CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 84-32

NPDES NO. CA0038008

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

CITY OF LIVERMORE
WATER RECLAMATION PLANT

ALAMEDA COUNTY

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

1. The City of Livermore, by application dated March 16, 1984, has submitted a report of waste discharge for reissuance of NPDES Permit No. CA0038008.

2. The discharger presently discharges an average dry weather flow of 4.7 million gallons per day (mgd) flow from its secondary plant which has a dry weather design capacity of 6.25 mgd. Existing treatment consists of pre-aeration and grit removal, primary sedimentation using clarifiers, activated sludge, secondary clarification, and chlorination. The plant has an emergency 10 mg holding pond. Sludge is anaerobically digested, dewatered using belt filters, and trucked for disposal to a waste disposal site. This facility treats domestic and industrial wastewaters from the City of Livermore service areas. A flow diagram is appended as Attachment A.

3. Approximately 85 percent (4.3 mgd) of the present annual flow is discharged to the Livermore-Amador Valley Water Management Agency export system. The remaining 15 percent (or 0.4 mgd) is further treated and used for irrigation of the Los Positas Golf Course, landscape irrigation at the Livermore airport and within the treatment plant, and landscape along sections of Interstate Highway 580. All these uses are under Board waste discharge requirements. Requirements for irrigation and groundwater protection are currently prescribed in Board Order No. 71-76 which is under consideration for revision to conform with the Basin Plan.

4. The discharger transports the treated wastewater to the Livermore Amador Valley Water Management Agency (LAVWMA) export pump station where it combines with the Dublin San Ramon Services District's treated wastewater. The combined wastewaters flow to two flow-equalization basins, receive additional chlorination and are pumped via LAVWMA's pipeline to the East Bay Discharge Authority's (EBDA) system. EBDA is responsible for the combined transport, dechlorination, and discharge of LAVWMA's treated wastewater by contractual agreement and of treated wastewaters from EBDA's member agencies. The discharge point is a deepwater diffuser located 23.5 feet below the surface (at MLLW) in Lower San Francisco Bay west of the Oakland Airport at longitude 122°18′ west, latitude 37°42 north. A diagram showing LAVWMA's flow scheme and a map of the EBDA system are appended as Attachments B and C, respectively, hereinafter parts of this Order.

5. LAVWMA became effective on March 26, 1979 as a joint powers agency created for wastewater management planning for the service areas of Livermore, Pleasanton, and Dublin San Ramon Services District. By contractural

agreement, the Dublin San Ramon Services District is responsible for operating and maintaining LAVWMA's export pump station and pipeline facilities and for performing and submitting the self-monitoring requirements for the LAVWMA facilities.

6. Both EBDA and LAVWMA are Joint Exercise of Powers Agencies which exist under Joint Exercise of Powers Agreements (JEPA) to operate treated wastewater transport and disposal facilities.

   Since LAVWMA and its tributary agencies are not signatories to the EBDA JEPA, the EBDA-LAVWMA agreement empowers EBDA to monitor discharges by LAVWMA into the EBDA system and requires LAVWMA, as a condition of continuing service, to comply with all requirements prescribed by the Regional Board at the individual treatment plants, except residual chlorine, for which EBDA will be responsible.

   The LAVWMA JEPA limits that Joint Agency to providing and operating the transport (and auxiliary) facilities from its member agencies' treatment plants to EBDA. LAVWMA is not empowered to take actions to secure member agency compliance with Board requirements.

7. The discharge is presently governed by Waste Discharge Requirements (NPDES Permit), Order No. 79-68, as amended by Order No. 80-51, which allows discharge into Lower San Francisco Bay of combined treated wastewaters from the LAVWMA and EBDA systems through the EBDA treansport and common outfall system under the National Pollutant Discharge Elimination System (NPDES No. CA0037869). These requirements are also being reissued. Seperate waste discharge requirements for Dublin San Ramon Services District, the City of Livermore (the discharger), and EBDA jointly with its member agencies will be adopted..

8. LAVWMA is presently considering final expansion of its export pump station and pipeline capacity to the maximum contractual flow of 19.72 mgd to the EBDA system. Preliminary feasibility studies have indicated that LAVWMA's facilities can be expanded to export 21.0 mgd of treated wastewaters. However, LAVWMA's contract limits with EBDA would require alternate disposal of 1.28 mgd during peak wet weather flows in the EBDA system. LAVWMA is presently preparing feasibility studies and an EIR for a proposed intermittent discharge of up to 1.28 mgd to San Lorenzo Creek as part of LAVWMA's facilities expansion plans. Sufficient capacity in LAVWMA's facilities to transport the discharger's proposed 2.5 mgd increase as result of plant expansion has not been documented to the Board at this time.

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 Lower San Francisco Bay and contiguous waters.

10. The existing and potential beneficial uses of Lower San Francisco Bay and contiguous water bodies are:

    - Water contact and Non-contact water recreation
    - Wildlife Habitat
    - Preservation of Rare and Endangered Species
    - Estuarine Habitat
    - Fish migration and spawning
    - Industrial service and process supply
    - Shellfish Harvesting
    - Navigation
    - Commercial and Sport Fishing

11. Disposal of the discharger's treated wastewaters into the EBDA system outside of the Livermore Amador Valley complies with Basin Plan surface water objectives for Alameda Creek, ground water objectives for the Niles Cone groundwater basin, and discharge prohibitions for these objectives.

12. 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.

13. This Order serves as an NPDES Permit, adoption of which is exempt from the provision 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.

14. The discharger and interested agencies and persons have been notified of the Board's intent to reissue waste discharge 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.

15. 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. <u>Discharge Prohibitions</u>

1. Bypass or overflow of untreated or partially treated wastewater to waters of the State either at the treatment plant or from any of the joint facilities or the discharger's collection system and pump stations tributary to the treatment plant is prohibited.

2. The average dry weather flow shall not exceed 6.25 mgd. Actual average dry weather flow shall be determined for compliance with this prohibition over three consecutive dry weather 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. Discharge of treated wastewaters to any surface water other than Lower San Francisco Bay through the LAVWMA tranmission line and EBDA interceptor and deepwater outfall is prohibited; specifically these waste discharge requirements prohibit discharge to San Lorenzo Creek or any other surface or ground waters without first filing a Report of Waste Discharge with the Board and the subsequent adoption of appropriate waste discharge requirements by the Board.

B. Effluent Limitations

1 Effluent discharged shall not exceed the following limits:

Constituents	Units	30-day Average	7-day Average	Maximum Daily	Instantaneous Maximum
a. Settleable Matter	ml/l-hr	0.1	-	-	0.2
b. BOD or	mg/l	30	45	-	-
Carbonaceous BOD(1)	mg/l	25	40	-	-
c. Total Suspended Solids	mg/l	30	45	-	-
d. Oil & Grease	mg/l	10	-	20	-
e. Total Chlorine Residual (2)	mg/l	-	-	-	0.0

Notes:
(1) Effective upon its promulgation in a new secondary treatment definition by EPA.

(2) Requirement defined as below the limit of detection in standard methods. This requirement shall be demonstrated in the EBDA combined effluent.

2. The arithmetic mean of the biochemical oxygen demand (5-day, 20C) and suspended solids values, by weight for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected approximately the same times during the same period (i.e. 85 percent removal).

3. The pH of the discharge shall not exceed 9.0 nor be less than 6.0.

4. The survival of test organisms acceptable to the Executive Officer in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50% survival based on the the ten most recent consecutive samples. Samples may be dechlorinated in the laboratory prior to testing.

