CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 95-126
NPDES PERMIT NO. CA0110116

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:
U.S. NAVY, NAVAL SUPPORT ACTIVITY
TREASURE ISLAND
SAN FRANCISCO COUNTY

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

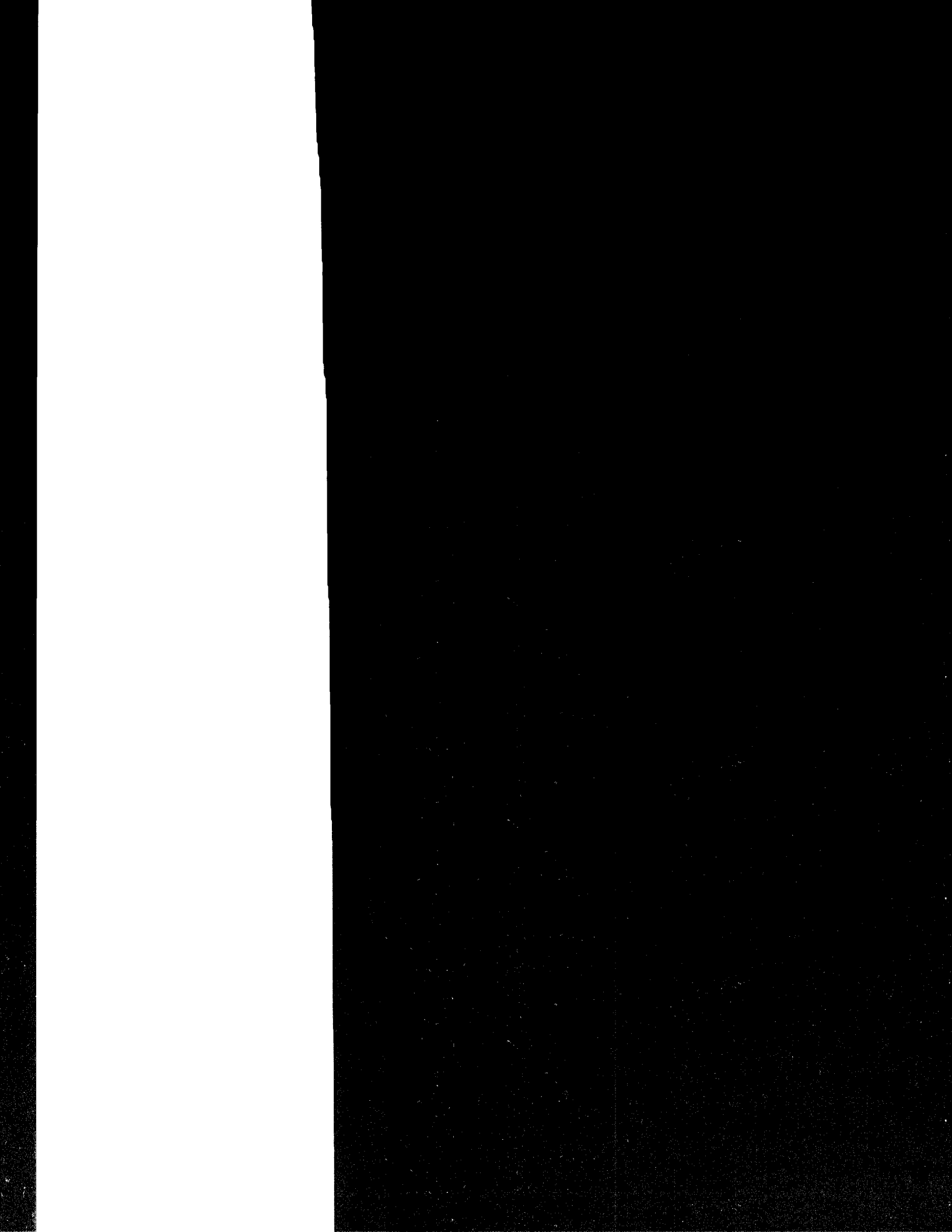
1. The United States Navy, hereinafter called the discharger, submitted a report of waste discharge dated January 17, 1995, for reissuance of NPDES Permit No. CA0110116 for the Naval Support Activity, Treasure Island. The discharge is presently governed by waste discharge requirements contained in Order No. 90-081 issued by the Board on June 20, 1990.

2. The United States Navy owns and operates a wastewater treatment plant located on the north side of Treasure Island in San Francisco County. The facility has capacity to provide secondary level treatment for 2.0 million gallons per day (mgd) of domestic wastewater from Treasure Island. The average dry weather flow for 1994 at the treatment plant was 0.81 mgd. The facility's peak wet weather design flow is 8.0 mgd.

