

**STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
81 Higuera Street, Suite 200  
San Luis Obispo, CA 93401-5427**

**WASTE DISCHARGE REQUIREMENTS ORDER R3-2002-0083  
NPDES NO. CA 0048551**

For

**MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY  
WASTEWATER TREATMENT SYSTEM  
MONTEREY COUNTY**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Regional Board), finds that:

**DISCHARGER**

1. The Monterey Regional Water Pollution Control Agency (hereafter Discharger) operates a wastewater collection, treatment, transport, and disposal system to provide service to the sewered portions of northern Monterey County. The Facility is located at 11481 Del Monte Boulevard, Marina, CA 93933.

**LOCATION**

2. The Monterey Regional Wastewater Treatment Plant is located on property owned by the Discharger in Monterey County (Section, MD B&M), as shown on Attachment "A" of this Order. The collection system and pump stations are also shown on Attachment A.

**TRIBUTARY SEWERING AGENCIES**

3. The Cities of Monterey, Pacific Grove, Seaside, Del Rey Oaks, Sand City, and Salinas, the Marina Coast Water District, the Boronda, Castroville, and Moss Landing County Sanitation Districts retain ownership and direct responsibility for wastewater collection and transport systems up to the point of discharge into interceptors owned and operated by the Discharger. These local sewerage agencies are regulated by the

General Waste Discharge Requirements for Local Sewage Collection Agencies Tributary to Monterey Regional Wastewater Treatment Plant Order No. R3-2002-0078. The General Order requires the sewer agencies to prevent sanitary sewer overflows and restrict or prohibit the volume, type, or concentration of wastes added to the system.

4. It is incumbent upon the Discharger and the local sewerage agencies to protect the environment to the greatest degree possible and ensure their local collection systems and treatment system are properly protected and utilized.

**PURPOSE OF THE ORDER**

5. An application for authorization to discharge wastes pursuant to the National Pollutant Discharge Elimination System (NPDES) was submitted on March 5, 2002, by the Discharger. NPDES Permit No. CA0048551 was last modified by the Regional Board on December 5, 1997 (Order No. 97-83). Order No. 97-83 is been revised to include all current guidance and regulations applicable to the treatment plant operation and wastewater discharge from the Plant.

**OPERATION DESCRIPTIONS**

6. Secondary treatment of domestic and industrial wastewater consists of aerated grit removal, primary sedimentation, biological treatment via biotowers, and secondary clarification. Solid wastes (biosolids) are

- disposed at the Marina Landfill. Volatile wastes (methane gas) are reused at the treatment plant to generate electricity. Peak dry weather flow capacity is calculated at 29.6 million gallons per day (MGD), and peak wet weather flows are estimated at 75.6 MGD.
7. Treated municipal wastewater is discharged to the Pacific Ocean through the Discharger's 11,260-foot (3,432-m) outfall/diffuser system during the winter months. The outfall (36° 43' 40" N. Latitude, 121° 50' 14" W. Longitude) terminates in the Pacific Ocean in approximately 100 feet (30.5 m) of water. The minimum dilution of the outfall is 145:1 (parts seawater to effluent). The outfall location is shown on Attachment "A."
  8. Effluent is discharged to a portion of the Pacific Ocean designated as the Monterey Bay National Marine Sanctuary. The entire Monterey Bay was officially designated as a National Marine Sanctuary on September 15, 1992. The National Marine Sanctuaries Program is mandated by Title III of the Marine Protection, Research, and Sanctuaries Act of 1972. The Program protects areas of the marine environment which possess conservation, recreational, ecological, historical, research, educational, or aesthetic qualities of special national significance. The first priority of the Program is the long-term protection of resources within a sanctuary. The Monterey Bay Sanctuary has been recognized for its unique and diverse biological and physical characteristics.
  9. The Discharger's sanitary sewer system collects wastewater using sewers, pipes, pumps, and/or other conveyance systems and directs this raw sewage to the wastewater treatment plant. A "sanitary sewer overflow" is defined as a discharge to ground or surface water from the sanitary sewer system at any point upstream of the wastewater treatment plant. Temporary storage and conveyance facilities (such as wet wells, regulated impoundments, tanks, highlines, etc.) may be part of a sanitary sewer system and discharges to these facilities are not considered sanitary sewer overflows, provided that the waste is fully contained within these temporary storage/conveyance facilities.
  10. Sanitary sewer overflows consist of varying mixtures of domestic sewage, industrial wastewater, and commercial wastewater; this mixture depends on the pattern of land use in the sewage collection system tributary to the overflow. The chief causes of sanitary sewer overflows include grease blockages, root blockages, debris blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, storm or groundwater inflow/infiltration, lack of capacity, and contractor caused blockages.
  11. Sanitary sewer overflows often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen demanding organic compounds, oil and grease, and other pollutants. Sanitary sewer overflows can cause temporary exceedences of applicable water quality objectives, pose a threat to public health, adversely affect aquatic life, and impair the public recreational use and aesthetic enjoyment of surface waters in the area.
  12. The Discharger is expected to take all necessary steps to adequately maintain, operate, and prevent discharges from its sanitary sewer collection system. This Order requires the Discharger to prepare and implement an Infiltration/Inflow and Spill Prevention Program.
- #### WASTEWATER RECYCLING
13. The Discharger owns and operates a water recycling facility that can treat up to 29.6 million gallons per day (average dry weather flow) of secondary treated effluent. Treatment consists of chemical coagulation, flocculation, filtration, and disinfection. The primary user of the recycled water is the Monterey County Water Resources Agency (Water Agency). The Water Agency conveys the recycled water to approximately 12,100 acres of farmland in the Castroville area, Attachment B.
  14. In 1994, Regional Board issued Water Recycling Requirements Order No. 97-82 to the Water Agency to regulate uses of the recycled water from the Plant. Recycled water supplements irrigation water to local farmers

to minimize severe seawater intrusion in Northern Monterey County.

#### **CITY OF PACIFIC GROVE CLEAN BEACH INITIATIVE**

15. The City of Pacific Grove is the recipient of a State Water Board Clean Beach Initiative \$500,000 grant to divert dry weather storm water flow and routine storm drain flush flows to the city's sanitary system. The Discharger and the City of Pacific Grove agree that diverted storm drain flow will be treated at the Plant. High bacteria levels traced to urban runoff have caused area beach closures in the City. The goal of the program is to minimize impacts of urban runoff on area beaches. The maximum diverted flow volume is expected to be a minor portion of the Discharger's overall collection and treatment system design capacity.

#### **CALIFORNIA OCEAN PLAN**

16. The "Water Quality Control Plan -Ocean Waters of California" (2001 Ocean Plan) on became effective on December 3, 2001. The Ocean Plan contains water quality objectives and other requirements governing discharge to the Pacific Ocean. This Order implements the requirements in the Ocean Plan.

#### **REGIONAL BASIN PLAN**

17. The Water Quality Control Plan, Central Coastal Basin (Basin Plan), was revised and adopted by the Regional Board on September 8, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
18. Existing and anticipated beneficial uses of Monterey Bay and the Pacific Ocean in the vicinity of the discharger's outfall include:
- a. Water contact recreation;
  - b. Non-contact water recreation;
  - c. Industrial service supply;
  - d. Navigation;
  - e. Marine habitat;
  - f. Shellfish harvesting;
  - g. Ocean commercial and sport fishing;

- h. Rare, threatened, or endangered species; and,
- i. Wildlife habitat; and
- j. Preservation of rare, threatened and endangered species;
- k. Spawning, reproduction, and early development of some aquatic organisms

#### **STORM WATER MANAGEMENT**

19. Storm water that falls upon the facility and may come in contact with pollutants is routed to the headworks for treatment.

#### **MONITORING AND REPORTING PROGRAM**

20. The Discharger participates in the Regional Monitoring Program in the Monterey Bay National Marine Sanctuary by being apart of the Central Coast Long-Term Environmental Assessment Network. Monitoring and Reporting Program No. R3-2002-0083 reflects the Regional Monitoring Program.

