

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 94-126
NPDES PERMIT NO. CA0038598

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

SEWER AUTHORITY MID-COASTSIDE,
CITY OF HALF MOON BAY,
MONTARA SANITARY DISTRICT,
AND GRANADA SANITARY DISTRICT
SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

PURPOSE OF ORDER

1. Sewer Authority Mid-Coastside (hereinafter referred to as SAM) was formed by the City of Half Moon Bay, Granada Sanitary District, and Montara Sanitary District in a Joint Exercise of Powers Agreement dated February 3, 1976, to perform all functions for the collection, treatment and disposal of wastewater. These three entities are collectively referred hereinafter as the discharger.
2. The discharger, submitted a Report of Waste Discharge dated May 24, 1994 for reissuance of waste discharge requirements and a permit to discharge wastewater to waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES).
3. This discharge is presently regulated by Waste Discharge Requirements in Order No. 89-148, adopted by the Board on September 20, 1989, which allows discharge into the Pacific Ocean.

FACILITY DESCRIPTION

4. The discharger owns and operates the treatment plant located at Half Moon Bay. The plant provides secondary level treatment for domestic and industrial wastewater from the City of Half Moon Bay, Montara Sanitary District, and Granada Sanitary District. The discharger's service area has a present population of 20,000. The treatment plant has an average dry weather flow design of 2.0 million gallons per day (mgd), and can treat up to 2.5 mgd during the wet weather flow period. The plant presently discharges an average dry weather flow of 1.5 mgd, and an annual average effluent flow of 1.525 mgd.
5. The U.S. Environmental Protection Agency (USEPA) and the Board have classified this discharge as a major discharge.

6. Treatment facilities utilized prior to discharge into the Pacific Ocean, a water of the State and United States, consist of comminutors, grit removal, primary sedimentation, activated sludge, secondary clarification, chlorination and dechlorination. A treatment process schematic diagram is included as Attachment C.
7. Treated wastewater is currently discharged into the Pacific Ocean, a water of the State and United States, west of Pilarcitos Creek through a submerged diffuser about 1900 feet offshore at a depth of 37 feet below mean lower low water (Latitude 37 Deg. 28 Min. 23 Sec.; Longitude 122 deg. 27 Min. 00 Sec.), with a initial dilution ration of 119:1. The wastewater is discharged directly into Monterey Bay National Marine Sanctuary, an area of special biological significance.
8. Solids treatment and disposal is as follows:

Sludge is treated by an aerobic digester and belt filter presses. Final sludge disposal is to a sanitary landfill.

APPLICABLE PLANS & POLICIES

9. The State Water Resources Control Board adopted a revised "Water Quality Control Plan for the Ocean Waters of California" (California Ocean Plan) on September 22, 1988 and amended it on October 18, 1990.

BENEFICIAL USES

10. The Ocean Plan contains water quality objectives and beneficial uses for the Pacific Ocean. The beneficial uses of the Pacific Ocean are as follows:
 - Industrial Service Supply
 - Navigation
 - Water Contact Recreation
 - Non-contact Water Recreation
 - Ocean Commercial and Sport Fishing
 - Wildlife Habitat
 - Preservation of Rare and Endangered Species
 - Fish Migration
 - Fish Spawning
 - Shellfish Harvesting
 - Marine Habitat
 - Preservation of Areas of Special Biological Significance
 - Preservation of the Monterey Bay National Marine Sanctuary

BASIS FOR EFFLUENT LIMITATIONS

11. The Basin Plan allows for distinguishing between effluent limitations that are met by current performance, and effluent limitations not currently attained. Immediate compliance is required for effluent limits that are met by current performance. Compliance with limitations not currently attained is required by December 1997. A longer compliance time schedule will be

permitted if the discharger participates in an aggressive source control program. Implementation of source control measures to reduce pollutant loadings to the maximum extent practicable shall be completed as soon as possible, but no later than April 11, 1996.

Ocean Discharge

12. A review of the discharger's effluent monitoring data indicated that the discharger will not be able to comply with the revised Basin Plan deep water effluent limits for settleable solids. Based on the available monitoring data, this Order implements the provisions as follows:

- 12..1. Sets interim limits in effect from September 1994 to December 1997 for settleable solids.

