirements.

Morro Bay's discharges are relatively small compared to major California dischargers; for example Morro Bay's discharges are less than 0.5% of the volume of any of the large California dischargers (City and County of Los Angeles, Orange County, and the City of San Diego). Moreover, there is little industry in Morro Bay, especially when compared with these major dischargers. EPA and the RWQCB have both reviewed Morro Bay's application. EPA's independent Technical Evaluation determined Morro Bay to meet the applicable Clean Water Act standards for a waiver, and on December 11, 1998, the Central Coast RWQCB determined the discharges would meet California Ocean Plan standards. Monitoring results for the past 5 years support Morro Bay's claim that the discharges comply with secondary treatment waiver requirements and would not adversely affect marine resources. The stringent monitoring as required under Section 301(h) will be continued. Marine resource effects have not changed since the Commission's previous concurrence, and the discharges would be consistent with the water quality, marine resources, commercial and recreational fishing, and public access and recreation policies (Sections 30230, 30231, 30234, 30234.5, 30213, and 30220) of the Coastal Act.

STAFF SUMMARY AND RECOMMENDATION:

I. <u>Project Description</u>. The City of Morro Bay and the Cayucos Sanitary District 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 Morro Bay-Cayucos Wastewater Treatment Plant (WWTP). The waiver would allow the discharge of wastewater receiving less-than-secondary treatment into the Pacific Ocean. The applicant has been operating under a Section 301(h) modified NPDES permit (number CA0047881) that expired March 8, 1998. The current permit has been "administratively extended" until action is taken on this current request. The applicant seeks to renew the existing 301(h) modified NPDES permit.

Ŧ

The Morro Bay-Cayucos WWTP is located in the northwest sector of the City of Morro Bay (Exhibits 1 & 2). The plant serves a population of approximately 13,000 in the City of Morro Bay and the nearby community of Cayucos. The treatment plant is designed for an average dry weather flow of 2.06 MGD (million gallons per day) and a peak flow of 6.6 MGD. Average dry weather flows are 1.6 MGD. The outfall pipe is 27 inches in diameter and terminates to a 170 ft. long multiport diffuser (Exhibit 3 provides physical characteristics). The diffuser is located approximately 4400 ft. from shore at a depth of 50 ft.

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

- SS: (1) The 30-day average shall not exceed 30 mg/l (milligrams per liter). (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%;
- BOD: (1) The 30-day average shall not exceed 30 mg/l. (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%;
- pH: The effluent limits for pH shall be maintained within the limits of 6.0 to 9.0 pH units.

The existing system is a combined primary and secondary treatment plant that has operated under a modified 301(h) NPDES permit since March 1985. The plant was originally built in 1954 and expanded in 1964. A new outfall was constructed and came into operation in 1982. Prior to this, effluent was discharged to the surf zone directly west of the plant. The current treatment system includes primary treatment of all influent by screening, grit removal, and primary sedimentation. In addition, a portion of the primary effluent receives secondary treatment to achieve 75 percent solids removal in the subsequent primary and secondary blend, as required by the California Ocean Plan.

The applicant is requesting a continued waiver for both biochemical oxygen demand (BOD) and suspended solids (SS) with the same effluent limits specified in the existing permit; these limits are as follows: BOD limits are 120/180 milligrams/liter (mg/l) (monthly average/maximum) and suspended solids limits are 70/105 mg/l (monthly average/maximum). The applicant is not requesting a waiver of pH requirements.

On May 30, 1997, the applicant applied to the RWQCB for reissuance of the 301(h) waiver. The RWQCB staff reviewed the application and certified to EPA that the proposed permit, if properly conditioned, could comply with state requirements. EPA then performed a technical review and on September 2, 1998, issued a Tentative Decision

to grant the 301(h) waiver of secondary requirements. On December 11, 1998, the RWQCB adopted Order No. 98-15, thereby granting its approval, with conditions, of the waiver.

t

II. <u>Background/Commission Review of Waivers</u>. In 1979, and 1983-5, the Commission reviewed a number of secondary treatment waiver applications under the federal consistency provisions of the Coastal Zone Management Act, and EPA ultimately granted many of these waivers. During these reviews the Commission expressed concern over the need for treatment meeting the *equivalent* of secondary treatment with respect to removal of toxics. Nevertheless, at that time, the Commission consciously adopted a neutral position on the waivers. Since a position of "neutrality" is not an action that is recognized under CZMA regulations, the Commission's concurrence in the waivers was presumed pursuant to 15 CFR Section 630.63(a).