#### **PRETREATMENT**

21. A Pretreatment Program is a regulatory program administered by the Discharger that implements National Pretreatment Standards. These standards are promulgated by the U.S. Environmental Protection Agency (hereafter USEPA) in accordance with Section 307 (b) and (c) of the federal Clean Water Act (hereafter CWA). This permit implements General Pretreatment Regulations of Codified Federal Regulation (CFR), at 40 CFR 403, dated January 28, 1981, as reference.

#### **ANTI-BACKSLIDING**

22. Order No. 97-83 contains technology-based limits for acute toxicity that were taken from the 1997 Ocean Plan. The 2001 Ocean Plan replaces the technology-based effluent limits for acute toxicity with a water quality-based objective and grants some dilution credit. The resulting limit for acute toxicity in this Order is a daily maximum of 4.65 TUa, which is slightly greater than the existing permit limit of 2.5 TUa. Monthly and weekly average limits for acute toxicity are removed in accordance with the 2001 Ocean Plan.

Because the technology-based limits are replaced by a water quality-based limit, these changes do not constitute backsliding.

The change in the acute toxicity limitation is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution No. 68-16. Any impact on existing water quality will be insignificant.

#### GENERAL FINDINGS

23. The USEPA and Regional Board classify this discharge as a major discharge.
24. Issuance of waste discharge requirements for this discharge is exempt from provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.
25. This Order is consistent with the requirements of the USEPA's Antidegradation Policy per 40 CFR 131.12.
26. A permit and the privilege to discharge waste into waters of the State is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and of the Clean Water Act (as amended or supplemented by implementing guidelines and regulations) and with any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act. Compliance with this Order should mitigate any potential changes in water quality resulting from the discharge of waste.
27. The Clean Water Enforcement and Pollution Prevention Act of 1999 (amendments to Water Code section 13385) became effective January 1, 2000. The Act requires the Regional Board to impose mandatory penalties for certain violations. Failure to comply with NPDES Permit effluent limitations and certain other requirements and conditions may result in significant enforcement action by the Regional Board.

28. On July 30, 2002, the Regional Board notified the Discharger and interested agencies and persons of its intent to revise portions of waste discharge requirements for the discharge, provided them with an opportunity to submit their written views and recommendations, and scheduled a public hearing.
29. In a public hearing on November 1, 2002, the Regional Board heard and considered all comments pertaining to the proposed revisions and found this Order consistent with the above findings.
30. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing.

**IT IS HEREBY ORDERED**, pursuant to authority in Sections 13263, 13377, and 13523 of the California Water Code, that the Monterey Regional Water Pollution Control Agency, its agents, successors, and assigns, may discharge waste from the Wastewater Treatment Plant providing they comply with the following:

[Permit conditions, definitions and methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge - Elimination System Permits," dated January 1985. Applicable paragraphs are referenced in paragraph E.3. of this Order.]

Requirements in this Order are provided with superscript as follows to indicate their origin:

- A -Title 40, Sections 122 & 133, Code of Federal Regulations.
- B -California Ocean Plan.

Requirements without superscript are based on staff's professional judgment.

#### A. DISCHARGE PROHIBITIONS

1. Discharge of wastewater at locations other than those listed below is prohibited:
  - a. Ocean outfall (36° 43' 40" N. Latitude, 121° 50' 14" W. Longitude); and,
  - b. Approved recycled water use sites authorized under valid water recycling

requirements issued or waived by the Regional Board.

## B. EFFLUENT LIMITATIONS

1. "Removal Efficiencies" for Total Non-Filterable Residue (Total Suspended Solids) and Carbonaceous Biochemical Oxygen Demand (CBOD) shall not be less than 85%<sup>A</sup>. In addition, effluent shall not exceed the following limitations:

**TABLE A - EFFLUENT LIMITATIONS**

Constituent	Units	Monthly (30-day) Average	Weekly (7-day) Average	Daily Maximum
CBOD, 5-day <sup>A</sup>	mg/l	25	40	85
	lbs/day	6172 <sup>1</sup>	9875 <sup>1</sup>	20983 <sup>1</sup>
Total Suspended Solids <sup>A</sup>	mg/l	30	45	90
	lbs/day	7406 <sup>1</sup>	11109 <sup>1</sup>	22218 <sup>1</sup>
Oil & Grease <sup>B</sup>	mg/l	25	40	75
	lbs/day	6172 <sup>1</sup>	9875 <sup>1</sup>	18515 <sup>1</sup>
Settleable Solids <sup>B</sup>	ml/l	1.0	1.5	3.0
Turbidity <sup>B</sup>	NTU	75	100	225
pH <sup>B</sup>	Units	--	--	6.0 - 9.0 at all times

<sup>1</sup> For flows less than 29.6 MGD, mass emission rates shall not exceed the "Maximum Allowable Mass Emission Rate."

2. Effluent shall not exceed the following Limits:

## B. PROTECTION OF MARINE AQUATIC LIFE

Constituents	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	µg/l	733	4237	11245
Cadmium	µg/l	146	584	1460
Chromium (Hex) <sup>1</sup>	µg/l	292	1168	2920
Copper	µg/l	148	1462	4090
Lead	µg/l	292	1168	2920
Mercury	µg/l	5.7675	23.2875	58.3275
Nickel	µg/l	730	2920	7300
Selenium	µg/l	2190	8760	21900
Silver	µg/l	79	385.6	998.8
Zinc	µg/l	1760	10520	28040
Cyanide	µg/l	146	584	1460
Total Chlorine Residual <sup>2</sup>	µg/l	292	1168	8760
Ammonia (expressed as nitrogen)	µg/l	87600	350400	876000
Acute Toxicity	Tu <sub>a</sub>	--	4.65	--
Chronic Toxicity	Tu <sub>c</sub>	--	146	--
Phenolic Compounds (nonchlorinated)	µg/l	4380	17520	43800
Chlorinated Phenolics	µg/l	146	584	1460
Endosulfan	ng/l	1314	2628	3942
Endrin	ng/l	292	584	876
HCH	ng/l	584	1168	1752
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.			

<sup>1</sup> Discharger may at their option meet this limitation as a total chromium limitation.

<sup>2</sup> Water quality objective 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  $\mu\text{g/l}$ ) to apply when chlorine is being discharged;

x = the duration of uninterrupted chlorine discharge in minutes.

### C. PROTECTION OF HUMAN HEALTH - NONCARCINOGENS

Constituent	Units	30-Day Average
Acrolein	$\mu\text{g/l}$	32120
Antimony	mg/l	175
Bis(2-chloroethoxy) methane	$\mu\text{g/l}$	642.4
Bis(2-chloroisopropyl) ether	mg/l	175
Chlorobenzene	$\mu\text{g/l}$	83220
Chromium (III)	mg/l	27740
di-n-butyl phthalate	mg/l	511
Dichlorobenzenes	mg/l	744
1,1-dichloroethylene	mg/l	1036
Diethyl phthalate	mg/l	4818
Dimethyl phthalate	mg/l	119720
4,6-dinitro-2-methylphenol	$\mu\text{g/l}$	32120
2,4-dinitrophenol	$\mu\text{g/l}$	584
Ethylbenzene	mg/l	598.6
Fluoranthene	$\mu\text{g/l}$	2190
Hexachlorocyclopentadiene	$\mu\text{g/l}$	8468
Isophorone	mg/l	21900
Nitrobenzene	$\mu\text{g/l}$	715.4
Thallium	$\mu\text{g/l}$	2044
Toluene	mg/l	12410
1,1,2,2-tetrachloroethane	mg/l	175.2
Tributyltin	ng/l	204.4
1,1,1-trichloroethane	mg/l	78840
1,1,2-trichloroethane	mg/l	6278

### D. PROTECTION OF HUMAN HEALTH - CARCINOGENS

Constituent	Units	30-Day Average
Acrylonitrile	$\mu\text{g/l}$	14.7
Aldrin	ng/l	3.212
Benzene	$\mu\text{g/l}$	861.4
Benzidine	$\mu\text{g/l}$	10.074
Beryllium	Ng/l	4818
bis(2-chloroethyl) ether	$\mu\text{g/l}$	6.57
Bis(2-ethylhexyl) phthalate	$\mu\text{g/l}$	511
Carbon tetrachloride	$\mu\text{g/l}$	131.4
Chlordane	ng/l	3.358
Chloroform	mg/l	18.98
DDT	ng/l	24.82
1,4-dichlorobenzene	$\mu\text{g/l}$	2628
3,3'-dichlorobenzidine	ng/l	1182.6
1,2-dichloroethane	mg/l	18.98
Dichloromethane	mg/l	65.7

