

CALIFORNIA COASTAL COMMISSION

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Tu 15d**STAFF REPORT AND RECOMMENDATION****ON CONSISTENCY CERTIFICATION**

Consistency Certification No.	CC-3-98
Staff:	MPD-SF
File Date:	1/12/98
3 Months:	4/12/98
6 Months:	7/12/98
Commission Meeting:	3/11/98

APPLICANT: County Sanitation Districts of Orange County (CSDOC)

PROJECT

LOCATION: Fountain Valley and Huntington Beach Wastewater Reclamation and Treatment Plants, Orange County, and offshore waters approximately 4 miles offshore of the Santa Ana River mouth (Exhibits 1-4)

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 Waste Discharge Requirements

SUBSTANTIVE FILE DOCUMENTS:

1. CSDOC, RWQCB Order No. 989-5 and NPDES Permit No. CA0110604
2. Consistency Certifications for secondary treatment waiver renewals, CC-88-92 (City of Morro Bay) and CC-126-96 (Goleta Sanitary District).
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

EXECUTIVE SUMMARY

The County Sanitation Districts of Orange County (CSDOC) has submitted a consistency certification for the renewal of its EPA-issued secondary treatment waiver. Under the Clean Water Act, wastewater discharges from publicly owned treatment works (POTWs) are required to receive at least secondary treatment. 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 Clean Water Act requirements for full secondary treatment of wastewater discharges. Such a waiver is intended to result in the discharge of high quality, but less than full secondary-treated, wastewater effluent. Such a waiver is a federal license for an activity affecting land or water uses within the coastal zone, and thus requires Commission consistency review. The waiver would authorize CSDOC to continue to discharge effluent at less than full secondary treatment in terms of suspended solids, biochemical oxygen demand, and pH.

In reviewing past waiver renewal requests, the Commission has found applicable Coastal Act policy requirements, including those relating to water quality, marine resources, commercial and recreational fishing, and public access and recreation, to be met when adequate monitoring is in place and when EPA and the applicable RWQCB have determined a discharger's effluent to meet the applicable Clean Water Act and Ocean Plan requirements. EPA has conducted an independent Technical Evaluation of CSDOC's discharges. This evaluation concludes that the discharges would comply with the requirements of Section 301(h) of the Clean Water Act and with the California Ocean Plan. The RWQCB staff has also reviewed CSDOC's proposal and concluded that the discharges would comply with the California Ocean Plan. Furthermore, monitoring of past CSDOC discharges supports its claim that the discharges comply with secondary treatment waiver requirements and would not adversely affect marine resources. EPA's and the RWQCB's conclusions are contingent on CSDOC continuing to perform the stringent monitoring as required under Section 301(h). With the continued monitoring, the discharges would not adversely affect marine resources, and would be consistent with the water quality, marine resources, commercial and recreational fishing, and public access and recreation policies (Sections 30230, 30231, 30234, 30234.5, 30213, and 30220) of the Coastal Act.

STAFF SUMMARY AND RECOMMENDATION:

I. **Project Description.** Based on the provisions of Section 301(h) of the Clean Water Act, (33 U.S.C. Section 1311(h)), CSDOC has requested a waiver from the secondary treatment requirements contained in Section 301(b)(1)(B) of the Clean Water Act.. The waiver is being sought for ocean discharges from CSDOC's Fountain Valley Reclamation Plant #1 and

Huntington Beach Treatment Plant #2. The waiver would allow CSDOC to continue to discharge of wastewater receiving less-than-secondary treatment into the Pacific Ocean. CSDOC has been operating under a Section 301(h) modified NPDES permit that expired February 21, 1990, but which, pursuant to 5 U.S.C §558, has been "administratively extended" by EPA since that time.

CSDOC operates two treatment facilities (Exhibits 2-3). The Fountain Valley facility (Reclamation Plant #1) has capacity for 48 million gallons per day (MGD) of primary and 66 MGD of secondary. The Huntington Beach facility (Treatment Plant #2) located near the mouth of Santa Ana River has the capacity for 186 MGD in primary and 75 MGD in secondary. Since the application CSDOC has added another 60 MGD of primary to Plant #1 and is in the process of adding another 34 MGD of secondary capacity to plant #1 and another 15 MGD of secondary at Plant #2. In practice the plants generally operate to create a 50/50 mix of primary and secondary treated sewage.

Treated sewage from both plants is conveyed through an ocean outfall which discharges in 195 feet (60 m) of water, approximately 4 miles (6,523 m) offshore from the mouth of the Santa Ana River (Exhibit 4). The outfall terminates in an L-shaped multi-port diffuser approximately one mile (1,829 m) in length. There is an emergency discharge located 1.3 miles (2,114 m) offshore in approximately 65 feet (19.8 m) of water. This outfall has been used twice since 1985 for a total of 11 hours while maintenance and repair work was being performed on the main outfall. A third discharge, located on the Santa Ana River and designed for extreme emergencies, has never been used.

