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

WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2002-026
NPDES NO. CA0047996

Waste Discharger Identification No. 3 270101001

For

CARMEL AREA WASTEWATER DISTRICT AND PEBBLE BEACH COMMUNITY SERVICES DISTRICT MONTEREY COUNTY

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

1. The Carmel Area Wastewater District, a governmental agency, owns and operates a wastewater collection, treatment, and disposal system to provide sewerage service for residential and commercial sources, including restaurants, in
   a. the City of Carmel-by-the-Sea, a governmental agency,
   b. the Pebble Beach Community Services District, a governmental agency, and
   c. outlying county areas

2. The Carmel Area Wastewater District has agreed to provide one third of its treatment and disposal capacity to the Pebble Beach Community Services District.

3. The Pebble Beach Community Services District, owns, operates, and has direct responsibility for a wastewater collection and transport system for residential and commercial sources in its constituent area. That responsibility transfers to the Carmel Area Wastewater District once the collected sewage enters interceptors owned and operated by the Carmel Area Wastewater District.

4. It is incumbent upon the Carmel Area Wastewater District and the Pebble Beach Community Services District to protect the environment to the greatest degree possible and insure their respective collection systems and receiving sewerage systems are protected and utilized properly. This responsibility includes preventing overflows and may include restricting or prohibiting the volume, type, or concentration of wastes added to the system.

5. The Board last issued NPDES Permit No. CA0047996 on July 14, 2000, under Board Order No. 00-061. The Discharger appealed Order No. 00-061 to the State Board in August 2000. In August 2001, Regional Board staff agreed to a hold a new hearing of this permit. The State Board has placed the Discharger's petition into abeyance until 30 days after the new hearing.

6. The Carmel Area Wastewater District's treatment facility, located as shown on Attachment "A", is designed to process an annual average daily flow rate of 3.00 million gallons per day (MGD). Actual flows over the last three years ranged from 1.48 MGD to 1.89 MGD.

7. Wastewater treatment consists of grit removal, primary settling, flow equalization, activated sludge contact, clarification, chlorination, and dechlorination. Sludge is anaerobically digested, de-watered by a belt press, and hauled for land application or composting by a second party.

8. Treated wastewater is either recycled or discharged to the Pacific Ocean. The recycling project is regulated under a separate Board

Order. Ocean discharge occurs through a 600-foot outfall/diffuser system. The outfall terminates in Carmel Bay within the Monterey Bay National Marine Sanctuary (36° 32" 00' N. Latitude, 121° 55" 43' W. Longitude) in approximately 35 feet of water. The minimum initial dilution (seawater:effluent) of the outfall is 121:1.

9. The Environmental Protection Agency and Board classify this discharge as a major discharge.

10. 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 that 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.

11. The State Water Resources Control Board (State Board) most recently adopted the "Water Quality Control Plan, Ocean Waters of California-California Ocean Plan" (California Ocean Plan) on December 3, 2001. The Ocean Plan contains objectives and requirements governing discharges to the Pacific Ocean.

12. The Ocean Plan provides that waste shall not be discharged to designated Areas of Special Biological Significance (ASBS), except for temporary activities specified in the Ocean Plan. The Ocean Plan also authorizes the State Water Resources Control Board to grant exceptions to Ocean Plan requirements in compliance with the California Environmental Quality Act, after a public hearing, subject to the concurrence of the U.S. Environmental Protection Agency, where the State Board determines the exception will not compromise protection of ocean waters for beneficial uses, and the public interest will be served. In 1984, the State Water Resources Control Board adopted Resolution No. 84-78, conditionally authorizing the Discharger to discharge wastewater from its treatment facility to the Carmel Bay ASBS. The conditions required annual monitoring, including mussel growth measurements, and a comprehensive study to be implemented every ten years, beginning in 1987, to evaluate the effects of the discharge on the ASBS, and determine whether there are changes as a result of the discharge. Additional conditions included compliance with flow limits established by the Regional Board, which must be included in the Discharger's NPDES permit. The State Board based this exception on the finding that discharges of secondary treated wastewater into the Carmel Bay ASBS had no significant adverse impact on Carmel Bay ecosystems. The State Board also found it was financially and economically infeasible for Discharger to cover the entire cost of advanced treatment needed for the wastewater to be recycled. The State Board has not revisited the 1984 exception to the Ocean Plan. The Discharger failed to implement the comprehensive study required in 1997 by Resolution No. 84-78.

13. The California Department of Fish and Game declared Point Lobos an Ecological Reserve in 1973. Commercial fishing is prohibited in this Reserve. The State Water Resources Control Board designated ocean waters within one-quarter mile offshore of Point Lobos' from Granite Point to the southernmost boundary of the Point Lobos State Reserve, as shown on Attachment "A", as an ASBS.

14. The State Board designated portions of Carmel Bay an ASBS on July 19, 1975 (Resolution No. 75-61). The ASBS is that part of Carmel Bay shoreward from an imaginary straight line between Pescadero Point and Granite Point as shown on Attachment "A". The Department of Fish and Game designated the same area as an Ecological Reserve on August 27, 1977. Commercial fishing is severely restricted within the boundaries of the Reserve.

15. The Water Quality Control Plan, Central Coast Basin (Basin Plan) was adopted by the Board and approved 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 including the Pacific Ocean.