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

III. <u>Status of Local Coastal Program.</u> The standard of review for federal consistency certifications is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal Program (LCP) of the affected area. If the LCP has been certified by the Commission and incorporated into the California Coastal Management Program (CCMP), it can provide guidance in applying Chapter 3 policies in light of local circumstances. If the LCP has not been incorporated into the CCMP, it cannot be used to guide the Commission's decision, but it can be used as background information. The City of Morro Bay's LCP has been certified by the Commission but has not been incorporated into the CCMP.

IV. <u>Applicant's Consistency Certification</u>. The City of Morro Bay has certified that the proposed activity complies with California's approved coastal management program and will be conducted in a manner consistent with such program.

V. Staff Recommendation:

The staff recommends that the Commission adopt the following motion:

MOTION. I move that the Commission **concur** with the City of Morro Bay'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 Morro Bay for the proposed waiver, finding that the waiver is consistent with the California Coastal Management Program (CCMP).

VI. Findings and Declarations:

The Commission finds and declares as follows:

A. Water Quality/Marine Resources

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

Section 301(h) of the Clean Water Act provides that an NPDES permit which modifies the secondary treatment requirements may be issued if the applicant: (1) discharges into oceanic or saline, well-mixed estuarine waters; and (2) demonstrates to EPA's satisfaction that the modifications will meet those requirements specified in Section 301(h) (see pp. 6-7), including: (1) that the waiver will not result in any increase in the discharge of toxic pollutants or otherwise impair the integrity of receiving waters; and (2) that the discharger must implement a monitoring program for effluent quality, must assure compliance with pre-treatment requirements for toxic control, must assure compliance with water quality standards, and must measure impacts to indigenous marine biota. In California, the applicable water quality standards are embodied in the California Ocean Plan (see pp. 7-9).

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

Section 307(f) of the federal CZMA specifically incorporates the Clean Water Act into the California Coastal Management Program (CCMP). Commission consistency certification review is required for 301(h) applicants, because EPA NPDES permits are listed in California's program as federal licenses or permits for activities affecting land or water uses in the coastal zone. In reviewing the discharges, the Commission relies on the Clean Water Act and its implementing regulations, the California Ocean Plan, the Coastal Act (Chapter 3 policies), and Water Code Section 13142.5 (incorporated into the Coastal Act by Section 30412(a)). These requirements, which are further described and summarized below, provide both specific numerical standards for pollutants, as well as general standards for protection of marine biological productivity.

a. <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 outfalls beyond 3 miles *and* for secondary treatment waivers (regardless of location) are issued jointly by EPA and the applicable RWQCB. The Clean Water Act divides pollutants into three categories for purposes of regulation, as follows: (1) conventional pollutants, consisting of total suspended solids (TSS or SS); biochemical oxygen demand (BOD, a measure of the amount of oxygen consumed during degradation of waste); pH; fecal coliform bacteria; and oil and grease; (2) toxic pollutants (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 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) the discharge of pollutants in accordance with such modified requirements [i.e., the secondary treatment waiver] 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 1

a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities in and on the water (301(h)(2)).

(2) the applicant has established a system for monitoring the impact of such discharge on a representative sample aquatic biota, to the extent practicable (301(h)(3));

(3) such modified requirements will not result in any additional requirements on any other point or nonpoint source ((301(h)(4)));

(4) all applicable pre-treatment requirements for sources introducing waste into such treatment works will be enforced (301(h)(5));

(5) 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 (301(h)(8)); and

(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 pre-treatment program which, in combination with the treatment of discharges from such works, removes the same amount of such a 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 (301(h)(6)).