OTHER FINDINGS

13. The Discharger plans to expand its facility from a 2 mgd plant to a 4 mgd plant. The construction is scheduled to be completed by 1997.
14. The 1986 Basin Plan initiated the Effluent Toxicity Characterization Program (ETCP) in which certain major dischargers (not including Sewer Authority Mid-Coastside) were required to monitor their effluent using critical life stage toxicity tests to generate information on toxicity test species sensitivity and effluent variability to allow development of appropriate chronic toxicity effluent limitations.

Because the discharger's design flow is less than 5 MGD, the Board did not require the discharger to participate in the ETCP. This permit may be amended in the future to include chronic toxicity effluent limits and monitoring requirements.

Storm Water

15. Federal Regulations for storm water discharges were promulgated by the U.S. Environmental Protection Agency 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 Available (BAT) and Best Conventional Pollutant Control Technology (BCT) to control pollutants in industrial storm water discharges.
16. The storm water flows from the wastewater treatment facility process areas are directed to the wastewater treatment plant headworks and are treated along with the wastewater discharged to the treatment plant. These stormwater flows constitute all industrial stormwater at this facility and consequently this permit regulates all industrial stormwater discharge at this facility.

17. An **Operations and Maintenance Manual** is maintained by the discharger for purposes of providing plant, collection system, and regulatory personnel with a source of information describing all equipment, recommended operation strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, the manual must be kept updated to reflect significant changes in treatment and collection facility equipment and operation practices.
18. This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code [California Environmental Quality Act (CEQA)] pursuant to Section 13389 of the California Water Code.

NOTIFICATIONS AND MEETINGS

19. The discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity to submit their written views and recommendations.
20. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and to the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. Discharge of treated wastewater at a location or in a manner different from that described in Finding No. 6&7 is prohibited.
2. The average dry weather flow discharge shall not exceed 2.0 mgd. The average dry weather flow shall be determined over three consecutive dry weather months each year.
3. Discharges of water, materials, or wastes other than storm water, which are not otherwise authorized by this NPDES permit, to a storm drain system or waters of the State are prohibited.
4. Compliance with Effluent Limitation B.1.g shall be determined using 96-hour flow-through fish bioassays, and one of the following test species: *Gasterosteus aculeatus* (three-spine stickleback), *Pimephales promelas* (fathead minnow), or *Oncorhynchus mykiss* (rainbow trout).
5. Discharges within 1000 feet offshore from the extreme low waterline is prohibited.
6. The discharge of municipal and industrial waste sludge either directly or indirectly 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 into a waste stream that discharges to the ocean without further treatment is prohibited.

7. Storm water discharges shall not cause pollution, contamination, or nuisance.
8. Discharges of water, materials, or wastes other than stormwater, which are not otherwise authorized by this NPDES permit, to a storm drain system or waters of the state are prohibited.

B. EFFLUENT LIMITATIONS

The term "effluent" in the following limitations means the fully treated wastewater effluent from the discharger's wastewater treatment facility, as discharged to the Pacific Ocean.

1. The effluent discharged to the Pacific Ocean shall not exceed the following limits:

Constituent	Monthly Units	Weekly Average	Daily Average	Instantaneous Maximum	Maximum
a. Biological Oxygen Demand (BOD ₅ , 20°C)	mg/l	30	45	60	--
b. Total Suspended Solids	mg/l	30	45	60	--
c. Oil & Grease	mg/l	10	--	--	20
d. Settleable Matter	ml/l-hr	0.1	--	--	0.2
e. Total Chlorine Residual (1)	mg/l	--	--	--	0.0
f. Turbidity	NTU	75	100	225	--
g. Toxicity Concentration (2)	tu	1.5	2.0	2.5	--

Footnote: (1) Requirement defined as below the limit of detection in standard test methods.

$$(2) \text{ Toxicity Concentration (tu)} = \frac{100}{96\text{-hour LC50}}$$

When it is not possible to determine the 96-hour LC50 from the bioassay test results due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the following:

$$\text{Toxicity Concentration (tu)} = \frac{\text{Log } (100 - S)}{1.7}$$

Where S = percent survival in 100 % wastewater.

If S ≥ 99, the toxicity concentration shall be reported as zero.

2. **pH:** the pH of the discharge shall not exceed 9.0 nor be less than 6.0

3. **Total Coliform Bacteria:**

The treated wastewater, at some place in the treatment process prior to discharge, shall meet the following limits of bacteriological quality: The moving median value for the Most Probable Number (MPN) of total coliform bacteria in any five (5) consecutive samples shall not exceed 2400 MPN/100 ml; and, any single sample shall not exceed 24,000 MPN/100 ml.

