CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 83-40

NPDES NO. CA0038148

WASTES DISCHARGE REQUIREMENTS FOR:

CITY OF MARTINEZ
WATER TREATMENT PLANT
MARTINEZ, CONTRA COSTA COUNTY

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

1. The City of Martinez (hereinafter called the discharger) by application dated February 27, 1983, has applied for renewal of waste discharge requirements and a permit to discharge wastes under the National Pollutant Discharge Elimination System (NPDES).

2. The discharger treats about four million gallons per day (mgd) of municipal water by coagulation, clarification, and filtration. Sludge is gravity thickened and then discharged to evaporation ponds. During wet weather, the ponds may become full, necessitating discharge of ponded rainwater in order to facilitate sludge drying. The discharge would occur several times a year at a maximum daily rate of .04 mgd via overflow weirs into a buried drain pipe which empties into an unnamed watercourse at a point in the Shell Oil Company's Martinez Refinery, about 2500 feet east from its Pacheco Gate No. 2. The watercourse is tributary to Carquinez Strait, a water of the United States near Bulls Head.

3. The discharge is currently governed by Waste Discharge Requirements, Order No. 79-38, which allow discharge inot Carquinez Strait.

4. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for Suisun Bay.

5. The beneficial uses of Carquinez Strait and contiguous waters are:

   a. Recreation (contact and non-contact)
   b. Fish migration and spawning
   c. Habitat for wildlife and estuarine organisms including some rare and endangered species
   d. Industrial water supply
   e. Esthetic enjoyment
   f. Navigation
   g. Commercial and sport fishing

6. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.

7. Effluent limitations establish pursuant to Section 301, 304 and 307 of the Clean Water Act and amendments thereto are applicable to the discharge.

8. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U. S. Environmental Protection Agency. Effluent limitations of this Order are based ont he Basin Plan, State plans and policies, current plant perfomance, and best engineering judgment. These limitations are considered to be those attainable by BAT, in the judgment of the Board.

9. The Board has notified the discharge and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the City of Martinez, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge of waste to the watercourse tributary to Carquinez Straits is prohibited between May 1 and September 30 of each year.

2. Discharge in excess of .04 mgd at any time between October 1 and April 30 of each year is prohibited.

3. No sludge shall be discharged into watercourses or waters of the State.

4. There shall be no bypass of untreated wastewater to waters of the State.

B. Effluent Limitations

1. The discharge of waste containing constituents in excess of the following limits is prohibited:

Constituent	Units	30-Day Average	Maximum Daily
Aluminum, dissolved	kg/day	0.151	.227
	mg/l	1.0	1.5

Constituent	Units	30-Day Average	Maximum Daily
Total suspended solids	kg/day mg/l	4.53 30	6.80 45
Chlorine residual	mg/l	-	0.0
Settleable matter	ml/l/hr	-	.5

2. The discharge shall not have pH of less than 6.5 nor greater than 8.5.

3. In any representative set of samples, the waste as discharged shall meet the following limit of quality:

   TOXICITY: The survival of test fishes in 96-hour bioassays of theeffluent as discharged shall be a median of 90% survival and a 90 percentile value of not less than 70% survival.

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 depsosited macroscopic particulate matter or foam;

   b. Bottom deposits or aquatic growths;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin:

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, 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.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

   a. Dissolved oxygen — 7.0 mg/l minimum - median for any three consecutive months not less than 80% saturation. When natural factors cause lesser concentration than specified above, then discharge shall not cause further reduction in the concentration of dissolved oxygen.

b. Dissolved sulfide 0.1 mg/l maximum.

c. pH Variation from natural ambient pH by more than 0.5 pH units.

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 79-38 adopted on April 17, 1979. Order No. 79-38 is hereby rescinded.

2. The discharger shall comply with all sections of this Order immediately upon adoption.

3. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977, except A-16.

4. The discharger shall comply with the self-monitoring program as adopted by this Board and as may be amended by the Executive Officer.

5. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator, U. S. Environmental Protection Agency, has no objections.

6. This Order expires on October 19, 1988 and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

I, Fred H. Dierker, 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, San Francisco Bay Region, on October 19, 1983.

FRED H. DIERKER
Executive Officer

Attachments:
Standard Provisions, Reporting
Requirements & Definitions - April 1977
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

City of Martinez

Water Treatment Plant

Martinez, Contra Costa County

NPDES NO. CA 0038148

ORDER NO. 83-40

EFFECTIVE _____

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

CITY OF MARTINEZ
WATER TREATMENT PLANT
MARTINEZ, CONTRA COSTA COUNTY

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board. (See APPENDIX E.)

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

A grab sample is defined as an individual sample collected in fewer than 15 minutes.

D. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

The discharger is required to perform observations, sampling, and analyses according to the schedule in Table I.

E. RECORDS TO BE MAINTAINED

1. Written reports, strip charts, calibration and maintenance records, and other records shall be maintained at the waste treatment plant and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board or Regional Administrator of the U. S. Environmental Protection Agency, Region IX. Such records shall show the following for each sample:

   a. Identity of sampling and observation stations by number.

   b. Date and time of sampling and/or observations.

   c. Date and time that analyses are started and completed, and name of personnel performing the analyses.

   d. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to specific section of Standard Methods is satisfactory.

   e. Calculations of results.

   f. Results of analyses and/or observations.

2. A tabulation shall be maintained showing the total waste flow or volume for each discharge.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Bypass Reports

   Bypass reporting shall be an integral part of regular monitoring program reporting, and a report on bypassing of untreated waste or bypassing of any treatment unit(s) shall be made which will include cause, time, and date, duration and estimated volume of waste bypassed, method used in estimating volume, and persons notified, for planned and/or unplanned bypass.

   The discharger shall file a written technical report at least 15 days prior to advertising for bid on any construction project which would cause or aggravate the discharge of waste in violation of requirements; said report shall describe the nature, costs, and scheduling of all action necessary to preclude such discharge.

   In the event the discharger is unable to comply with the conditions of the waste discharge requirements and prohibitions due to:

   (a) maintenance work, power failures, or breakdown of waste treatment equipment, or

(b) accidents caused by human error or negligence, or

(c) other causes such as acts of nature,

the discharger shall notify the Regional Board Office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

In addition, if the noncompliance caused by items (a), (b), or (c) above is with respect to any of the effluent limits, the waste discharger shall promptly accelerate his monitoring program to analyze the discharge at least once every day for those constituents which have been violated. Such daily analyses shall continue until such time as the effluent limits have been attained, or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Self-Monitoring Report.

2. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar quarter by the fifteenth day of the following month. The reports shall be comprised of the following:

a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications and/or plant facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. Monitoring reports and the letter transmitting reports shall be signed by either a principal executive officer, ranking elected official, or other duly authorized employee.

The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be prepared using the example shown in APPENDIX A. The discharger will prepare the format using those parameters and requirement limits for effluent constituents specified in his permit.

c. Map or Aerial Photograph

A map or aerial photograph shall accompany the report showing sampling and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Section G. by date, time, type of sample, and station, signed by the laboratory director. The report format will be prepared using the examples shown in APPENDIX B.

e. Effluent Data Summary

Summary tabulations of the data to include for each constituent total number of analyses, maximum, minimum, and average values for each period.

f. List of Approved Analyses

(1) Listing of analyses for which the discharger is approved by the State Department of Health.

(2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

3. Annual Reporting

By January 30 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the report shall contain a comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements. The report format will be prepared by the discharger using the examples shown in APPENDIX D and should be maintained and submitted with each regular self-monitoring report.

G. Monitoring Specifications

1. Description of Sampling Stations

a. Evaporation Ponds

Station	Description
EP-001 thru EP-004	At a point within the evaporation ponds representative of the water to be discharged.

b. Effluent

Station	Description
E-001 thru E-004	At a point in the discharge streams from evaporation ponds 1 thru 4.

c. Land Disposal Site Observations

Station	Description
P-1 thru P-n	At points along the periphery of the sludge disposal site at 25 foot intervals.

2. Schedule of Sampling and Analysis

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

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 83-40.

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 discharger and revisions will be ordered by the Executive Officer.

FRED H. DIERKER
Executive Officer

Effective Date_____

Attachments:
Table I

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

SAMPLING STATIONS	EP-001 thru EP-004	E-001 thru 004	P						
TYPE OF SAMPLES	G	G[3]							
Flow rate gals/day		E							
Chlorine Residual mg/l & kg/day	E								
Settleable Matter ml/l-hr	E	E							
Total Suspended Solids mg/l & kg/d	E[1]								
pH	E								
Aluminum, dissolved mg/l & kg/d	E[1]								
Observations	E[2]		M[4]						

(1) If ponded rainwater from more than one pond is discharged simultaneously, the grab samples from each pond may be composited in proportion to their estimated discharge rates. The results may be reported as applying to each discharge.

(2) Determine freeboard before and after discharge.

(3) Effluent grab samples shall be collected immediately prior to cessation of discharge.

(4) Land disposal sites should be inspected for evidence of leaching during the wet weather period.,

LEGEND FOR TABLE

STATIONS

EP = evaporation pond
E = effluent from evaporation pond

TYPES OF SAMPLES

G = grab sample

SAMPLING FREQUENCY

E = each discharge occurrence
M = monthly