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

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

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

C. Chemical Characteristics, including dissolved oxygen, pH, dissolved sulfide in and near sediments, concentration of substances in the sediments,

organic materials in the sediments, and nutrient levels, and including maintenance of standards such as protecting indigenous biota and marine life; ŀ

D. Biological Characteristics, including:

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

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

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

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

General requirements in the Ocean Plan include:

A. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.

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

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

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

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

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

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

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

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

1. Pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body-contact sports.

2. Natural water quality conditions are not altered in areas designated as being of special biological significance.

3. Maximum protection is provided to the marine environment.

In addition, the Ocean Plan contains "Table A" effluent limitations for major wastewater constituents and properties, "Table B" limitations that provide maximum concentrations for toxic materials that may not be exceeded upon completion of initial dilution, and other standards. Table A and B limitations are shown on Exhibit 4.

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

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

Section 30231 provides:

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

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

(a) In addition to the provisions set forth in Section 13142.5 of the Water Code, the provisions of this section shall apply to the commission and the State Water Resources Control Board and the California regional water quality control boards. ţ

(b) The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate the provisions of this section. Neither the commission nor any regional commission shall, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.

Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, regional commission, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out the provisions of this division.

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

In addition to any other policies established pursuant to this division, the policies of the state with respect to water quality as it relates to the coastal marine environment are that:

(a) Waste water discharges shall be treated to protect present and future beneficial uses, and, where feasible, to restore past beneficial uses of the receiving waters. Highest priority shall be given to improving or eliminating discharges that adversely affect any of the following:

(1) Wetlands, estuaries, and other biologically sensitive sites.

(2) Areas important for water contact sports.

(3) Areas that produce shellfish for human consumption.

(4) Ocean areas subject to massive waste discharge.

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

2. <u>EPA and RWQCB's Analysis of Morro Bay's Discharges</u>. As it did prior to the Commission's previous concurrence with Morro Bay's secondary treatment waiver renewal request, EPA has conducted a technical evaluation analyzing Morro Bay's compliance with the 301(h) criteria discussed above. This evaluation, dated September 3, 1998, includes the following EPA findings:

Summary of Findings

Based upon review of the data, references and empirical evidence furnished in the 1997 re-application, and associated monitoring reports, EPA Region 9 makes the following findings with regard to compliance with the statutory and regulatory criteria:

1. The applicants proposed discharge will comply with the California Ocean Plan standards for suspended solids and dissolved oxygen, and pH. [Section 301(h) (1), 40 CFR 125.61]

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

3. The existing monitoring program was last revised in 1993 and will be modified by EPA and the Central Coast Regional Water Quality Control Board during permit reissuance to better evaluate the effects of the discharge. [Section 301(h), 40 CFR 125.63]

4. The applicant's proposed discharge will not result in any additional treatment requirements on any other point or nonpoint source [Section 301(h) (4), 40 CFR 125.64].

5. The applicant is exempt from the pretreatment requirements specified under 40 CFR 125.6(c). The draft NPDES permit implements pollution prevention requirements specified in 40 CFR 125.66(d) in lieu of the General Pretreatment Regulations specified in 40 CFR Part 403. This finding is conditional upon receipt of documented certification from the applicant that there are no known sources of toxic pollutants or pesticides. [Section 301(h) (5), 40 CFR 125.66 and 125.68]

6. The applicant is a small discharger and exempt from the urban pretreatment requirements. [Section 301(h) (6), 40 CFR 125.60 (b) (2)]

3

7. The requirement for a nonindustrial source control program is being met through a Pollution Prevention Program (as specified in the draft NPDES permit) which implements public education and waste minimization/source reduction programs to limit entrance of toxic pollutants and pesticides into the treatment plant. [Section 301(h) (7), 40 CFR 125.66]

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

9. The applicant has demonstrated through past performance that its treatment facilities will be removing more than 30% of the influent fiveday biochemical oxygen demand (BOD) and suspended solids. The applicant will be in compliance with all applicable Federal water quality criteria, as established under Section 304(a) of the Clean Water Act. [Section 301(h) (9), 40 CFR 125.60]

10. In a letter dated July 27, 1998, the Central Coast Regional Water Quality Control Board made a preliminary determination that the NPDES permit contains provisions to ensure that the discharge will meet water quality standards for the Pacific Ocean and not require imposition of additional treatment or control requirements to be applied to other discharges. Issuance of final waste discharge requirements will constitute the State's certification and concurrence under 40 CFR 124.54.

