

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 84-47
NPDES NO. CA0037672

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

NORTH POINT WATER POLLUTION CONTROL PLANT
CITY AND COUNTY OF SAN FRANCISCO

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

1. The City and County of San Francisco, hereinafter called the discharger, submitted a report of waste discharge dated March 15, 1984 for reissuance of NPDES Permit No. CA0037672.
2. The North Point Water Pollution Control Plant (WPCP) treats exclusively wet weather flow consisting of a combination of domestic and industrial wastewater mixed with storm water runoff, all containing pollutants.
3. The treated wastewater is discharged through four forty-eight inch diameter outfalls which terminate 800 feet offshore, two at the end of Pier 33 and two at Pier 35. The discharges are submerged at a depth of 17-26 feet below mean lower low water.
4. Wet weather operation of the North Point WPCP depends upon the coordinated operation of all the Bayside combined wastewater control system facilities. These facilities consist of the North Shore Outfall Consolidation, North Point WPCP, North Shore Pump Station, Channel Outfall Consolidation, Channel Pump Station, Islais Creek South Side Outfall Consolidation, and the Southeast WPCP. (See attached Drawing A.)
5. Wet weather flows are intermittent in nature and subject to a high degree of variability throughout the wet weather season. Based on past rainfall records, the North Point WPCP will be operated approximately 30-40 times per wet season, with the duration of each operation expected to average approximately 12 hours at a maximum flow rate of 140 mgd.
6. Wet weather flow in excess of the storage and treatment capacity of the combined Bayside wastewater control system is discharged through wet weather diversion structures. These overflows are regulated by NPDES Permit No. CA0038610 adopted by the Board.
7. The North Point WPCP will provide the capability to treat dry weather wastewater from the North Point area in the event of emergency circumstances making treatment at the North Point WPCP preferable to treatment at the Southeast WPCP. Any such discharge will be governed by the requirements contained in the Southeast WPCP Permit No. CA0037664.

8. The discharge is presently governed by Waste Discharge Requirements, Order No. 83-3, which allow discharge into San Francisco Bay.
9. 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 San Francisco Bay and contiguous waters.
10. The beneficial uses of San Francisco Bay and contiguous water bodies are:
 - Water contact recreation
 - Non-contact water recreation
 - Wildlife habitat
 - Estuarine habitat
 - Fish migration and spawning
 - Industrial service supply
 - Navigation
 - Commercial and sport fishing
11. An Operations and Maintenance Manual is maintained by the discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, facilities, and recommended operating strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, this manual should be kept updated to reflect significant changes in plant facilities or activities.
12. This Order serves as a NPDES permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
13. 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 with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.
14. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger 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 as amended and regulations and guidelines adopted thereunder shall comply with the following:

A. Effluent Limitations

1. The discharge of effluent in excess of the following limits is prohibited:

	Units	(1)Ann. Avg.	5 sample Median	Inst. Max.
a. Settleable Solids	ml/l-hr	0.5	-	1.5
b. Oil & Grease	mg/l	20	-	40
c. Chlorine Residual	mg/l	0.0	-	0.0
d. Total Coliform	MPN/100 ml	-	240	10,000

- (1) Annual average shall be calculated for all days of operation over the period of July 1 - June 30 each year.
2. The discharge shall not have a pH of less than 6.0 nor greater than 9.0.
3. Effluent shall be essentially free of material that is floatable or will become floatable upon discharge.
4. The survival of test fishes in 96 hour static or flow-through bioassays of the effluent shall be a 90 percentile value of not less than 50 percent survival.

B. Discharge Prohibitions

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

C. Provisions

1. The discharge of toxic substances shall be minimized through diligent implementation of a source control program and proper municipal wastewater treatment. The discharger shall maintain a program which will identify and minimize sources of toxic substances resulting from accidental spills and inadequate storage or handling of hazardous materials.
2. The discharger shall undertake all reasonable efforts to operate the Bayside combined wastewater control system to its maximum capability to meet the following goals: (1) minimize untreated overflows in compliance with other NPDES permits adopted by this Board; (2) maximize secondary treatment of wastewater at the Southeast WPCP; (3) operate the North Point WPCP and Southeast WPCP within the effluent limitations set by this Board.
3. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 83-3. Order No. 83-3 is hereby rescinded.

4. When concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:

Mass Emission Limit in kg/d = Concentration Limit in mg/l x 3.79 x Actual Flow in mgd averaged over the time interval to which the limit applies.

5. The discharger shall comply with all sections of this Order immediately upon adoption.
6. The discharger shall review and update its Operations and Maintenance Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Board by September 15 of each year. A time schedule for completion of the initial revision shall be submitted by September 15, 1984. Documentation of operator input and review shall accompany each annual update.
7. The discharger shall review and update by October 1, 1984 and annually thereafter 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.
8. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
9. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977, except A.12, B.3, and Section C.
10. This Order expires July 18, 1989. 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.
11. 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, Roger B. James, 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 July 18, 1984.