16. Present and anticipated beneficial uses of the Pacific Ocean in the vicinity of the discharge include:
    a. Industrial Water Supply,
    b. Water Contact Recreation,
    c. Water Non-Contact Recreation,
    d. Aesthetic Enjoyment,
    e. Navigation,
    f. Commercial and Sport Fishing,
    g. Mariculture,
    h. Preservation and Enhancement of Areas of Special Biological Significance,
    i. Rare, Threatened, and Endangered Species,
    j. Marine Habitat,
    k. Fish Migration and Spawning, and
    l. Shellfish Harvesting

17. The California Water Code Section 13263.6 requires this Permit include effluent limitations for all substances that are reported in toxic chemical release data reports prepared pursuant to Section 313 of the Emergency Planning and Community Right to Know Act of 1986 (42 USC section 11023). There are no industries in the CAWD service area and no toxic chemical release reports have been submitted to the CAWD. Therefore, there are no substances to report that fall under this rule.

18. Discharges of toxic pollutants (listed in Table B of the Ocean Plan) are typically intermittent and more variable than discharges of conventional pollutants. Intermittent discharge of toxic pollutants may cause or contribute to an excursion above effluent limitations that may not be measured by annual samples of the effluent, and thus not be accounted for in a statistical analysis (Reasonable Potential Analysis) of the effluent. The Discharger's Reasonable Potential Analysis was based on 2 to 4 samples of each pollutant and U.S. EPA's default coefficient of variation, which provides insufficient statistical knowledge of actual effluent variability of each pollutant. The discharge to the Carmel Bay Area of Special Biological Significance (ASBS) and the Monterey Bay National Marine Sanctuary (MBNMS) warrants a greater knowledge of actual effluent variability of each pollutant than the Discharger's Reasonable Potential Analysis has provided. No legal authority mandates the removal of existing effluent limitations from an NPDES permit based on the results of a Reasonable Potential Analysis based on effluent quality alone. Effluent limitations may be retained if the Board has a reasonable basis to do so. Additionally, elimination of the existing effluent limitations may violate the anti-backsliding provisions of federal Clean Water Act section 402(o). While there may be an exception to anti-backsliding, the fact that the discharge is to an ASBS and MBNMS means there is a heavier burden of proof to justify an exception. The anti-backsliding exception must be consistent with the anti-degradation policy. The anti-degradation policy provides that where high quality waters constitute an outstanding national resource, that water quality shall be maintained and protected. In addition, all dischargers of waste into MBNMS are prohibited unless specifically authorized by a state or federal permit (15 C.F.R. sec. 922.123). Consistent with the highest level of water quality protection required in Carmel Bay, all existing effluent limitations remain in the proposed permit.

19. A statistical evaluation of the Discharger's frequently monitored (i.e. daily or weekly) effluent data, long-term performance trends, and compliance with effluent limitations indicates minor reductions in monitoring frequency are appropriate for some constituents.

20. Waste discharge requirements for the existing discharge are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et seq.) in accordance with section 13389 of the California Water Code.

21. The discharge has been subjected, and will continue to be subjected, to extensive monitoring to assure no environmental impacts on the ASBS. Other factors concerning impacts from growth were addressed in a final Environmental Impact Report certified in June 1979.

22. The U.S. Environmental Protection Agency promulgated Federal Regulations for stormwater discharges on November 19, 1990. The regulations [40 Code of Federal Regulations (CFR) Parts 122, 123, and 124] require specific categories of industrial activities including Publicly Owned Treatment Works (POTWs) which discharge storm water associated with industrial activity (industrial storm water) to obtain a NPDES permit and to implement Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to control pollutants in industrial storm water discharges.

23. The majority of storm water from the wastewater treatment facility process areas are collected and discharged to percolation beds. A small portion is directed to the wastewater treatment plant headworks and treated along with the wastewater. These storm water flows constitute all industrial storm water at this facility and consequently this permit regulates all industrial storm water discharge at this facility. The Carmel Area Wastewater District must still comply with the Industrial Activities Storm Water General permit adopted April 17, 1997. The regional Board approved an exemption from sampling stormwater runoff at the District's facility in June 11, 1993.

24. 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 and as Waste Discharge Requirements pursuant to the California Water Code. Compliance with this Order should assure conditions are met and mitigate any potential changes in water quality due to the project.

25. Discharge of any wastewater by the Carmel Area Wastewater District into the Carmel Bay ASBS is subject to the Ocean Plan exception adopted by the State Board in 1984. Additionally, all discharges of wastewater to the Monterey Bay National Marine Sanctuary are prohibited unless authorized by a state or federal permit that is accepted by NOAA. Pursuant to California Water Code section 13263, discharging waste is a privilege and not a right, and no discharge, even if authorized by permit, creates a vested right to continue the discharge. Pursuant to the State Board resolution, the Regional Board established a permitted flow limit of 3.0 MGD. Any increase in this flow limitation is subject to authorization by the Regional Board, in compliance with applicable provisions of the federal Clean Water Act, state Porter-Cologne Act, and applicable regulations. Any increase in wastewater discharge volume is prohibited by the Anti-degradation policy (40 C.F.R. section 131.12 and SWRCB Resolution 68-16) unless the Regional Board adopts findings, supported by evidence in the record, that justify authorizing additional waste load to the Carmel Bay ASBS and Monterey Bay National Marine Sanctuary. Note the Anti-degradation policy provides that where high quality waters constitute an outstanding National resource, that water quality shall be maintained and protected.

26. On December 21, 2001, the Board notified the public and interested agencies of its intent to reissued waste discharge requirements for the Discharger, provided them with an opportunity to submit their written views and recommendations, and scheduled a public hearing.

27. In a public hearing on March 22, 2002, in Salinas, the Board heard and considered all comments pertaining to the discharge and found this Order consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263 of the California Water Code, Carmel Area Wastewater District, its agents, successors, and assigns, may discharge waste at its Carmel Wastewater Treatment Facility, providing compliance is maintained with the following.