4. **85 Percent Removal, BOD and TSS:**

The arithmetic mean of the biochemical oxygen demand (Five-day, 20°C) and total suspended solids values, by weight, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period.

5. **INTERIM TOXIC SUBSTANCES EFFLUENT LIMITATIONS:** To be in effect September 1994 through December 1997.

The effluent shall not exceed the following limits :

Table 1

<u>Constituent</u>	<u>Monthly Average</u>	<u>Interim Limit Daily Average</u>
Settleable Matter	0.3 ml/l-hr	0.6 ml/l-hr

6. **FINAL TOXIC SUBSTANCES EFFLUENT LIMITATIONS:(a)(d)(e)(f)**
The effluent shall not exceed the following limits: (see footnotes):

Table 2

Constituents	Units of Measurement	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	ug/l	603	3,483	9,243
Cadmium	ug/l	120	480	1,200
Chromium(VI)(b)	ug/l	240	960	2,400
Copper	ug/l	122	1,202	3,362
Lead	ug/l	240	960	2,400
Mercury	ug/l	4.74	19.14	47.94
Nickel	ug/l	600	2,400	6,000
Selenium	ug/l	1,800	7,200	18,000
Silver	ug/l	64.96	316.96	820.96
Zinc	ug/l	1448	8,648	23,048
Cyanide(c)	ug/l	120	480	1,200
Ammonia (as N)	ug/l	72,000	288	720
Phenolic Compounds (non-chlorinated)	ug/l	3,600	144,002	360,002.5
Chlorinated Phenolics	ug/l	120	480	1200
Endosulfan	ug/l	1.08	2.16	3.24
Endrin	ug/l	0.24	0.48	0.72
HCH	ug/l	0.48	0.96	1.44
Radioactivity	Not to exceed limits specified in Title 17, Division 5, Chapter 4, Group 3, Article 3, Section 32069 of the California Code of Regulations.			

Table 2 (cont.)

Constituents	Units of Measurement	30 - day Average
Acrolein	ug/l	26400
Antimony	ug/l	144,000
Bis(2-chloroethoxy)methane	ug/l	528
Bis(2-chloroisopropyl) ether	ug/l	144,000,000.00
Chlorobenzene	ug/l	68,400.00
Chromium(III)	ug/l	22,800,000.00
Di-n-butyl Phthalate	ug/l	420,000.00
Dichlorobenzenes	ug/l	612,000.00
1,1-Dichloroethylene	ug/l	852,000.00
Diethyl phthalate	ug/l	3,960,000.00
Dimethyl phthalate	ug/l	98,400,000.00
4,6,-Dinitro-2-methylphenol	ug/l	26,400.00
2,4,- Dinitrophenol	ug/l	480
Ethylbenzene	ug/l	492,000.00
Fluroanthene	ug/l	1,800.00
Hexachlorocyclopentadiene	ug/l	6,960.00
Nitrobenzene	ug/l	588
Thallium	ug/l	1,680.00
Toluene	ug/l	10,200,000.00
1,1,2,2-Tetrachloroethane	ug/l	64,800,000.00
Acrylonitrile	ug/l	12
Aldrin	ug/l	0.0265
Benzene	ug/l	708
Benzidine	ug/l	0.08
Beryllium	ug/l	3.96
Bis(2-chloroethyl)ether	ug/l	5.4

Table 2 (cont.)

Constituents	Units of Measurement	30 - Day Average
Bis(2-ethylhexyl)phthalate	ug/l	420
Carbon tetrachloride	ug/l	108
Chlordane	ug/l	0.0032
Chloroform	ug/l	15,600.00
DDT	ug/l	0.02
1,4-Dichlorobenzene	ug/l	2,160.00
3,3-Dichlorobenzidine	ug/l	0.972
1,2-Dichloroethane	ug/l	15,600.00
Dichloromethane	ug/l	54,000.00
1,3-Dichloropropene	ug/l	1,068.00
Dieldrin	ug/l	0.000068
2,4-Dinitrotoluene	ug/l	312
1,2-Diphenylhydrazine	ug/l	19.2
Halomethanes	ug/l	15,600.00
Heptachlor	ug/l	0.864
Hexachlorobenzene	ug/l	0.03
Hexachlorobutadiene	ug/l	1,680.00
Hexachloroethane	ug/l	300
N-nitrosodimethylamine	ug/l	876
N-nitrosodiphenylamine	ug/l	300
PAHs	ug/l	1.056
PCBs	ug/l	0.00068000
TCDD equivalents	ug/l	0.000000468
Tetrachloroethylene	ug/l	11880
Toxaphene	ug/l	0.03
Trichloroethylene	ug/l	3,240.00
2,4,6-Trichlorophenol	ug/l	34.8
Vinyl chloride	ug/l	4,320.00