Constituent	Units	30-Day Average
1,3-dichloropropene	µg/l	1299.4
Dieldrin	ng/l	5.84
2,4-dinitrotoluene	µg/l	379.6
1,2-diphenylhydrazine	µg/l	23.36
Halomethanes	mg/l	18.98
Heptachlor	ng/l	105.12
Hexachlorobenzene	ng/l	30.66
Hexachlorobutadiene	µg/l	2044
Hexachloroethane	µg/l	365
N-nitrosodimethylamine	µg/l	1065.8
N-nitrosodiphenylamine	µg/l	365
PAHs	ng/l	1284.8
PCBs	ng/l	2.774
TCDD equivalents	pa/l	0.5694
Tetrachloroethylene	µg/l	14454
Toxaphene	ng/l	30.66
Trichloroethylene	µg/l	3942
2,4,6-trichlorophenol	µg/l	42.34
Vinyl chloride	µg/l	5256

Notes: During any 24-hr period, the effluent mass emission rate shall not exceed the "Maximum Allowable Daily Mass Emission Rate." Violation of the "Instantaneous Maximum" or "Maximum Allowable Emission Rate" must be reported to the Regional Board within 24 hours. During any six-month period, the effluent mass emission rate shall not exceed the "Maximum Allowable Six-Month Median Mass Emission Rate."

Effluent limitations are based on California Ocean Plan criteria using a minimum initial dilution of 145:1. If actual dilution is found to be less than this value, it will be recalculated and the order revised. The chromium limit may be met as total chromium if the Discharger chooses.

3. Effluent daily dry weather flow shall not exceed a monthly average of 29.6 MGD (112,130 m<sup>3</sup>/day).
4. Effluent shall be essentially free of materials and substances that<sup>B</sup>:
  - a. float or become floatable upon discharge.
  - b. may form sediments which degrade benthic communities or other aquatic life.
  - c. accumulate to toxic levels in marine waters, sediments or biota.
  - d. decrease the natural light to benthic communities and other marine life.
  - e. materials that result in aesthetically undesirable discoloration of the ocean surface.
1. Discharge shall not cause the following water quality objectives to be violated in ocean waters upon completion of "initial dilution":
  - a. Body-Contact Standards - Within a zone bounded by the shoreline and a distance of 1000 feet from the shoreline or the 30-foot depth contour, whichever is farther from the shoreline, and in areas outside this zone used for body-contact sports, as determined by the Regional Board, but including all kelp beds, the following bacteriological objectives shall be maintained throughout the water column:
    - (1) The most probable number of total coliform organisms shall be less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of samples taken at any sampling station in any 30-day period may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).

### C. RECEIVING WATER LIMITATIONS<sup>B</sup>

(Receiving water quality is a result of many factors, some unrelated to the discharge. This permit considers these factors and is designed to minimize the influence of the discharge on the receiving water.)

(2) The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a geometric mean of 200 per 100 ml, and not more than ten percent of the total samples during any 60-day period shall exceed 400 per 100 ml.

## 2. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible.
- b. The discharge of "waste" shall not cause aesthetically undesirable discoloration of the ocean surface.
- c. "Natural light" shall not be "significantly" reduced at any point outside the "zone of initial dilution" as the result of the discharge of "waste".
- d. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
- e. Temperature of the receiving water shall not be altered to adversely affect beneficial uses.

## 3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not be depressed more than 10 percent from that which occurs naturally or fall below 5.0 mg/L as the result of the discharge of oxygen-demanding "waste" materials.
- b. The pH shall not be changed more than 0.2 units from that which occurs naturally and shall be within the range of 7.0 to 8.5 at all times.
- c. The dissolved sulfide concentrations of waters in and near sediments shall not be "significantly" increased above that present under natural conditions.
- d. The concentrations of substances set forth in Effluent Limitation No. B.2.a. shall not be increased in marine sediments to levels which would "degrade" indigenous biota.

- e. The concentration of organic materials in marine sediments shall not be increased to levels which would "degrade" marine life.
- f. Nutrient materials shall not cause objectionable aquatic growth or "degrade" indigenous biota.

## 4. Biological Characteristics

- a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be "degraded."
- b. The natural taste, odor, and color of fish, "shellfish," or other marine resources used for human consumption shall not be altered.
- c. The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

## 5. Radioactivity

- a. Discharge of radioactive "waste" shall not "degrade" marine life.

## 6. General Standards

- a. The discharge shall not cause deposition of visible sewage solids or other physical evidence of the waste discharge on beaches, rocks, or shorelines, and material of sewage origin shall not be visible in the water.
- b. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Board, as required by the Clean Water Act and regulations adopted thereunder.

## D. PRETREATMENT SPECIFICATIONS

1. The Discharger shall be responsible for the performance of all pretreatment requirements contained in 40 CFR 403 and shall be subject to enforcement actions, penalties, fines, and other remedies by the USEPA, or other appropriate parties, as provided in the CWA, as amended (33



- USA 1351 et seq.). The Discharger shall implement and enforce its Approved Publicly Owned Treatment Works (POTW) Pretreatment Program. Implementation of the Discharger's Approved POTW Pretreatment Program is hereby made an enforceable condition of this permit. USEPA may initiate enforcement action against an industrial user for non-compliance with applicable standards and requirements as provided in the CWA.
2. The Discharger shall enforce the requirements promulgated under Sections 307 (b), (c), & (d) and 402 (b) of the CWA. The Discharger shall cause industrial users subject to Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.
  3. The Discharger shall perform the pretreatment functions as required in 40 CFR Part 403, including, but not limited to:
    - i. Implement necessary legal authorities as provided in 40 CFR 403.8 (f)(1);
    - ii. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
    - iii. Implement the programmatic functions as provided in 40 CFR 403.8 (f)(2); and,
    - iv. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8 (f)(3).
  4. The Discharger shall submit annually a report to the USEPA - Region 9, the Regional Board, and the State Water Resources Control Board describing the Discharger's pretreatment activities over the previous twelve months. In the event that the Discharger is not in compliance with conditions or requirements of this permit affected by the pretreatment program, it shall also include reasons for non-compliance and a statement how and when it shall comply. This annual report is due by January 31 of each year and shall contain, but not be limited to, the contents described in the "Pretreatment Reporting Requirements" contained in the Monitoring and Reporting Program No. R3-2002-0083.

5. The Discharger shall comply, and ensure affected "indirect dischargers" comply with Paragraph No. D.1 of the "Standard Provisions and Reporting Requirements".

#### E. PROVISIONS

1. Order No. 97-83, "Waste Discharge Requirements for Monterey Regional Water Pollution Control Agency Wastewater System and Local Sewering Entities of the Cities of Monterey, Pacific Grove, Seaside, Del Rey Oaks, Sand City, and Salinas, Marina County Water District, Boronda, Castroville and Moss Landing County Sanitation Districts and U.S. Army at Fort Ord, Monterey County" adopted by the Regional Board on December 5, 1997 is hereby rescinded.
2. Discharger shall comply with "Monitoring and Reporting Program No. R3-2002-0083," or any amendments thereto, as ordered by the Executive Officer.
3. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January 1985 (also referred to as "Standard Provisions"). Paragraph (a) of item E.1. shall apply only if the bypass is for essential maintenance to assure efficient operation.
4. This Order expires November 1, 2007, and the Discharger must file Report of Waste Discharge in accordance with Title 23, Division 3 Chapter 9, of the California Code of Regulation, at least six months prior to that date, if the discharge will continue.
5. The Discharger shall conduct a Bacterial Assessment and take appropriate remedial action to control source(s), if the discharge consistently exceeds the Receiving Water Limitation C.1 or the following enterococcus densities:

Parameter	<u>Enterococcus Organism</u> (MPN/100 mL)
30-Day Geometric Mean*	24
6-Month Geometric Mean*	12

\*Geometric (or Log) Mean as defined in the Standard Provisions.