All technical and monitoring reports submitted pursuant to this Order are required pursuant to Sections 13267 and 13383 of the California Water

Code. Failure to submit reports in accordance with schedules established by this Order, attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the Discharger to enforcement action pursuant to Sections 13268 and 13385 of the California Water Code. The Regional Board will base all enforcement actions on the date of Order adoption.

The following references are used throughout this Permit to indicate the source for the Permit condition:

OP	Water Quality Control Plan, Ocean Waters of California
84-78	State Water Resources Control Board Resolution No. 84-78
ROWD	The Discharger's Report of Waste Discharge

A. PROHIBITIONS

1. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited. [OP]

2. Discharges of discrete, point-source sewage in a manner that would alter conditions from those occurring naturally in the area of the discharge, an ASBS, are prohibited. [84-78]

3. Federal law prohibits pipeline discharge of sludge to the ocean; the discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean without further treatment, is prohibited. [OP]

4. Discharge to Carmel Bay at a location other than 36° 32" 00' N. Latitude, 121° 55" 43' W. Longitude, shown on Attachment "A", is prohibited. [ROWD]

5. Discharge of anything other than that described in the Findings of this Permit is prohibited. [ROWD, OP]

B. EFFLUENT LIMITATIONS

1. "Removal efficiencies" for Total Non-Filterable Residue (Suspended Solids) and Biochemical Oxygen Demand (BOD) shall not be less than 85 percent (40 CFR 133). In addition, effluent concentrations shall not exceed the following limits*:

Constituent	Units	30-Day Average	7-Day Average	Daily Maximum
BOD_5	mg/l lbs/day kg/day	30 750 340	45 1130 510	90 2250 1020
Total Non-Filterable Residue (Suspended Solids)	mg/l lbs/day kg/day	30 750 340	45 1130 510	90 2250 1020

2. Effluent shall not exceed the following limits:[B]

Constituent	Units	30-Day Average	7-Day Average	Daily Maximum
Grease and Oil*	mg/l lbs/day kg/day	25 630 280	40 1000 450	75 1880 850
Settleable Solids	ml/l	1.0	1.5	3.0
Turbidity	NTU	75	100	225

* For flows less than 3.0 MGD, mass emission rates shall not exceed the "Maximum Allowable Mass Emission Rate" as specified in the Standard Provisions and Reporting Requirements.

3. Effluent shall maintain pH within limits of 6.0 to 9.0 pH units at all times.[OP]

4. Effluent shall not exceed the following limits (minimum initial seawater:effluent dilution ratio equals 121:1):[OP]

a. PROTECTION OF MARINE AQUATIC LIFE**

Constituents	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	mg/l	0.61	3.54	9.40
Cadmium	mg/l	0.12	0.49	1.22
Chromium(Hex)[1]	mg/l	0.24	0.98	2.44
Copper	mg/l	0.12	1.22	3.42
Lead	mg/l	0.24	0.98	2.44
Mercury	µg/l	4.82	19.46	48.74
Nickel	mg/l	0.61	2.44	6.10
Selenium	mg/l	1.83	7.32	18.30

[1] The chromium limit may be met as Total Chromium as the Discharger chooses.

Constituents	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Silver	mg/l	0.07	0.33	0.84
Zinc	mg/l	1.47	8.79	23.43
Cyanide[2]	mg/l	0.12	0.49	1.22
Total Chlorine Residual	mg/l	0.24	0.98	7.32
Ammonia (as N)	mg/l	73.20	292.80	732.00
Acute Toxicity	TUa		3.9	
Chronic Toxicity	TUc		122.00	
Phenolic Compounds (non-chlorinated)	mg/l	3.66	14.64	36.60
Chlorinated Phenolics	mg/l	0.12	0.49	1.22
Endosulfan[3]	µg/l	1.10	2.20	3.29
Endrin	µg/l	0.24	0.49	0.73
HCH[4]	µg/l	0.49	0.98	1.46
Radioactivity[5]	Not to exceed limits specified in California Code of RegulationsTitle 22, Chapter 15, Article 5, Section 64443.			

b. PROTECTION OF HUMAN HEALTH -- NONCARCINOGENS**

Constituents	Units	30-Day Average
Acrolein	mg/l	26.84
Antimony	g/l	0.15
Bis(2-chloroethoxy) Methane	mg/l	0.54
Bis(2-chloroisopropyl) Ether	g/l	0.15
Chlorobenzene	mg/l	69.54
Chromium (III)	g/l	23.18
Di-n-butyl Phthalate	g/l	0.43
Dichlorobenzenes[6]	g/l	0.62
Diethyl Phthalate	g/l	4.03
Dimethyl Phthalate	g/l	100.04
4,6-dinitro-2-methylphenol	mg/l	26.84
2,4-dinitrophenol	mg/l	0.49
Ethylbenzene	g/l	0.50
Fluoranthene	mg/l	1.83
Hexachlorocyclopentadiene	mg/l	7.08
Nitrobenzene	mg/l	0.60
Thallium	mg/l	0.24
Toluene	g/l	10.37
Tributyltin	µg/l	0.17
1,1,1-trichloroethane	g/l	65.88

[2] The cyanide limit may be met by the combined measurements of free cyanide, simple alkali metal cyanides and weakly complexed organometallic complexes upon approval of the Regional Board and the U.S. Environmental Protection Agency.

[3] Endosulfan shall mean the sum of endosulfan-alpha and –beta and endosulfan sulfate.

[4] HCH shall mean the sum of the alpha, beta, gamma (lindane), and delta isomers of hexachlorocyclohexane.

[5] Effluent limitation on radioactivity shall apply to the undiluted combined effluent.