5. Representative samples of the effluent shall not exceed the following limits (1):

Constituent	Unit of Measurement	6 Month Median	Daily Maximum
a. Arsenic	mg/l	0.01	0.02
b. Cadmium	mg/l	0.02	0.03
c. Total Chromium	mg/l	0.005	0.01
d. Copper	mg/l	0.2	0.3
e. Lead	mg/l	0.1	0.2
f. Mercury	mg/l	0.001	0.002
g. Nickel	mg/l	0.1	0.2
h. Silver	mg/l	0.02	0.04
i. Zinc	mg/l	0.3	0.5
j. Cyanide	mg/l	0.1	0.2
k. Phenolic Compounds	mg/l	0.5	1.0
l. Total Identifiable Chlorinated Hydrocarbons(2)	mg/l	0.002	0.004

Notes (for Effluent Limitation B.5.):

(1) These limits are intended to be achieved through secondary treatment, source control and application of pretreatment standards.

(2) Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyls (PCBs), and other identifiable chlorinated hydrocarbons.

6. The running median value for the MPN of total coliform in any five (5) consecutive effluent samples shall not exceed 240 coliform organisms per 100 millimeters. Any single sample shall not exceed 10,000 MPN/100 ml.

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 wasteshall 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 concentrtion(s) 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 0.4 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.

D. <u>Provisions</u>

1. The requirements prescribed by this Order supersede the requirements prescribed by Order Nos. 79-68 and 80-51. Order Nos. 79-68 and 80-51 are hereby rescinded.

2. There shall be no discharge from the holding ponds north of the treatment facilities to surface waters or to land for irrigation.

3. The requirements for irrigation and groundwater prescribed in Order No. 71-76 shall remain in effect until they are revised.

4. Where concentration limitations in mg/l are contgained in this permit, the following mass emission limitations shall also apply:

Mass Emission Limit in lbs/day = Concentration limit in mg/l x 8.34 x Actual Flow in mgd over the time interval for which the limit applies.

11. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977 with the exception of Provision A.12. and Reporting Requirements B.2 and B.3.

Item C.2 of the Standard Provisions shall read as follows:

"The '30-day, or 7-day, average' discharge is the total discharge by weight during a 30, or 7, consecutive calendary day period, respectively, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the 30-day, or 7-day, average discharge shall be determined by the summation of all the measured discharges by weight divided by the number of days during the 30, or 7 day, consecutive calendar day period when the measurements were made. For other then 7-day or 30-day periods, compliance shall be based upon the average of all measurements made during the specified period."

12. This Order expires June 20, 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.

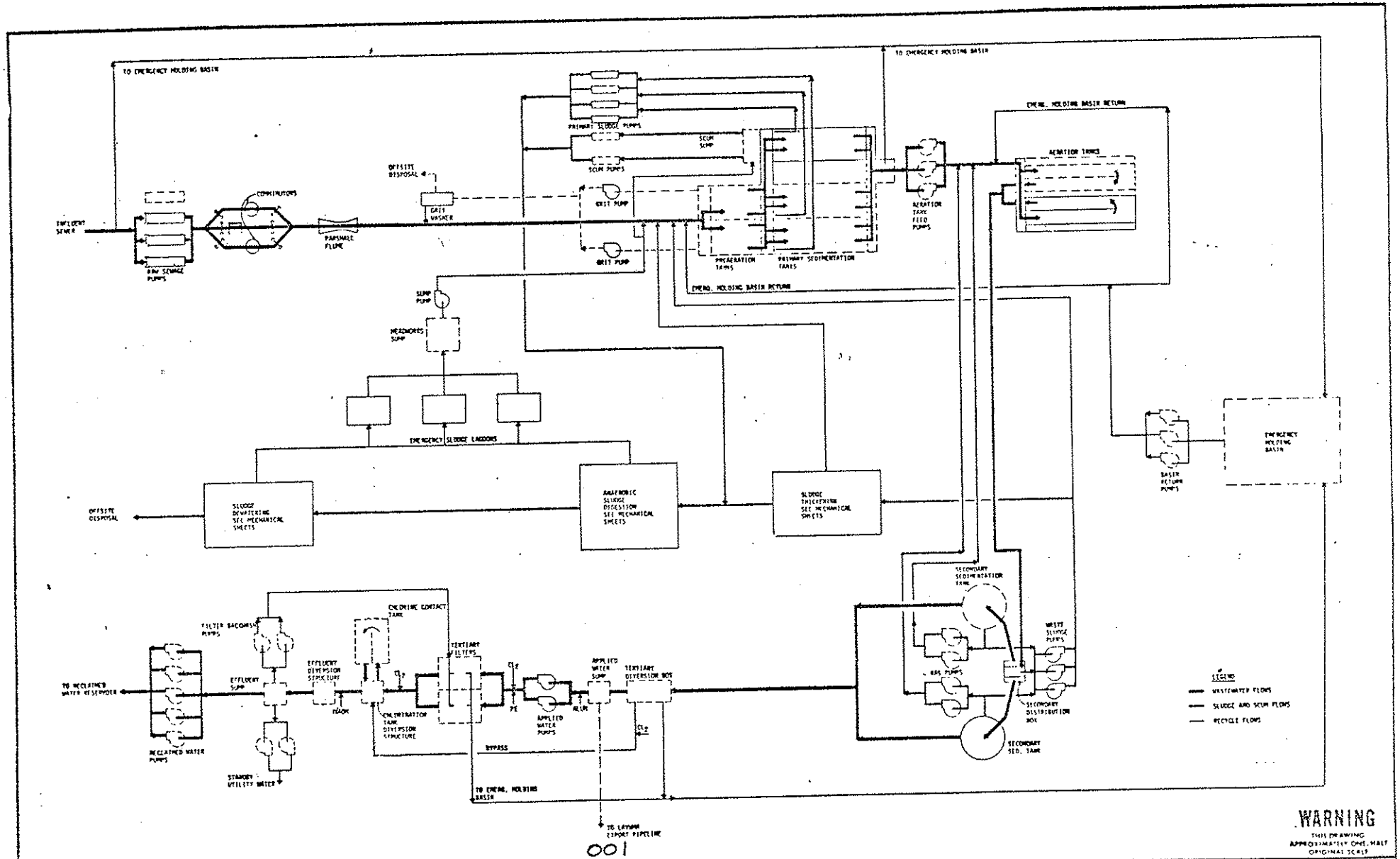
13. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. 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 June 20, 1984.

ROGER B. JAMES
Executive Officer

Attachments:

Attachment A - Livermore WRP Flow Diagram
Attachment B - LAVWMA's Flow Scheme (1983)
Attachment C - EBDA System Map
Standard Provisions &
Reporting Requirements, April 1977
Self-Monitoring Program
Resolution No. 74-10