EPA also determined that past performance and monitoring have established that Morro Bay's discharges regularly meet applicable water quality standards, including those for suspended solids, BOD, and pH; EPA noted:

The applicant has demonstrated through past performance the ability to meet the 75% removal requirement and typically achieves removal efficiencies greater than 85% for suspended solids.

The overall effect ... on ambient DO [Dissolved Oxygen] concentrations is negligible and well below the 10% standard in the COP.

The applicant has not requested a variance for pH.

EPA concluded, concerning applicable water quality standards:

Based on the information provided by the applicant and a review of past performance, the discharge will be operated in a manner which ensures compliance with the State water quality standards relevant to suspended solids, BOD, and pH. This includes the effluent limits specified in the COP for suspended solids (75% removal), turbidity (75 NTU) and pH (6.0 to 9.0) and the ambient standards for dissolved oxygen and light transmittance. The revised NPDES permit will contain effluent limitations for suspended solids, turbidity, BOD and pH to ensure continued compliance.

In addition, concerning biological effects, EPA determined "... that a balanced indigenous population is being maintained in the vicinity of the outfall and recreational activities are protected."

The RWQCB also determined that the discharges would comply with applicable water quality standards. Regarding evidence from past monitoring by the applicant, the RWQCB determined:

COMPLIANCE STATUS:

The Dischargers have demonstrated a good compliance record. Discharger self-monitoring and Board Staff monitoring indicate only a few incidents of noncompliance resulting from storm events or other unforeseen occurrences. Past monitoring data indicates the Discharger will be able to meet the permit limitations.

Historically the Dischargers have produced effluent with significantly lower pollutant load than allowed under the limits of the permit. ...

3. <u>Commission Conclusion</u>. The information submitted by the City of Morro Bay, along with the supporting analyses from by EPA and the RWQCB, supports its request for a continued secondary treatment waiver. When the Commission concurred five years ago with the City's previous consistency certification for this type of waiver, the Commission determined that monitoring efforts to date supported the conclusion that the discharges would comply with secondary treatment waiver requirements and would not adversely affect marine resources. The Commission's findings in that previous waiver review are hereby incorporated by reference into these findings. No new information in the ensuing 5-year period alters this determination; in fact, as noted by the RWQCB, the monitoring has shown the discharges continue to meet the applicable standards. Moreover, the stringent monitoring as required under Section 301(h) will be continued.

The RWQCB has also addressed the Commission's historic concern over toxics by continuing to include requirements for the implementation of a pollution prevention program to minimize discharge of toxic pollutants into the sewer system which might interfere with the treatment processes. Thus, upon reviewing the available evidence, the Commission reiterates its conclusion that the discharges would be consistent with the applicable marine resource and water quality provisions (Sections 30230 and 30231) of the Coastal Act.

B. Commercial Fishing/Recreation

Section 30230 of the Coastal Act, quoted in full on page 9, 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.