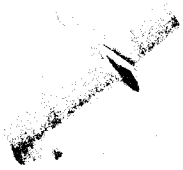
The treatment facility consists of screening, grit removal and primary clarification, secondary treatment by trickling filter, secondary clarification, chlorination and dechlorination. The treated wastewater is discharged into San Francisco Bay, a water of the United States, through a submarine outfall 400 feet offshore in 30 feet of water at latitude 37° 49' 50" and longitude 122° 21' 25". Sludge is anaerobically digested before disposal in an authorized sanitary landfill.

he Board adopted a revised Water Quality Control Plan for the San Francisco Basin asin Plan) on December 17, 1986. The Basin Plan identifies beneficial uses and water lity objectives for surface and groundwaters in the region, as well as effluent tations and discharge prohibitions intended to protect beneficial uses. This Order ements the plans, policies and provisions of the Board's Basin Plan.

ent limitations in this permit are based on the plans, policies, and water quality a of the Basin Plan, *Quality Criteria for Water* (EPA 440/5-86-001, 1986; Gold applicable Federal Regulations (40 CFR Parts 122 and 131), the National Toxics 7 FR 60848, 22 December 1992; NTR), and Best Professional Judgement.



6. The beneficial uses of San Francisco Bay and contiguous water bodies are:



- Industrial Service Supply
- Industrial Process 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
- Estuarine Habitat

7. The effluent limit for copper in this permit is based on 4.9 µg/l copper as an interpretation of the narrative toxicity objective in the Basin Plan, based on best professional judgement. Specifically, the use of 4.9 µg/l as the site-specific objective for copper is based on the Regional Board study that employed the "water effect ratio" approach developed by the EPA. This study and associated staff analysis are described in a September 25, 1992 staff report entitled "Revised Report on Proposed Amendment to Establish a Site Specific Objective for Copper for San Francisco Bay".

8. Federal Regulations for stormwater 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 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 stormwater discharges.

The storm water flow from the wastewater treatment facility process areas are d to the primary sedimentation basins and treated along with the wastewater disc the treatment plant. These stormwater flows constitute all industrial storm v facility and consequently this permit regulates all industrial storm water di this facility.

9. An **Operations and Maintenance Manual** is maintained by the disc of providing plant and regulatory personnel with a source of inform equipment, recommended operation strategies, process control m maintenance activities. In order to remain a useful and relevan shall be kept updated to reflect significant changes in treatmer operation practices.

10. This Order serves as an NPDES Permit, adoption of wh provisions of Chapter 3 (commencing with Section 21

Resources Code [California Environmental Quality Act (CEQA)] pursuant to Section 13389 of the California Water Code.

11. 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.

12. 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. Bypass or overflow of untreated wastewater to waters of the State either at the treatment plant or from any of the discharger's interceptor system and pump stations tributary to the treatment plant is prohibited.

2. The average dry weather flow shall not exceed 2.0 mgd. The average shall be determined over three consecutive months each year.

3. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.

4. 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.

5. Storm water discharges shall not cause pollution, contamination, or nuisance.

B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits:

Constituents	Units	Monthly Average	Weekly Average	Maximum Daily	Instantaneous Maximum
a. Settleable Matter	ml/l-hr	0.1	--	--	0.2
b. BOD (5-day)	mg/l	30	45	60	--
c. Total Suspended Solids	mg/l	30	45	60	--
d. Oil & Grease	mg/l	10	--	20	--
e. Total Chlorine Residual[(1)]	mg/l	--	--	--	0.00

(1) Requirement defined as below the limit of detection in the latest edition of "Standard Methods for the Examination of Water and Wastewater."

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 240 MPN/100 ml; and, any single sample shall not exceed 10,000 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. Acute Toxicity: Representative samples of the effluent shall meet the following limits for acute toxicity: (Provision E.5 of this Order applies to these bioassays.)

   The survival of organisms in undiluted effluent shall be an eleven (11) sample median value of not less than 90 percent survival, and an eleven (11) sample 90 percentile value of not less than 70 percent survival. The eleven sample median and 90th percentile effluent limitations are defined as follows:

   11 sample median: A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if five or more of the past ten or less bioassay tests show less than 90 percent survival.

   90th percentile: A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit, if one or more of the past ten or less bioassay tests show less than 70 percent survival.