ATTACHMENT A

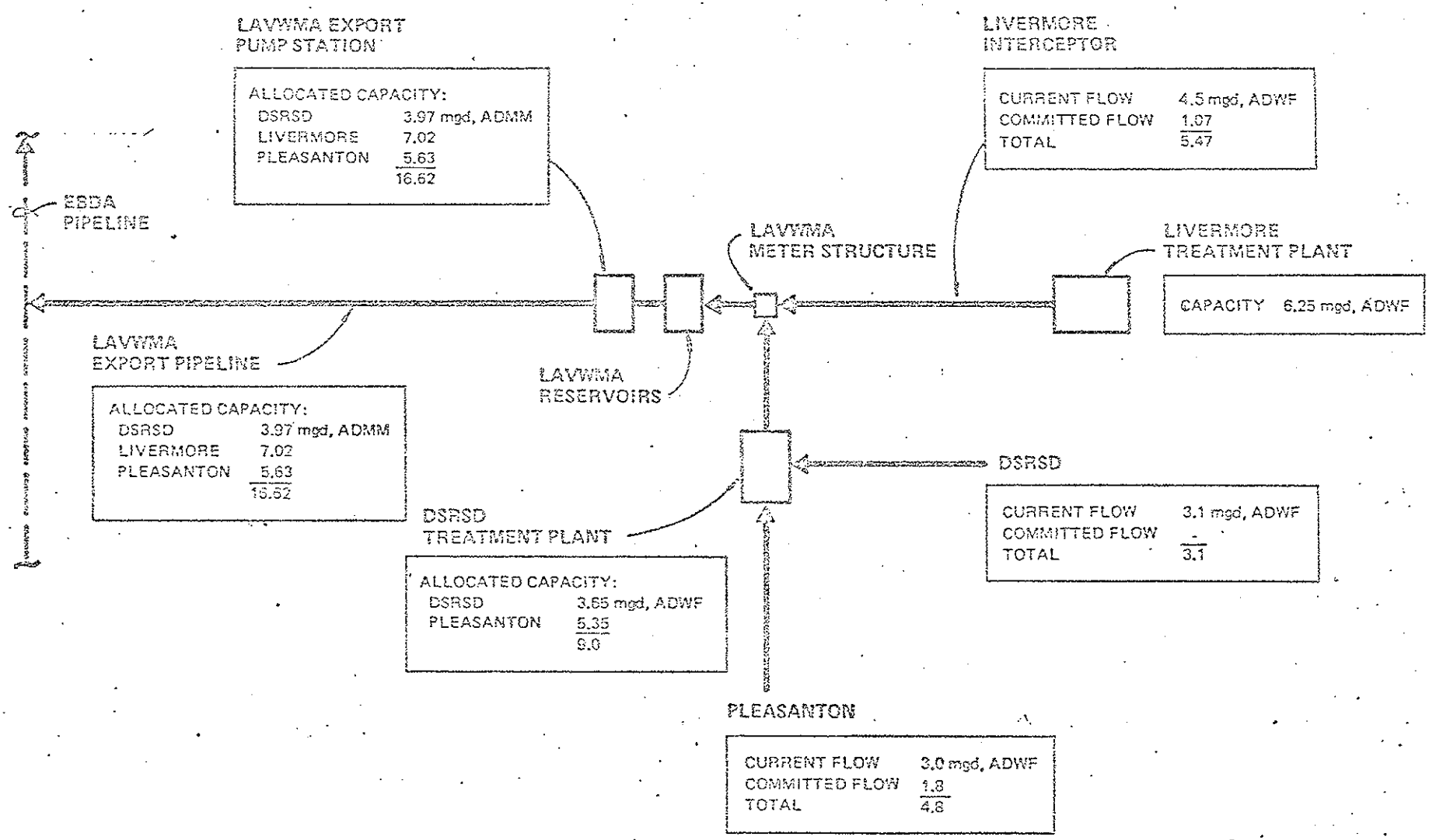


Figure 2

LAVWMA FLOW SCHEMATIC

(from LAVWMA Preliminary Report for Wastewater Management Evaluation, June 1983)

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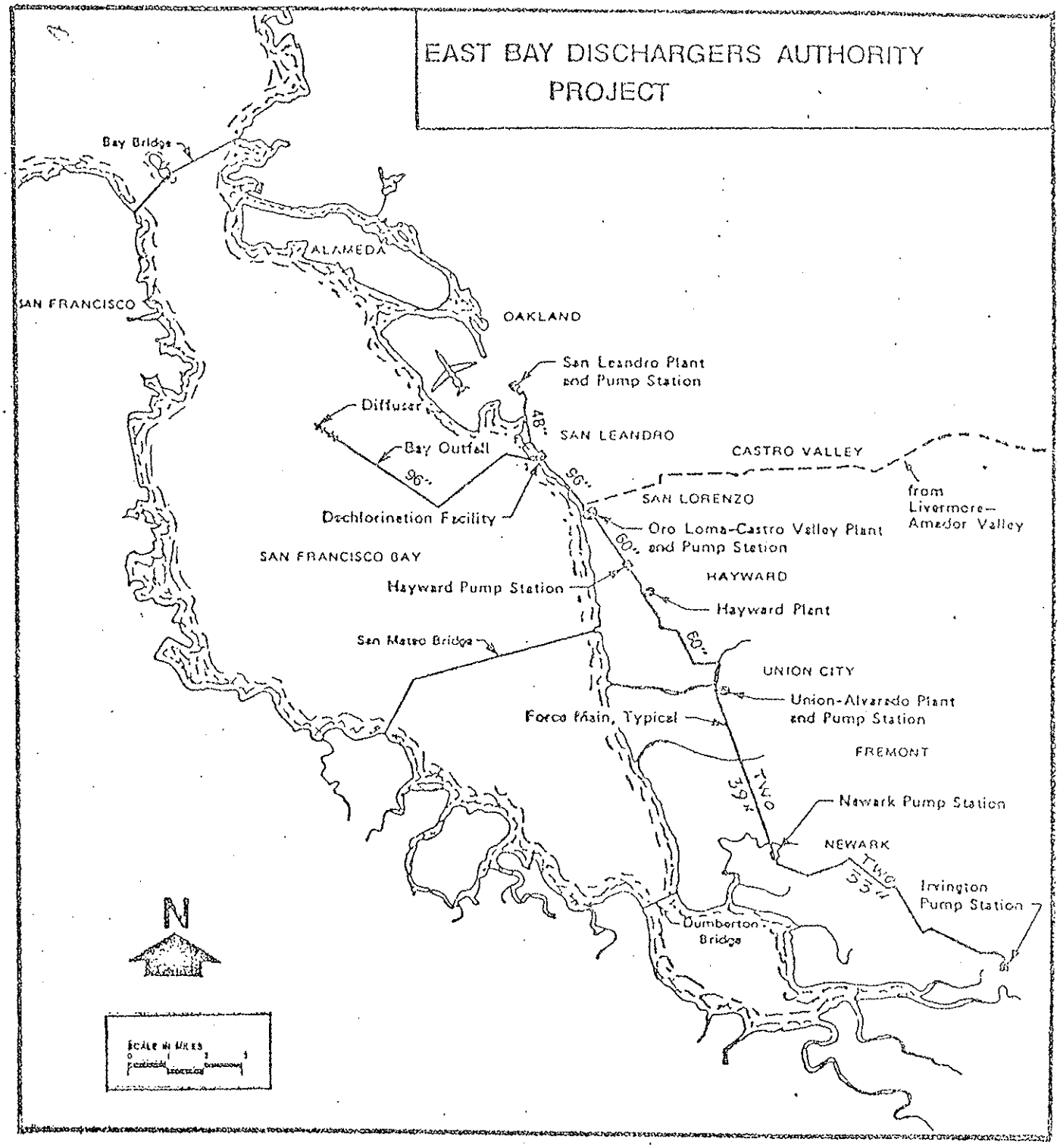


ATTACHMENT C

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

AMENDED
SELF-MONITORING PROGRAM
FOR

CITY OF LIVERMORE
WATER RECLAMATION PLANT

NPDES NO. CA 0038008

ORDER NO. 84-32

CONSISTING OF

PART A, DATED JANUARY 1978

AND

PART B, ORDERED NOV. 14, 1980
REVISED JUNE 20, 1984

PART B

1. 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 or sidestreams.

B. EFFLUENT

Station	Description
E-001	At any point in the treatment plant facilities at which adequate disinfection has taken place and just prior to where the facility has lost control of its effluent to LAVWMA facilities.
E-002	At any point in the EBDA common outfall at which all waste tributary to that outfall is present.