ROGER B. JAMES
Executive Officer

Attachments:

Standard Provisions, Reporting
Requirements & Definitions, April 1977
Self-Monitoring Program
Resolution 74-10

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

City and County of San Francisco

North Point WPCP and North Shore Wet Weather

Diversion Structures*

NPDES NO. _____

ORDER NO. 84-47 & 84-28

CONSISTS OF

PART A, dated 1/78

AND

PART B

*Monitoring requirements for the Southeast
Sewerage Zone wet weather diversion structures
is contained in the self-monitoring program
for the Southeast WPCP, NPDES No. CA0037664.

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT

<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 and preceding any phase of treatment.

B. EFFLUENT

<u>Stations</u>	<u>Description</u>
E-001	At any point in the outfall from the treatment facilities between the point of discharge and the point at which all waste tributary to that outfall is present. (May be the same as E-001-D).
E-001-D	At any point in the disinfection facilities for Waste E-001 at which point adequate contact with the disinfectant is assured.

C. OFFSHORE RECEIVING WATERS

<u>Stations</u>	<u>Description</u>
N-1	At a point in San Francisco Bay, located within the waste plume between Piers 33 and 35. (See Figure 1)
N-2	At a point in San Francisco Bay, located within the dilution field at 600 feet from Pier 31. (See Figure 1)

- N-3 At a point in San Francisco Bay, located within the dilution field at 600 feet from Pier 37. (See Figure 1)
- N-4 At a point in San Francisco Bay, located within the dilution field between Piers 33 and 35. (See Figure 1)
- N-5 At a point in San Francisco Bay, located 1.0 miles NE from Station N-1. (See Figure 1)
- Grid Points Stations are located at 500' intervals, commencing at 100' from the end of each pier, extending along the radial from that pier. (See attached Map)

The specific locations for Stations N-1 and N-4 shall be described and reported in the first monitoring report submitted under these revised requirements.

D. SHORELINE RECEIVING WATERS

<u>Stations</u>	<u>Description</u>
S-1A	On Marine Drive-in Golden Gate National Recreational Area adjacent to a Presidio storm sewer discharge.
S-2	North of U.S. Coast Guard Station by Marin Drive
S-3	End of Lyon St.
S-4	Inner Beach west end Yacht Harbor
S-5	Shoreline foot of Pierce St. outfall pipe
S-7	Shoreline foot of Laguna St., small boat dock

S-10	Aquatic Park beach west end
S-11	Aquatic Park beach east end
S-13	Shoreline Bulkhead ft. of Leavenworth St.
S-14	Fisherman's Wharf at Pump Station
S-15A	Pierhead, Pier 35
S-16	Pierhead, Pier 33
S-17	Shoreline Bulkhead between Piers 17 and 19
S-18	Shoreline Bulkhead between Piers 7 and 9
S-19	Shoreline Bulkhead Pier 1 1/2 center
S-20	Foot of Howard St.
S-21	Bulkhead N. Side Pier 38
S-22	Bulkhead N.E. corner 3rd St. Bridge
S-23A	Midway between the 5th Street North Overflow Structure 6th Street North Overflow Structure
S-25	7th Street Overflow Structure

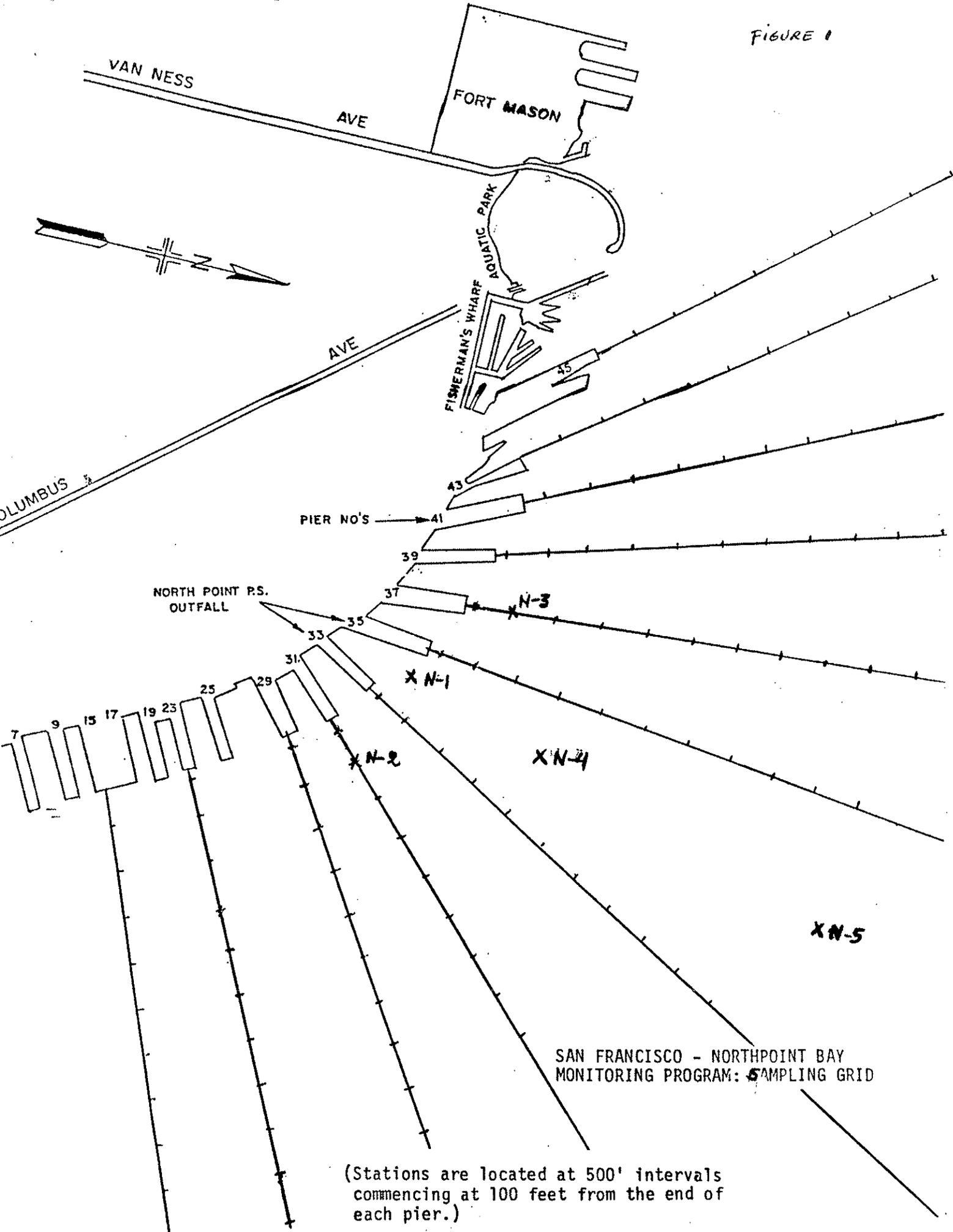
E. LAND OBSERVATIONS (Odor Control)