[6] Dichlorobenzenes shall mean the sum of 1,2- and 1,3-dichlorobenzene.

c. PROTECTION OF HUMAN HEALTH -- CARCINOGENS**

Constituents	Units	30-Day Average
Acrylonitrile	µg/l	12.20
Aldrin	ng/l	2.68
Benzene	mg/l	0.72
Benzidine	ng/l	8.42
Beryllium	µg/l	4.03
Bis(2-chloroethyl) Ether	µg/l	5.49
Bis(2-ethylhexyl) Phthalate	mg/l	0.43
Carbon tetrachloride	mg/l	0.11
Chlordane[7]	ng/l	2.81
Chlorodibromomethane	mg/l	1.05
Chloroform	mg/l	1.59
DDT[8]	ng/l	20.74
1,4-dichlorbenzene	mg/l	2.20
3,3-dichlorobenzidine	µg/l	0.99
1,2-dichloroethane	mg/l	3.4
1,1-dichloroethylene	mg/l	0.11
Dichlorobromomethane	mg/l	0.76
Dichloromethane	mg/l	54.90
1,3-dichloropropene	mg/l	1.09
Dieldrin	ng/l	4.88
2,4-dinitrotoluene	mg/l	0.32
1,2-diphenylhydrazine	µg/l	19.52
Halomethanes[9]	mg/l	15.86
Heptachlor	µg/l	0.006
Heptachlor epoxide	µg/l	0.002
Hexachlorobenzene	ng/l	25.62
Hexachlorobutadiene	mg/l	1.71
Hexachloroethane	mg/l	0.31
Isophorone	mg/l	89.06
N-nitrosodimethylamine	mg/l	0.89
N-nitrosodi-N-propylamine	mg/l	0.046
N-nitrosodiphenylamine	mg/l	0.31
PAHs[10]	µg/l	1.07
PCBs[11]	ng/l	2.32
TCDD equivalents[12]	pg/l	0.48

[7] Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

[8] DDT shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

[9] Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).

[10] PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo(a)pyrene, chrysene, dibenzo(ah)anthracene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.

[11] PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

[12] TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans(2,3,7,8-CDFs) multiplied by their respective toxicity factors, as listed in Appendix I of the Ocean Plan.

Constituents	Units	30-Day Average
1,1,2,2-tetrachloroethane	mg/l	0.28
Tetrachloroethylene	mg/l	0.244
Toxaphene	ng/l	25.62
Trichloroethylene	mg/l	3.29
1,1,2-trichloroethane	mg/l	1.147
2,4,6-trichlorophenol	µg/l	35.38
Vinyl Chloride	mg/l	4.39

** Based on California Ocean Plan criteria using a minimum initial dilution ratio of **121:1** (seawater:effluent). If the actual dilution is found to be less than this value, it will be recalculated and the Order revised.

c. During any 24-hour period, the effluent mass emission rate shall not exceed the "Maximum Allowable Mass Emission Rate".

d. The Discharger shall report violations of the "Instantaneous Maximum" or "Maximum Allowable Daily Emission Rate" to the Executive Officer within 24 hours after discovery.

e. During any six-month period, the effluent mass emission rate shall not exceed the "Maximum Allowable Six month Median Mass Emission Rate."

5. Effluent daily dry weather average flow shall not exceed a monthly average of 3.0 MGD.

6. The median number of total coliform organisms in effluent shall not exceed 230 per 100 milliliters, as determined from the bacteriological results of the last seven days for which analyses have been completed, and the number of coliform organisms in any sample shall not exceed 10,000 per 100 milliliters.[OP]

7. Effluent shall be essentially free of materials and substances that:[OP]

a. float or become floatable upon discharge.

b. may form sediments which alter 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.

Table 1 - Shoreline Bacterial Limitations

		30-Day		60-Day	6-Month
	Maximum	Geometric Mean	80% of Samples	90% of Samples	Geometric Mean
Total Coliform (MPN/100mL)	10,000		1,000		
Fecal Coliform (MPN/100mL)		200		400	
Enterococcus (MPN/100mL)		24			12

Where a "Geometric Mean" shall be a moving average based on no less than five samples per month, spread evenly over the time interval

Table 2 – Water Column Bacterial Limitations (if shellfish are harvested)

Parameter Applicable to Any 60-day Period	Total Coliform Organisms (MPN/100mL)
Median	70
10% of Samples	230

C. RECEIVING WATER LIMITATIONS (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 in the receiving water.)

1. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Board, but including all kelp beds, the bacterial objectives of Table 1 shall be maintained throughout the water column. [OP]

2. The bacteriological limits of Table 2 are not to be exceeded in the water column in areas where shellfish are harvested. [OP]

3. Floating particulates and grease and oil shall not be visible on the ocean surface. [OP]

4. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface. [OP]

5. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste. [OP]

6. 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. [OP]

7. The dissolved oxygen concentrations 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. [OP]

8. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally. [OP]

9. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions. [OP]

10. The concentration of substances set forth in Table B of the Ocean Plan shall not increase in marine sediments to levels that would degrade indigenous biota. [OP]

11. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life. [OP]

12. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota. [OP]

13. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded. [OP]

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

15. 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. [OP]

16. Discharge of radioactive waste shall not degrade marine life. [OP]

D. PROVISIONS

1. The Discharger shall submit for Executive Officer approval no later than **September 22, 2002**, a work plan for the development of a comprehensive study of the discharge's effect on Carmel Bay. The study shall incorporate all pertinent receiving water data, define natural water quality conditions in Carmel Bay, and evaluate the discharge's effect on the natural water quality of Carmel Bay. If necessary, the Discharger shall participate in a working group with the Executive Officer that will be assigned such tasks as further defining the scope of the study, determining additional data needs, and evaluating the findings of the study. A written report of the study shall be submitted to the Executive Officer no later than **March 22, 2003**. [84-78]