6. TOXIC SUBSTANCES EFFLUENT LIMITATIONS: The discharge of effluent containing constituents in excess of the following concentration limits is prohibited[a,f]:

Table 1 (All limits in $\mu g/\ell$)

Constituent	Monthly Average[b]	Daily Average[b]
1. Arsenic [h]	---	200
2. Cadmium [h]	---	30

Table 1 (All limits in $\mu g/\ell$)

	Constituent	Monthly Average[b]	Daily Average[b]
3.	Chromium (VI) [c] [h]	---	110
4.	Copper	---	37
5.	Lead[g]	---	53
6.	Mercury	0.21	1
7.	Nickel[g]	---	65
8.	Selenium[g]	---	50
9.	Silver [h]	---	23
10.	Zinc[g] [h]	---	580
11.	Cyanide[e]	---	10
12.	PAHs [d]	0.31	150
13.	Phenols	---	500

Footnotes:

a. These limits are based on marine water quality objectives, and are intended to be achieved through secondary treatment and, as necessary, pretreatment and source control.

b. Limits apply to the average concentration of all samples collected during the averaging period (Daily - 24-hour period; Monthly - Calendar month).

c. The discharger may meet this limit as total chromium.

d. 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[a,h]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene, and pyrene.

e. The discharger may demonstrate compliance with this limitation by measurement of weak acid dissociable cyanide.

f. All analyses shall be performed using current USEPA Methods, as specified in 40 CFR 136 (40 CFR 122.44(i)).

g. Effluent limitation may be met as a 4-day average. If compliance is to be determined based on a 4-day average, then concentrations of four 24-hour composite samples shall be reported, as well as the average of four.

h. Limit was specified in the previous permit and is lower than new limit specified in the revised Basin Plan. The discharger has maintained compliance with this lower limit; therefore, this limit will continue to apply to the effluent, and not be replaced with the new limit from the Basin Plan.

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. Alternation of temperature, turbidity, or apparent color beyond present natural background levels;
d. Visible, floating, suspended, or deposited oil or other products of petroleum or origin;
e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or water fowl, or which render any of these unfit for human consumption wither at levels created in the receiving waters or as 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 concentrations than those specified above, then this 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.
d. Un-ionized Ammonia	0.025 mg/l as N Annual Median 0.16 mg/l as N Maximum

3. The discharge shall not cause a violation of any applicable water quality standard for receiving water adopted by the Board or the State Water Resource 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.

4. Storm Water Discharge

a. Storm water discharges shall not adversely impact human health or the environment.

b. Storm water discharges shall not cause or contribute to a violation of any applicable water quality objective for receiving waters contained in the Basin Plan.

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. 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.

7. 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.

8. General Provision C of this Board's "Standard Provisions and Reporting Requirements", dated August 1993, apply to sludge handling, disposal and reporting practices.

9. The Board may amend this permit prior to expiration if changes occur in applicable state and federal sludge regulations.

E. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 90-081. Order No. 90-081 is hereby rescinded.

2. Where concentration limitations in mg/l or μg/l are contained in this Permit, the following Mass Emission Limitations shall also apply:

   (Mass Emission Limit in kg/day) = (Concentration Limit in mg/l) x (Actual Flow in million gallons per day averaged over the time interval to which the limit applies) x 3.785 (conversion factor).

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

4. As new water quality objectives go into effect for San Francisco Bay (whether statewide, regional or site-specific), the effluent limitations in this permit will be modified as necessary to reflect the objectives. Adoption of the effluent limitations contained in this permit is not intended to restrict in any way future modification based on legally adopted water quality objectives.

5. **Compliance with Acute Toxicity Effluent Limitation:**

   a. Compliance with Effluent Limitation B.5 (Acute Toxicity) of this Order shall be evaluated by measuring survival of test fishes exposed to undiluted effluent for 96 hours in flow-through bioassays. Each fish species represents a single bioassay

   b. The two compliance species shall be as specified by the Executive Officer. The discharger shall conduct a minimum of one screening of three species: three-spine stickleback, rainbow trout and fathead minnow. All tests in a single screening must be completed within ten days of each other. The three species screening requirement can be met using either flow-through or static renewal bioassays. The discharger shall submit screening test data acceptable to the Executive Officer, within six months after adoption of this Order.

   c. The Executive Officer may consider allowing compliance monitoring with only one (the most sensitive of two), if the discharger can document that the acute toxicity limitation, specified above, has not been exceeded during the previous three years, or that acute toxicity has been observed in only one of two fish species.

   d. All bioassays shall be performed according to protocols approved by the USEPA or State Board, or published by the American Society for Testing and Materials (ASTM) or American Public Health Association.

d. All bioassays shall be performed according to protocols approved by the USEPA or State Board, or published by the American Society for Testing and Materials (ASTM) or American Public Health Association.

6. The dischargers shall comply with effluent limitations specified in Effluent Limitations B.6 immediately upon adoption of this Order.