According to the Commission's previous review of the applicant's waiver request, in the Morro Bay/Estero Bay area, sandy bottom fishes include various members of the orders Pleuronectiformes (flatfish), Squaliformes (sharks) and Rejiformes (sharks and rays). A variety of commercial and sport fish are found in the vicinity of the Morro Bay-Cayucos WWTP discharge area. Commercial catches from the Morro Bay area are typically dominated by rockfish (Sebastes spp.), albacore tuna (Thunnus alalunya), California halibut (Paralichthys californicus) and the red abalone (Haliotis rufescens). Catches from sport fishing (i.e. recreational party boat, pier, and shore fishermen) include rockfish, a variety of flatfish (Bothidae and Pleuronectidae), lingcod (Ophiodon elongatus), bocaccio (Sebastes paucispinis), cabezon (Scorpaenichthys marmoratus), pacific staghorn sculpin (Leptocottus armatus), various surfperch (Embiotocidae), white croaker (Genyonemus lineatus), queenfish (Seriphus politus), jacksmelt (Atherinopsis californiensis) and occasionally striped bass (Roccus saxatilis). Recreational harvesting for the Pismo clam (Tivela stultorum) and several other bivalve species has been conducted in the past along Atascadero State Beach north of Morro Rock.

Through the Commission's previous waiver review, the Commission staff and Central California shellfish harvesters expressed concern that the proposed permit needed to address shellfish monitoring in greater detail. At that time, the RWQCB responded to this concern by adding to its order a condition requiring:

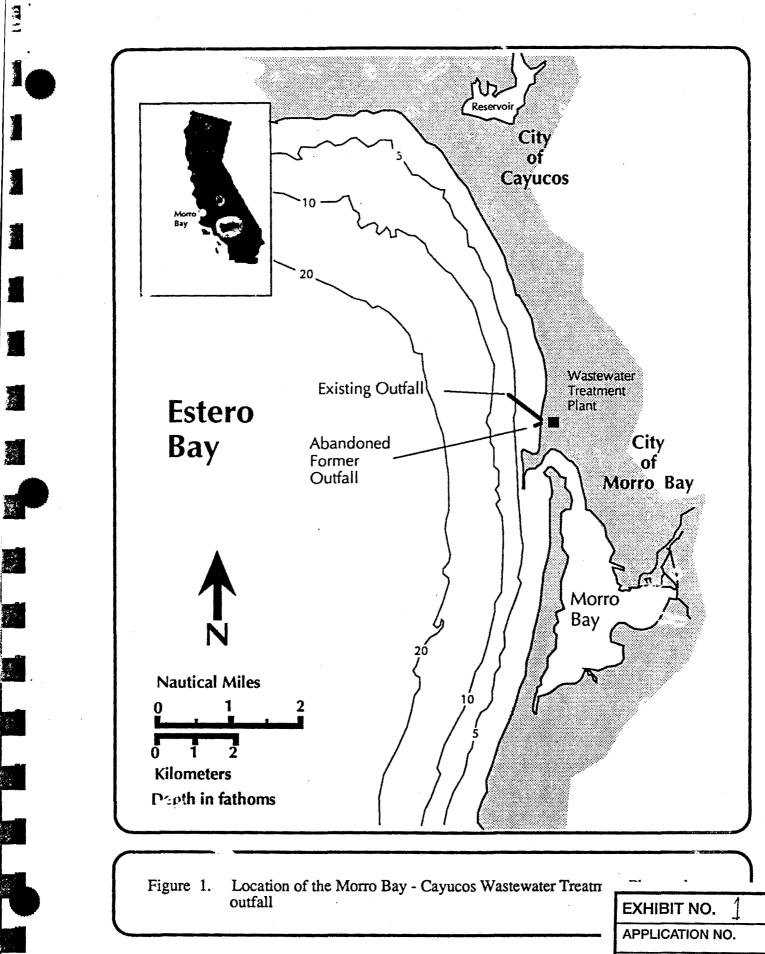
Shellfish Tissue Sampling

Following consultation with appropriate agencies, the discharger shall propose a shellfish monitoring program. The proposed program shall be submitted by no later than 45 days following the effective date of this permit.

The Commission previously found that, with this condition, the discharges addressed all 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 future discharges. Therefore, as discussed above with respect to marine resources, and with continued monitoring, the Commission reiterates its conclusion that the discharges would be consistent with the applicable commercial and recreational fishing and general recreation policies (Sections 30230, 30234, 30234, 30234, 30213, and 30220) of the Coastal Act.