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.

According to EPA, CSDOC has demonstrated through past performance the ability to meet the 75% removal requirement contained in the California Ocean Plan (Ocean Plan, Table A) and typically achieves removal efficiencies greater than 80% for suspended solids. EPA states the revised NPDES permit will require compliance with the 75% removal requirement of the COP. While the Ocean Plan does not contain a specific effluent limit for BOD or DO (dissolved oxygen), the Ocean Plan contains provisions that 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," and that "the mean annual dissolved oxygen concentration shall not be less than 7.0 mg/l and the minimum not less than 5.0 mg/l at any time, due to the discharge of oxygen-demanding wastes". With respect to pH, CSDOC is not requesting a variance.

CSDOC estimates projected flows to increase to 295 MGD by the year 2003. Based on past performance (1990 and 1995), the annual average effluent concentration ranged from 43 to 46 mg/l for SS and from 72 to 78 mg/l for BOD. The removal efficiency ranged from 80% to 82% for SS and from 65% to 72% for BOD. In terms of mass emissions, suspended solids loadings have ranged from 14,000 to 17,500 metric tons per year (MT/yr.) since 1985.

II. Background. 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. This set of waivers included Orange County's (CSDOC's), which the Commission had received on September 20, 1979. 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 this 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: CSDOC, Morro Bay and Goleta. In 1989, CSDOC was the first applicant to apply to the Commission for a Section 301(h) waiver renewal (its original Section 301(h) waiver was granted by EPA/RWQCB in 1985). The Commission held a workshop on the issues raised, but deferred action pending completion of EPA's Technical Evaluation of CSDOC's application. On January 12, 1993, the Commission concurred with the City of Morro Bay's 301(h) waiver renewal, in 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, the Commission concurred with Goleta's Section 301(h) waiver renewal (CC-126-96).

III. Status of Local Coastal Program. The standard of review for federal consistency certifications is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal program (LCP) of the affected area. If 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 a majority but not all of the Orange County LCP segments have been certified by the Commission and incorporated into the CCMP.

IV. Applicant's Consistency Certification. CSDOC 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. Procedures. The federal consistency regulations implementing the CZMA include the following provision:

Section 930.51:

(a) The term "Federal license or permit" means any authorization, certification, approval, or other form of permission which any Federal agency is empowered to issue to an applicant.

(b) The term also includes the following types of renewals and major amendments which affect the coastal zone:

(1) Renewals and major amendments of Federal license and permit activities not previously reviewed by the State agency;

(2) Renewals and major amendments of Federal license and permit activities previously reviewed by the State agency which are filed after and are subject to management program amendments not in existence at the time of original State agency review; and

(3) Renewals and major amendments of Federal license and permit activities previously reviewed by the State agency which will cause coastal zone effects substantially different than those originally reviewed by the State agency.

EPA considers the activity before it to be the renewal of a previously issued waiver. However, for purposes of the Commission's review of the waiver under the Coastal Zone Management Act, the standard of review for the Commission is based on subsection (b)(1) above (as opposed to subsection (b)(3)), for two reasons: (1) based on the Commission's original "neutral" position on the original Orange County waiver (discussed further on page 4 above), the Commission has not previously reviewed CSDOC's discharges under the applicable Coastal Act policies; and (2) in any event, the proposed discharges include an expansion of overall volumes of discharges compared to the originally-authorized discharges, thus constituting a potential new impact not previously reviewed.

VI. Staff Recommendation:

The staff recommends that the Commission adopt the following motion:

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

VI. Findings and Declarations:

The Commission finds and declares as follows:

A. Water Quality/Marine Resources/Fishing/Recreation.

1. **Regulatory Framework.** Treated municipal wastewater for outfalls beyond the state's 3-mile limit is discharged to the Pacific Ocean under NPDES permits issued jointly by the EPA and the applicable RWQCB (Regional Water Quality Control Board). These two agencies administer 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 pages 12-14), 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 pages 8-10).

The State of California (through the SWRCB and RWQCBs) administers an approved NPDES permit program and issues permits for discharges to waters within State jurisdiction. Authority to grant a waiver and issue a modified NPDES permit under Section 301(h) of the Act is, however, reserved to the Regional Administrator of the EPA. 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, both 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) thereof, which provide both specific numerical standards for pollutants, as well as general standards for protection of marine biological productivity. These standards are described and summarized below.

a. Clean Water Act/Section 301(h). Implementation of the Clean Water Act in California, for the most part, has been delegated to the applicable RWQCB for issuance of NPDES permits. Under an MOA between EPA and the State of California, NPDES permits for outfalls beyond 3 miles and for secondary treatment waivers 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 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 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. 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):

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

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;

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;

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.*

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

General requirements in the Ocean Plan (Chapter III) 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 (Chapter IV) 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.