6. The Discharger shall conduct a Toxicity Reduction Evaluation (TRE), if the discharge consistently exceeds effluent toxicity limits. The TRE shall include all reasonable steps to identify the source(s) of toxicity. Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps necessary to reduce toxicity to the required level. If specific identifiable substances can be demonstrated as being rapidly rendered harmless upon discharge to the environment, but not as the result of dilution, analysis may be conducted after samples have been adjusted to remove the influence of those substances.


**F. INFILTRATION/INFLOW AND SPILL PREVENTION PROGRAM REQUIREMENTS**

The Discharger shall develop and implement an Infiltration/Inflow and Spill Prevention Program (Program). The Program shall be reviewed and updated as necessary by September 1, of every year.

1. The Program shall be developed in accordance with good engineering practices and shall address the following objectives:
    - a. identify infiltration and inflow sources that may affect treatment facility operation or possibly result in overflow or exceed pump station capacity; and,
    - c. identify, assign, and implement spill prevention measures and collection system management practices to ensure overflows and contribution of pollutants or incompatible wastes to Discharger's treatment system are minimized.
  2. The Discharger shall make a copy of the Program available upon request to a representative of the Regional Board.
  3. The Program shall provide a description of the collection and transport system, measures used to ensure proper operation, and other information necessary to determine compliance with these requirements. The Program shall include, at a minimum, the following items:
    - a. A map showing: collection system lines greater than 12 inches, pump stations, standby power facilities, surface water bodies (including discharge point(s) where pump station overflows may occur), storm drain inlets, and date of last revision.
- b. A narrative description of the following:
    - i. Line Flushing and Cleaning: Describe available equipment and projected schedule necessary to clean and flush entire system every two years, and assigned staff. Describe coordination with area plumbers to address introduction of incompatible wastes (root balls) during lateral cleaning and efforts to abate introduction of construction debris into the system.
    - ii. Visual System Inspection: Describe visual inspection methods (e.g., televising lines), replacement schedules, frequency, collection system length and assigned staff. Describe results and detail problem areas found. Inspection records shall be retained for five years.
    - iii. Inflow & Infiltration: Describe current and five year projected investigation methods (e.g., smoke testing), frequency, results, and efforts to reduce storm water inflows and sewer line ex-filtration. Inspection records shall be retained for five years.
    - iv. Preventive Repair and Replacement: Describe a projected schedule to eliminate sewage conveyance systems determined or projected to be structurally compromised. List each project or reach of conveyance to be replaced separately along with proposed start and estimated completion dates.
    - v. Pump Station Maintenance: Describe each pump station, location, flow monitoring (wet and dry weather), and the previous year's operational problems and overflows.
    - vi. Alternate Power Supply for Pump Station Operation: Describe alternate power supply for each pump station within the member entity's system.
  4. Fiscal Resources: The Program shall provide a description of fiscal resources necessary to ensure system operation. The Program shall include, at a minimum, the following items:

- a. Fee Structure: Quantification of current and five year projected sewer assessment fees necessary to implement the Program.
  - b. Available Fiscal Resources: Actual and five year projected budget expenses for staffing, operation and replacement of the collection system, including a description of a capital improvement or sinking fund to provide funding for item 6.e., below.
5. Personnel and Training: The Program shall provide a description of staffing available to ensure system operation. The Program shall include, at a minimum, the following items:
- a. Personnel: Identify specific individuals (and job titles) who are responsible for developing, implementing, and revising the Program. Provide an organizational chart of all staff, position, duties, and training received during the past year. Identify managers and provide a list of contacts with associated phone numbers.
  - b. Training: List the frequency of training and qualification of each employee. Periodic dates for training shall be identified.
6. Planning and Reporting: The Program shall provide a description of planning efforts and reporting of system operation. The Program shall include, at a minimum, the following items:
- a. Spill Response: Describe a plan, identify employees responsible and duties necessary to implement your response to spills. Identify posting, notification, and spill estimation efforts used.
  - b. Annual Reporting: List spills or system problems during the previous year, cleanups, amounts, location, and efforts to ensure similar spills or problems do not reoccur. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken. Inspections and maintenance activities shall be documented and recorded.
  - c. Offsite and Onsite Spill Alarms: Describe the current or proposed alarm system (or why unnecessary), central information location, staffing and response times for detecting spills from the system.
  - d. Wet Season Manhole Inspections: Describe or propose frequency to conduct inspections to detect line blockage during wet season flows to avoid system overflows, staffing, and available and projected equipment to ensure safe and effective inspections.
  - e. Capital Improvement - Describe a current and projected work plan.
  - f. Five Year Planning - Describe projected planning efforts.
  - g. 20 Year Planning - Describe long term planning efforts.
7. The Discharger shall provide a semiannual report, due in March 15 and September 15 of each year, describing program development and permit compliance over the previous six months. Reports shall be of sufficient content as to enable the Regional Board to determine compliance with requirements.

I, **Roger W. Briggs, Executive Officer**, do hereby certify the foregoing is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on November 1, 2002.

  
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Roger W. Briggs  
Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL  
BOARD  
CENTRAL COAST REGION**

**MONITORING AND REPORTING PROGRAM NO. R3-2002-0083  
NPDES No. CA0048551**

**FOR  
MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY  
WASTEWATER TREATMENT SYSTEM  
MONTEREY COUNTY**

**I. INFLUENT MONITORING**

The influent monitoring program shall be in accordance with Table I below:

**Table 1**

<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>	<b>Min. Analysis Frequency</b>
Daily Flow	Million Gallons	Metered	Daily
Instantaneous Flow	Million Gallons per Day	Metered	Daily
Maximum Daily Flow	Million Gallons per Day	Metered	Monthly
Mean Daily Flow	Million Gallons per Day	Calculated	Monthly
CBOD, 5-Day	mg/L	24 Hour Composite	Weekly
Total Suspended Solids	mg/L	24 Hour Composite	Weekly

**II. EFFLUENT MONITORING**

Representative effluent samples of the Ocean discharge shall be collected at the specified frequency after the last point of treatment. Measurement of Ocean Plan Table B toxic materials and the remaining "priority pollutants", except asbestos, in the effluent will be required under dry-weather conditions. Sampling frequency may be modified depending on detection of specific pollutants during the first year of monitoring. However, all Ocean Plan Table B constituents, and those "priority pollutants" and "pesticides" detected during the first year of the monitoring program, must be measured throughout the term of the permit unless and/or until sufficient verifiable data exist to show that they are no longer present in the effluent. The effluent monitoring program shall be in accordance with Table 2 below:

**Table 2**

<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>	<b>Min. Analysis Frequency</b>
Daily Flow	Million Gallons	Metered	Daily
Instantaneous Flow	Million Gallons per Day	Metered	Daily
Maximum Daily Flow	Million Gallons per Day	Metered	Daily
Chlorine Residual	mg/L	Grab	Daily
Chlorine Used	lbs/day	Recorded	Daily
Temperature	°F	--	Weekly
Settleable Solids	ml/l	Grab	Weekly
Grease and Oil	mg/L	Grab	Weekly
Total Suspended Solids	mg/L	24 Hour Composite	Weekly
CBOD, 5-Day	mg/L	24 Hour Composite	Weekly
pH	pH units	Grab	Weekly
Mean Daily Flow	Million Gallons per Day	Calculated	Monthly

Table 2 (cont.)

Parameter	Units	Sample Type	Min. Analysis Frequency
Ammonia (as N)	mg/L	Grab	Monthly
Urea	mg/L	Grab	Monthly
Silicate	mg/L	Grab	Monthly
Nitrate	mg/L	Grab	Monthly
*Acute Toxicity Concentration	TUa	24 Hour Composite	Quarterly(Jan/Apr/Jul/Oct)
**Chronic Toxicity Concentration	TUc	24 Hour Composite	Quarterly(Jan/Apr/Jul/Oct)
Total Phenolic Compounds	mg/L	Grab	Quarterly(Jan/Apr/Jul/Oct)
Total Sulfides	mg/L	Grab	Quarterly(Jan/Apr/Jul/Oct)

\* Compliance with acute toxicity objective (TUa) shall be determined using EPA's "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA/600/4-90/027F."