Footnotes:

- a. Limits apply to the average concentration of all samples collected during the averaging period (Daily - 24-hour period; Monthly - Calendar month).
- b. The discharger may meet this limit as total chromium.
- c. The discharger may demonstrate compliance with this limitation by measurement of weak acid dissociable cyanide.
- d. All analyses shall be performed using current USEPA Methods, as specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", SW-846, Third Edition. Detection limits, practical quantitative levels, and limits of quantitative will be taken into account in determining compliance with effluent limitations.
- e. The above limits are based on Ocean Plan criteria, using a minimum initial dilution value of 119:1. If actual dilution is found to be less than 119:1, these values will be recalculated.
- f. According to the Ocean Plan, effluent limitations for toxic materials shall be derived from objectives listed in Table B for the protection of marine aquatic life and human health, calculated according to the following formula:

$$C_e = C_o + D_m (C_o - C_s)$$

where:

- C_e = the effluent concentration limit,
 C_o = the concentration objective for the receiving waters, to be met at the completion of initial dilution,
 C_s = background seawater concentration,
 D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

* C_s values exist only for arsenic, copper, mercury, silver, and zinc, as listed in Table C of the Ocean Plan. For all other Table B parameters,

C. RECEIVING WATER LIMITATIONS

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam; or
 - b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses; or
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels; or
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; or
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption,

either at levels created in the receiving waters or as a result of biological concentration.

- f. Significant adverse effects that may injure resources or qualities of the Monterey Bay National Marine Sanctuary.
2. 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.
3. The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Board or the State Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
4. The dissolved oxygen concentration shall not at any time be depressed more than ten percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste material.
5. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
6. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
7. The concentration of substances set forth in Chapter IV, Table B of the Water Quality Control Plan for Ocean Waters of California, dated October 18, 1990, in Marine sediments shall not be increased to levels which would degrade indigenous biota.
8. The concentration of organic materials in marine sediments shall not be increased to levels which would degrade marine life.
9. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.
10. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
11. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
12. 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.
13. Discharge of radioactive waste shall not degrade marine life.

14. With in 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 body contact recreation, as determined by the Regional Board the following bacteriological objectives shall be maintained throughout the water column:
 - a. Samples of water from each sampling station shall have a concentration of total coliform organisms less than 1,000 per 100 ml; provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 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.
 - b. The fecal coliform concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60 day period exceed 400 per 100 ml.
15. At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacteriological objectives shall be maintained throughout the water column:

The median total coliform concentration shall not exceed 70 per 100 ml, and not more than 10 percent of the sample shall exceed 230 per 100 ml.

D. SLUDGE MANAGEMENT PRACTICES

1. All sludge generated by the discharger must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Part 503. If the discharger desires to dispose of sludge by a different method, a request for permit modification must be submitted to the USEPA 180 days before start-up of the alternative disposal practice. All the requirements in 40 CFR 503 are enforceable by USEPA whether or not they are stated in an NPDES permit or other permit issued to the discharger.
2. Sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.
3. Duty to mitigate: The discharger shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.
4. The discharge of sewage sludge shall not cause waste material to be in a position where it is, or can be carried from the sludge treatment and storage site and deposited in the waters of the State.
5. The sludge treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the temporary storage site.

Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.

6. The discharger shall submit an annual report to the USEPA and the Board containing monitoring results and pathogen and vector attraction reduction requirements as specified by 40 CFR 503, postmarked February 19 of each year, for the period covering the previous calendar year.
7. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR 258. In the annual self-monitoring report, the discharger shall include the amount of sludge disposed of, and the landfill(s) to which it was sent.
8. Permanent on-site sludge storage or disposal activities are not authorized by this permit. A report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activity by the discharger.
9. General Provisions of this Board's "Standard Provisions and Reporting Requirements", dated August 1993, apply to sludge handling, disposal and reporting practices.
10. The Board may amend this permit prior to expiration if changes occur in applicable state and federal sludge regulations.