C. RECEIVING WATERS (SAN FRANCISCO BAY)

Station — Description

The Receiving Water monitoring program is the responsibility of the East Bay Dischargers Authority. See that SMP for details on receiving water monitoring.

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. (A sketch showing the locations of these stations will accompany each report.)

E. OVERFLOWS AND BYPASSES (TREATMENT PLANT, COLLECTION SYSTEMS, LAVWMA EXPORT SYSTEM.)

Station	Description
O-1 thru O-'n'	Bypass or overflows from manholes, pump stations, interceptor, or collection system, or holding ponds.

F. MISCELLANEOUS REPORTING

Compliance with receiving water and effluent residual chlorine limits shall be demonstrated by EBDA reports. Compliance with fish toxicity limits may be demonstrated in the EBDA combined outfall and results shall be reported by the discharger.

II. SCHEDULE OF SAMPLING AND ANALYSIS

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

III. MODIFICATION OF PART A, DATED JANUARY 1978 (with amendments)

Additions/Deletions: NONE

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures 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. 84-32.

2. Has been ordered by the Regional Board on June 20, 1984.

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.

ROGER B. JAMES
Executive Officer

Attachments:
Table I (with footnotes)

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1), (7), (10), (11)

Sampling Station	A	E-001			E-002			All P Sta.	All O Sta.				
TYPE OF SAMPLE	C-24	G(4)	C-24	cont	G(4)	C-24	cont	O	O				
Flow Rate (mgd)	D			D			D						
BOD, 5-day, 20° C, or COD (mg/l & kg/day) (1), (3)	5/W		5/W										
Chlorine Residual & Dosage (mg/l & kg/day) (8)		H or cont			H or cont								
Settleable Matter (ml/1-hr. & cu. ft./day)		D											
Total Suspended Matter (mg/l & kg/day) (1), (3)	5/W		5/W										
Oil & Grease (mg/l & kg/day) (2)		2/M											
Coliform (Total or Fecal) (MPN/100 ml) per req't		3/W											
Fish Toxicity, 96-hr. TL_{50} (5), (6)/ % Survival in undiluted waste			M										
Ammonia Nitrogen (mg/l & kg/day)			M(9)										
Nitrate Nitrogen (mg/l & kg/day)													
Nitrite Nitrogen (mg/l & kg/day)			M(9)										
Total Organic Nitrogen (mg/l & kg/day)													
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Units)													
pH (units)		D											
Dissolved Oxygen (mg/l and % Saturation)													
Temperature (°C)		D											
Apparent Color (color units)													
Secchi Disc (inches)													
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)													
Arsenic (mg/l & kg/day)			3M										
Cadmium (mg/l & kg/day)			3M										
Chromium, Total (mg/l & kg/day)			3M										
Copper (mg/l & kg/day)			3M										
Cyanide (mg/l & kg/day)			3M										
Silver (mg/l & kg/day			3M										
Lead (mg/l & kg/day)			3M										

TABLE I (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

(1),(7),(10),(11)

Sampling Station	A	E-001			E-002			All P Sta.	All O Sta.				
TYPE OF SAMPLE	C-24	G(4)	C-24	cont	G(4)	C-24	cont	O	O				
Mercury (mg/l & kg/day)			3M										
Nickel (mg/l & kg/day)			3M										
Zinc (mg/l & kg/day)			3M										
PHENOLIC COMPOUNDS (mg/l & kg/day)			3M										
All Applicable Standard Observations		D						2/W	E				
Bottom Sediment Analyses and Observations													
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)			3M										
Organic & Metallic Pollutants (see 5/9/84 letter)	Y		3M										

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
C-X = composite sample - X hours (used when discharge does not continue for 24-hour period)
Cont = continuous sampling
DI = depth-integrated 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
C = receiving water stations
P = treatment facilities perimeter stations
L = basin and/or pond levee stations
B = bottom sediment stations
G = groundwater stations

FREQUENCY OF SAMPLING

E = each occurence
H = once each hour
D = once each day
W = once each week
M = once each month
Y = once each year to coincide with the first quarterly sampling for E-001 organic & metallic pollutant sampling

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

NOTES FOR TABLE I:

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 additiong to the above schedule for sampliang, measurement and analyses:

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 weeks or less frequently 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/ Fish toxicity test compliance may be demonstrated in the EBDA combined outfall upon approval of the Executive Officer. In the event that a fish toxicity violation is detected, sampling shall be increased to weekly at the individual treatment plant (discharger) until compliance is achieved.

6/ If a continuous bioassay is to be run, sample may be taken from E-001 prior to disinfection instead of dechlorinating E-001 effluent.

7/ If any sample is in violation of limits, sampling shall be increased for that parameter to weekly until compliance is demonstrated in two successive samples.

8/ Data shall be reported using forms provided by the Board or an approved equivalent; chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, grab samples shall be taken every 30 minutes until compliance is achieved.

9/ These parameters shall be tested for on the same composite sample used for the bioassay, and may be demonstrated in the EBDA combined outfall upon approval of the Executive Officer. Results shall be reported by the discharger.

10/ Monthly sampling dates and approximate times shall coincide with receiving water monitoring conducted by EBDA.

11/ All flow other than to the outfall (e.g. sludge, etc.) shall 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.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 84-22

NPDES NO. CA0038059

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

AQUIFER RECLAMATION / SALINITY BARRIER WELLS
ALAMEDA COUNTY WATER DISTRICT
FREMONT AND NEWARK, ALAMEDA COUNTY

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

1. The Alameda County Water District, by application dated February 29, 1984, has submitted a report of waste discharge for reissuance of NPDES Permit No. CA0038059 to discharge wastes under the National Pollutant Discharge Elimination System (NPDES).

2. The discharger is currently rehabilitating the Niles Cone Ground Water Basin aquifers by removing saline water which has intruded from San Francisco Bay and creating a barrier controlling further intrusion. The extracted brackish water is pumped from a total of 16 wells to six discharge locations in the Fremont - Newark area for a total flow of up to 30 mgd (monthly average) and returned to the Bay as locations shown in the chart below. (The discharge serial and well site numbers are those used in the discharger's application.) Maps showing the facilities are appended at ATTACHMENT A, hereinafter a part of this Order.

Effluent Stream #	Discharge Serial #	Highest Monthly Average Flow and Discharge Location	Well Site
E-07	01	2 mgd to Alameda Creek Flood Control Channel	S.B.P. "E"
E-08	02	2 mgd to Alameda Creek Flood Control Channel	S.B.P. "D
E-01	03	3.3 mgd to Alameda Creek Flood Control Channel	Lowry Well
E-05 E-05 E-09 E-10	04	7.3 mgd (total) to Newark Slough	Darvon 1 Darvon 2 Willow St. S.B.P. "C"
E-06 E-06 E-02 E-02 E-11	05	9.9 mgd (total) to Plummer Creek	Willowood 1 Willowood 2 Cedar 1 Cedar 2 Enterprise

Effluent Stream #	Discharge Serial #	Highest Monthly Average Flow and Discharge Location	Well Site
E-03	06	5.3 mgd (total) to Mowry Slough	Bellflower
E-12			S.B.P. "B"
E-04			Farwell
E-13			S.B.P. "A"

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 Lower San Francisco Bay and contiguous waters.