(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.

The Coastal Act also contains policies protecting commercial and recreational fishing. Aside from the provisions in Section 30230 (quoted above), 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.

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

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

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

Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, regional commission, local government, or port governing body from exercising the regulatory controls over development

pursuant to this division in a manner necessary to carry out the provisions of this division.

Section 13142.5 of the Water Code 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. EPA and RWQCB's Analysis of CSDOC's Discharges. EPA has conducted a technical evaluation which analyzed CSDOC's compliance with the 301(h) criteria. EPA's Technical Evaluation concluded:

SUMMARY OF FINDINGS

Based upon review of the data, references, and empirical evidence furnished in the 1989 application, the associated Technical Review Report (TRR; Tetra Tech, 1995), monitoring reports, and supplementary information supplied by CSDOC, the EPA Region 9 makes the following findings with regard to compliance with the statutory and regulatory criteria:

- 1. The applicant's proposed discharge will comply with the California Ocean Plan water quality standards for suspended solids and dissolved oxygen, and pH. [Section 301(h)(1), 40 CFR 125.61].*
- 2. The applicant's proposed discharge will not adversely impact public water supplies or interfere with the protection and propagation of a balanced,*

indigenous population of fish, shellfish, and wildlife. [Section 301(h)(2), 40 CFR 125.62].

3. An extensive monitoring program was developed as part of the permit in 1985. The revised monitoring program, developed in coordination with EPA and the Santa Ana Regional Board, includes core monitoring requirements and associated scientific studies designed to study the effect of the proposed discharge. [Section 301(h)(3), 40 CFR 125.63].

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

5. The applicant has an acceptable pretreatment program that was originally approved by EPA January 1984, and amended August 1989 and February 1992. [Section 301(h)(5), 40 CFR 125.66 and 125.68].

6. The applicant has provided a letter of intent (dated November 3, 1995) regarding their intent to comply with the urban area pretreatment requirements specified in the Clean Water Act, as amended, through the development of local limits as needed to fulfill the requirements. [Section 301(h)(6), 40 CFR 125.65].

7. The applicant has proposed an acceptable schedule of activities intended to limit entrance of toxic pollutants from nonindustrial sources into the treatment works as part of their pretreatment program. [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 five-day biochemical oxygen demand (BOD) and suspended solids; and after initial dilution 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 December 8, 1997, the Santa Ana Regional Water Quality Control Board provided a preliminary evaluation regarding compliance with water quality standards. The letter states that "monitoring data has not indicated any violations of receiving water limitations, for any parameters, of the

Ocean Plan" and that their information indicates that the applicant is "capable of complying with State law, including water quality standards identified in the California Ocean Plan and the Water Quality Control Plan for the Santa Ana River Basin, under existing and planned future flow rates". Issuance of final waste discharge requirements will constitute the State's certification and concurrence under 40 CFR 124.54.

Based on these findings, EPA concluded:

CONCLUSION

It is concluded that the applicant's proposed discharge will comply with the requirements of section 301(h) and 40 CFR Part 125, subpart G, as stated above.

RECOMMENDATION

It is recommended that the applicant be allowed to retain the 301(h) variance in accordance with the above findings, contingent upon the satisfaction of the following conditions, and that a National Pollutant Discharge Elimination System (NPDES) Permit be renewed in accordance with the applicable provisions of 40 CFR Parts 122-125. The applicant's renewal of a section 301(h) variance is contingent upon:

- 1. The implementation of the revised monitoring program upon issuance of the renewed 301(h) modified permit (40 CFR 125.63).*
- 2. The California Coastal Commission determination that the applicant's proposal is consistent with the relevant State Coastal Zone Program [40 CFR 125.59(b)(3)].*
- 3. Findings from the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that operation of the discharge will not adversely impact threatened or endangered species or critical habitat pursuant to the Endangered Species Act [40 CFR 125.59(b)(3)].*
- 4. Final concurrence from the Santa Ana Regional Water Quality Control Board on the approval of a section 301(h) variance [40 CFR 125.59(i)(2)].*

EPA also stipulated that the NPDES permit include, in addition to all applicable terms and conditions required by the 40 CFR Part 122, the following terms and conditions specific to Section 301(h):