Stations

Description

P-1 thru P-'n'	Located at the corners and midpoints of the perimeter fence-line surrounding the treatment facilities. (A sketch showing the locations of these stations will accompany each report).
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FIGURE 1



(Stations are located at 500' intervals commencing at 100 feet from the end of each pier.)

F. BEACH OBSERVATIONS

<u>Stations</u>	<u>Description</u>
B-1	Aquatic Park Beach
B-2	Outer Beach Yacht Harbor
B-3	Inner Beach Yacht Harbor
B-4	Coast Guard Beach

G. OVERFLOWS

OV1	Jackson Street
OV2	Beach Street
OV3	Laguna Street
OV4	Pierce Street
OV5	Lyon Street
OV6	5th Street
OV7	6th Street

H. BOTTOM SEDIMENTS

BS-1 thru (See Figure 2)
BS-5

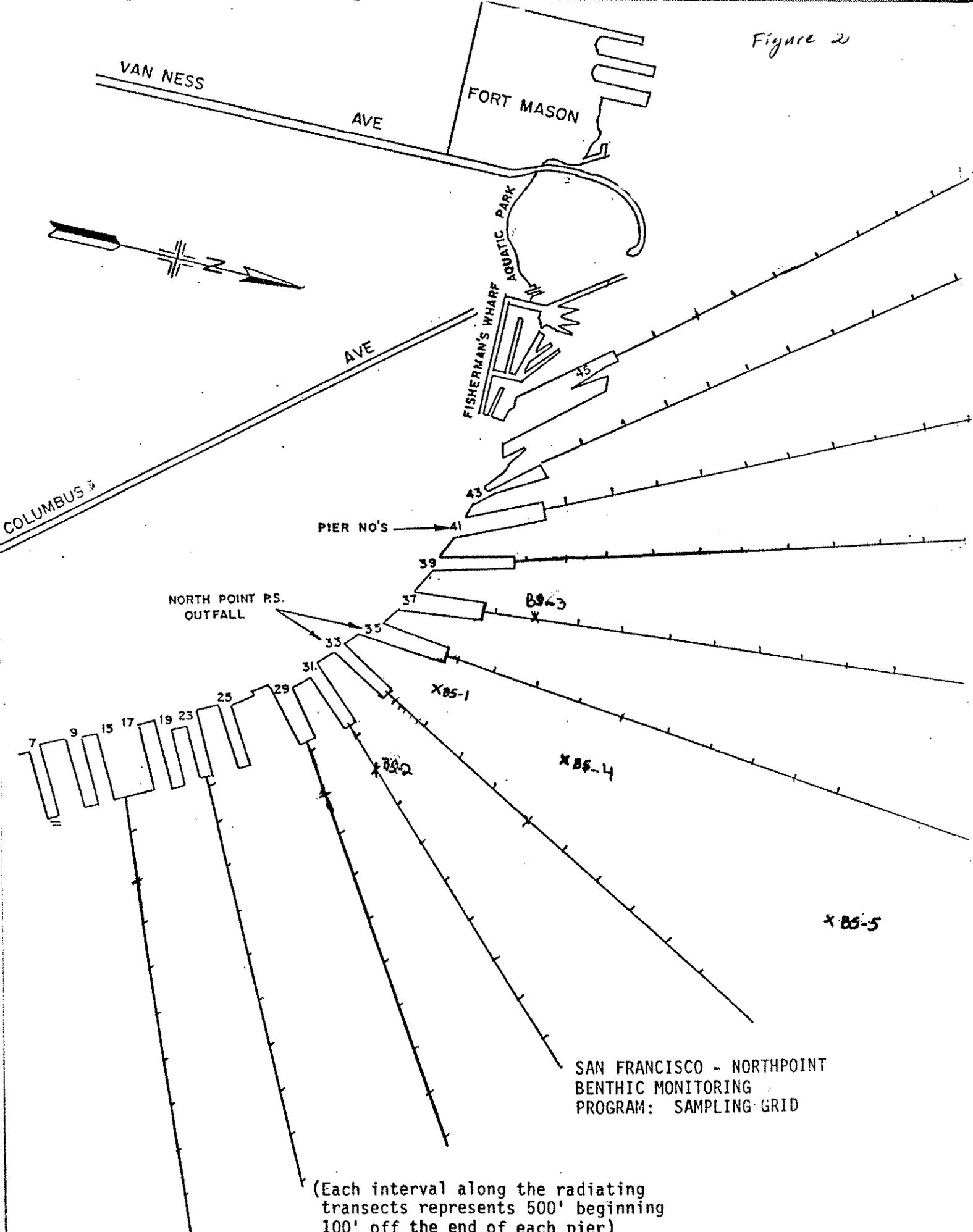
II. SCHEDULE OF SAMPLING ANALYSES AND OBSERVATIONS

- A. The frequency of sampling and analysis shall be that given as Table I.
- B. The discharger is required to perform observations, sampling, and analyses according to the following schedule:

Receiving Waters

1. Offshore and shoreline receiving water samples shall be collected during daylight hours. Tide conditions should be recorded at sampling.
2. Water column samples will be collected at Stations N1 through N5 during each sampling period.

Figure 2



(Each interval along the radiating transects represents 500' beginning 100' off the end of each pier)

3. Supplemental sampling will be performed at Stations N1 through N5 on the same day if there is any violation of receiving water limitations on analysis (of pH, D.O., temperature, and standard observations) performed in situ or on the sampling boat.

III. REPORTING

- A. Tabulations of the data to include for each constituent total number of analyses, maximum, minimum, and average values for each period. The data shall be reported on either the EPA Form 3320-1, or the State Form Q-2⁽¹⁾.
- B. The Annual Receiving Water Data Summary (S-39)⁽¹⁾ and the Annual Waste Characteristics and Loading Summary (S-37)⁽¹⁾ shall be filed for each constituent, monthly.⁽²⁾
- C. A Requirement Compliance Summary, showing violation ratios, listing all constituents shall be file monthly.