2. The Discharger shall conduct a bacterial assessment if Receiving Water Limitations C.1 is consistently exceeded. If the bacterial assessment finds the discharge is the source of

coliform or enterococcus bacteria, the Discharger shall conduct a survey to determine if the Discharge is the source of contamination. The survey shall be in accordance with a time schedule to be agreed upon in writing by the Executive Officer. OP

3. If the discharge consistently exceeds an effluent limitation based on a toxicity objective in Table 1, a toxicity reduction evaluation (TRE) is required. The TRE shall include all reasonable steps to identify the source 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. OP

4. The Discharger shall comply with "Monitoring and Reporting Program No. R3-2002-026," as ordered by the Executive Officer.

5. 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.

6. The Discharger may request Permit modification should the Ocean Plan be revised during the term of the Permit. All requests shall be in writing and shall contain facts or reasons supporting the request.

7. This permit may be modified in accordance with the requirements set forth at 40 Code of Federal Regulations, Part 122 and 124, to include appropriate conditions on limits based on newly available information, or to implement an EPA-approved new state water quality objective.

8. The discharger shall comply with all requirements of the most current Industrial Activities Storm Water General Permit (General Permit) adopted by the State Board, except the discharger is exempt from sampling stormwater runoff at its facility. The discharger shall implement a Storm Water Pollution Prevention Plan (SWPP Plan) in accordance with the General Permit. The SWPP Plan shall be reviewed and updated as appropriate before the next Permit reissuance or whenever appropriate.

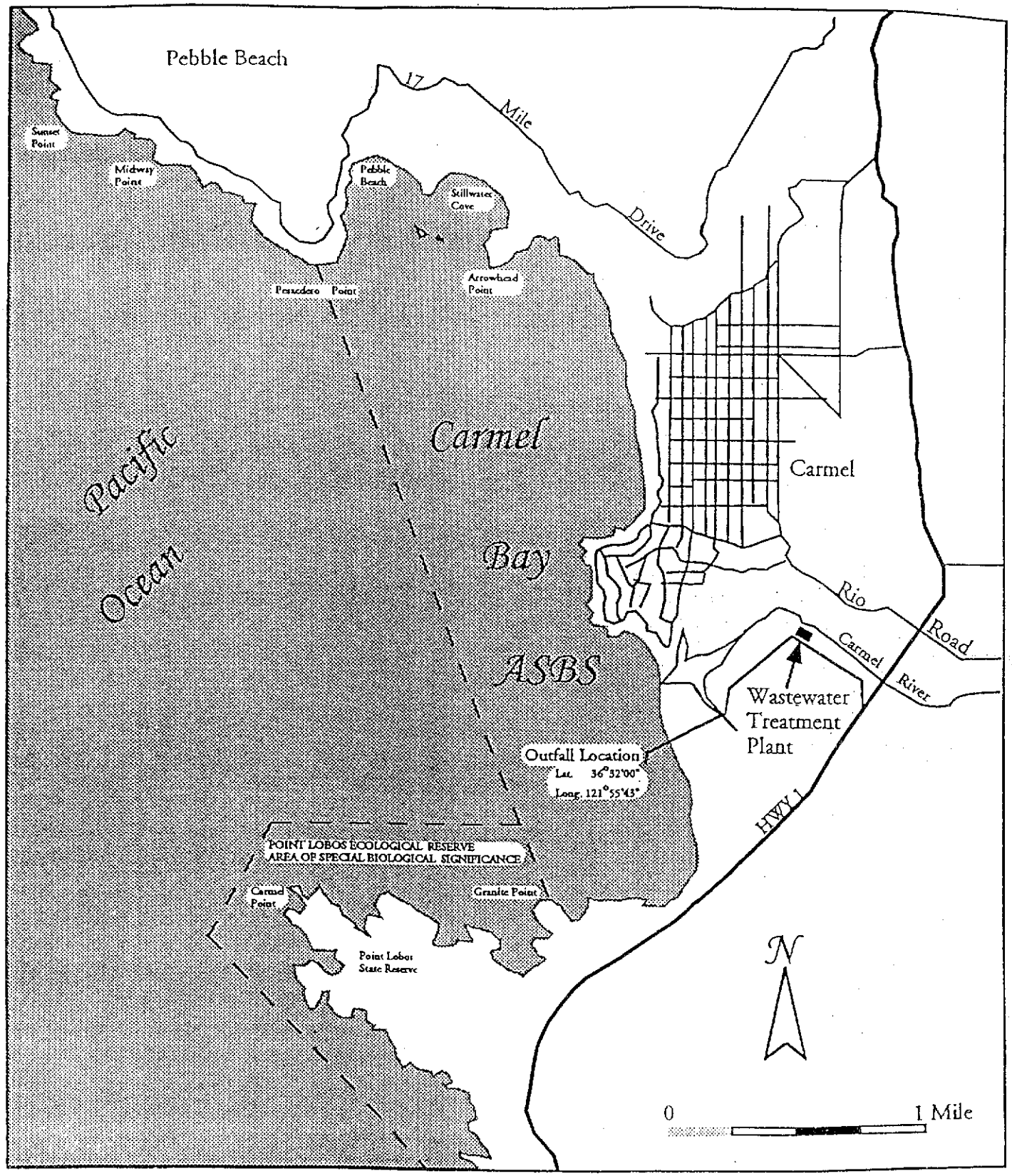
9. This Order expires March 22, 2007, and the Discharger must file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9, of the California Administrative Code, not later than September 23, 2006, if it wishes to continue the discharge.