- 1. Final effluent limitations (including flows, concentrations and loadings) in accordance with the terms and conditions of this [Draft NPDES permit] document.*
- 2. A schedule for the development and implementation of the revised monitoring program in accordance with the terms and conditions of this [Draft NPDES permit] document.*
- 3. Reporting requirements in accordance with 40 CFR 125.67(d). These include reporting the monitoring results at the prescribed frequency in the approved monitoring program.*

Regarding compliance with California Ocean Plan policies, EPA's Technical Evaluation states:

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

A. Suspended Solids. ...

Summary of Suspended Solids. The applicant has demonstrated through past performance the ability to meet effluent limitations for suspended solids and turbidity established by the COP. Limits for suspended solids and turbidity will be included in the revised NPDES permit to ensure continued compliance. EPA concludes that these limits will be sufficient to ensure compliance with the ambient water quality standard for transmissivity.

B. Dissolved Oxygen

The COP does not have an effluent limit for BOD. The COP provides that 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". In addition, the Basin Plan states that "the mean annual DO concentration shall not be less than 7.0 mg/l and the minimum not less than 5.0 mg/l at any time, due to the discharge of oxygen-demanding wastes".

The potential for outfall-related DO depressions was evaluated with respect to 1) initial dilution 2) BOD exertion in the farfield 3) steady-state sediment oxygen demand and 4) oxygen demand due to sediment resuspension. The procedures for making these calculations are detailed in EPA's 301(h) Technical Support Document (EPA, 1982, 1994). ...

- 5. Conclusions on Dissolved Oxygen. DO depressions associated with the outfall are not likely to exceed the COP standards of 10%. The maximum oxygen*

depression upon initial dilution is 0.03 mg/l, the maximum DO due to BOD is 0.06 mg/l, and the maximum DO depression due to steady-state oxygen demand is 0.35 mg/l. Additively, these represent a 0.44 mg/l depression, which is a relatively small change in magnitude. The outfall-related DO demand would only result in changes greater than 10% when ambient DO concentrations are naturally low (i.e., less than 4.4 mg/l) as is the case during periods of upwelling. The worst-case analysis of DO demand due to sediment resuspension results in a depression of less than 0.87 mg/l. This would only occur in the highly unlikely event of an instantaneous resuspension of all the organic material that has accumulated over a 90-day period. The DO demand associated with sediment resuspension is not added to the other sources of DO demand discussed above since conditions capable of resuspending such a massive amount of sediment would almost certainly be associated with higher initial dilutions.

The magnitude of these depressions are small relative to the range of natural variation in DO concentrations. Based on these analyses and a review of the dischargers monitoring reports (CSDOC, 1985 - 1994), EPA concludes that the discharge currently meets (and will continue to meet through the end of the permit period) the COP dissolved oxygen standard. The State may comment on these conclusions during the 401 certification and concurrence on the waiver.

C. pH Compliance.

The applicant has not requested a variance for pH. The COP states that "pH shall not be changed more than 0.2 units from that which occurs naturally." The permit limits for effluent pH are 6.5 to 9.0 pH units. As currently operated the plant effluent pH is between 7.1 and 7.6 pH units. Using the chart presented in EPA's Technical Support Document (EPA, 1982), the applicant predicted potential shifts in pH up to 0.2 pH units. EPA modeled effluent discharges ranging from 6 to 9 pH units and concluded that the maximum change in receiving water following initial dilution would be 0.03 pH units.