Acute Toxicity (TUa) = 100/96-hr LC 50. LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques. The Discharger shall use one of the approved test species identified in "EPA/600/490/027F"; however other approved test species in "EPA/600/4-90/027F" may be used with sufficient justification and approval by the Executive Officer.

If specific identifiable substances in wastewater can be demonstrated by the Discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \{\log(100 - S)\}/1.7$$

S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

\*\* Chronic Toxicity (TUc) = 100/NOEL. The No Observed Effect Level (NOEL) is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test to measure TUc. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results. The Discharger shall use one of the approved test species identified in "EPA/600/4-90/027F"; however other approved test species may be used with sufficient justification and approval by the Executive Officer.

**TABLE B POLLUTANTS- PROTECTION OF MARINE AQUATIC LIFE**

Parameter	Units	Sample Type	Min. Analysis Frequency
Arsenic	ug/l	Grab	Semi-annually (Apr/Oct)
Cadmium	ug/l	Grab	Semi-annually (Apr/Oct)
Chromium (Total)	ug/l	Grab	Semi-annually (Apr/Oct)
Copper	ug/l	Grab	Semi-annually (Apr/Oct)
Lead	ug/l	Grab	Semi-annually (Apr/Oct)
Mercury	ug/l	Grab	Semi-annually (Apr/Oct)
Nickel	ug/l	Grab	Semi-annually (Apr/Oct)
Selenium	ug/l	Grab	Semi-annually (Apr/Oct)
Silver	ug/l	Grab	Semi-annually (Apr/Oct)
Zinc	ug/l	Grab	Semi-annually (Apr/Oct)
Cyanide	ug/l	Grab	Semi-annually (Apr/Oct)
Phenolic Compounds (non-chlorinated)	ug/l	Grab	Semi-annually (Apr/Oct)
Chlorinated Phenolics	ug/l	Grab	Semi-annually (Apr/Oct)
Endosulfan	ng/L	Grab	Semi-annually (Apr/Oct)
Endrin	ng/L	Grab	Semi-annually (Apr/Oct)
HCH	ng/L	Grab	Semi-annually (Apr/Oct)
Radioactivity	pci/L	Grab	Semi-annually (Apr/Oct)

**TABLE B POLLUTANTS - PROTECTION OF HUMAN HEALTH- NONCARCINOGENS**

Parameter	Units	Sample Type	Min. Analysis Frequency
Acrolein	ug/L	Grab	Semi-annually (Apr/Oct)
Antimony	mg/L	Grab	Semi-annually (Apr/Oct)
(2-chloroethoxy) methane	ug/L	Grab	Semi-annually (Apr/Oct)
(2-chloroisopropyl) ether	mg/L	Grab	Semi-annually (Apr/Oct)
Chlorobenzene	ug/L	Grab	Semi-annually (Apr/Oct)
Chromium (III)	mg/L	Grab	Semi-annually (Apr/Oct)
Di-n-butyl phthalate	mg/L	Grab	Semi-annually (Apr/Oct)
Dichlorobenzenes	mg/L	Grab	Semi-annually (Apr/Oct)
1,1-Dichloroethylene	mg/L	Grab	Semi-annually (Apr/Oct)
Diethyl phthalate	mg/L	Grab	Semi-annually (Apr/Oct)
Dimethyl phthalate	mg/L	Grab	Semi-annually (Apr/Oct)
4,6-Dinitro-2-methyl phenol	ug/L	Grab	Semi-annually (Apr/Oct)
2,4-Dinitrophenol	ug/L	Grab	Semi-annually (Apr/Oct)
Ethylbenzene	mg/L	Grab	Semi-annually (Apr/Oct)
Fluoranthene	mg/L	Grab	Semi-annually (Apr/Oct)
Hexachlorocyclopentadiene	ug/L	Grab	Semi-annually (Apr/Oct)
Isophorone	ug/L	Grab	Semi-annually (Apr/Oct)
Nitrobenzene	ug/L	Grab	Semi-annually (Apr/Oct)
Thallium	ug/L	Grab	Semi-annually (Apr/Oct)
Toluene	mg/L	Grab	Semi-annually (Apr/Oct)
1,1,2,2-Tetrachloroethane	mg/L	Grab	Semi-annually (Apr/Oct)
Tributyltin	ng/L	Grab	Semi-annually (Apr/Oct)
1,1,1-Trichloroethane	mg/L	Grab	Semi-annually (Apr/Oct)
1,1,2-Trichloroethane	mg/L	Grab	Semi-annually (Apr/Oct)

Parameter	Units	Sample Type	Min. Analysis Frequency
Acrylonitrile	ug/L	Grab	Semi-annually (Apr/Oct)
Aldrin	ng/L	Grab	Semi-annually (Apr/Oct)
Benzene	ug/L	Grab	Semi-annually (Apr/Oct)
Benzidine	ng/L	Grab	Semi-annually (Apr/Oct)
Beryllium	ng/L	Grab	Semi-annually (Apr/Oct)
Bis(2-Chloroethyl)ether	ug/L	Grab	Semi-annually (Apr/Oct)
Bis(2- ethylhexyl)phthalate	ug/L	Grab	Semi-annually (Apr/Oct)
Carbon tetrachloride	ug/L	Grab	Semi-annually (Apr/Oct)
Chlordane	ng/L	Grab	Semi-annually (Apr/Oct)
Chloroform	mg/L	Grab	Semi-annually (Apr/Oct)
DDT	ng/L	Grab	Semi-annually (Apr/Oct)
1,4-Dichlorobenzene	ug/L	Grab	Semi-annually (Apr/Oct)
3,3-Dichlorobenzidine	ng/L	Grab	Semi-annually (Apr/Oct)
1,2-Dichloroethane	mg/L	Grab	Semi-annually (Apr/Oct)
Dichloromethane	mg/L	Grab	Semi-annually (Apr/Oct)
1,3-Dichloropropene	ug/L	Grab	Semi-annually (Apr/Oct)
Dieldrin	ng/L	Grab	Semi-annually (Apr/Oct)
2,4-Dinitrotoluene	ug/L	Grab	Semi-annually (Apr/Oct)
1,2-Diphenylhydrazine	ug/L	Grab	Semi-annually (Apr/Oct)
Halomethanes	mg/L	Grab	Semi-annually (Apr/Oct)
Heptachlor	ng/L	Grab	Semi-annually (Apr/Oct)
Hexachlorobenzene	ng/L	Grab	Semi-annually (Apr/Oct)
Hexachlorobutadiene	ug/L	Grab	Semi-annually (Apr/Oct)
Hexachloroethane	ug/L	Grab	Semi-annually (Apr/Oct)
N-Nitrosodimethylamine	ug/L	Grab	Semi-annually (Apr/Oct)
N-Nitrosodiphenylamine	ug/L	Grab	Semi-annually (Apr/Oct)
PAHs	ng/L	Grab	Semi-annually (Apr/Oct)
PCBs	ng/L	Grab	Semi-annually (Apr/Oct)
TCDD Equivalents	pg/L	Grab	Semi-annually (Apr/Oct)
Tetrachloroethylene	ug/L	Grab	Semi-annually (Apr/Oct)
Toxaphene	ng/L	Grab	Semi-annually (Apr/Oct)
Trichloroethylene	ug/L	Grab	Semi-annually (Apr/Oct)
2,4,6-Trichlorophenol	ug/L	Grab	Semi-annually (Apr/Oct)
Vinyl chloride	ug/L	Grab	Semi-annually (Apr/Oct)