5. The existing and potential beneficial uses of South San Francisco Bay and contigous water bodies are:

   - Water contact and Non-contact water recreation
   - Wildlife Habitat
   - Preservation of Rare and Endangered Species
   - Estuarine Habitat
   - Fish migration and spawning
   - Industrial service and process supply
   - Shellfish Harvesting
   - Navigation
   - Commercial and Sport Fishing
   - Warm and Cold Water Habitat

6. This Order serves as reissuance of an NPDES Permit, adoption of which is exempt from the provision 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.

7. The discharger and interested agencies and persons have been notified of the Board's intent to reissue waste discharge 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.

8. 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. <u>Discharge Prohibitions</u>

   1. The discharge of effluent other than described in the Permit application is prohibited.

   2. The utilization of these wells in the clean-up of manufactured toxic pollutants as a result of leaks, spills, or other incidents is prohibited without the prior aproval of the Executive Officer.

B. 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 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.

D. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 79-53. Order No. 79-53 is hereby rescinded.

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

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

4. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977 with the exception of Provision A.12. and Reporting Requirements B.2, B.3., and B.5.

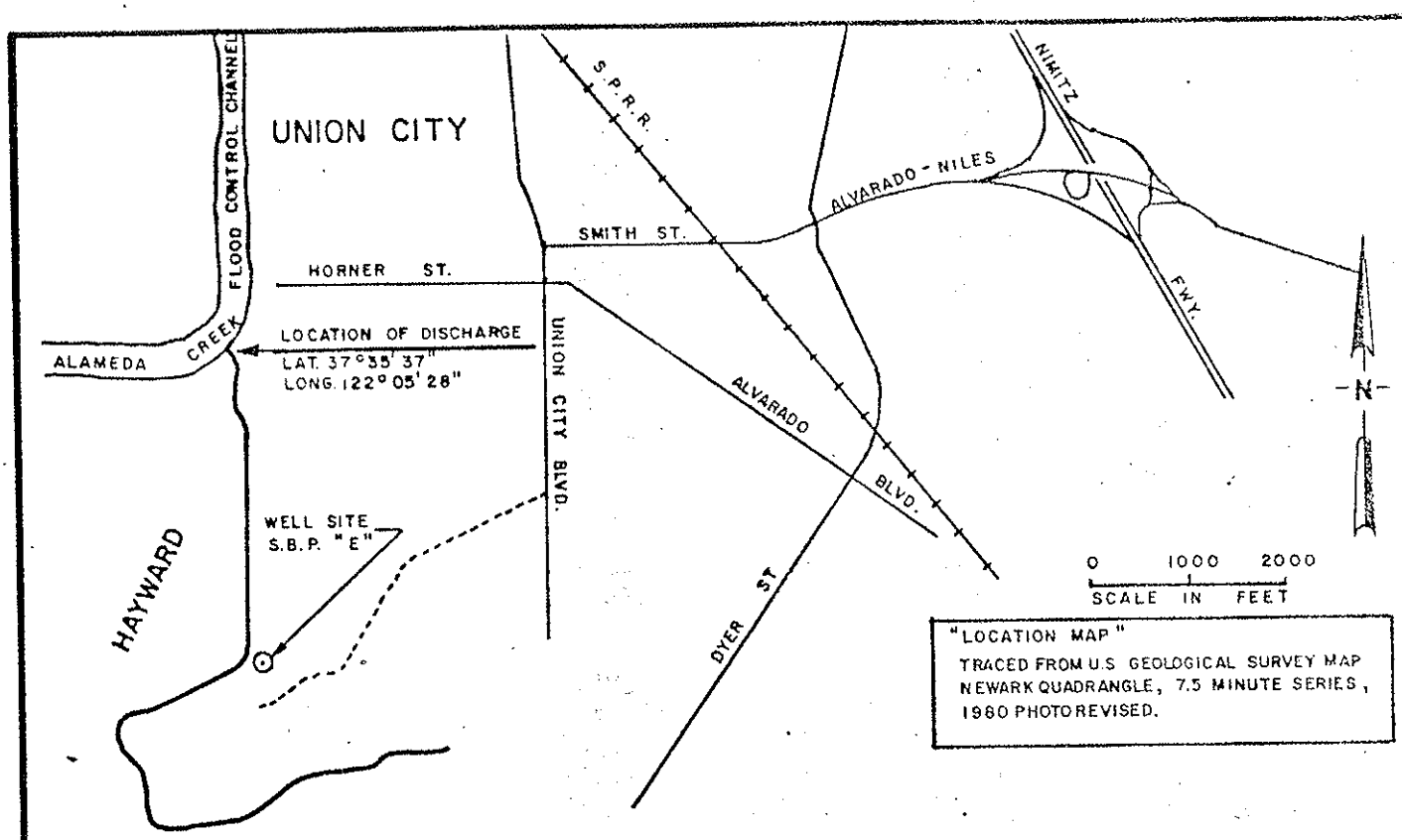
5. This Order expires June 19, 1989. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

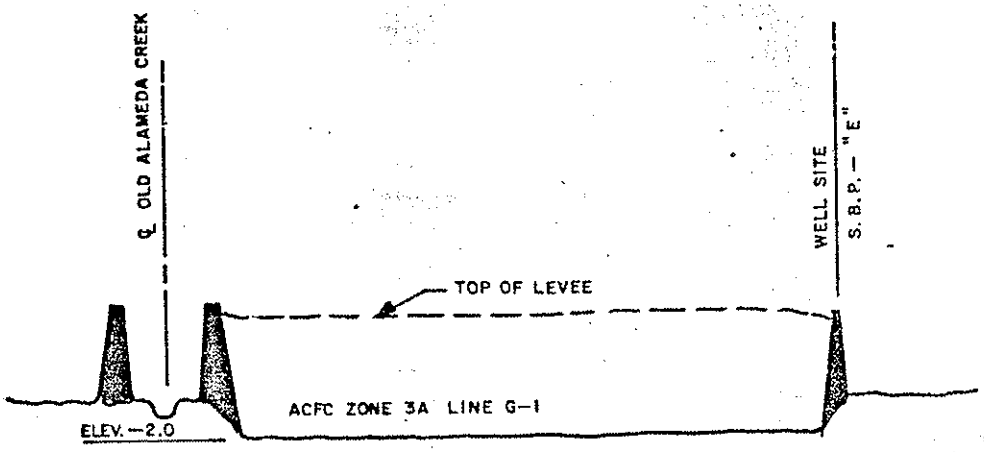
6. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. 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 June 20, 1984.

ROGER B. JAMES
Executive Officer

Attachments:
Standard Provisions &
Reporting Requirements, April 1977
Self-Monitoring Program
Attachment A - Location Maps (6) of ACWD Wells and Discharge Locations.