SUBSTANTIVE FILE DOCUMENTS:

- 1. RWQCB Order No. 98-15 and NPDES Permit No. CA0047881, Morro Bay Cayucos Sanitary District.
- Consistency Certifications for secondary treatment waiver renewals, CC-88-92 (Morro Bay), CC-126-96 (Goleta Sanitary District), and CC-3-98 (County Sanitation Districts of Orange County (CSDOC)).
- 3. No Effects Determination NE-94-95 (City of San Diego, secondary treatment waiver).
- 4. Consistency Determination No. CD-137-96 (IBWC) International Boundary and Water Commission International Wastewater Treatment Plant Interim Operation.



C	(-	123	-98

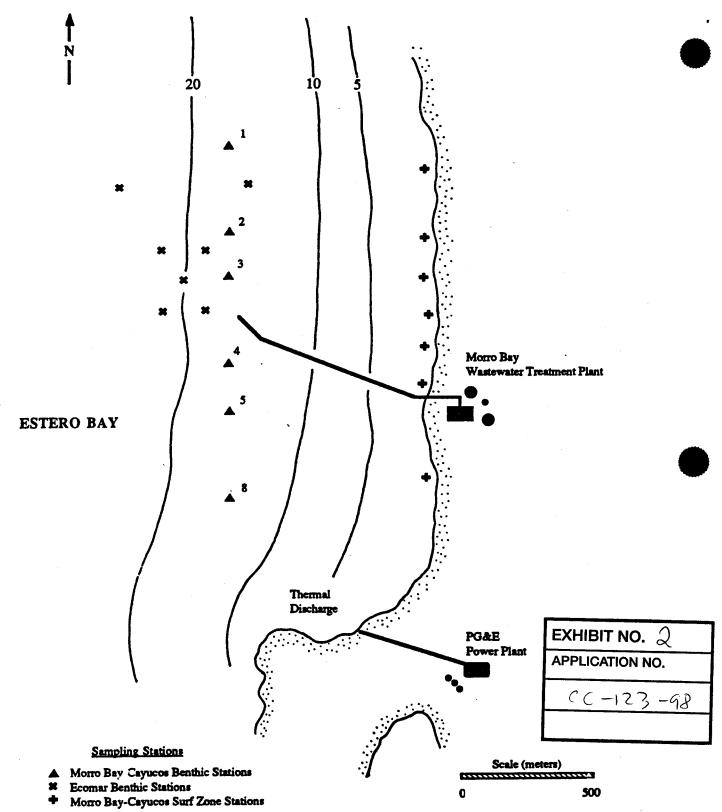


Figure 2. Morro Bay sampling locations for benthic and surf zone monitoring (depth contours in meters).

19

Description	Value
Outfall diameter, m (in)	0.69 (27)
Outfall length, m (ft) Land Ocean	207 (679) 1,449 (4,754)
Diffuser diameter, m (in)	0.69 (27)
Diffuser length, m (ft)	51.8 (170)
Angle of port orientation from horizontal, degrees	. 0
Port diameter, cm (in)	5.1 (2.0)
Orifice contraction coefficient	0.89
Vertical distance from mean low water to port, m (ft)	15.2 (50)
Number of ports open	28 (of 34)
Port spacing, m (ft) ^a	1.5 (5.0)
Design flow rate for each port ^b m ³ /sec (MGD)	0.0100 (0.228

TABLE 1. PHYSICAL CHARACTERISTICS OF THE MORRO BAY-CAYUCOS OUTFALL AND DIFFUSER

^a Ports are located on alternating sides of the pipe in 5-foot increments (10-foot increments on a single side).

^b This design flow rate per port for 34 ports results in a total flow of 0.340 m³/sec (7.76 MGD). The outfall design capacity is 0.358 m³/sec (8.16 MGD).

Source: Wastewater Treatment Plant Summary Report (Brown and Caldwell 1989a), Table 2-3, p.2-12.

EXHIBIT NO. 3	
APPLICATION NO.	
CC-123-98	

Chapter IVChapter IVChapter IV QUALITY REQUIREMENTS FOR WASTE* DISCHARGES (EFFLUENT LIMITATIONS)

This chapter sets forth the quality requirements for waste* discharge to the ocean*.