REMAINING PRIORITY POLLUTANTS

Parameter	Units	Sample Type	Min. Analysis Frequency
Endrin Aldehyde	ug/L	Grab	Semi-annually (Apr/Oct)
Acenaphthene	ug/L	Grab	Semi-annually (Apr/Oct)
1,2,4-Trichlorobenzene	ug/L	Grab	Semi-annually (Apr/Oct)
2-Chloronaphthalene	ug/L	Grab	Semi-annually (Apr/Oct)
2,6-Dinitrotoluene	ug/L	Grab	Semi-annually (Apr/Oct)
4-Chlorophenyl	ug/L	Grab	Semi-annually (Apr/Oct)
Phenyl Ether	ug/L	Grab	Semi-annually (Apr/Oct)
4-Bromophenyl	ug/L	Grab	Semi-annually (Apr/Oct)
Phenyl Ether	ug/L	Grab	Semi-annually (Apr/Oct)
Naphthalene	ug/L	Grab	Semi-annually (Apr/Oct)
N-Nitrosodi-M- Propylamine	ug/L	Grab	Semi-annually (Apr/Oct)
Bis (2-Ethyl-hexyl) Phthalate	ug/L	Grab	Semi-annually (Apr/Oct)
N-Butyl Benzyl Phthalate	ug/L	Grab	Semi-annually (Apr/Oct)
Di-N-Octyl Phthalate	ug/L	Grab	Semi-annually (Apr/Oct)
Benzo(A)Anthracene	ug/L	Grab	Semi-annually (Apr/Oct)
Benzo(A)Pyrene	ug/L	Grab	Semi-annually (Apr/Oct)
Benzo(B)Fluoranthene	ug/L	Grab	Semi-annually (Apr/Oct)
Benzo(K)Fluoranthene	ug/L	Grab	Semi-annually (Apr/Oct)
P-Chloro-M-Cresol	ug/L	Grab	Semi-annually (Apr/Oct)
2-Chlorophenol	ug/L	Grab	Semi-annually (Apr/Oct)
2,4-Dichlorophenol	ug/L	Grab	Semi-annually (Apr/Oct)
2,4-Dimethylphenol	ug/L	Grab	Semi-annually (Apr/Oct)
2-Nitrophenol	ug/L	Grab	Semi-annually (Apr/Oct)
4-Nitrophenol	ug/L	Grab	Semi-annually (Apr/Oct)
4,6-Dinitro-O-Cresol	ug/L	Grab	Semi-annually (Apr/Oct)
Pentachlorophenol	ug/L	Grab	Semi-annually (Apr/Oct)
Phenol	ug/L	Grab	Semi-annually (Apr/Oct)
1,1-Dichloroethane	ug/L	Grab	Semi-annually (Apr/Oct)
Chloroethane	ug/L	Grab	Semi-annually (Apr/Oct)
1,2,-Trans- Dichloroethylene	ug/L	Grab	Semi-annually (Apr/Oct)
1,2,-Dichloropropane	ug/L	Grab	Semi-annually (Apr/Oct)
Methylene Chloride	ug/L	Grab	Semi-annually (Apr/Oct)
Trichlorofluoromethane	ug/L	Grab	Semi-annually (Apr/Oct)
Dichlorodifluoromethane	ug/L	Grab	Semi-annually (Apr/Oct)
Dibromochloromethane	ug/L	Grab	Semi-annually (Apr/Oct)
Bis(Chloromethyl) Ether	ug/L	Grab	Semi-annually (Apr/Oct)
2-Chloroethyl Vinyl Ether	ug/L	Grab	Semi-annually (Apr/Oct)

**III. RECEIVING WATER MONITORING**

Receiving water monitoring is conducted to verify compliance with the California Ocean Plan. The Discharger shall participate in the Central Coast Long-term Environmental Assessment Network as a component of receiving water monitoring activities.

The Receiving Water Monitoring Program consists of the following components:



- A. 30-Foot Contour Bacterial Sampling
- B. Central Coast Long-term Environmental Assessment Network (CCLEAN)
  - 1) Bottom sediment sampling
  - 2) Benthic biota sampling
  - 3) Mussel bioaccumulation sampling
  - 4) Stream and river mouth sampling
  - 5) Solid Phase Extraction Column sampling of effluent and rivers.

#### A. Bacterial Monitoring

Bacterial monitoring along the 30-foot contour shall be conducted at sites indicated in Table 3.

**Table 3**

Stations	Location
A	900 feet north of the outfall 1000 feet offshore
B	Adjacent to the outfall 1000 feet offshore
C	900 feet south of the outfall 1000 feet offshore
D	1800 feet south of the outfall 1000 feet offshore

Note: All station locations shall be reported according to latitude and longitude coordinates. Bacteriological monitoring is conducted to assess bacteriological conditions in areas used for body-contact sports (e.g., swimming), and to assess aesthetic conditions for general recreational use (e.g., picnicking, boating). Bacterial sampling at 30-foot contour shall be performed as indicated in Table 4 below.

Monitoring shall include observations of wind (direction and speed) weather (e.g., cloudy, sunny, rainy), antecedent rainfall (7-day), sea state, longshore currents (e.g., direction), tidal conditions (e.g., high, slack, or low tide). Observations of water discoloration, floating oil and grease, turbidity, odor, material of sewage origin in the water or on the beach, and temperature (°C) shall be recorded and reported.

**Table 4**

Parameter	Units	Sample Station	Min. Frequency
Total & Fecal Coliform <sup>1,2</sup>	MPN/100 mL	A,B,C,D	Monthly <sup>4</sup>
Enterococcus Organisms <sup>1,3</sup>	MPN/100 mL	A,B,C,D	Monthly <sup>4</sup>
Surf Conditions	Narrative	A,B,C,D	Monthly <sup>4</sup>
Current Direction	Narrative	D	Monthly <sup>4</sup>
Antecedent rainfall (7-day)	Narrative	-	Monthly <sup>4</sup>

1. For all bacterial analyses, sample dilutions shall be performed so the range of values extends from 2 to 16,000 MPN/100ml. The detection methods used for each analysis shall be reported with the results of the analysis.
2. Detection methods used for total and fecal coliform shall be those presented in the most recent edition of Standard Methods for the Examination of Water and Wastewater or any improved method determined by the Regional Board (and approved by EPA) to be appropriate.
3. Detection methods used for enterococcus shall be those presented in EPA publication EPA 600/4-85/076, "Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure", or any improved method determined by the Regional Board (and approved by EPA) to be appropriate.

4. Sampling interval shall be monthly, with more frequent sampling, at 5 times in a 30-day period (as described in CCLEAN, 9/25/2000, Section 2.4.2), triggered when samples exceed 1000 MPN/100 ml for total coliform, 400 MPN/100 ml for fecal coliform, or 104 MPN/100 ml for Enterococcus. Sampling shall continue at this increased frequency until the geometric mean of the most recent 5 samples fall below 1000 MPN/100 ml for total coliform, 200 MPN/100 ml for fecal coliform, or 104 MPN/100 ml for Enterococcus.
5. Shore Stations (immediately inshore of 30-foot contour sites) shall be sampled concurrent with 30-foot contour sites, when 30-foot contour sample results exceed 1000 MPN/100 ml for total coliform, 400 MPN/100 ml for fecal coliform, or 104 MPN/100 ml for Enterococcus.

#### **B. Central Coast Long-term Environmental Assessment Network (CCLEAN)**

The Discharger shall participate in the implementation of the CCLEAN Regional Monitoring Program in order to fulfill receiving water compliance monitoring requirements and support the following CCLEAN Program Objectives:

- I. Obtain high-quality data describing the status and long-term trends in the quality of nearshore waters, sediments, and associated beneficial uses.
- II. Determine whether nearshore waters and sediments are in compliance with the Ocean Plan.
- III. Determine sources of contaminants to nearshore waters.
- IV. Provide legally defensible data on the effects of wastewater discharges in nearshore waters.
- V. Develop a long-term database on trends in the quality of nearshore waters, sediments and associated beneficial uses.
- VI. Ensure that the nearshore component database is compatible with other regional monitoring efforts and regulatory requirements.
- VII. Ensure that nearshore component data are presented in ways that are understandable and relevant to the needs of stakeholders.

General components of the first phase of the CCLEAN Program are outlined in Table 5. The CCLEAN Quality Assurance Project Plan (QAPP) for each year will be submitted for staff approval prior to initiation of CCLEAN sampling. A detailed technical study design description, including specific location of sampling sites and a description of the specific contents of the CCLEAN Annual Report, shall be provided as a component of the CCLEAN QAPP. Any year-to-year modifications to the program (including implementation of subsequent program phases) shall be identified in this document.