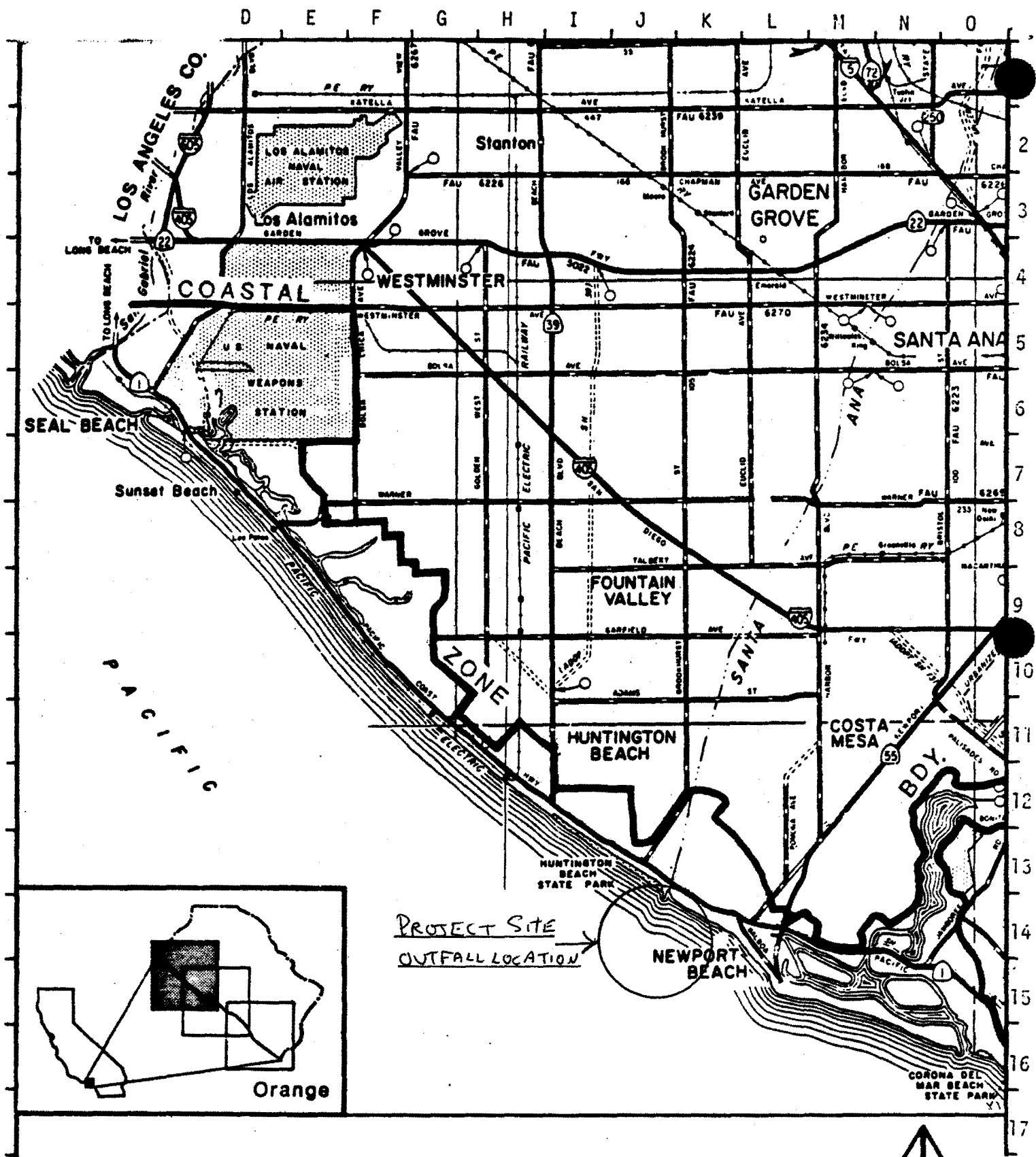
D. Conclusions on Compliance with Applicable Water Quality Standards.

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.

The RWQCB staff has also reviewed the proposed waiver and has published a draft waste discharge order/NPDES permit, which will be jointly issued by the RWQCB and EPA. The two agencies have scheduled a March 6, 1998, public hearing on the order/NPDES permit, to hear and consider any public comments on the matter. In a letter dated December 8, 1997, the RWQCB staff stated (Exhibit 5):

Information in our files indicates that CSDOC is capable of complying with State law, including water quality standards identified in the California Ocean Plan and the Water Quality Control Plan for the Santa Ana River Basin, under existing and planned future flow rates. Monitoring data has not indicated any violations of the receiving water limitations, for any parameters, of the Ocean Plan.

3. Commission Conclusion. In reviewing past waiver renewal requests (see following section of this report), the Commission has found Coastal Act water quality, marine resources, commercial and recreational fishing, and public access and recreation policies to be met when adequate monitoring is in place and when EPA and the applicable RWQCB have determined a discharger's effluent to meet the applicable Clean Water Act and Ocean Plan requirements. This is in part due to the fact that the Clean Water Act and Ocean Plan requirements summarized above require a similar level of resource protection as that reflected in the policies of the Coastal Act. EPA has conducted an independent Technical Evaluation of CSDOC's discharges. This evaluation concludes that the discharges would comply with the requirements of Section 301(h) of the Clean Water Act and with the California Ocean Plan. The RWQCB staff has also reviewed CSDOC's proposal and concluded that the discharges would comply with the California Ocean Plan. These conclusions are contingent on CSDOC continuing to perform stringent monitoring as required under Section 301(h). Monitoring of the biological effects of past CSDOC discharges, as well as the continued monitoring that must occur under its NPDES permit, support its assertion that its discharges will comply with Clean Water Act secondary treatment waiver requirements and other water quality standards, and would not adversely affect marine resources. In reviewing all available evidence, the Commission agrees with EPA and the RWQCB that, with the continued extensive monitoring provisions as being required by EPA and the RWQCB, the discharges would not adversely affect marine resources. The Commission therefore concludes that the discharges would be consistent with the applicable water quality provisions, 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. This conclusion is based on CSDOC's commitment to continue to monitor and report the effects of the discharges.