7. **Toxic Pollutants Special Study**

   The dischargers shall submit a technical report acceptable to the Executive Officer summarizing the results of a minimum of six (6) effluent sample analysis for the constituents listed in Table 2 of the attached Self-Monitoring Program (three in wet season and three in dry season), with the exception of TCDD Equivalents [dioxins] for which three (3) analyses shall be sufficient. For each constituent, the report shall include the limit of quantification (LOQ), method detection limit (MDL), and practical quantification limit (PQL) achieved at the discharger's laboratory. For constituents analyzed by outside laboratories, MDLs and PQLs should be provided to the discharger by outside laboratories, and included in this technical report. The technical report shall contain recommendations on effluent sampling and analysis, both with respect to type and frequency of analysis. This NPDES permit shall be subsequently modified to include effluent sampling for the subject constituents.

8. 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.

9. 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.

10. 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 Wastewater Treatment Facilities, Pumping, and Collection System Reliability Improvement and Management Program summary report discussing the status of this

12. The discharger shall comply with all applicable items of the attached "**Standard Provisions and Reporting Requirements** " dated August 1993, or any amendments thereafter.

13. 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.

14. This Order expires on June 21, 2000. 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 before this expiration date as application for reissuance of waste discharge requirements.

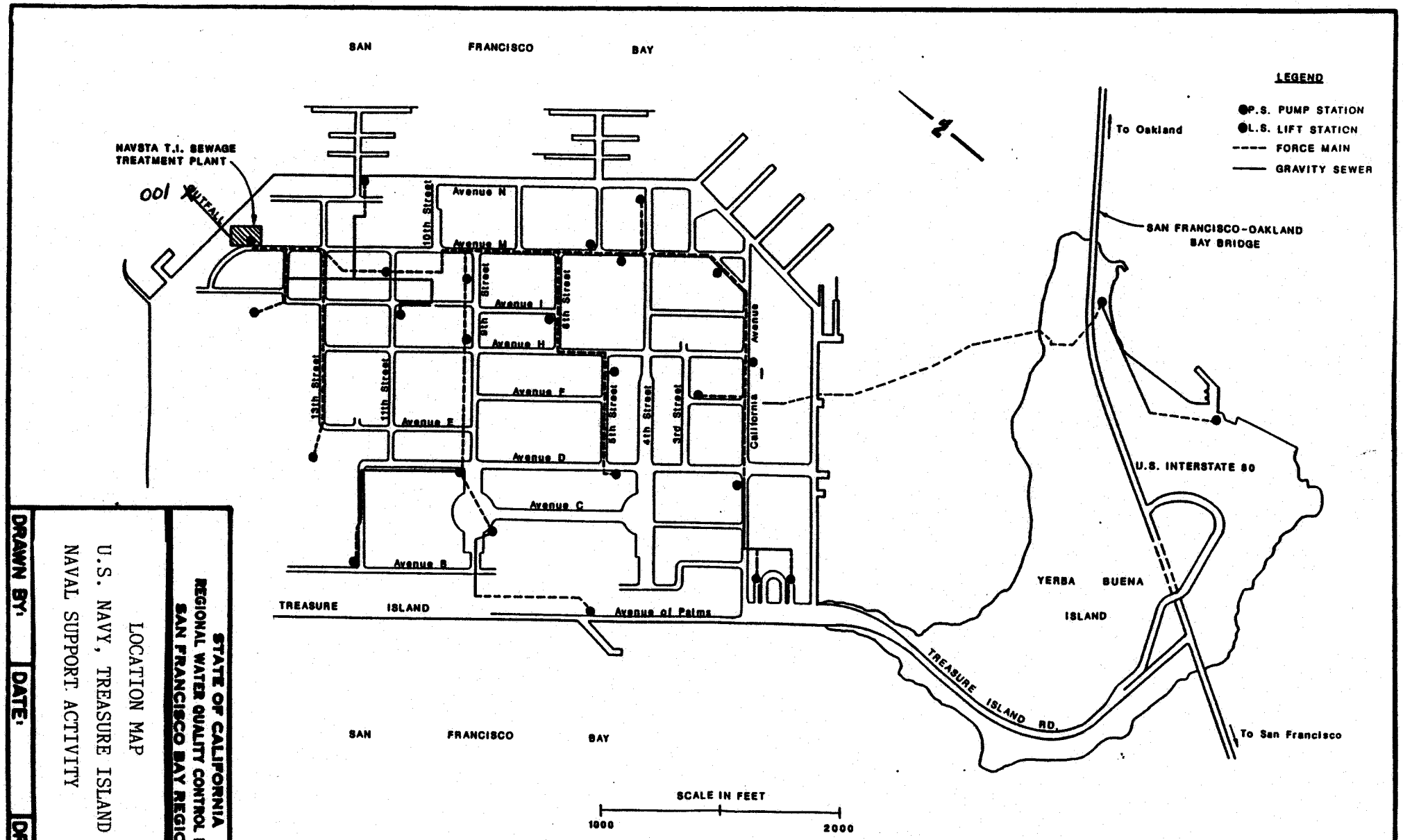
15. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, EPA, has no objection. If the Regional 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 June 21, 1995.