**Table 5**  
**Sampling sites, parameters sampled, frequency of sampling, applicable water-quality stressors,**  
**and relevant program objectives in Phase I of CCLEAN**

(all sampling began in 2001 with the exception of flow-proportioned river mouth sampling)

Sampling Sites	Parameters Sampled at Each Site	Frequency of Sampling	Applicable Water-quality Stressors	Program Objectives
<b>Water Sampling</b> Four outfall sites (Santa Cruz, Watsonville, Monterey, Carmel) in effluent Beginning 2002 - Four river sites (San Lorenzo, Pajaro, Salinas, Carmel) near mouths	30-day flow proportioned samples using automated pumping equipment, solid-phase-extraction techniques for: 1) persistent organic pollutants, and weekly grab samples of effluent and recording probes in rivers for 2) ammonia and nitrate, 3) turbidity, 4) temperature, conductivity, pH	Twice per year (wet season and dry season)	Persistent Organic Pollutants Nutrients Suspended Sediments in Rivers	III, IV
	Grabs for urea, nitrate and silicate in effluent	Monthly	Nutrients	III, IV
	Evaluate satellite imagery for algal blooms	Periodically	Nutrients (effects of)	I, III, IV
30-ft contour sites for each major discharge and sites sampled for AB 411	Grabs for total and fecal coliform, enterococcus	Monthly	Pathogens	I, II, III, IV
Approximately 20 streams and rivers	Grabs for: 1) total and fecal coliform and enterococcus, 2) nitrates, urea, silicate, 3) total suspended solids	Monthly	Pathogens Nutrients Suspended Sediments in Rivers	I, II, III
<b>Sediment Sampling</b> Four depositional sites and four background sites along 80-m contour	Single samples for benthic infauna, persistent organic pollutants, total organic carbon and grain size	Annually	Persistent Organic Pollutants (and effects of)	I, II
<b>Mussel Sampling</b> Five rocky intertidal sites	One composite of 30-40 mussels for persistent organic pollutants, total and fecal coliform, and enterococcus	Twice per year (wet season and dry season)	Persistent Organic Pollutants Pathogens	I, II, III

#### IV. PRETREATMENT MONITORING

At least once per year, influent, effluent and biosolids shall be sampled and analyzed for the priority pollutants identified under Section 307(a) of the Clean Water Act. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the plant's influent and effluent for those pollutants EPA has identified under Section 307(a) of the Act which are known or suspected to be discharged by industrial users. The Discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR Part 136. Biosolids shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling and analysis. The biosolids analyzed shall be a composite sample of a minimum of twelve discrete samples taken at equal time intervals over the 24-hour period. Wastewater and biosolids sampling and analysis shall be performed a minimum of annually and not less than the frequency specified in the required monitoring program for the plant. The discharger shall also provide any influent, effluent or biosolids monitoring data for nonpriority pollutants which the discharger believes may be causing or contributing to interference, pass through or adversely impacting biosolids quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto. Biosolids samples shall be collected from the last point in solids handling before disposal. If biosolids is dried on-site, samples shall be composited from at least twelve discrete samples from twelve representative locations.

#### V. BIOSOLIDS MONITORING

1. The following information shall be submitted with the Annual Report as required by the Standard Provisions:
  - a) Annual biosolids production in dry tons and percent solids.
  - b) A schematic diagram showing biosolids handling facilities (e.g., digesters, lagoons, drying beds, incinerators) and a solids flow diagram.
  - c) A narrative description of biosolids dewatering and other treatment processes, including process parameters. For example, if biosolids are digested, report average temperature and retention time of the digesters. If drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.
  - d) A description of disposal methods, including the following information related to the disposal methods used at the facility. If more than one method is used, include the percentage of annual biosolids production disposed by each method.
    - i) For landfill disposal include: 1) the Regional Board's WDR numbers that regulate the landfills used, 2) the present classifications of the landfills used, and 3) the names and locations of the facilities receiving biosolids.
    - ii) For land application, include 1) the location of the site(s), 2) the Regional Board's WDR numbers that regulate the site(s), 3) the application rate in lbs/acre/year (specify wet or dry), and 4) subsequent uses of the land.
2. A representative sample of residual solids (biosolids) as obtained from the last point in the handling process (i.e., in the drying beds just prior to removal) shall be analyzed for the following constituents at the frequencies listed below (Table 6). The sample shall be documented to show it is representative of biosolids from the facility. All constituents shall be analyzed for total concentrations for comparison with Total Threshold Level Concentration (TTLC) criteria. The Waste Extraction Test shall be performed on any constituent when the total concentration of the waste exceeds ten times the Soluble Threshold Level Concentration (STLC) limit for that substance.

**Table 6****Biosolids Monitoring**

Parameter	Units	Sample Unit	Min. Frequency
Quantity	Tons or yds <sup>3</sup>	Measured	During Removal
Location of Disposal	Narrative	Measured	During Removal
Moisture Content	%	Grab	Annually (October)
Total Kjeldahl Nitrogen	mg/kg	Grab	Annually (October)
Ammonia (as N)	mg/kg	Grab	Annually (October)
Nitrate (as N)	mg/kg	Grab	Annually (October)
Total Phosphorus	mg/kg	Grab	Annually (October)
Grease & Oil	mg/kg	Grab	Annually (October)
pH	mg/kg	Grab	Annually (October)
Arsenic	mg/kg	Grab	Annually (October)
Boron	mg/kg	Grab	Annually (October)
Cadmium	mg/kg	Grab	Annually (October)
Copper	mg/kg	Grab	Annually (October)
Chromium	mg/kg	Grab	Annually (October)
Lead	mg/kg	Grab	Annually (October)
Nickel	mg/kg	Grab	Annually (October)
Mercury	mg/kg	Grab	Annually (October)
Molybdenum	mg/kg	Grab	Annually (October)
Selenium	mg/kg	Grab	Annually (October)
Zinc	mg/kg	Grab	Annually (October)

**VI. OUTFALL INSPECTION**

At least once per year the Discharger shall visually inspect the entire outfall structure (e.g., dye study) to note its structural integrity and whether there are leaks or potential leaks. Results of the outfall inspection shall be reported in the annual report.

**VII. REPORTING**

Note on detection limits: When the effluent limit is below the detection limit, compliance determinations based on analysis of a single sample shall only be undertaken if the concentration of the constituent of concern in the sample is greater than or equal to the detection limit.

The annual summary report (specified in Standard Provision C.16) shall include a summary of lift station and collection system overflows, their causes, corrective actions taken and corrective actions planned. This summary shall include overflows in the Dischargers jurisdiction. Monitoring reports shall be submitted for all monitoring and sampling herein (except Ocean Receiving Water Monitoring) on, or before, the last day of the month following the sampling or monitoring event.

The Discharger shall submit a copy of the inflow/infiltration and spill reporting program and a summary documenting significant changes, efforts, and activities to develop and implement an effective program. The report shall be submitted by October 1 of each year.

Receiving water monitoring components specified in Table 5 above shall be reported in a single CCLEAN Annual Report which summarizes findings for all participants. 30-foot contour and shoreline pathogen monitoring shall be reported monthly by the Discharger, as well as in the CCLEAN Annual Report.

In reporting "priority pollutants" or Table B toxic materials, the constituents must be listed in the same order as listed in the Effluent Monitoring Section of this Monitoring and Reporting Program.

All water quality data shall be submitted to the Board in both hard copy and electronic format at the time of reporting. The electronic data submission shall conform to criteria approved by the Central Coast Regional Water Quality Control Board Executive Officer.