IT IS FURTHER ORDERED, that Pebble Beach Community Services District shall comply with relevant items of the "Standard Provisions and Reporting Requirements".

I, **Roger W. Briggs**, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on March 22, 2002.

Ordered By: _____
Roger W. Briggs, Executive Officer

Date: 3-26-02



ATTACHMENT "A"
CARMEL AREA WASTEWATER DISTRICT
WASTEWATER TREATMENT PLANT

California Regional Water Quality Control Board

Central Coast Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov/~rwqcb3
81 Higuera Street, Suite 200, San Luis Obispo, California 93401-5427
Phone (805) 549-3147 • FAX (805) 543-0397

Gray Davis
Governor

March 26, 2002

Mr. Ray Von Dohren
Carmel Area Wastewater District
P.O. Box 221428
Carmel, CA 93922

Mr. Mike Niccum
Pebble Beach CSD
Forest Lake and Lopez
Pebble Beach, CA 93953

Dear Messrs. von Dohren and Niccum:

UPDATED WASTE DISCHARGE REQUIREMENTS FOR CARMEL AREA WASTEWATER DISTRICT AND PEBBLE BEACH COMMUNITY SERVICES DISTRICT, MONTEREY COUNTY

Enclosed is a copy of Waste Discharge Requirements Order No. R3-2002-026 (NPDES Permit No. CA0047996) for Carmel Area Wastewater District and Pebble Beach Community Services District. This Order was adopted by the Regional Board on March 22, 2002, and is effective immediately.

If you have any questions, please contact **Matt Thompson at (805) 549-3159** or Gerhardt Hubner at (805) 542-4647.

Sincerely,

Roger W. Briggs
Executive Officer

Enclosure

cc:

Monterey Bay National Marine Sanctuary
299 Foam Street, Suite D
Monterey, CA 93940

Discharger File: Carmel Area Wastewater District
S:\WB\Coastal Watershed\Staff\MThompson\Regulated Facilities\NPDES\Carmel Area Wastewater District\Adopted Order No. 02-026\Transmittal adopted 02-026.doc

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

MONITORING AND REPORTING -PROGRAM ORDER NO. R3-2002-026
NPDES NO. CA0047996
Waste Discharger Identification No. 3 270101001

for

CARMEL AREA WASTEWATER DISTRICT AND
PEBBLE BEACH COMMUNITY SERVICES DISTRICT
MONTEREY COUNTY

I. INFLUENT MONITORING

A sampling station shall be established where representative samples of the influent can be obtained. Samples shall be collected for the following constituents at the frequencies specified in Table I.

Table 1

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Total Flow Volume	MG	Metered	Daily
Max. Daily Flow	MGD	Metered	Daily
BOD_5	mg/l	24-hr. Composite	Once every 13 days
Total Suspended Solids	mg/l	24-hr. Composite	Once every 13 days

II. EFFLUENT MONITORING

A sampling station shall be established where representative samples of effluent can be obtained. Samples shall be collected for the following constituents at the frequencies specified in Table 2.

Table 2

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Average Daily Flow	MGD	Metered	Daily
pH	--	Grab	Five days per week
Temperature	^0F	Grab	Five days per week
Suspended Solids	mg/l	24-hr. Composite	Five days per week
Settleable Solids	ml/l	Grab	Five days per week
Total Coliform Organisms	MPN/100 mL	Grab	Five days per week, and whenever Final Chlorine Residual (as measured prior to dechlorination) is less than 25% of Initial Chlorine Residual for 5%, or more, of any 24-hour period.
Total Chlorine Residual	mg/l	Continuous	Daily
BOD_5	mg/l	24-hr. Composite	Once every 13 days
Turbidity	NTU	24-hr. Composite	Once every 13 days

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Oil and Grease	mg/l	Grab	Once every 13 days
Ammonia (as N)	mg/l	Grab	Monthly
Nitrate (as N), Total Nitrogen	mg/l	Grab	Monthly
Urea	mg/l	Grab	Monthly
Silicate	mg/l	Grab	Monthly
Acute Toxicity[1]	TUa	Grab	Quarterly (Mar., June, Sept., Dec.)
Chronic Toxicity[1]	TUc	Grab	Quarterly (Mar., June, Sept., Dec.)

[1] Compliance with Toxicity Objectives: Compliance with acute toxicity objective (TUa) shall be determined using an established protocol, e.g., American Society for Testing Materials (ASTI), EPA, American Public Health Association, or State Board.

The Regional Board requires the use of critical life stage toxicity tests to measure TUc. A minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity objective. If possible the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, and after Executive Officer approval, monitoring can be reduced to the most sensitive species. Dilution and control water should be obtained from and unaffected area of the receiving water. 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 following tests shall be used to measure TUc:

Species	Effect	Test Duration	Bioassay Reference
abalone, Haliotis rufescens	abnormal shell development	48 hours	see* below
giant kelp, Macrosystis pyrifera	% germination; germ tube length	48 hours	see *below
Silversides, Menidia beryllina	larval growth rate; percent survival	7 days	see **below

Bioassay Reference

*Hunt, J.W., B.S. Anderson, S.L. Turpin, A.R. Conlon, M. Martin, F.. Palmer, and J.J. Janik. 1989. Experimental Evaluation of Effluent Toxicity Testing Protocols with Giant Kelp, Mysids, Red Abalone, and Topsmelt. Marine Bioassay Project. Fourth Report. California State Water Resources Control Board, Sacramento.

**Weber, C.I., W.B. Horning, II, D.J. Klemm, T.W. Neiheisel, P.A. Lewis, E.L. Robinson, J. Menkedick, and F. Kessler (eds.). 1988. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to marine and estuarine organisms. EPA-600/4-87/028. National Technical Information Service, Springfield, VA.