(1) The format of data presentation is subject to modification upon agreement between the discharger and the Executive Officer of the Regional Board.

(2) The frequency of filing these summaries is subject to modification upon agreement between the discharger and the Executive Officer.

I, Roger B. James, 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 Nos. 84-47 and 84-28.
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 discharer, and revisions will be ordered by the Executive Officer.

ROGER B. JAMES
Executive Officer

Effective Date _____

Attachments: Table I

TABLE 1
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-001		E-001		E-001-D		OV(9)		N(11)	S(18)	B	BS	P
TYPE OF SAMPLE	C-X	G	C-X	G	C-X	G	C-X	G	G	G	O	BS	O
Flow Rate (mgd)	cont.		cont.					(5)					
BOD, 5-day, 20°C or COD (mg/l & kg/day)	E		E				E(6)						
Chlorine Residual & Dosage (mg/l & kg/day)						cont.							
Settleable Matter (ml/l-hr. & cu. ft./day)		H(1)		H(1)				E(7)					
Total Suspended Matter (mg/l & kg/day)	E		E				E(6)						
Oil and Grease (mg/l & kg/day)		E(2)		E(2)				E(7)					
Coliform (Total) (MPN/100 ml) per req't						E(4)		E(8)	(12)	(14) 4/W			
Fish Tox'y 96-hr. TL % Surv'l in undiluted waste					2W								
Ammonia Nitrogen (mg/l & kg/day) (NH -N)			E				E(6)		(12)	(15) (16)			
Nitrate Nitrogen (mg/l & kg/day)													
Nitrite Nitrogen (mg/l & kg/day)													
Total Organic Nitrogen (mg/l & kg/day)													
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Unit)									(12)				
pH (units)				E				E(7)	(12)	(15) (16)			
Dissolved Oxygen (mg/l and % Saturation)									(12)	(15) (16)			
Temperature (°C)									(12)	(15) (16)			
Conductivity (mMhno/cm)								E(7)	(12)	(15) (16)			
Secchi Disc (inches)									(12)				
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)													
Arsenic (mg/l & kg/day)			(3)										
Cadmium (mg/l & kg/day)			(3)										
Chromium, Total (mg/l & kg/day)			(3)					(7) (20)					
Copper (mg/l & kg/day)			(3)					(7) (20)					
Cyanide (mg/l & kg/day)			(3)										
Silver (mg/l & kg/day)			(3)										
Lead (mg/l & kg/day)			(3)					(7) (20)					