Table 7

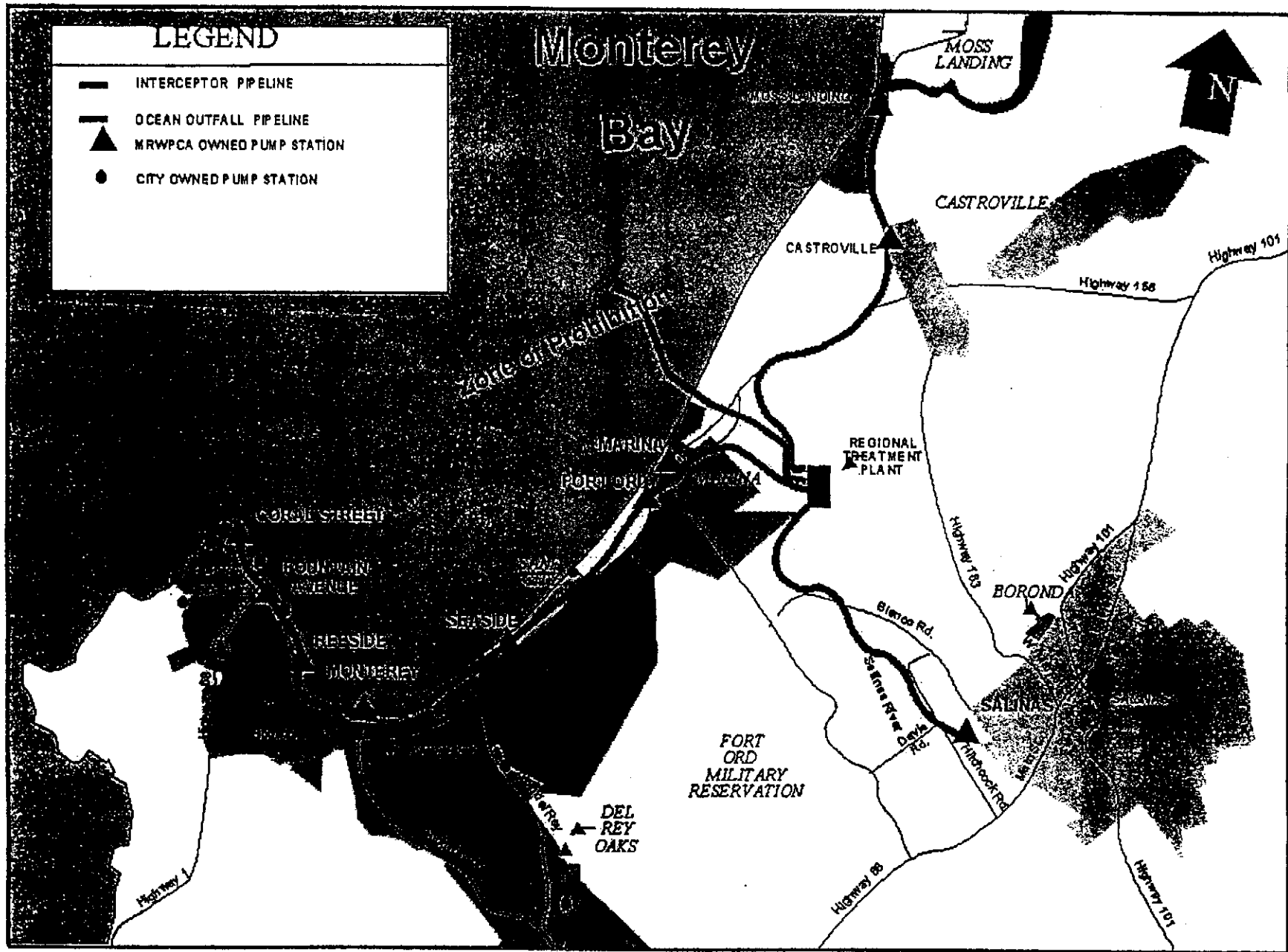
Reporting Schedule

Monitoring Period	Report Due
Daily, Weekly, and Monthly	30th day of the month following sampling
Quarterly Water Column Monitoring Report	30th day of the month following quarterly period
Quarterly	30th day of the month following quarterly period
Semi-Annually	30th day of the month following semi-annual period
Monthly (30-foot contour pathogen monitoring)	30th day of the month following sampling
Annually (CCLEAN Annual Report and QAPP for upcoming year)	31 <sup>st</sup> day January
Pretreatment	31 <sup>st</sup> day of January
Inflow/Infiltration and Spill Reporting	15 <sup>th</sup> day of March and September
Annually (Biosolids)	31 <sup>st</sup> day January
Annually (Outfall and Diffuser)	31 <sup>st</sup> day January

ORDERED BY: \_\_\_\_\_








*Roger W. Briggs*  
 Roger W. Briggs  
 Executive Officer

11-5-02  
 Date



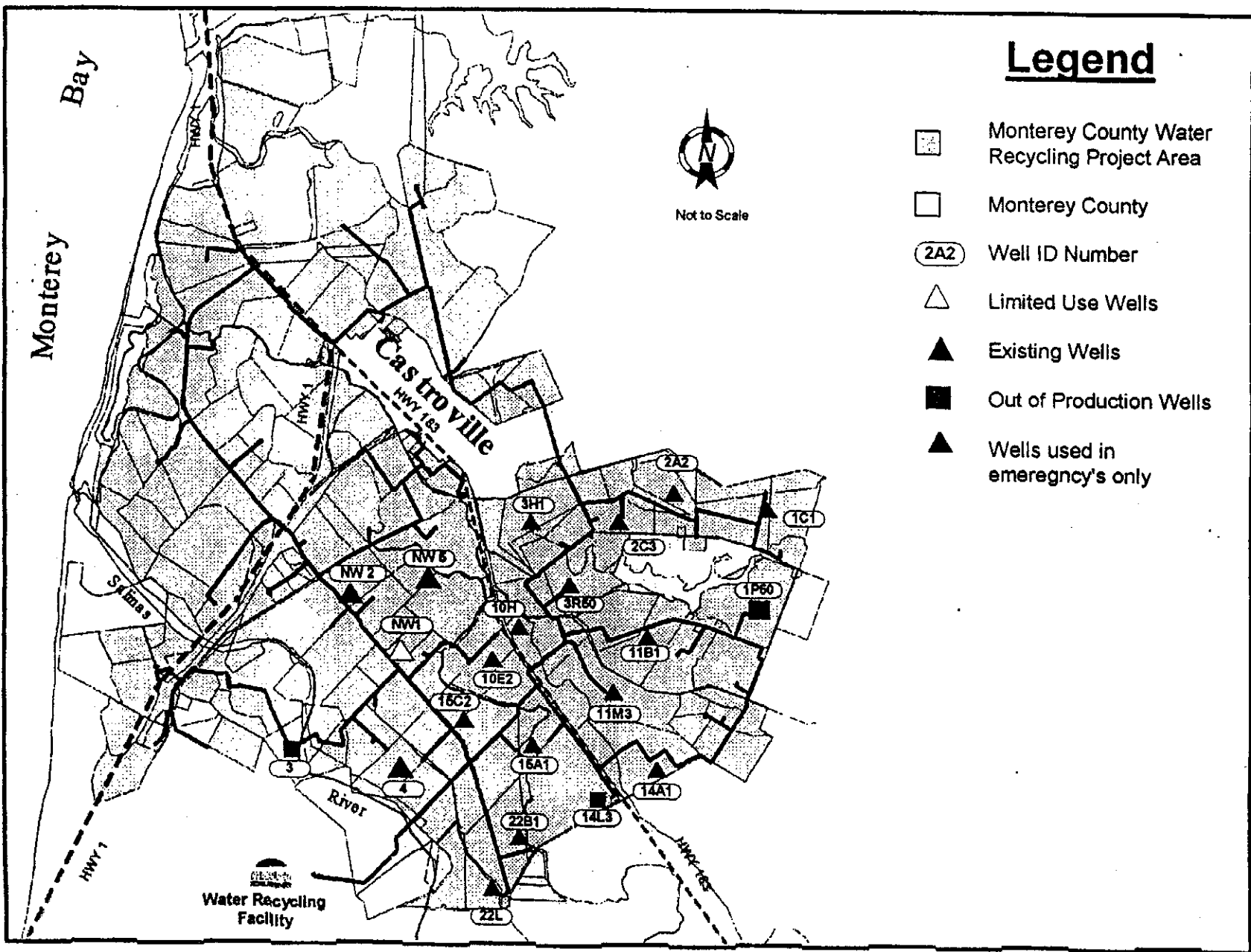
ATTACHMENT A

# Legend

-  Monterey County Water Recycling Project Area
-  Monterey County
-  Well ID Number
-  Limited Use Wells
-  Existing Wells
-  Out of Production Wells
-  Wells used in emergency's only



Not to Scale



ATTACHMENT B