STEVEN R. RITCHIE
Executive Officer

Attachments:

Figure 1 - Location & Process Schematic Maps
Summary of Reports
Self-Monitoring Program
Standard Provisions and Reporting Requirements - August 1993
Resolution No. 74-10



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

LOCATION MAP

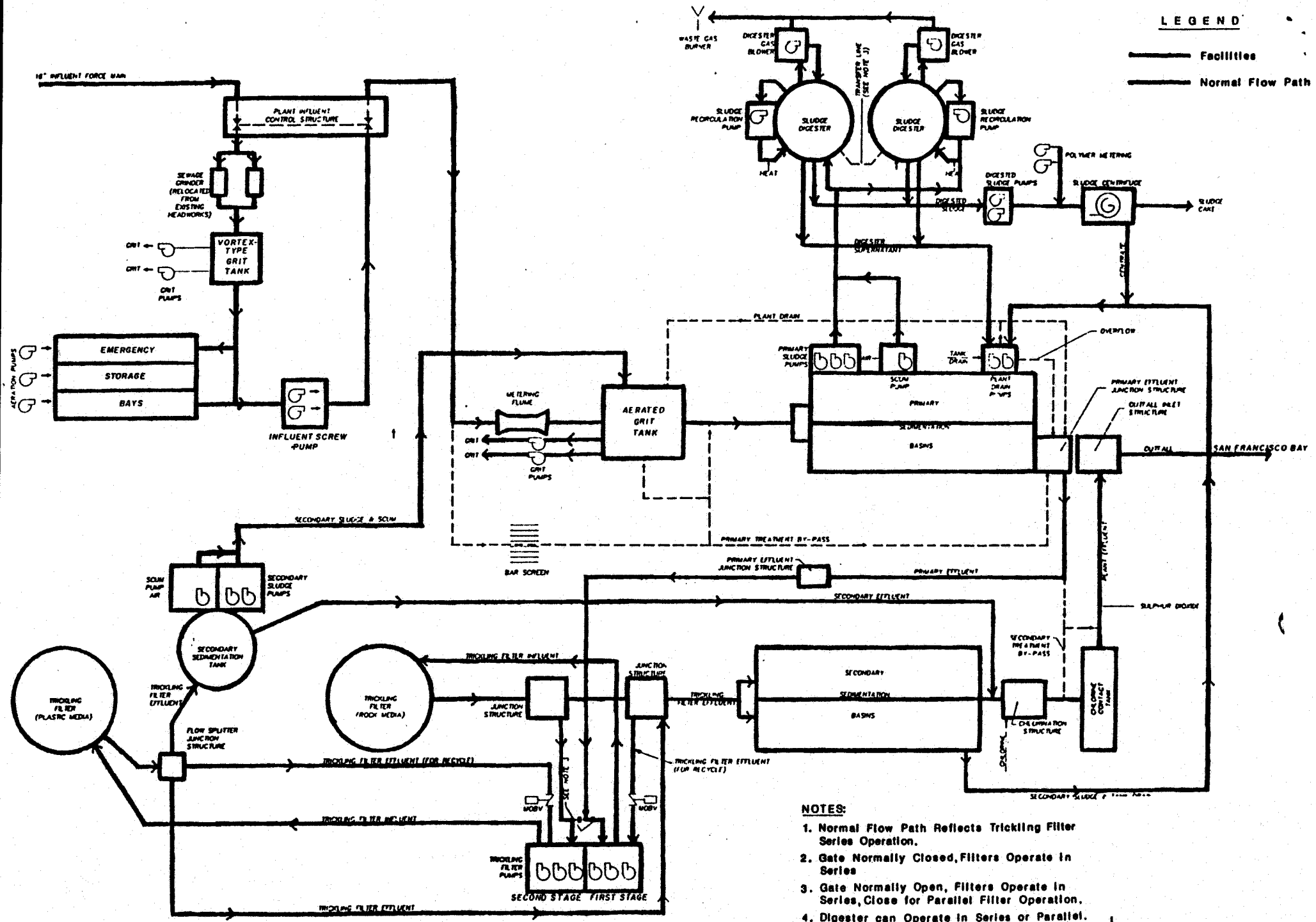
U.S. NAVY, TREASURE ISLAND

NAVAL SUPPORT ACTIVITY

DRAWN BY:

DATE:

DRWG. NO.