TABLE 1 (continued)

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-001		E-001		E-001-D		OV		N	S	B	BS	P
	C-X	G	C-X	G	C-X	G	C-X	G	G	G	O	BS	O
Mercury (mg/l & kg/day)			(3)					(7) (20)					
Nickel (mg/l & kg/day)			(3)										
Zinc mg/l & kg/day)			(3)					(7) (20)					
Phenolic Compounds (mg/l & kg/day)			(3)										
All Applicable Standard Observsations			E					E(10)			(17) E		(19)
Bottom Sediment Analyses and Observations												(13) Y	
Tot. Ident. Chlorig. Hydro- carbons (mg/l & kg/day)			(3)										
Synthetic Organics by EPA Methods 624 and 625 (mg/l)								(8) (20)					

LEGEND FOR TABLE

TYPES OF SAMPLES

- G = grab sample
- C-6 = composite sample - 6-hour
- C-X = composite sample - X hours
(used when discharge does not
continue for 24-hour period)
- Cont = continuous sampling
- DI = depth-intergrated sample
- BS = bottom sediment sample
- O = observation

TYPES OF STATIONS

- I = intake and/or water supply stations
- A = treatment facility influent stations
- E = waste effluent stations
- N = receiving water stations
- P = treatment facilities perimeter stations
- L = basin and/or pond levee stations
- BS = bottom sediment stations
- G = groundwater stations
- OV = overflow stations
- S = shoreline stations
- B = beach 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 = once in March and
once in September
- Q = quarterly, once in
March, June, Sept.
and December
- 2H = every 2 hours
- 2D = every 2 days
- 2W = every 2 weeks
- 3M = every 3 months
- Cont = continuous

NORTH POINT PLANT AND NORTH SHORE
WET WEATHER DIVERSION STRUCTURES

Footnotes for Table I

- (1) Hourly for first four hours of discharge and every 6 hours thereafter.
- (2) Three grab samples taken at 2 hour intervals, collected in glass containers and analyzed separately. The weighted average, based upon flow rate, of the three samples shall be calculated.
- (3) Sample the first and second discharge event of the season, 2 winter events in December or January and 2 spring events in March or April.
- (4) Sample shall be collected 4 hours \pm 30 minutes after discharge starts (between 4:00 AM and 5:00 PM); sample shall be collected first thing in the morning if the plant begins operation after 5:00 pm or before 4:00 am.
- (5) Date, duration, and inclusive times of overflow.
- (6) Analysis performed on composite sample. (See Figure A)
- (7) Run on initial overflow sample and each hourly sample for 4 hours or end of overflow event. (See Figure A)
- (8) Run on initial overflow sample only. (See Figure A)
- (9) Samples at overflow stations (OV1, OV2, OV3, OV4 and OV5) should be collected only during daylight hours. Samples at overflows stations (OV6 and OV7) should be collected each occurrence.
- (10) Standard Observations: Identification of particulate matter, color, turbidity, odor and extent of affected area during an overflow. (See Figure B)
- (11) Receiving water sampling shall be performed within 48 hours of discharge from North Point Plant, whenever possible.
- (12) Water column samples of stations N-1 to N-5 up to 2/M during wet weather. Stations N-1 to N-5 should be sampled once one month before wet weather season starts (Oct.) and once one month after wet weather season ends (May).

- (13) Collect sediment samples 1/y at stations N-1 to N-5 during August-September. Sediments should be analyzed for benthic infauna, trace metals and organics. Run priority pollutant scan on sediments.
- (14) Monday through Thursday at stations 1A,2,3,4,10 and 11. One of the days Monday through Thursday at stations 5,7,13,14, 15A,16,17,18,19,20,21,22,23A, and 25. Daily for five days at adjacent shoreline stations after end of a storm event which results in overflows, or operation of the North Point plant, near stations 1A,2,3,4,5,7,8,9,10,11,13, 14,15A, 16,17,18,19,20,21,22,23A, or 25. (See Figure C)
- (15) Sample 1/M dry weather, up to 2/M wet weather at S-1A,2,3,4, 5,7,10,11,13,14,15A,16,17,18,19,20,21,22,23a and 25. Wet weather sampling should coincide with "receiving water sampling", i.e., within 48 hours of discharge from Northpoint Plant, whenever possible.
- (16) Sample each day after overflow starts for up to 3days after storm event (up to 2/M) at S-1A,2,3,4,5,7,10,11,13,14,15a, 16,17,18,19,20,21,22,23a, and 25. Cease sampling at any station once water quality has returned to ambient levels.
- (17) Sampling daily for up to three days after overflow. Cease survey at any station where objects of sewer origin are recorded. (See Figure D & E)
- (18) Shorelines and beaches sampling shall coincide with days of overflow whenever possible. In addition to chemical analyses, six investigations per year shall be conducted into possible causes for elevated bacterial levels at shoreline sampling stations during the dry season. An investigation should consist of visual inspection, dye testing, or additional coliform analyses. The results of these investigations should be reported monthly, and summarized in the annual report.
- (19) 2/M during wet weather.
- (20) Sampling for these metals at all overflow stations 3 times per year, subject to note (9), above. Sampling for sythetic organics at one overflow station 3 times per year. The overflow station may change from storm to storm. Detection limits of one microgram per liter for priorty pollutants and 10 parts per billion for non-priority pollutants should be achieved. Two of the three sample sets should be from the first and second overflow-causing storms of the year. One of the three sets should be from an overflow-causing storm late in the wet weather season.