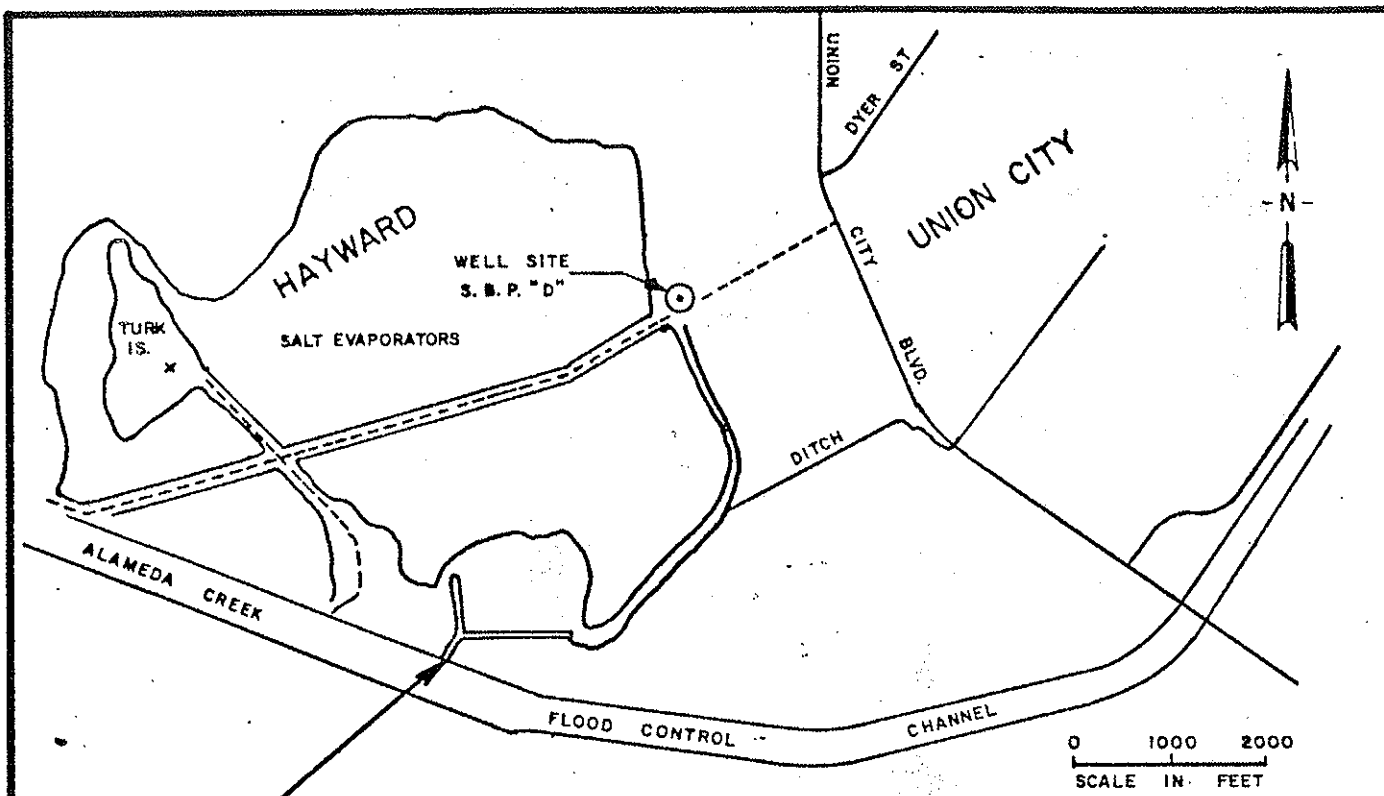




PROFILE OF LINE G-1

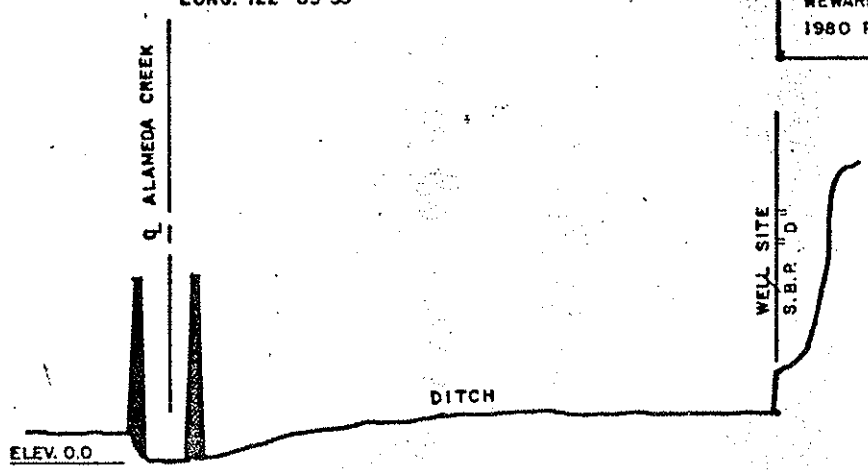
VERTICALLY 1" = 20'
HORIZONTALLY 1" = 1000'

N.P.D.E.S. PERMIT CA 0038059
DISCHARGE SERIAL NO. 001
WASTEWATER DISCHARGE OF A.C.W.D.
AQUIFER RECLAMATION / SALINITY BARRIER
WELL SITE S.B.P. — E INTO OLD
ALAMEDA CREEK AT HAYWARD
ALAMEDA COUNTY, CA.
FEBRUARY 23, 1984



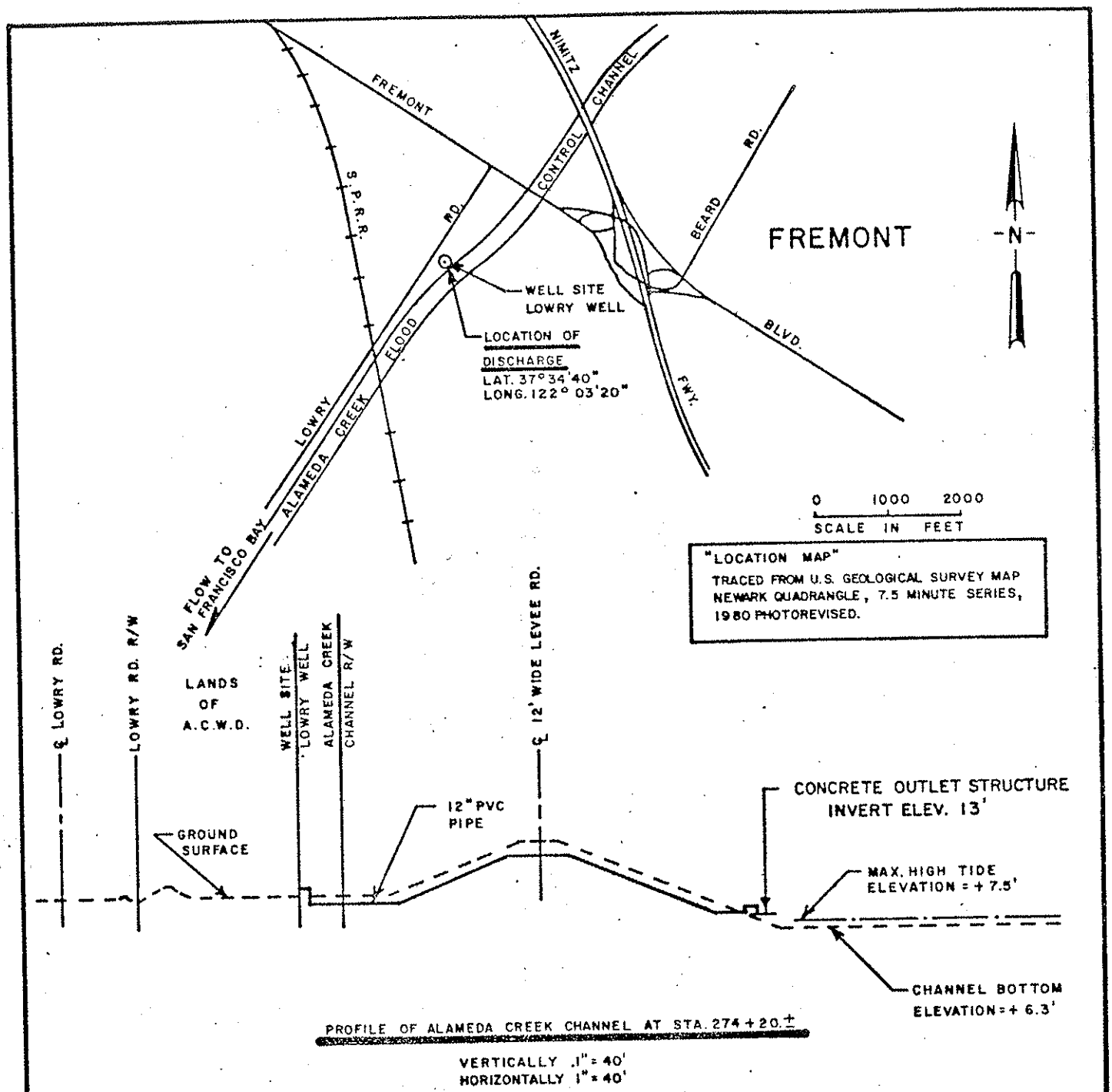
LOCATION OF DISCHARGE
LAT. 37° 33' 52"
LONG. 122° 05' 35"