NOTES:

1. Normal Flow Path Reflects Trickling Filter Series Operation.
2. Gate Normally Closed, Filters Operate in Series
3. Gate Normally Open, Filters Operate in Series, Close for Parallel Filter Operation.
4. Digester can Operate in Series or Parallel.

TREASURE ISLAND SEWAGE TREATMENT PLANT

ATTACHMENT

SUMMARY OF REPORT DUE DATES AND ACTION DEADLINES

DUE DATE TO BOARD	NAME OF REPORT/ACTION	REFERENCE
A. ANNUAL REPORTS		
February 19	Sludge Monitoring Results	D.6
April 15	Operation and Maintenance Manual	E.8
April 15	Contingency Plan Revisions	E.9
April 15	Wastewater Treatment, Pumping and Collection System Reliability Program Summary Report	E.10
C. SPECIFIC REPORT/ACTION DEADLINES		
January 1, 1996	Acute Toxicity Time Schedule	E.5.d

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

U.S. NAVY, NAVAL SUPPORT ACTIVITY
TREASURE ISLAND
SAN FRANCISCO COUNTY

NPDES PERMIT NO. CA0110116
ORDER NO. 95-126

CONSISTS OF
PART A, dated August 1993, and
PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT

Station	Description
A-1	At any point in the treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment that may alter influent character.

B. EFFLUENT

Station	Description
E-001	At any point in the disinfection facilities at which point adequate contact with the disinfectant is assured.

C. RECEIVING WATER - OFFSHORE STATIONS

Sampling stations shall be located offshore at the following distances from the outfall (see figure 1):

Station	Description
CS-1	100 feet northwest of outfall
CS-2	Directly over outfall
CS-3	100 feet east of outfall
CS-4	100 feet south of outfall
CS-5	1600 feet northwest of outfall (reference station)

D. LAND OBSERVATIONS (TREATMENT PLANT)

Station	Description
P-1 through P-n	Located at the corners and midpoints of the perimeter fenceline surrounding the discharger's treatment facilities or sludge lagoons (A sketch showing the locations of these stations will accompany each report).

E. OVERFLOWS AND BYPASSES

Station	Description
OV-1 through OV-'n'	Bypass or overflows from stations, or collection system.

Note: Initial SMP report to include map and description of each known bypass or overflow location.

Reporting - Shall be submitted monthly whenever bypass or overflow occurs and shall include date, time, and period of each overflow and/or bypass.

II. SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

The schedule of sampling, analysis and observation shall be that given in Table 1.

III. REPORTING REQUIREMENTS

1. General Reporting Requirements are described in Section C of this Board's "Standard Provisions and Reporting Requirements", dated August 1993.

2. Self-Monitoring Reports for each calendar month shall be submitted monthly, by the 22nd day of the following month. The required contents of these reports are described in Section F.4. of Part A.

3. An Annual Report for each calendar year shall be submitted to the Board by February 15th of the following year. The required contents of the annual report are described in Section G.5. of Part A.

4. Any overflow, bypass or significant non-compliance incident that may endanger health or the environment shall be reported according to the Sections F.1 and F.2 of Part A.

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.95-126.

2. Is effective on the date shown below.

3. May be amended by the Executive Officer pursuant to 40 CFR 122.63.

STEVEN R. RITCHIE
Executive Officer

Effective Date: 6/21/95

Attachments:

Table 1
Notes for Table 1
Table 2 - Toxic organic pollutant monitoring list
Figure 1 - Offshore sampling locations

TABLE 1 (1,9,12)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

NPDES PERMIT NO. CA0110116
ORDER NO. 95-126

SAMPLING STATION	A-1	E-001			All CS	All P	All OV
TYPE OF SAMPLE	C-24	G[4]	C-24	Cont.	G[8]	O	O
Flow Rate (mgd)				D			
BOD, 5-day, 20°C, or CBOD (mg/l & Kg/day) (3)	3/W		3/W				
Chlorine Residual & Dosage (mg/l & Kg/day) (11)		2H or Continuous					
Settleable Matter (ml/l-hr. & cu.ft./day)		3/W					
Total Suspended Matter (mg/l & Kg/day) (3)	3/W		3/W				
Oil & Grease (mg/l & Kg/day) (2)		M					
Total Coliform (MPN/100 ml)		3/W			M		
Acute Toxicity, 96-hr. (% Survival) (5,6)			M				
pH (7) (Units)		3/W			M		
Dissolved Oxygen (mg/l & % Saturation)					M		
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)					M		
Temperature (°C)		3/W			M		
Ammonia Nitrogen (µg/l & Kg/day)			M[10]				
Arsenic (µg/l & Kg/day)			Q				
Cadmium (µg/l & Kg/day)			Q				