Figure A CITY & COUNTY OF SAN FRANCISCO
NORTHSHORE OVERFLOW MONITORING PROGRAM

DATE		
DAY	MONTH	YEAR

GRAB SAMPLE

ANALYSTS:

STATION LOCATIONS	INITIAL TIME:			1 HOUR TIME:			2 HOUR TIME:			3 HOUR TIME:			4 HOUR TIME:			COMMENTS
	SETTLEABLE SOLIDS ml/l/hr	pH	GREASE/OIL mg/kg	SETTLEABLE SOLIDS ml/l/hr	pH	GREASE/OIL mg/kg	SETTLEABLE SOLIDS ml/l/hr	pH	GREASE/OIL mg/kg	SETTLEABLE SOLIDS ml/l/hr	pH	GREASE/OIL mg/kg	SETTLEABLE SOLIDS ml/l/hr	pH	GREASE/OIL mg/kg	
OV-1																
OV-2																
OV-3																
OV-4																
OV-5																
OV-6																
OV-7																

COMPOSITE SAMPLE

STATION LOCATIONS	START TIME	END TIME	NH ₃ -N	BOD	TSS
OV-1					
OV-2					
OV-3					
OV-4					
OV-5					
OV-6					
OV-7					

- OV-1 Jackson
- OV-2 Beach
- OV-3 Laguna
- OV-4 Pierce
- OV-5 Baker
- OV-6 5th Street
- OV-7 6th Street

FIGURE B
CITY AND COUNTY OF SAN FRANCISCO
WATER WEATHER DIVISION STRENGTHS
JACKSON BEACH LAQUINA PIERCE BAKER 5th Street 6th Street

Date of Observation _____
 By: _____
 Time: _____
 Site: _____

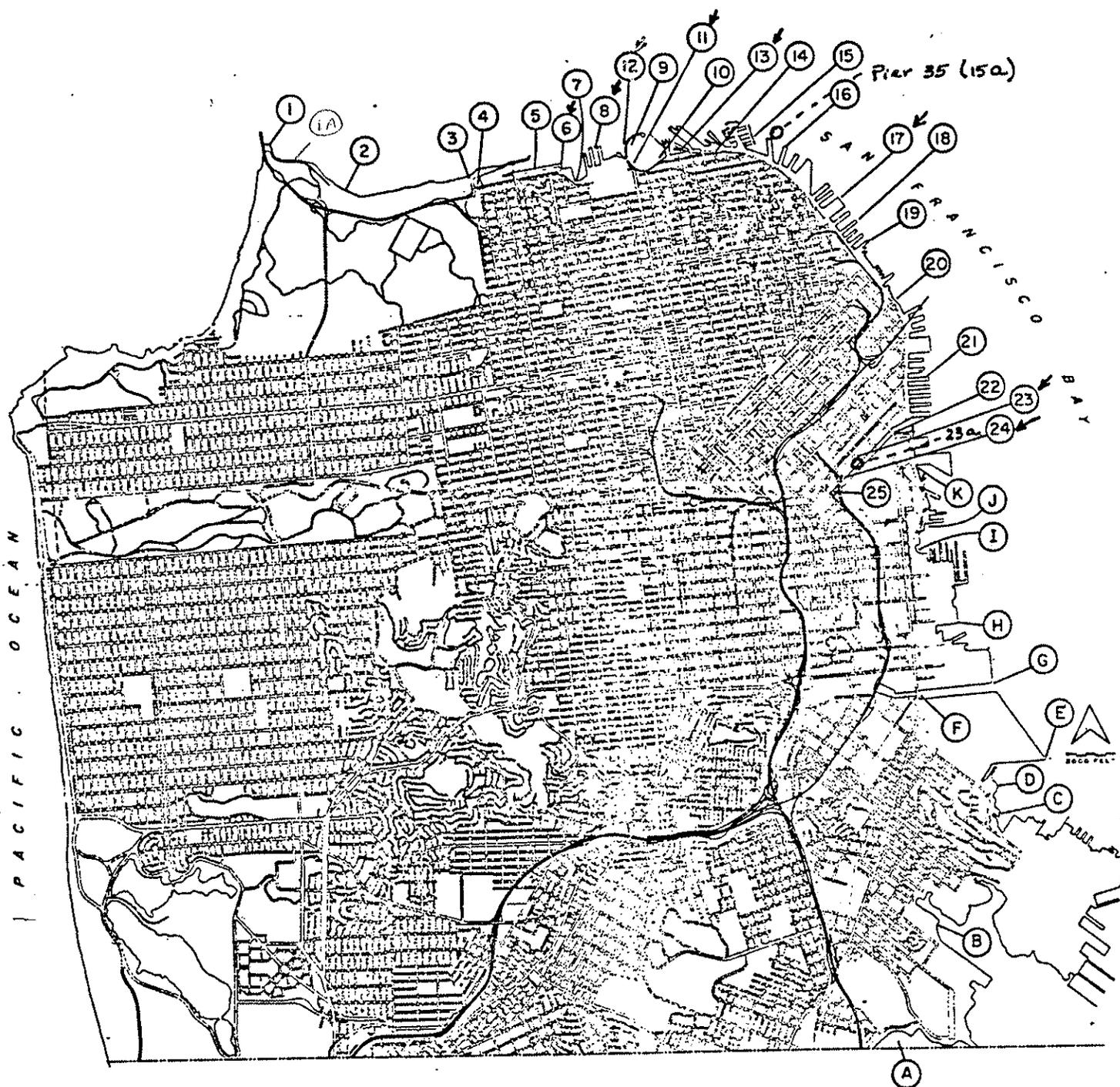
	OV-1		OV-2		OV-3		OV-4		OV-5		OV-6		OV-7	
	n	s	n	s	n	s	n	s	n	s	n	s	n	s
A. Particulate Matter														
Absent Source														
Grease														
Oil														
Algae														
Flotsam														
Garbage														
Fecal Matter														
Condoms														
Others														
B. Color & Turbidity														
Absent Source														
Black														
Brown														
Grey														
Green														
Turbid														
C. Odor														
Absent Source														
Sulphides														
Sewage Odor														
Petroleum Products														
Solvents														
Others														
D. Affected Area														
50 Square Yards														
100 Square Yards														
200 Square Yards														
300 Square Yards														
> 1000 Square Yards														
E. Distance of Travel														
50 Feet														
100 Feet														
200 Feet														
300 Feet														
> 1000 Feet														
F. Beneficial Use														
Absent														
Fishes														
Swimmers														
Surfing														
G. Wildlife														

