

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 91-127
NPDES NO. CA0029050

WASTE DISCHARGE REQUIREMENTS FOR:

MARE ISLAND NAVAL SHIPYARD
HYDRAULIC MAINTENANCE DREDGING AND SPOILS DISPOSAL
VALLEJO, SOLANO COUNTY

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

1. The Department of the Navy, Mare Island Naval Shipyard, hereinafter called the discharger, by application dated December 7, 1990 has applied for reissuance of waste discharge requirements (Order No. 86-37) and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES), from Mare Island Naval Shipyard.
2. The discharger performs maintenance dredging in Mare Island Strait. The boundary of the maintenance dredging extends from the Highway 37 bridge on the north to Carquinez Strait on the south as shown in attachment A. The maintenance dredging referred to in this Order is separate from the maintenance dredging of the main channel in Mare Island Strait conducted by the U.S. Army Corps of Engineers.
3. About 600,000 cubic yards per year of material is dredged primarily by hydraulic dredging methods. The dredged material is disposed of in seven disposal ponds totaling about 510 acres. These ponds are located above mean higher high water on the western side of Mare Island as shown in Attachment A. Depending on the location of the dredging operation, dredged material is transported to the disposal ponds via one of five permanent pipelines.
4. A maximum of 2.5 million gallons per day (mgd) of decanted water from the disposal ponds is discharged to the marsh area between the disposal ponds and San Pablo Bay. The discharge is controlled by weir structures at ten points located along the west side of the disposal ponds as shown in attachment A.
5. The discharge is presently governed by Waste Discharge Requirements, Order No. 86-37 which allow discharge into

San Pablo Bay.

6. The U.S. Environmental Protection Agency (EPA) and the Board have classified this discharge as a minor discharge.
7. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) in December 1986. The State Water Resources Control Board approved it in May 1987. The Basin Plan contains water quality objectives for San Pablo Bay and contiguous waters.
8. The beneficial uses of San Pablo Bay and contiguous water bodies are:
 - o Water contact recreation
 - o Non-contact water recreation
 - o Wildlife habitat
 - o Preservation of rare and endangered species
 - o Fish migration and spawning
 - o Industrial process supply
 - o Industrial service supply
 - o Navigation
 - o Commercial and sport fishing
 - o Shellfish harvesting
 - o Estuarine habitat
9. The Basin Plan prohibits the discharge of any wastewater which has particular characteristics of concern to beneficial uses at any point which does not receive a minimum initial dilution of at least 10:1 or into any nontidal water or dead end slough or similar confined water areas or their immediate tributaries. The discharge into the marsh does not receive an initial dilution of 10:1.
10. The Board finds that this discharge does not contain particular characteristics of concern to beneficial uses. Therefore, the Basin Plan prohibition does not apply to this waste discharge.
11. Effluent limitations and toxic effluent standards, established pursuant to Section 301, 304, and 307 of the Clean Water Act and amendments thereto are applicable to the discharge.
12. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) have not been promulgated by the U.S. Environmental Protection Agency for this type of discharge. Effluent limitations of the Order are based on the Basin Plan, State Plans and Policies, current operational

performance, and best professional judgement. The limitations are considered to be those attainable by BAT, in the judgement of the Board.

13. 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 (CEQA) pursuant to Section 13389 of the California Water Code.
14. The Board has notified the discharger 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.
15. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT Mare Island Naval Shipyard, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The bypassing of treatment facilities and the discharge of untreated waste to waters of the State is prohibited.

B. Effluent Limitations

1. The wastewater as discharged through any of the discharge points to waters of the State from the disposal ponds shall not exceed the following limit:

<u>Constituent</u>	<u>Units</u>	<u>Maximum</u>
Settleable Matter	ml/l-hr	1.0

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;

- 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 5.0 mg/L minimum. Median of any three consecutive months shall not be less than 80% saturation.
When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen
- b. pH Variation from natural ambient pH by more than 0.5 pH units.
- c. Un-ionized ammonia 0.025 mg/L as N Annual Median
0.4 mg/L as N maximum.

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 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.

C. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 86-37 adopted on

June 18, 1986. Order No. 86-37 is hereby rescinded.

2. The discharger shall comply with all sections of this order immediately upon adoption.
3. The discharger shall review and update annually its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
4. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
5. Neither the discharge nor its treatment shall create a nuisance or pollution as defined in Section 13050 of the California Water Code.
6. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986, except items B.2 and C.8.
7. Pursuant to Environmental Protection Agency regulations [40 CFR 122.42(a)] the Discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of a toxic pollutant.
8. This Order expires September 18, 1996. 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 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
9. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, 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 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 18, 1991.



STEVEN R. RITCHIE
Executive Officer

Attachments:

Standard Provisions & Reporting
Requirements, December 1986
Self Monitoring Program
Resolution 74-10



HIGHWAY

297

VALLEJO

MARE ISLAND STRAIT

SAN PABLO BAY

PIPELINE 4

PIPELINE 3

PIPELINE 2

PIPELINE 1

PIPELINE 5

E-5

E-7

E-6

E-3

E-4

E-2

-  Area Dredged by Navy
-  Dredge Spoils Disposal Ponds
-  Pipeline
-  Decanted Water Discharge Weir

0 1000 2000 FEET

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ATTACHMENT A
MARE ISLAND NAVAL SHIPYARD
HYDRAULIC MAINTENANCE DREDGING
AND SPOILS DISPOSAL

DRAWN BY: LWT | DATE: 5-19-86 | DRWG. NO.

(updated 8-26-91)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

MARE ISLAND NAVAL SHIPYARD
HYDRAULIC MAINTENANCE DREDGING AND SPOILS DISPOSAL

VALLEJO, SOLANO COUNTY

NPDES NO. CA0029050

ORDER NO. 91-127

SMP CONSISTS OF

PART A, dated December 1986

AND

PART B, Ordered September 18, 1991

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. Effluent

<u>Station</u>	<u>Description</u>
E-1 through E-11	The wastewater at each weir as shown in Attachment A, prior to discharge from the land disposal pond to the marsh adjacent to San Pablo Bay.

B. Receiving Waters

<u>Station</u>	<u>Description</u>
C-1 through C-11	At points located within 50 feet and under the influence of the discharge from each weir.

C. Land Observation

<u>Station</u>	<u>Description</u>
L-1 through L-'n'	Located along the perimeter levee of the land impoundment facility receiving dredge spoils at equidistant intervals not to exceed 300 feet.

II. SCHEDULE OF SAMPLING AND ANALYSIS

The schedule of sampling and analysis shall be as follows:

<u>Station</u>	<u>Type of Sample and Frequency</u>	<u>Analysis</u>	<u>Units</u>
E-1 through E-11	Grab samples collected once daily when discharging.	Settleable matter pH	ml/l-hr units
E-1 through E-11	Composite samples composed of two grab samples taken at four hour intervals. The sample shall be taken and analyzed at seven day intervals when discharging.	chromium lead zinc	mg/l mg/l mg/l
C-1 through C-11	Observations prior to and at the conclusion of each period of discharge.	All Standard Observations as defined in Part A.	

L-1 through l-'n'	Weekly observations starting from the time of disposal of dredge spoils to the ponds through to the of discharge to the marsh from the disposal ponds.	All Standard Observations as defined in Part A.
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III. MODIFICATIONS OF PART A

Delete items D.1, D.2.a., D.2.c, D.2.g., D.3., E.1.e., E.1.f., E.4, E.5.b., F.3., F.5., G.4.c.
 Instead of monthly reports as specified in G.4., written reports shall be submitted quarterly.

IV. MISCELLANEOUS REPORTING

A. Violations of any permit limitations shall be reported on the quarterly transmittal letter accompanying the self-monitoring report in the following format or equivalent:

1. Parameter of <u>Violated Limit</u>	Violation <u>Ratio</u>	Permit <u>Limit</u>	Value (or range of values) of <u>Violation</u>
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2. Remedy or proposed remedy to restore compliance.

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 this 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. 91-127
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.



STEVEN R. RITCHIE
 Executive Officer

DATE ORDERED September 18, 1991