SAMPLING STATION	A-1	E-001			All CS	All P	All OV
TYPE OF SAMPLE	C-24	G[4]	C-24	Cont.	G[8]	O	O
Chromium (μg/l & Kg/day)			Q				
Copper (μg/l & Kg/day)			Q				
Lead (mg/l & Kg/day)			Q				
Mercury (μg/l & Kg/day)			Q				
Nickel (mg/l & Kg/day)			Q				
Selenium (μg/l & Kg/day)			Q				
Silver (μg/l & Kg/day)			Q				
Zinc (mg/l & Kg/day)			Q				
Cyanide[13] (μg/l & Kg/day)			Q				
Phenolic Compounds[13] (μg/l & Kg/day)			Q				
PAH's (μg/l & Kg/day)			Q				
Constituents in Table 2[13] (μg/l & Kg/day)			(14)				
All Applicable Standard Observations					M	W	E
Un-ionized Ammonia					M		

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample (24-hour)
Cont. = continuous sampling
O = observation

TYPES OF STATIONS

E = waste effluent stations
C = receiving water stations
L = basin and/or pond levee stations
P = treatment facilities perimeter stations

FREQUENCY OF SAMPLING

E = each occurrence
H= once each hour
D = once each day
W = once each week
M = once each month
Y = once each year

2/H = twice per hour
2/W = 2 days per week
5/W = 5 days per week
2/M = 2 days per month
2/Y = twice per year
Q = quarterly, once each in Mar., June, Sept., & Dec.

2H = every 2 hours
2D = every two days
2W = every two weeks
2M = every two months
Cont. = continuous

NOTES FOR TABLE 1:

(1) During any day when bypassing occurs from any treatment unit(s) in the plant or to the emergency 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 analysis:

a. Composite sample for BOD and Total Suspended Solids.
b. Grab samples for Total Coliform, Settleable Matter, and Oil and Grease.
c. Continuous monitoring of flow.
d. Continuous or every two hour monitoring of chlorine residual.

(2) Oil and Grease sampling shall consist of a grab sample. In the event that sampling for oil and grease every two week or less frequency shows an apparent violation of the waste discharge permit, 30-day average limitation (considering the results of one or two day's sampling as a 30-day average), then the sampling frequency shall be increased to weekly so that a true 30-day average can be computed and compliance can be determined.

(3) Percent removal (effluent vs. influent) shall also be reported.

(4) Grab samples shall be taken on day(s) of composite sampling.

(5) Compliance with the acute toxicity limitations shall be determined using tests with Rainbow Trout and Three-spine Stickleback. All tests shall be conducted in accordance with EPA protocols.

(6) Sample date for bioassay and one for all other specified parameters shall coincide with composite sample(s).

(8) Samples should be collected within one foot below the surface of the receiving water body.

(7) A copy of all the strip charts and/or circle graphs for continuous monitoring of pH shall be included in the monthly self-monitoring reports.

(9) If any effluent sample is in violation of limits, except those for metals, cyanide, and organics, sampling shall be increased for that parameter to at least daily or greater until compliance is demonstrated in two successive samples. Receiving water violations shall be reported in the monthly report; increased receiving water monitoring may be required. Compliance measurements represent compliance status for the time period between measurements.

(10) These parameters shall be tested for on the same composite sample used for the bioassay.

(11) Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. A copy of all the strip charts and/or circle graphs for continuous monitoring of chlorine residual as well as the tabulated results from each analysis shall be included in the monthly self-monitoring reports. If an effluent violation is detected, grab samples shall be taken every 30 minutes until compliance is achieved.

(12) All flow other than to the outflow (e.g. sludge, etc.) shall also be reported monthly. Daily records shall be kept of the quantity (cu. yds. or cu. ft.) and solids content (%) of dewatered sludge disposed of and the location of disposal.

(13) A minimum of four grab samples, one every six hours over a 24-hour period, must be used for volatile organic compounds (EPA Method 624), Cyanide and Phenolic Compounds. These samples shall be composited at the laboratory just prior to analysis.