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

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

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

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

> Tables A & B OCEAN PLAN

EXHIBIT NO. 4	
APPLICATION NO.	
C(-123-98	

TABLE ATABLE ATABLE ATABLE A EFFLUENT LIMITATIONS

Limiting Concentrations

	Unit of Measurement	Monthly (30-day Average)	Weekly (7-day Average)	Maximum at any time
Grease and Oil Suspended Solids	mg/l	25	40 see below+	75
Settleable Solids	ml/l	1.0	1.5	3.0
Turbidity	NTU	75	100	225
pH	units		within limits	
•.			of 6.0 to 9.0	
			at all times	
Acute* Toxicity	TUa	1.5	2.0	2.5

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

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

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

EXHIBIT 4, P2

TABLE BTABLE BTABLE BTABLE B WATER QUALITY OBJECTIVES

		Lim	iting Concentration	ons
	Units of <u>Measurement</u>	6-Month Median	Daily Maximum	Instantaneous <u>Maximum</u>
OBJECTIVES FOR PROTECT	ION OF MARINE	E AQUATIC LIFI	Ξ	
Arsenic	μg/l	8	32	80
Cadmium	μg/l	1	4	10
Chromium (Hexavalent) (see below, a)	μg/l	2	8	20
Copper	μg/l	3	12	30
Lead	μg/1	2	8	20
Mercury	μg/l	0.04	0.16	0.4
Nickel	μg/l	5	20	50
Selenium	μg/l	15	60	150
Silver	μg/l	0.7	2.8	7
Zinc	μg/l	20	80	200
Cyanide (see below, b)	μg/l	1	4	10
Total Chlorine Residual (For intermittent chlorine sources, see below, c)	μg/l	2	8	60
Ammonia (expressed as nitrogen)	μg/l	600	2400	6000
Chronic* Toxicity	TUc		1	
Phenolic Compounds (non-chlorinated)	μg/l	30	120	300
Chlorinated Phenolics	μg/l	1	4	10
Endosulfan	μ <u>g</u> /l	0.009	0.018	0.027
Endrin	μg/l	0.002	0.004	0.006
HCH*	μg/l	0.004	0.008	0.012
Radioactivity				

Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30269 of the California Code of Regulations.

.

ExH. 4, p. 3

ŧ

Table B Continued

-

Table B Continued			
	30-day Average (µg/l) Decimal Notation Scientific Notation		
Chemical	Decimal Notation	Scientific Notation	
OBJECTIVES FOR PROTECTION OF	HUMAN HEALTH NONCAR	CINOGENS	
acrolein	220	2.2×10^2	
antimony	1,200	1.2×10^3	
bis(2-chloroethoxy) methane	4.4	4.4 x 10 ⁰	
bis(2-chloroisopropyl) ether	1,200	1.2 x 10 ³	
chlorobenzene	570	5.7 x 10 ²	
chromium (III)	190,000	1.9 x 10 ⁵	
di-n-butyl phthalate	3,500	3.5 x 10 ³	
dichlorobenzenes*	5,100	5.1 x 10 ³	
1,1-dichloroethylene	7,100	7.1 x 10 ³	
diethyl phthalate	33,000	3.3 x 10 ⁴	
dimethyl phthalate	820,000	8.2 x 10 ⁵	
4,6-dinitro-2-methylphenol	220	2.2 x 10 ²	
2,4-dinitrophenol	4.0	4.0 x 10 ⁰	
ethylbenzene	4,100	4.1 x 10 ³	
fluoranthene	15	1.5 x 10 ¹	
hexachlorocyclopentadiene	58	5.8 x 10 ¹	
isophorone	150,000	1.5 x 10 ⁵	
nitrobenzene	4.9	4.9 x 10 ⁰	
thallium	14	1.4 x 10 ¹	
toluene	85,000	8.5 x 10 ⁴	
1,1,2,2-tetrachloroethane	1,200	1.2 x 10 ³	
tributyltin	0.0014	1.4 x 10 ⁻³	
1,1,1-trichloroethane	540,000	5.4 x 10 ⁵	
1,1,2-trichloroethane	43,000	4.3 x 10 ⁴	