"LOCATION MAP"
TRACED FROM U.S. GEOLOGICAL SURVEY MAP
NEWARK QUADRANGLE, 7.5 MINUTE SERIES,
1980 PHOTOREVISED



PROFILE OF DRAINAGE DITCH
VERTICALLY 1" = 20'
HORIZONTALLY 1" = 2000'

N.P.D.E.S. PERMIT CA 0038059
DISCHARGE SERIAL NO. 002
WASTEWATER DISCHARGE OF A.C.W.D.
AQUIFER RECLAMATION / SALINITY BARRIER
WELL SITE S.B.P. – D INTO
ALAMEDA CREEK FLOOD CONTROL CHANNEL
AT HAYWARD, ALAMEDA COUNTY, CA.
FEBRUARY 23, 1984 PAGE 1 OF 1



N.P.D.E.S. PERMIT CA 0038059

DISCHARGE SERIAL NO. 003

WASTEWATER DISCHARGE OF A.C.W.D.

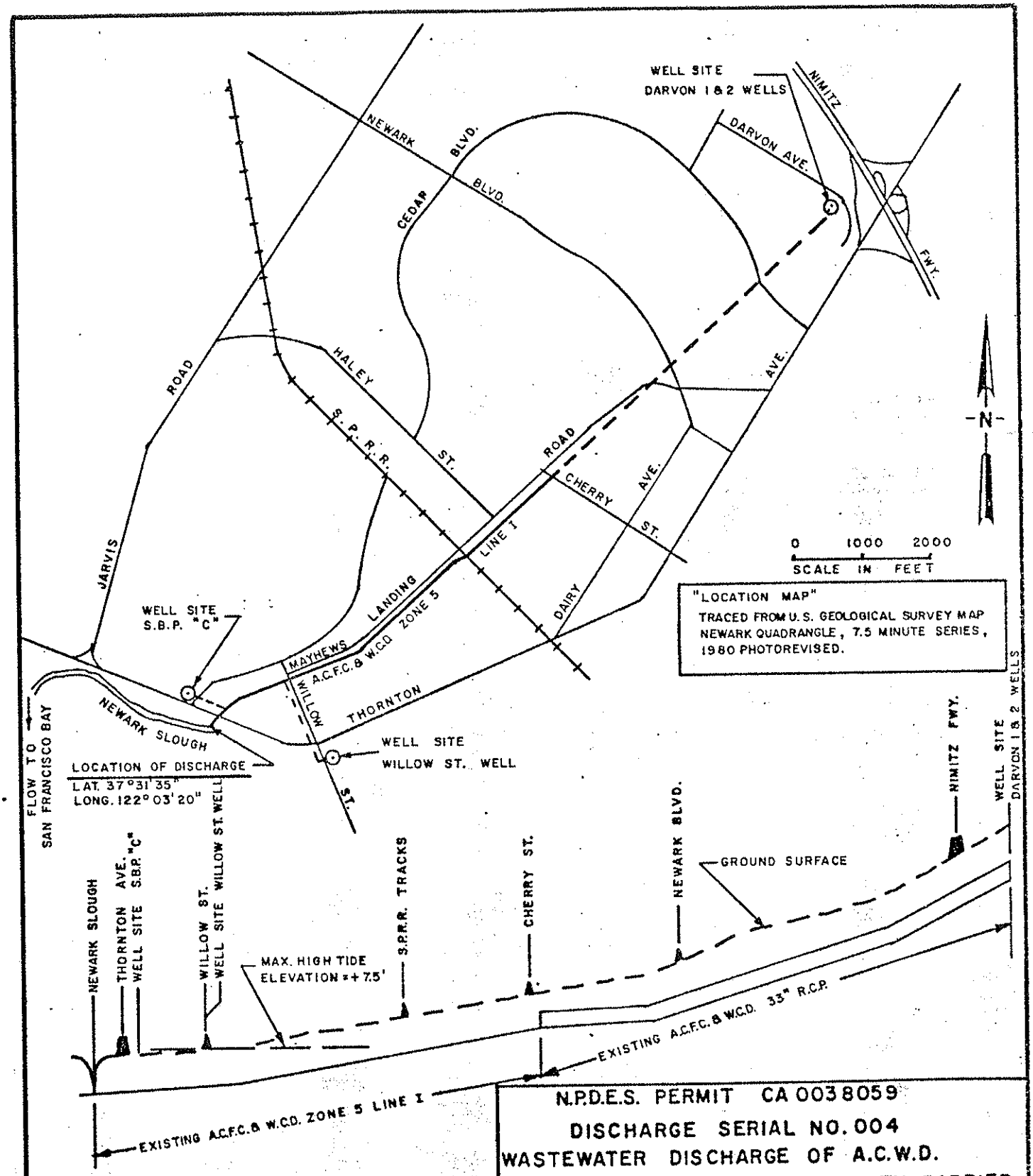
AQUIFER RECLAMATION / SALINITY BARRIER

WELL SITE LOWRY WELL INTO

ALAMEDA CREEK FLOOD CONTROL CHANNEL

AT FREMONT, ALAMEDA COUNTY, CA.

FEBRUARY 23, 1984



PROFILE OF LINE I & 33" R.C.P.