Remarks _____

Note: n = not of sewage origin; s = sewage origin; u = unknown

SOUTHEAST-NORTH POINT - NORTHSHORE
SHORELINE SAMPLING STATIONS

FIGURE C



- S-1 End of Marine Dr. (CGNRA)
- S-2 No. of US Coast Guard St. (Marine Dr.)
- S-3 End of Lyon St.
- S-4 Inner Beach West end Yacht Harbor
- S-5 Shoreline foot of Pierce St. outfall line
- S-6 Shoreline foot of Webster St. NE corner
- S-7 Shoreline foot of Laguna St. small boat dock
- S-8 NE corner Pier #3 Ft. Mason
- S-9 Municipal Pier East side
- S-10 Aquatic Park beach West end
- S-11 Aquatic Park beach East end

- S-13 Shoreline bulkhead foot of Leavenworth
- S-14 Fisherman's Wharf & Pump Station
- S-15 Pierhead, Pier 39

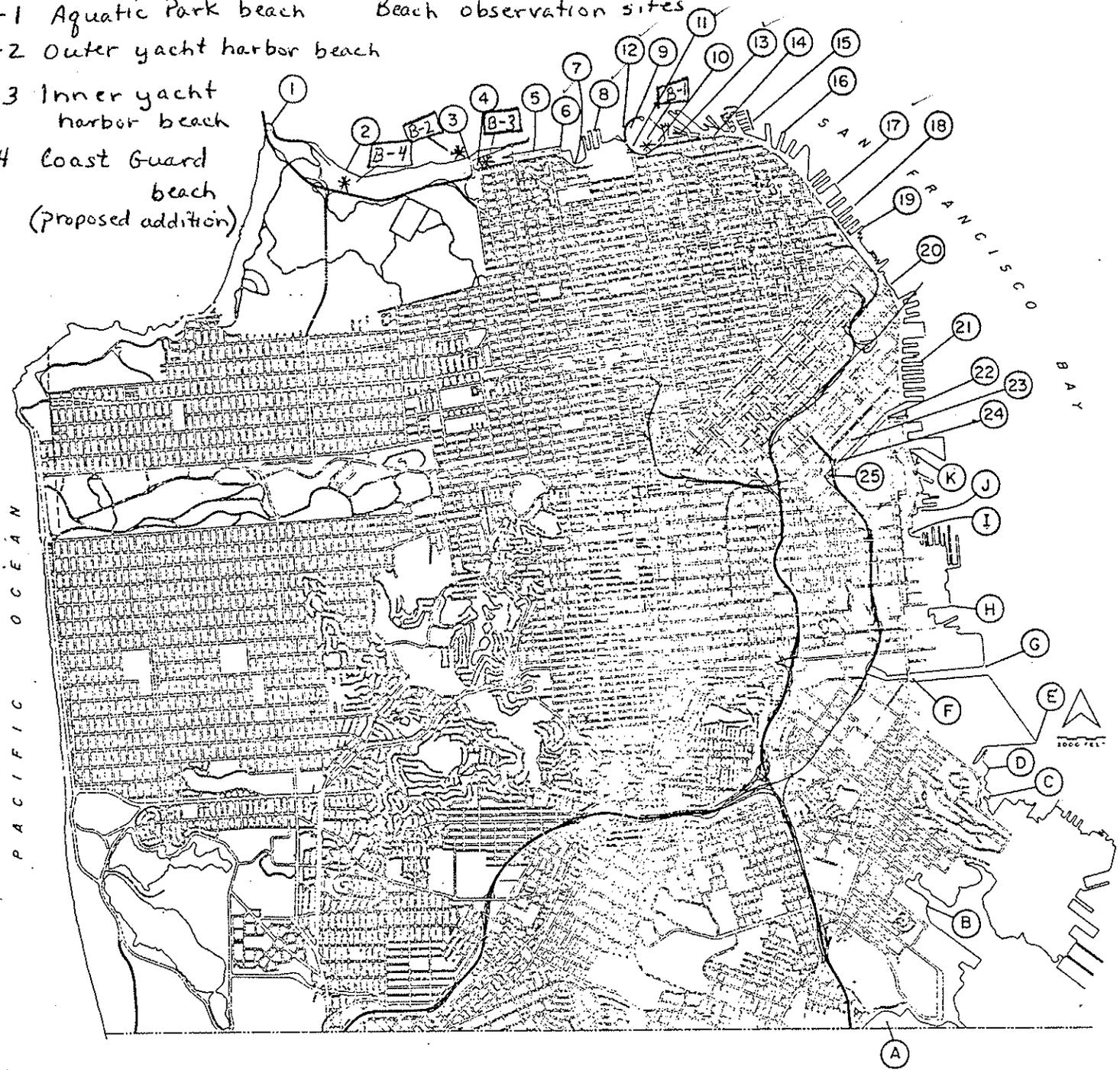
S-15a Pier 35

- S-18 Shoreline bulkhead between Piers 7 & 9
- S-19 Shoreline bulkhead Pier 1½
- S-20 Foot of Howard Street
- S-21 Bulkhead N. side of Pier 38
- S-22 Bulkhead NE corner 3rd St. bridge
- S-23a 5th St. North Overflow Structure

S-25 7th St. Overflow Structure

SOUTHEAST-NORTH POINT - NORTHSHORE
SHORELINE SAMPLING STATIONS
and
Beach observation sites

- B-1 Aquatic Park beach
B-2 Outer yacht harbor beach
B-3 Inner yacht harbor beach
B-4 Coast Guard beach
(proposed addition)



- S-1 End of Marine Dr. (GGNRA)
S-2 No. of US Coast Guard St. (Marine Dr.)
S-3 End of Lyon St.
S-4 Inner Beach West end Yacht Harbor
S-5 Shoreline foot of Pierce St. outfall line
S-6 Shoreline foot of Webster St. NE corner
S-7 Shoreline foot of Laguna St. small boat dock