County of Orange

ATTACHMENT "A"

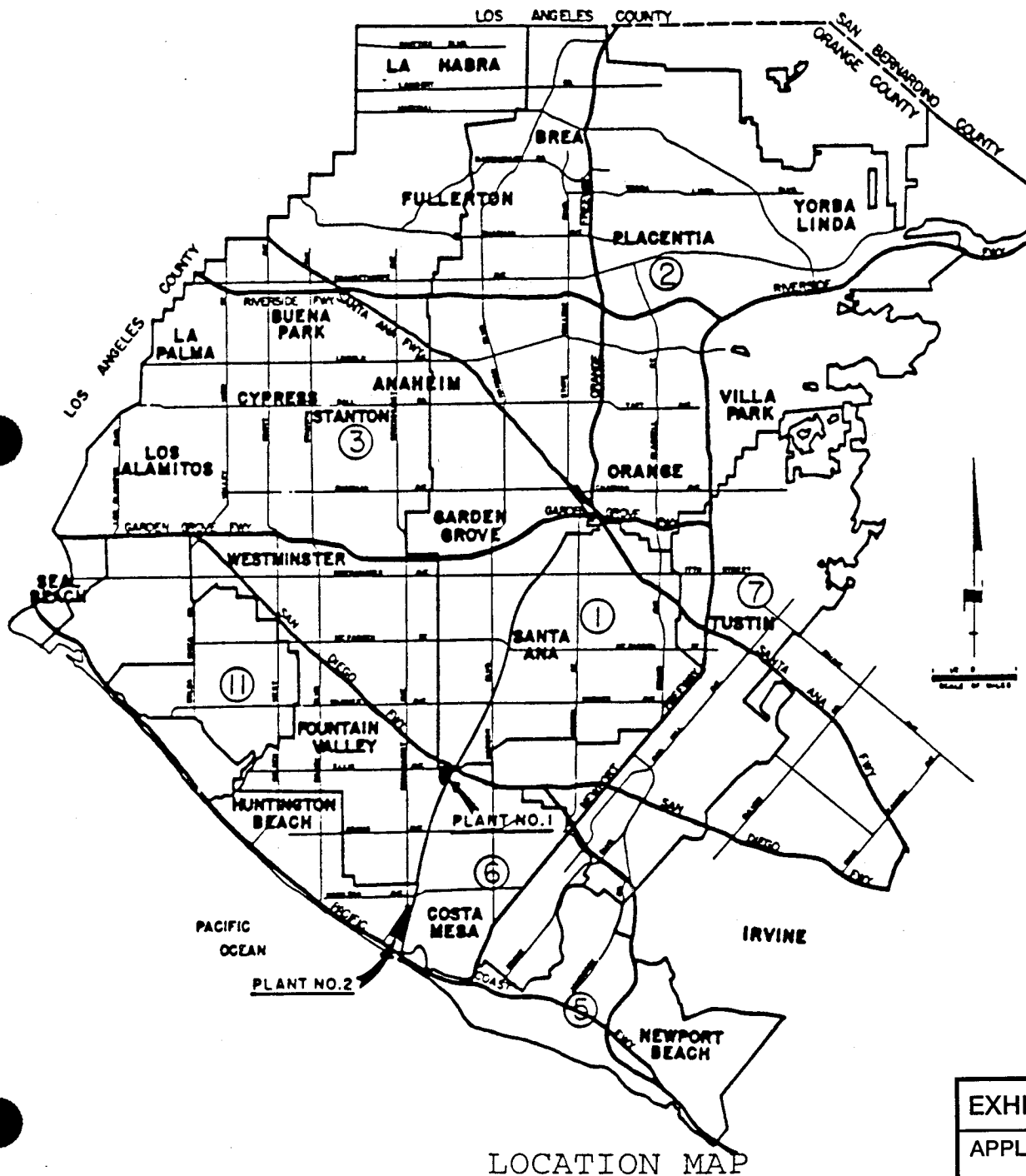
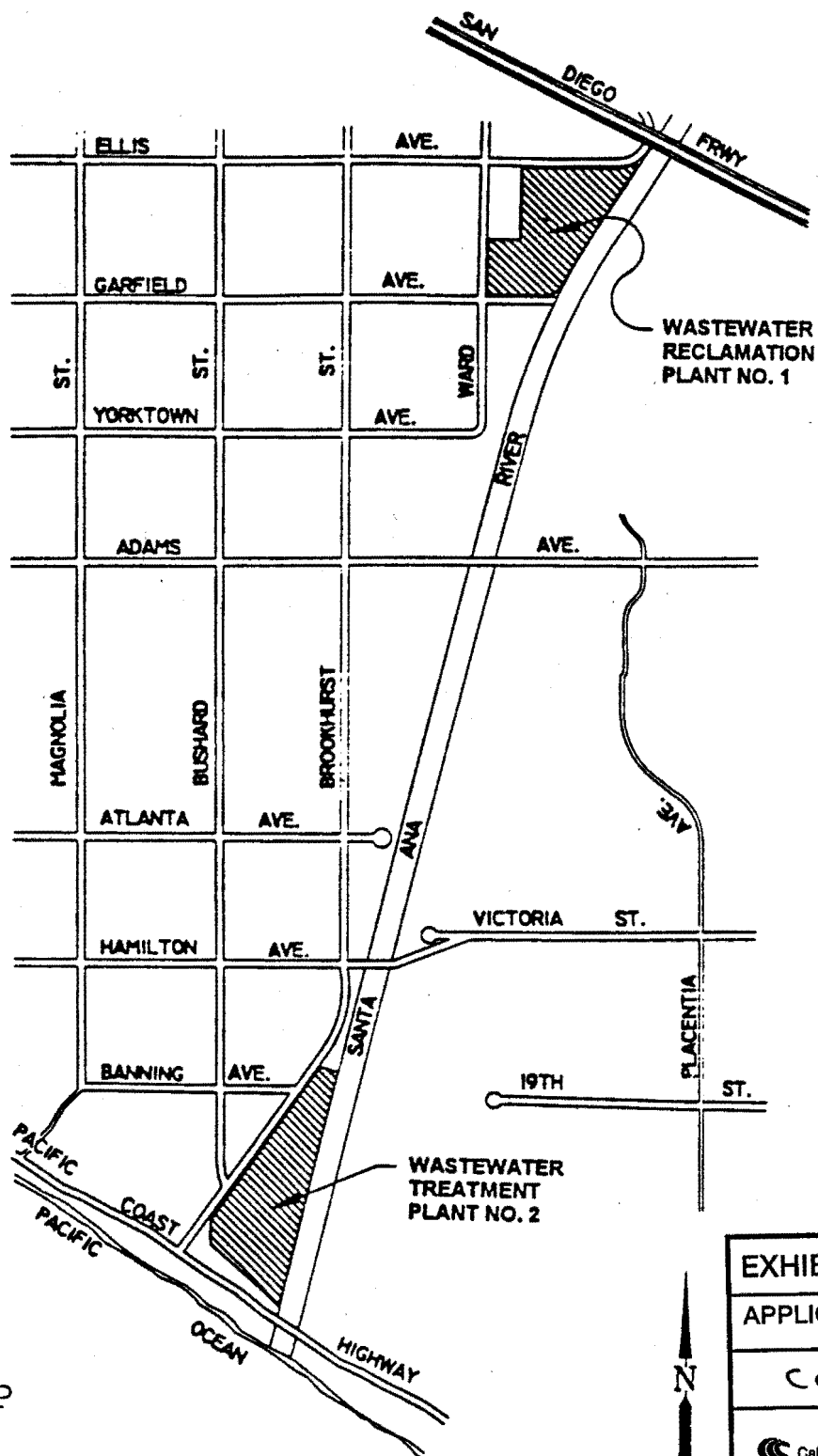