E. PROVISIONS

1. Requirements prescribed by this Order supersede the requirements prescribed by Order No.89-148. Order No.89-148 is hereby rescinded.
2. Where concentration limitations in mg/l or $\mu\text{g/l}$ are contained in this Permit, the following Mass Emission Limitations shall also apply.

$$(\text{Mass Emission Limit in kg/day}) = (\text{Concentration Limit in mg/l}) \times (\text{Actual Flow in million gallons per day averaged over the time interval to which the limit applies}) \times 3.78$$

(conversion factor).
3. The discharger shall comply with all sections of this Order immediately upon adoption.
4. **Compliance With Toxic Substances Limitations**
 - a. Due to the time required to set up and perform flow-through bioassays, the discharger shall commence flow through bioassay by December, 1994. In the interim, the discharger shall perform static bioassay test as specified on Order 89-148.
 - b. The discharger shall comply with Effluent Limitations in Section B immediately upon adoption of this Order. Except that the discharger shall

comply with effluent limitations specified in Effluent Limitations B.1.d by December, 1997 and B.1.g by November, 1994. The discharger may request an extended compliance time schedule for particular substances, based on the implementation of an aggressive source control and waste minimization program. Justification for longer compliance periods must include, at a minimum, all of the following:

- (1) Results of a diligent effort to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream;
- (2) Documentation of source control efforts currently underway or completed, including compliance with the General Source Control/Waste Minimization program described in the Basin Plan;
- (3) A proposed schedule for additional source control measures or waste treatment; and
- (4) A demonstration that the proposed schedule is as short as possible.

- c. The discharger shall initiate a monitoring program using appropriate USEPA methods and detection limits, to evaluate the compliance status for all constituents listed in Effluent Limitations in Section B. Monitoring for constituents shown in Section B shall be performed during all periods of surface water discharge.

5. Source Control/Pollution Prevention Program

- a. The discharger shall implement a pollution prevention program. The discharger shall submit a pollution prevention plan, acceptable to the Executive Officer, by the due date listed below. The discharger shall submitted annual reports, beginning **February 15, 1996**, that document its efforts and present an evaluation of the program's success. The discharger shall target constituents found to be not in compliance with effluent limits or potentially in violation of effluent limits.
- b. The discharger shall participate in the general pollution prevention (formerly waste minimization) program as described in the Basin Plan Chapter IV, "Waste Minimization" Section(September 1992 Basin Plan Amendments).

- c. The discharger shall complete the following tasks according to the specified compliance schedules:

<u>Task</u>	<u>Deadline</u>
(1) Submit Pollution Prevention Plan	February 15, 1995
(2) Source Identification Study	
(a) Complete study for any targeted effluent constituents	October 30, 1995
(b) Develop and initiate source reduction plan	April 30, 1996
(c) Complete implementation of the source reduction plan to reduce pollutant loading to the maximum extent possible	April 30, 1997

6. If the discharger chooses to pursue a capacity increase for the treatment plant, information that must be submitted prior to Board consideration of a flow increase must include, but may not be limited to, the following:
- a. Engineering reports documenting adequate reliability, capacity and performance of the completed improvements to the treatment facility;
 - b. Documentation that increased discharges (evaluation must include assessment of wet weather flows) will not result in degradation of receiving waters, or adverse impacts on beneficial uses of receiving waters, in accordance with State and Federal regulations;
 - c. Plans for including reuse of the treated effluent as an integral part of the wastewater management plan; and
 - d. Documentation of compliance with the CEQA.

April 15 Reporting Requirements

7. The discharger shall review, and update as necessary, its Operations and Maintenance Manual, annually, or within 90 days of completion of any significant facility or process changes. The discharger shall submit to the Board, by April 15 of each year, a letter describing the results of the review process including an estimated time schedule for completion of any revisions determined necessary, and a description or copy of any completed revisions.
8. Annually, the discharger shall review and update as necessary, its Contingency Plan as required by Board Resolution 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or adequately implement a contingency plan will be the basis for considering such discharge a willful and negligent violation of

this Order pursuant to Section 13387 of the California Water Code. Plan revisions, or a letter stating that no changes are needed, shall be submitted to the Board by April 15 of each year.