OBJECTIVES FOR PROTECTION OF HUMAN HEALTH -- CARCINOGENS

acrylonitrile	0.10	1.0 x 10 ⁻¹
aldrin	0.000022	2.2 x 10 ⁻⁵
benzene	5.9	5.9 x 10 ⁰
benzidine	0.000069	6.9 x 10-5
beryllium	0.033	3.3 x 10 ⁻²
bis(2-chloroethyl) ether	0.045	4.5 x 10 ⁻²
bis(2-ethylhexyl) phthalate	3.5	3.5 x 10 ⁰
carbon tetrachloride	0.90	9.0 x 10 ⁻¹
chlordane*	0.000023	2.3 x 10 ⁻⁵
chloroform	130	1.3 x 10 ²
DDT*	0.00017	1.7 x 10-4
1,4-dichlorobenzene	18	1.8 x 10 ¹
3,3'-dichlorobenzidine	0.0081	8.1 x 10 ⁻³

ExH. 4, p.4

Table B Continued	30-day Average (µg/l)	
Chemical	Decimal Notation	Scientific Notation
1,2-dichloroethane	130	1.3 x 10 ²
dichloromethane	450	4.5 x 10 ²
1,3-dichloropropene	8.9	8.9 x 10 ⁰
dieldrin	0.00004	4.0 x 10 ⁻⁵
2,4-dinitrotoluene	2.6	2.6 x 10 ⁰
1,2-diphenylhydrazine	0.16	1.6 x 10 ⁻¹
halomethanes*	130	1.3 x 10 ²
heptachlor*	0.00072	7.2 x 10-4
hexachlorobenzene	0.00021	2.1 x 10-4
hexachlorobutadiene	14	1.4 x 10 ¹
hexachloroethane	2.5	2.5 x 10 ⁰
N-nitrosodimethylamine	7.3	7.3 x 10 ⁰
N-nitrosodiphenylamine	2.5	2.5 x 10 ⁰
PAHs*	0.0088	8.8 x 10 ⁻³
PCBs*	0.000019	1.9 x 10 ⁻⁵
TCDD equivalents*	0.000000039	3.9 x 10 ⁻⁹
tetrachloroethylene	99	9.9 x 10 ¹
toxaphene	0.00021	2.1 x 10-4
trichloroethylene	27	2.7 x 10 ¹
2,4,6-trichlorophenol	0.29	2.9 x 10 ⁻¹
vinyl chloride	36	3.6 x 10 ¹

- a) Dischargers may at their option meet this objective as a total chromium objective.
- b) If a discharger can demonstrate to the satisfaction of the Regional Board (subject to EPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by Standard Methods 412F, G, and H (Standard Methods for the Examination of Water and Wastewater. Joint Editorial Board, American Public Health Association, American Water Works Association, and Water Pollution Control Federation. Most recent edition.).
- c) Water quality objectives for total chlorine residual applying to intermittent discharges not exceeding two hours, shall be determined through the use of the following equation:

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

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

ExH. 4, p. 5

Implementation Provisions for Table B

A. Calculation of Effluent Limitations

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

Ce = Co + Dm (Co - Cs) (1)

where:

- Ce = the effluent concentration limit,
- Co = the concentration (water quality objective) to be met at the completion of initial* dilution,
- Cs = background seawater concentration (see Table C below),
- Dm = minimum probable initial* dilution expressed as parts seawater per part wastewater.

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

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

TABLE C BACKGROUND SEAWATER CONCENTRATIONS (Cs)

Waste Constituent	<u>Cs (μg/l)</u>
Arsenic	3
Copper	2
Mercury	0.0005
Silver	0.16
Zinc	8

For all other Table B parameters, Cs = 0.

The six-month median shall apply as a moving median of daily values for any 180 day period in which daily values represent flow weighted average concentrations within a

ExH. 4, p.6

÷

,