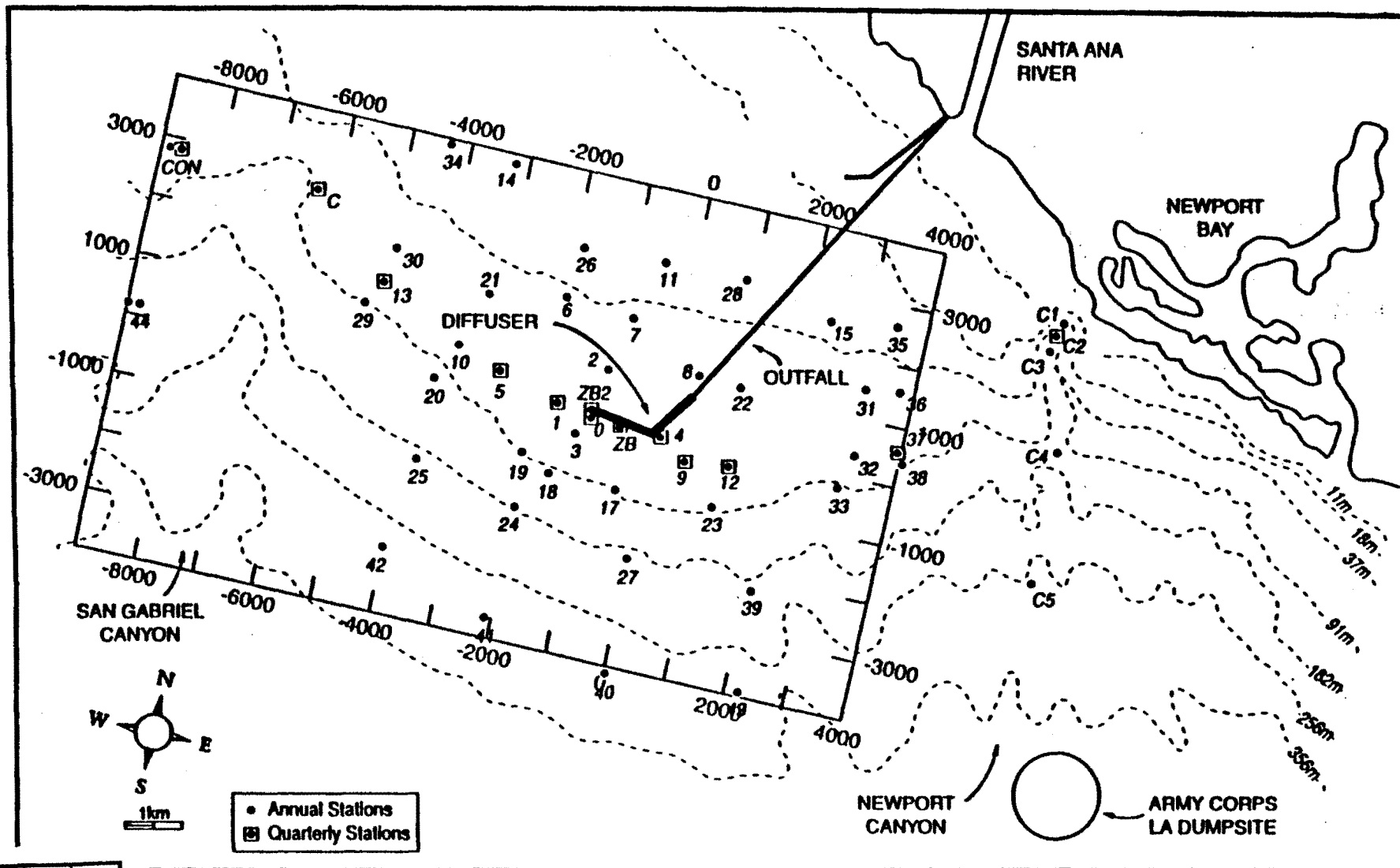
EXHIBIT NO. 2
APPLICATION NO.
CC-3-98
California Coastal Commission