9. The discharger shall implement a program to regularly review and evaluate its wastewater collection, treatment and disposal facilities in order to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, in order to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the discharger's service responsibilities. A Treatment Facilities Evaluation Program report discussing the status of this evaluation program, including any recommended or planned actions, shall be submitted to the Board by April 15 of each year.

Other Reporting Requirements

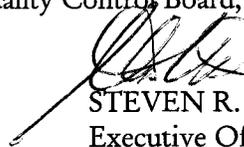
10. The discharger shall conduct a Bacterial Assessment Study for the duration of one year, in accordance to Chapter II.B of the 1990 Ocean Plan with the following time schedule:

<u>Task</u>	<u>Deadline</u>
a. Submit a proposal for conducting the tests. The proposal should describe the test protocol to be used, sample collection and handling procedures, and a schedule for collection of the test samples.	January 15, 1995
b. Commence the proposed study	March 15, 1995
c. Interim report due	September 15, 1995
d. Final report due	March 15, 1996
11. The discharger shall comply with the **Self-Monitoring Program** for this order, as adopted by the Board and as may be amended by the Executive Officer.
12. The discharger shall comply with all applicable items of the attached "**Standard Provisions and Reporting Requirements**" dated August 1993.
13. In addition to reporting to the Regional Board, the discharger shall also notify the Monterey Bay National Marine Sanctuary offices in Monterey and San Francisco, in writing, within 72 hours about any violations of effluent limitations, receiving water limitations, or sludge management practices.
14. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

To assume operation of this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. (Refer to Standard Provisions, referenced above). The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contact with the Board and a statement. The statement shall comply with the signatory paragraph described in Standard Provisions and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.

15. The Board may modify, or revoke and reissue, this Order and Permit if present or future investigations demonstrate that the discharge(s) governed by this Order are causing or significantly contributing to adverse impacts on water quality and/or beneficial uses of the receiving waters.
16. This Order expires on September 21, 1999. The discharger must file a report of waste discharge in accordance with Title 23, Division 3, Chapter 9, Article 3, of the California Administrative Code not later than 120 days before this expiration date as application for reissuance of waste discharge requirements.
17. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, EPA, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on September 21, 1994.


STEVEN R. RITCHIE
Executive Officer

Attachments:

- A. Location/Site Maps
- B. Summary of Report Due dates/Deadlines
- C. Process Schematic
- D. Contingency Plan - Regional Water Board Resolution No. 74-10
- E. Self-Monitoring Program
- F. Regional Water Board NPDES Standard Provisions and Reporting Requirements - August 1993

ATTACHMENT B

SUMMARY OF REPORT DUE DATES AND ACTION DEADLINES

DUE DATE TO BOARD
REFERENCE

NAME OF REPORT/ACTION

A. ANNUAL REPORTS

February 19	Sludge Monitoring	D. 6
February 15	Pollution Prevention Report	E.6
April 15	Operations & Maintenance Manual	E.8
April 15	Contingency Plan	E.9
April 15	Treatment Facilities Eval. Program	E.10

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

SEWER AUTHORITY MID-COASTSIDE
SAN MATEO COUNTY

NPDES PERMIT NO. CA0038598
ORDER NO. 94-126

CONSISTS OF

PART A,
DATED AUGUST 1993

AND

PART B

PART B
SEWER AUTHORITY MID-COASTSIDE

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT AND INTAKE

<u>Station</u>	<u>Description</u>
A-001	At any point in the treatment facilities headworks at which all waste tributary to the system is present, preceding any phase of treatment, and exclusive of any return flows or process side streams.

B. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the treatment facilities between the point of discharge and the point at which all waste from the treatment plant is present following dechlorination.
E-001-D	At any point in the treatment facilities after disinfection is complete and prior to dechlorination.

C. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1,2,3, and R	Identical to locations used in Pre-discharge Monitoring programs (see attached map).

D. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
P-1 through P-'n'	Located along the periphery of the waste treatment or disposal facilities, at equidistant intervals, not to exceed 500 feet. (a sketch showing the locations of these stations will accompany each report.)

E. OVERFLOWS AND BYPASSES

<u>Station</u>	<u>Description</u>
OV-1 through OV-'n'	Bypass or overflows from manholes, pump stations, or collection systems.

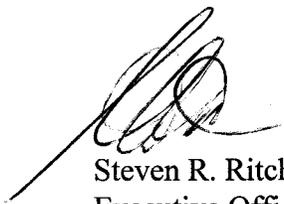
REPORTING - Shall be submitted monthly and include date, time, quantity, and period of each overflow or bypass and measures taken or planned to prevent future occurrences.

II. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

The schedule of sampling, analysis, and observations shall be that given as Table I.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89-148.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the dischargers and revisions will be ordered by the Executive Officer.


Steven R. Ritchie
Executive Officer

Effective Date: 9/21/94

Attachments:

- Table I and Footnotes
- Part A, August 1993
- Map - Receiving Water Stations

Table 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1)

Sampling Station		A-001		E-001			E-001D	All P Sta.	All OV Sta.	All C Sta.	Misc. Observe
TYPE OF SAMPLE	Unit	C-24	G(3)	C-24(3)	Cont.	G	C-24	O	O	G	O
Flow Rate	mgd				D						
BOD, 5-day, 20 deg C, CBOD; or COD	mg/l & kg/day	2/W		3/W							
Chlorine Residual & Dosage	mg/l & kg/day		2H	OR CONT(6)		2H OR	Cont				
Total Suspended Solids	mg/l & kg/day	2/W		D							
Oil & Grease	mg/l & kg/day	2/M	2/M(2)								
Settleable Matter	mg/l-hr & cu.		D								
Turbidity	NTU			D							
Fish Toxicity 96-hr. LC50	tu			2/M							
Ammonia Nitrogen & Un-ionized Ammonia	mg/l & kg/day			2/M(7)						Q	
pH	pH units		D	2/M(7)			D	2/M		Q	
Dissolve oxygen	mg/l and % Saturation		D	2/M(7)			D			Q	
Temperature	deg C		D	2/M(7)			D			Q	
Coliform (Total or Fecal)	MPN/100 ml					5/W					
Salinity	ppt									Q	
Secchi Disc	inches									Q	
Sulfides (if DO<5.0 mg/l)											
Total & Dissolved	mg/l		D				D				
Arsenic	µg/l			M(4)							
Cadmium	µg/l			M(4)							
Chromium(VI)	µg/l			M(4)							
Copper	µg/l			M(4)							
Lead	µg/l			M(4)							
Mercury	µg/l			M(4)							
Nickel	µg/l			M(4)							
Selenium	µg/l			M(4)							
Silver	µg/l			M(4)							
Zinc	µg/l			M(4)							
Cyanide	µg/l			M(4)							
Phenolic Compounds	µg/l			M(4)							
Chlorinated Phenolics	µg/l			Y(4)							
Endosulfan	µg/l			Y(4)							
Endrin	µg/l			Y(4)							
HCH	µg/l			Y(4)							
Radioactivity				Y(4)							
All Applicable Standard											
Observations			D					2/W	E	Q	
Daily Rainfall											D
Dewatered Sludge											D(8)
Acrolein	µg/l			Y(4)							
Antimony	µg/l			Y(4)							
Bis(2-chloroethoxy) methane	µg/l			Y(4)							
Bis (2-chloroisopropyl) ether	µg/l			Y(4)							
Chlorobenzene	µg/l			Y(4)							
Chromium (III)	µg/l			Y(4)							
Di-n-butyl phthalate	µg/l			Y(4)							
Dichlorobenzenes	µg/l			Y(4)							
1,1-Dichloroethylene	µg/l			Y(4)							