(14) For sampling frequency, refer to Provision E.7. of the NPDES permit. Constituents to be monitored are listed in the following table:

TABLE 2
TOXIC ORGANIC POLLUTANT MONITORING LIST FOR U.S.NAVY, TREASURE ISLAND

Constituent
1,2 Dichlorobenzene
1,3 Dichlorobenzene
1,4 Dichlorobenzene
2,4,6 Trichlorophenol
Aldrin
α-BHC
Benzene
β-BHC
Chlordane
Chloroform
DDT
Dichloromethane
Dieldrin
Endosulfan
Endrin
Fluoranthene
γ-BHC (Lindane)
Halomethanes
Heptachlor
Heptachlor Epoxide
Hexachlorobenzene
PCBs (Total)
Pentachlorophenol

Constituent
TCDD Equivalents [dioxin]
Toluene
Toxaphene
Tributyltin

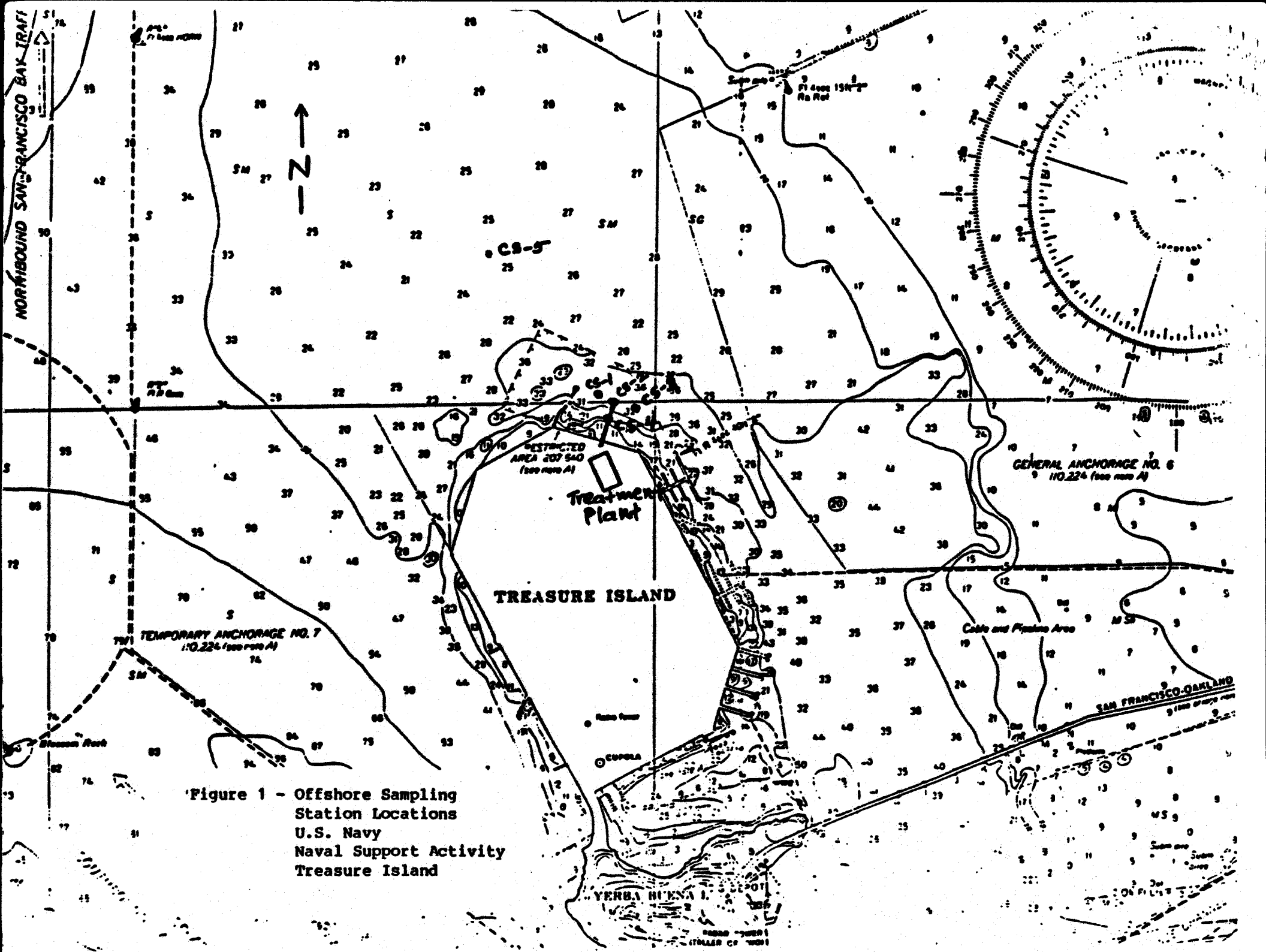


Figure 1 - Offshore Sampling Station Locations
U.S. Navy
Naval Support Activity
Treasure Island