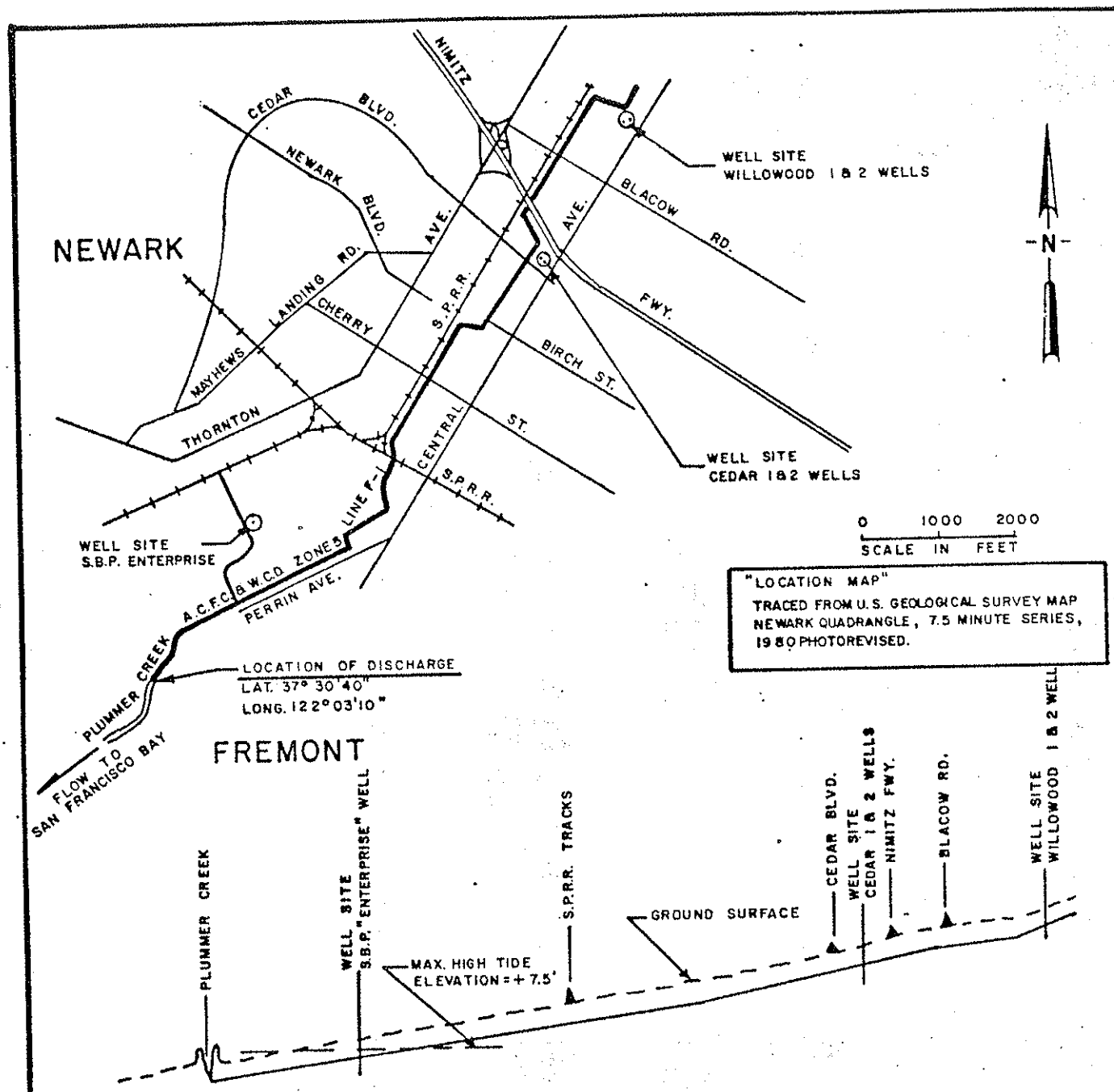
VERTICALLY 1" = 20'
HORIZONTALLY 1" = 2000'

N.P.D.E.S. PERMIT CA 0038059

DISCHARGE SERIAL NO. 004

WASTEWATER DISCHARGE OF A.C.W.D.
AQUIFER RECLAMATION / SALINITY BARRIER
WELL SITES S.B.P."C", DARVON 1, DARVON 2,
AND WILLOW ST. INTO NEWARK SLOUGH
AT NEWARK, ALAMEDA COUNTY, CA.

FEBRUARY 23, 1984



N.P.D.E.S. PERMIT CA 0038059

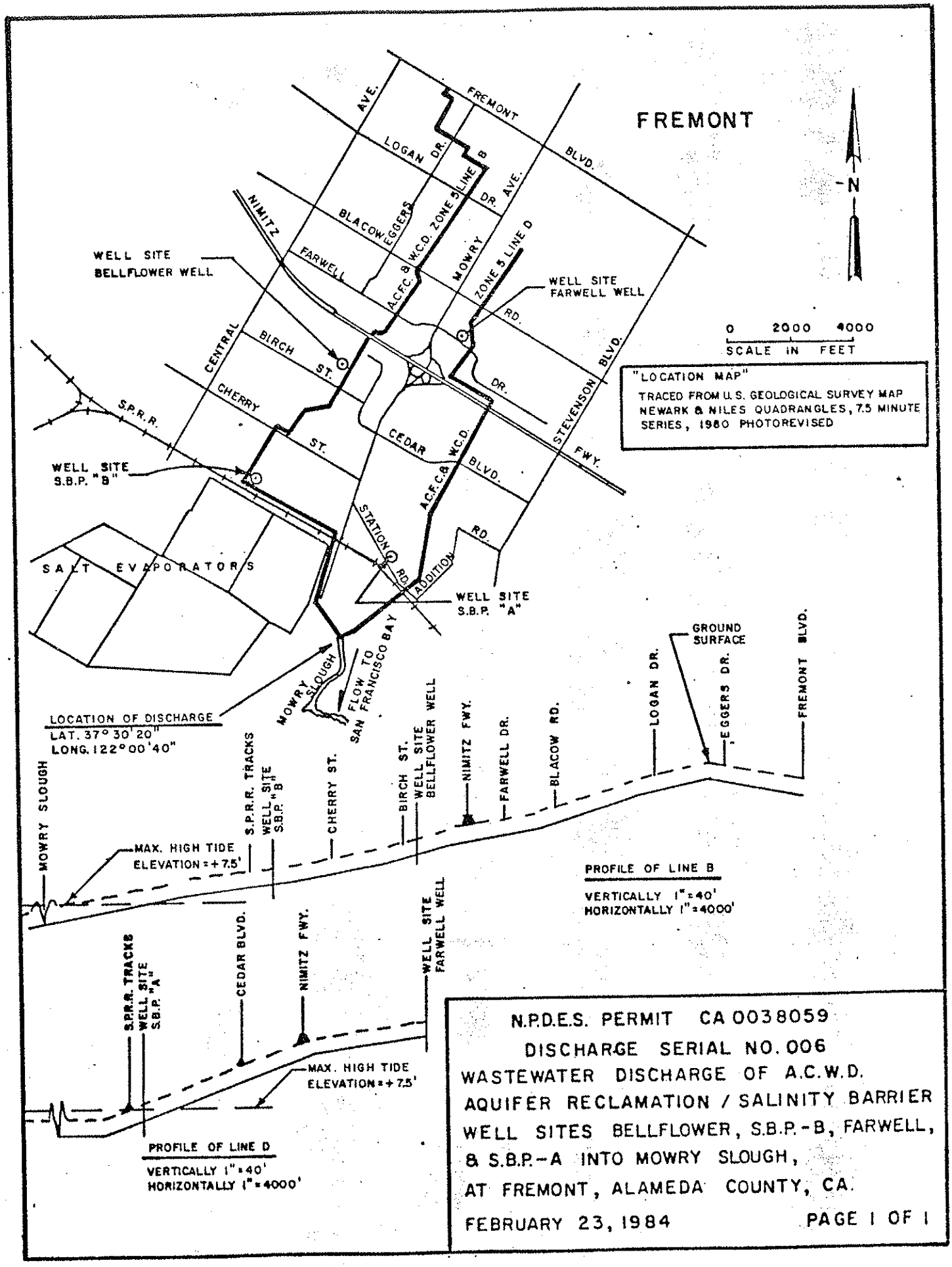
DISCHARGE SERIAL NO. 005

WASTEWATER DISCHARGE OF A.C.W.D.

AQUIFER RECLAMATION / SALINITY BARRIER

WELL SITES WILLOWOOD 1, WILLOWOOD 2, CEDAR 1, CEDAR 2, & ENTERPRISE DR. INTO PLUMMER CREEK AT FREMONT, ALAMEDA COUNTY, CA.

FEBRUARY 23, 1984



N.P.D.E.S. PERMIT CA 0038059

DISCHARGE SERIAL NO. 006

WASTEWATER DISCHARGE OF A.C.W.D.

AQUIFER RECLAMATION / SALINITY BARRIER

WELL SITES BELLFLOWER, S.B.P.-B, FARWELL, & S.B.P.-A INTO MOWRY SLOUGH,

AT FREMONT, ALAMEDA COUNTY, CA.

FEBRUARY 23, 1984