Attachment "A" (cont'd)



LOCATION MAP

EXHIBIT NO. 3
APPLICATION NO.
CC-3-98
California Coastal Commission



2. Station locations of the annual and quarterly sediment and benthic infauna sampling surveys, 1985-89 (Source: Figure 5.2 County Sanitation Districts of Orange County, CA 1989).

EXHIBIT NO. 4

APPLICATION NO.

CC-3-9P



Pete Wilson
Governor

California/EPA

December 8, 1997

California
Regional Water
Quality Control
Board - Santa
Ana Region

Alexis Strauss, Acting Director
Water Division
U. S. Environmental Protection Agency
Region IX, WTR-1
75 Hawthorne Street
San Francisco, CA 94105-3901

COUNTY SANITATION DISTRICTS OF ORANGE COUNTY - WATER QUALITY
STANDARDS CERTIFICATION

Dear Ms. Strauss:

This is in response to your request for our determination as to whether the continued discharge of wastewater to the ocean by the County Sanitation Districts of Orange County (CSDOC), pursuant to the terms of a modified NPDES permit under Section 301(h) of the Clean Water Act, will be in compliance with State law.

Information in our files indicates that CSDOC is capable of complying with State law, including water quality standards identified in the California Ocean Plan and the Water Quality Control Plan for the Santa Ana River Basin, under existing and planned future flow rates. Monitoring data has not indicated any violations of the receiving water limitations, for any parameters, of the Ocean Plan.

We also have no information to indicate that the discharge will have any effect on any other point or non-point source discharges.

This letter can be considered our preliminary evaluation regarding compliance with water quality standards. Issuance of final waste discharge requirements will constitute the State's certification and concurrence under 40 CFR 124.54.

Should you have any questions, please call me at (909) 782-3284, or Gary Stewart of my staff at (909) 782-4379.

Sincerely,

Gerard J. Thibeault
Executive Officer

cc: CSDOC - Nancy Wheatley

EXHIBIT NO.	5
APPLICATION NO.	
CC-3-98	
California Coastal Commission	