Toxicity Reduction Requirements:

If the discharge consistently exceeds an effluent limitation based on toxicity objectives, a toxicity reduction evaluation (TRE) shall be required. The TRE shall include all reasonable steps to identify the source of the toxicity. Once the toxicity is identified, the Discharger shall take all reasonable steps to reduce toxicity to the required level.

PROTECTION OF MARINE AQUATIC LIFE

Constituent	Units	Type of Sample	Minimum Frequency of Analysis	Minimum Levels[2] (µg/l)
Arsenic	mg/l	24-hr. Composite	Annually (December)	All methods contained in Table II-3, pg 33 of 2001 Ocean Plan, with exception to the Direct Current Plasma method
Cadmium	mg/l	" "	" "	" "
Chromium(Hex)	mg/l	" "	" "	" "
Copper	mg/l	" "	" "	" "
Lead	mg/l	" "	" "	" "
Mercury	µg/l	" "	" "	" "
Nickel	mg/l	" "	" "	" "
Selenium	mg/l	" "	" "	" "
Silver	mg/l	" "	" "	" "
Zinc	mg/l	" "	" "	" "
Cyanide	mg/l	" "	" "	" "
Phenolic Compounds (non-chlorinated)	mg/l	Grab	" "	See Appendix II, pg. 29 of 2001 Ocean Plan
Chlorinated Phenolics	mg/l	24-hr. Composite	" "	" "
Endosulfan	µg/l	" "	" "	0.01
Endrin	µg/l	" "	" "	0.01
HCH	µg/l	" "	" "	See Table II-4, pg 34 of 2001 Ocean Plan
Radionuclide	pCi/l	Grab	" "	--

[2] Minimum Levels (taken from Appendix II of the 2001 California Ocean Plan) represent the lowest quantifiable concentration in a sample based on the proper application of method-specific analytical procedures and the absence of matrix interferences.

The Discharger must instruct their laboratory to establish calibration standards so that the Minimum Level is the lowest calibration standard. At no time is the Discharger to use analytical date derived from extrapolation beyond the lowest point in the calibration curve.

The Discharger must report with each sample result the reported Minimum Level and the laboratory's current Method Detection Limit (MDL).

Dischargers must report analytical results using the following protocols:

1. Sample results greater than or equal to the reported Minimum* Level must be reported "as measured" by the laboratory (i.e., the measured chemical concentration in the sample).
2. Sample results less than the reported Minimum Level, but greater than or equal to the laboratory's MDL, must be reported as "Detected, but Not Quantified", or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc.").
3. Sample results less than the laboratory's MDL must be reported as "Not Detected", or ND.

PROTECTION OF HUMAN HEALTH – NONCARCINOGENS

Constituent	Units	Type of Sample	Minimum Frequency of Analysis	Minimum Levels (µg/l)	
				Gas Chromatography Method	Gas Chromatograpy / Mass Spectrometry Method
Acrolein	mg/l	24-hr. Composite	Annually (December)	2	5
Antimony	g/l	" "	" "	All methods contained in Table II-3, pg 33 of 2001 Ocean Plan	
Bis(2-chloroethoxy) Methane	mg/l	" "	" "	--	5
Bis(2-chloroisopropyl) Ether	g/l	Grab	" "	10	2
Chlorobenzene	mg/l	24-hr. Composite	" "	0.5	2
Chromium (III)	g/l	" "	" "	See Table II-3. pg 33 of 2001 Ocean Plan	
Di-n-butyl Phthalate	g/l	" "	" "	--	10
Dichlorobenzenes	g/l	" "	" "	See Table II-2. pg 30 of 2001 Ocean Plan	
Diethyl Phthalate	g/l	" "	" "	10	2
Dimethyl Phthalate	g/l	" "	" "	10	2
4,6-dinitro-2-methylphenol	mg/l	" "	" "	10	5
2,4-dinitrophenol	mg/l	" "	" "	5	5
Ethylbenzene	g/l	" "	" "	0.5	2
Fluoranthene	mg/l	" "	" "	10	1
Hexachlorocyclopentadiene	mg/l	" "	" "	5	5
Isophorone	g/l	" "	" "	10	1
Nitrobenzene	mg/l	" "	" "	10	1
Thallium	mg/l	" "	" "	See Table II-3. pg 33 of 2001 Ocean Plan	
Toluene	g/l	" "	" "	0.5	2
Tributyltin	µg/l	" "	" "	--	--
1,1,1-trichloroethane	g/l	" "	" "	0.5	2
1,1,2-trichloroethane	g/l	" "	" "	0.5	2

PROTECTION OF HUMAN HEALTH – CARCINOGENS

Constituent	Units	Type of Sample	Minimum Frequency of Analysis	Minimum Levels (µg/l)	
				Gas Chromatography Method	Gas Chromatograpy / Mass Spectrometry Method
Acrylonitrile	µg/l	24-hr. Composite	Annually (December)	2	2
Aldrin	ng/l	" "	" "	0.005	--
Benzene	mg/l	" "	" "	0.5	2
Benzidine	ng/l	" "	" "	--	5
Beryllium	µg/l	" "	" "	All methods contained in Table II-3, pg 33 of 2001 Ocean Plan, with exception to the Direct Current Plasma and Flame Atomic Absorption methods	