Sampling Station		A-001		E-001			E-001D	All P Sta.	All OV Sta.	All C Sta.	Misc. Observe
TYPE OF SAMPLE	Unit	C-24	G(3)	C-24(3)	Cont.	G	C-24	O	O	G	O
Diethyl phthalate	µg/l			Y(4)							
Dimethyl phthalate	µg/l			Y(4)							
4,6,-Dinitro-2-methylphenol	µg/l			Y(4)							
2,4-Dinitrophenol	µg/l			Y(4)							
Ethylbenzene	µg/l			Y(4)							
Fluroanthene	µg/l			Y(4)							
Hexachlorocyclopentadiene	µg/l			Y(4)							
Isophorone	µg/l			Y(4)							
Nitrobenzene	µg/l			Y(4)							
Thallium	µg/l			Y(4)							
Toluene	µg/l			Y(4)							
1,1,2,2-Tetrachloroethane	µg/l			Y(4)							
Tributyltin	µg/l			Y(4)							
1,1,1-Trichloroethane	µg/l			Y(4)							
1,1,2-Trichloroethane	µg/l			Y(4)							
Acrylonitrile	µg/l			Y(4)							
Aldrin	µg/l			Y(4)							
Benzene	µg/l			Y(4)							
Benzidine	µg/l			Y(4)							
Beryllium	µg/l			Y(4)							
Bis(2-chloroethyl)ether	µg/l			Y(4)							
Bis(2-ethylhexyl)phthalate	µg/l			Y(4)							
Carbon tetrachloride	µg/l			Y(4)							
Chlordane	µg/l			Y(4)							
Chloroform	µg/l			Y(4)							
DDT	µg/l			Y(4)							
1,4-Dichlorobenzene	µg/l			Y(4)							
3,3'-Dichlorobenzidine	µg/l			Y(4)							
1,2-Dichloroethane	µg/l			Y(4)							
Dichloromethane	µg/l			Y(4)							
1,3-Dichloropropene	µg/l			Y(4)							
Dieldrin	µg/l			Y(4)							
2,4 - Dinitrotoluene	µg/l			Y(4)							
1,2-Diphenylhydrazine	µg/l			Y(4)							
Halomethanes	µg/l			Y(4)							
Heptachlor	µg/l			Y(4)							
Hexachlorobenzene	µg/l			Y(4)							
Hexachlorobutadiene	µg/l			Y(4)							
Hexachloroethane	µg/l			Y(4)							
N-nitrosodimehtylamine	µg/l			Y(4)							
N-nitrosodiphenylamine	µg/l			Y(4)							
PAHs	µg/l			Y(4)							
PCBs	µg/l			Y(4)							
TCDD equivalents	µg/l			Y(4)							
Tetrachloroethylene	µg/l			Y(4)							
Toxaphene	µg/l			Y(4)							
Trichloroethylene	µg/l			Y(4)							
2,4,6-Trichlorophenol	µg/l			Y(4)							
Vinyl chloride	µg/l			Y(4)							

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample 24-hr
Cont = continuous sampling
O = observation

TYPES OF STATIONS

A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
OV = overflows and bypasses
Misc. Obsv = Miscellaneous Observations

FREQUENCY OF SAMPLING

E = each occurrence	2/H = twice per hour	2H = every 2 hours
H = once each hour	2/W = 2 days per week	2D = every 2 days
D = once each day	5/W = 5 days per week	2W = every 2 weeks
W = once each week	2/M = 2 days per month	3M = every 2 months
M = once each month		
2/Y = once in March and once in September		
Cont = continuous		
Q = quarterly, once in March , June, September and December		

* **For the numbers in the parenthesis please see attached foot notes**

FOOTNOTES

1. During any day when bypassing occurs from any treatment unit(s) in the plant or from the outfall, the monitoring program for the effluent and any nearshore discharge shall include the following in addition to the above schedule for sampling, measurement and analyses:
 - a. Composite sample for BOD and Total Suspended Solids (Influent and Effluent, for the duration of the bypass or 24 hours, whichever is shorter.)
 - b. Grab samples for Total Coliform, Settleable Matter, Oil and Grease, and chlorine residual (continuous or every two hours).
 - c. Continuous monitoring of flow.
2. In the event that sampling for oil and grease once every two weeks or less frequently shows an apparent violation of the waste discharge permit monthly average limitation (considering the results of one or two day's sampling as a monthly average), then the sampling frequency shall be increased to weekly so that a true monthly average can be computed and compliance can be determined.
3. Grab samples shall be taken on day(s) of composite sampling.
4. If any samples are in violation of limits, sampling shall be increased for that parameter to weekly until compliance is demonstrated in two successive samples.
5. Fish toxicity shall be determined using 96 hour continuous flow fish bioassays with one of the following test species: three-spined stickleback, rainbow trout or fathead minnow. Effluent used for fish bioassays must be dechlorinated prior to testing.
6. Data shall be reported using forms provided or approved equivalent. Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, grab samples shall be taken every 30 minutes until compliance is achieved.
7. Dissolved oxygen, pH, and temperature shall be tested for on the same composite sample(s) used for the bioassay(s) at the start of the bioassay(s) and at intervals of 24, 48, 72, and 96 hours after starting the bioassay(s). Ammonia nitrogen and unionized ammonia shall be tested for on the same composite sample(s) used for the bioassays(s) at the start of the bioassay test(s). The method of calculating unionized ammonia shall be indicated.
8. Daily records shall be kept of the quantity and solids contents of dewatered sludge disposed of and the location of disposal.