S-8 NE corner Pier #3 Ft. Mason
S-9 Municipal Pier East side
S-10 Aquatic Park beach West end
S-11 Aquatic Park beach East end
S-12 Municipal Pier West side

- S-13 Shoreline bulkhead foot of Leavenworth
S-14 Fisherman's Wharf & Pump Station
S-15 Pierhead, Pier 39
S-16 Pierhead, Pier 33
S-17 Shoreline bulkhead between Piers 17 & 1
S-18 Shoreline bulkhead between Piers 7 & 9
S-19 Shoreline bulkhead Pier 1½
S-20 Foot of Howard Street
S-21 Bulkhead N. side of Pier 38
S-22 Bulkhead NE corner 3rd St. bridge
S-23 5th St. North Overflow Structure
S-24 6th St. North Overflow Structure
S-25 7th St. Overflow Structure

NO:178 SHORE OVERFLOW WASTEWATER SOLIDS BASELINE SURVEY

Date Surveyed
Time Surveyed

	DAY 1			DAY 2			DAY 3			DAY 4			COMMENTS
	B-1	B-2	B-3										
Vegetable (seaweed, wood, leaves)	A P												
Animal (fish, crabs, feather rats)	A P												
Beach Litter (cans, bottles, cups)	A P												
Sewage Litter (feces, condoms, tampons)	A P												
Miscellaneous (Identify)	B-1												
	R-2												
	R-3												
Width of debris line													
0 Absent													
1 foot													
3 feet													
5 feet													
> 7 feet													
Weather													
W= Warm													
R= Rain													
C= Cold													
F= Foggy													

Note: A = Absent P = Present

- B-1 AQUATIC PARK BEACH
- B-2 OUTER YACHT HARBOR BEACH
- B-3 INNER YACHT HARBOR BEACH
- B-4 COAST GUARD BEACH

B-4 COMMENTS