Constituent	Units	Type of Sample	Minimum Frequency of Analysis	Minimum Levels (µg/l)	
				Gas Chromatography Method	Gas Chromatograpy / Mass Spectrometry Method
Bis(2-chloroethyl) Ether	µg/l	" "	" "	--	1
Bis(2-ethylhexyl) Phthalate	mg/l	" "	" "	10	5
Carbon tetrachloride	mg/l	" "	" "	0.5	2
Chlordane	ng/l	" "	" "	0.1	--
Chlorodibromomethane	µg/l	" "	" "	0.5	2
Chloroform	mg/l	" "	" "	0.5	2
DDT	ng/l	" "	" "	See Table II-4, pg 34 of 2001 Ocean Plan	
1,4-dichlorobenzene	mg/l	" "	" "	See Table II-1 and II-2, pgs. 29-30 of 2001 Ocean Plan	
3,3-dichlorobenzidine	µg/l	" "	" "	--	5
1,2-dichloroethane	mg/l	" "	" "	0.5	2
1,1-dichloroethylene	mg/l	" "	" "	0.5	2
Dichlorobromomethane	µg/l	" "	" "	0.5	2
Dichloromethane	mg/l	" "	" "	0.5	2
1,3-dichloropropene	mg/l	" "	" "	See Table II-1 and II-2, pgs. 29-30 of 2001 Ocean Plan	
dieldrin	ng/l	" "	" "	0.01	--
2,4-dinitrotoluene	mg/l	" "	" "	10	5
1,2-diphenylhydrazine	µg/l	" "	" "	--	1
Halomethanes	mg/l	" "	" "		
Heptachlor	µg/l	" "	" "	0.01	--
Heptachlor epoxide	µg/l	" "	" "	0.01	--
Hexachlorobenzene	ng/l	" "	" "	--	1
Hexachlorobutadiene	mg/l	" "	" "	5	1
Hexachloroethane	mg/l	" "	" "	5	1
N-nitrosodimethylamine	mg/l	" "	" "	10	5
N-nitrosodi-N-propylamine	mg/l	" "	" "	10	5
N-nitrosodiphenylamine	mg/l	" "	" "	10	1
PAHs	µg/l	" "	" "	See Appendix II, pg. 29 of 2001 Ocean Plan	
PCBs	ng/l	" "	" "	See Table II-4, pg 34 of 2001 Ocean Plan	
TCDD equivalents	pg/l	" "	" "	--	--
1,1,2,2-tetrachloroethane	g/l	" "	" "	0.5	2
Tetrachloroethylene	mg/l	" "	" "	0.5	2
Toxaphene	ng/l	" "	" "	0.5	--
Trichloroethylene	mg/l	" "	" "	0.5	2
2,4,6-trichlorophenol	µg/l	" "	" "	10	10
Vinyl Chloride	mg/l	" "	" "	0.5	2

III. SLUDGE MONITORING

A sampling station shall be established where representative samples of residual solids from the treatment process can be obtained. Samples shall be collected from the last point in the sludge handling process and analyzed for the following constituents at the frequencies specified in Table 3.

Table 3

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Quantity	Tons or yds^3	Measured	Monthly
Moisture Content	%	Grab	Semi-Annually (March and Sept.)
Total Kjeldahl Nitrogen	mg/l	Grab	" "
Ammonia (as N)	mg/l	Grab	" "
Nitrate (as N)	mg/l	Grab	" "
Total Phosphorous	mg/l	Grab	" "
PH	--	Grab	" "
Oil & Grease	mg/l	Grab	" "
Boron	mg/l	Grab	" "
Cadmium	mg/kg	Grab	" "
Copper	mg/kg	Grab	" "
Hexavalent Chromium	mg/kg	Grab	" "
Lead	mg/kg	Grab	" "
Nickel	mg/kg	Grab	" "
Mercury	mg/kg	Grab	" "
Zinc	mg/kg	Grab	" "
Silver	mg/kg	Grab	" "
Cyanide	mg/kg	Grab	" "

IV. 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 (CCLEAN) as a component of receiving water monitoring activities.

The Receiving Water Monitoring Program consists of the following components:

A. Shoreline 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. Shoreline Sampling

Shoreline sampling shall occur if effluent total coliform exceeds 2,400 MPN/100mL three or more times in a 30-day period. Latitude and Longitude shall be provided for all stations when reporting.

Table 4

Shore Stations	Description
K-4	Mission Point
K-5	North Shore Carmel River Mouth
K-6	Point at North end of Monastery Beach

Parameter	Units	Sampling Station	Depth of Sample	Sampling Frequency
Total and Fecal Coliform Organisms[3,4]	MPN/100ml	County Stations K-4 thru K-6	Surf Zone	Daily (until the Executive Officer agrees that normal sampling can resume)
Enterococcus Organisms[5]	MPN/100ml	" "	"	"

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

[3] 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.

[4] 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.

[5] 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.

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 the following Table. 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, 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 to begin 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
Water Sampling 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
Sediment Sampling 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
Mussel Sampling 5 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

Reporting

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so the date, the constituents, and the concentrations are readily discernable. The data shall be summarized to demonstrate compliance with requirements contained in Order No. 00-061. Location of sludge disposal shall be described in the report.

Monitoring reports shall be submitted for all monitoring and sampling herein on, or before, the last day of the month following the sampling or monitoring event (Table 6).

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 pathogen monitoring shall be reported monthly by the Discharger, as well as in the CCLEAN Annual Report.

Table 6

Monitoring Frequency	**Report Due**
Daily, Weekly and Monthly	last Day of Following Month
Quarterly Monitoring	last Day of January, April, July and October
Semi-Annual Monitoring	last Day of January and April, or , of July and October (as appropriate)
Annual Monitoring	last Day of January
Annually (CCLEAN Annual Report and QAPP for upcoming year)	last day of January

Roger W. Briggs, Executive Officer

Date: 3-26-02