CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 96-046
NPDES NO. CA0027821

WASTE DISCHARGE REQUIREMENTS FOR:

CALMAT COMPANY
PLEASANTON, ALAMEDA COUNTY

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

1. Calmat Company, hereinafter called the discharger, by application dated March 7, 1996, has applied for renewal of a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).

2. The discharger harvests and processes sand and gravel for construction aggregates. Wastewater consists of both aggregate wash water and groundwater being discharged to control water levels in the pit area. Groundwater used to wash clays from aggregates drains into the settling ponds and is then pumped into Arroyo Mocho or pumped back to the plant for reuse. Excess water that accumulates in the settling ponds and quarry pits is discharged as follows:

DISCHARGE POINT	AVERAGE DISCHARGE RATE (mgd)	MAXIMUM DISCHARGE RATE (mgd)	DISCHARGE LOCATION
001	0.86	1.72	**Arroyo Mocho**(1); Lat. 37°67'69"; Long. 121°82'62".
002	2.87	4.7	**Arroyo Mocho**(2)**;** Lat. 37°67'89"; Long. 121°82'89".

NOTES:
(1) Discharge point 001 is located approximately 1000 feet northwest of El Charro Bridge.
(2) Discharge point 002 is located approximately 100 feet northwest of El Charro Bridge.

3. Sewage wastes are disposed of in an onsite septic system.

4. The discharge is presently governed by waste discharge requirements in Order Nos. 91-034 (NPDES permit).

5. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents

the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20 and November 13, respectively, of 1995. A summary of regulatory provisions is contained in Title 23 of the California Code of Regulations at Section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including Alameda Creek, Arroyo de la Laguna, Shadow Cliffs Reservoir, Arroyo del Valle, Arroyo Mocho, and contiguous waters.

The beneficial uses of Alameda Creek, Arroyo de la Laguna, Arroyo Mocho, Arroyo del Valle, Shadow Cliffs Reservoir, and contiguous water bodies are:

a. Water contact recreation
b. Non-contact water recreation
c. Wildlife habitat
d. Warm fresh water habitat
e. Cold fresh water habitat
f. Fish migration and spawning
g. Municipal and domestic supply (Arroyo del Valle only)
h. Agricultural supply
i. Groundwater supply

6. The Basin Plan sets surface water quality objectives for the Alameda Creek watershed above Niles, including Arroyo del Valle and Arroyo Mocho:

Total Dissolved Solids (TDS):	250 mg/l 90 day - arithmetic mean 360 mg/l 90 day - 90th percentile 500 mg/l daily maximum
Chlorides:	60 mg/l 90 day - arithmetic mean 100 mg/l 90 day - 90th percentile 250 mg/l daily maximum

The discharger uses existing groundwater as wash water for in-plant reuse, which does not represent a new source of TDS. Effluent discharged may contain TDS concentrations up to 650 mg/l without impacting aquatic resources in the Alameda Creek watershed above Niles.

7. The Basin Plan prohibits discharge to Alameda Creek, including its tributaries, during the dry weather period (May 1 through October 31 of each year). The Board may allow exceptions to the dry weather discharge prohibition when the Board finds that the discharge does not contain characteristics of concern to beneficial uses in Alameda Creek. The following information supports an exception to the Basin Plan's dry weather discharge prohibition:

The discharge contains no sewage-bearing wastes nor process waste added by the discharger's operations which are considered characteristics of concern to beneficial uses to Alameda Creek.

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 stormwater flows from within the facility boundary are directed to the settling ponds. These stormwater flows constitute all industrial storm water at these facilities and consequently this permit regulates all industrial storm water discharges at this facility.

9. The reissuance of an NPDES permit for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

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

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

IT IS HEREBY ORDERED that CalMat Company, 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 treatment, reuse, or disposal of wastewaters shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

   2. The bypass or overflow of untreated or partially treated wastewater to waters of the State is prohibited.

   3. The discharge shall not contain silt, sand, clay or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discolorations in surface waters or to unreasonably affect or threaten to affect beneficial uses.

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, settling ponds, or waters of the State are prohibited.

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

6. The discharge shall not contain sewage or toxic wastes.

B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits:

Constituents	Monthly Average	Annual Average	Daily Maximum
a. Total Dissolved Solids (mg/l)	--	600	650
b. Turbidity (NTU)	--	--	40
c. Total Settleable Matter (ml/l-hr)	0.1	--	0.2

2. The pH of the discharge shall not be less than 6.5 nor greater than 9.0.

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

Acute Toxicity:

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.

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 this unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

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

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

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

D. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by the Order Nos. 91-034. Order No. 91-034 is hereby rescinded.

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

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

3. Discharges to Shadow Cliffs Reservoir shall be made only upon request of the East Bay Regional Park District.

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

5. Compliance with Acute Toxicity Effluent Limitation

   a. Compliance with Effluent Limitation B.3. (Acute Toxicity) of this Order shall be evaluated by measuring survival of test organisms acceptable to the Executive Officer exposed to undiluted effluent for 96 hours in static bioassays.

   b. 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 discharger shall comply with the attached **self-monitoring program**. The Executive Officer may make minor amendments to it pursuant to federal regulations (40 CFR 122.63).

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

8. Wastes from production and processing operations including storm runoff from areas used for loading or washing trucks, shall either be contained on site or routed into the sand and gravel wash water settling ponds.

9. The discharger shall provide the ACWD notice at least 24 hours prior to start-ups and planned shut-downs of discharge to surface streams.

10. The Board may modify, or revoke and reissue, this Order and Permit if present or future investigations demonstrate that the discharge governed by this Order is causing or significantly contributing to adverse impacts on water quality and/or beneficial uses of the receiving waters.

11 This Order expires April 17, 2001. The discharger must file a report of waste discharge in accordance with 23 CCR, Chapter 3, not later than 180 days in advance of such expiration date as applicable for issuance of new waste discharge requirements.

12. 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 objections to its issuance, the permit shall not become effective until such objection is withdrawn.

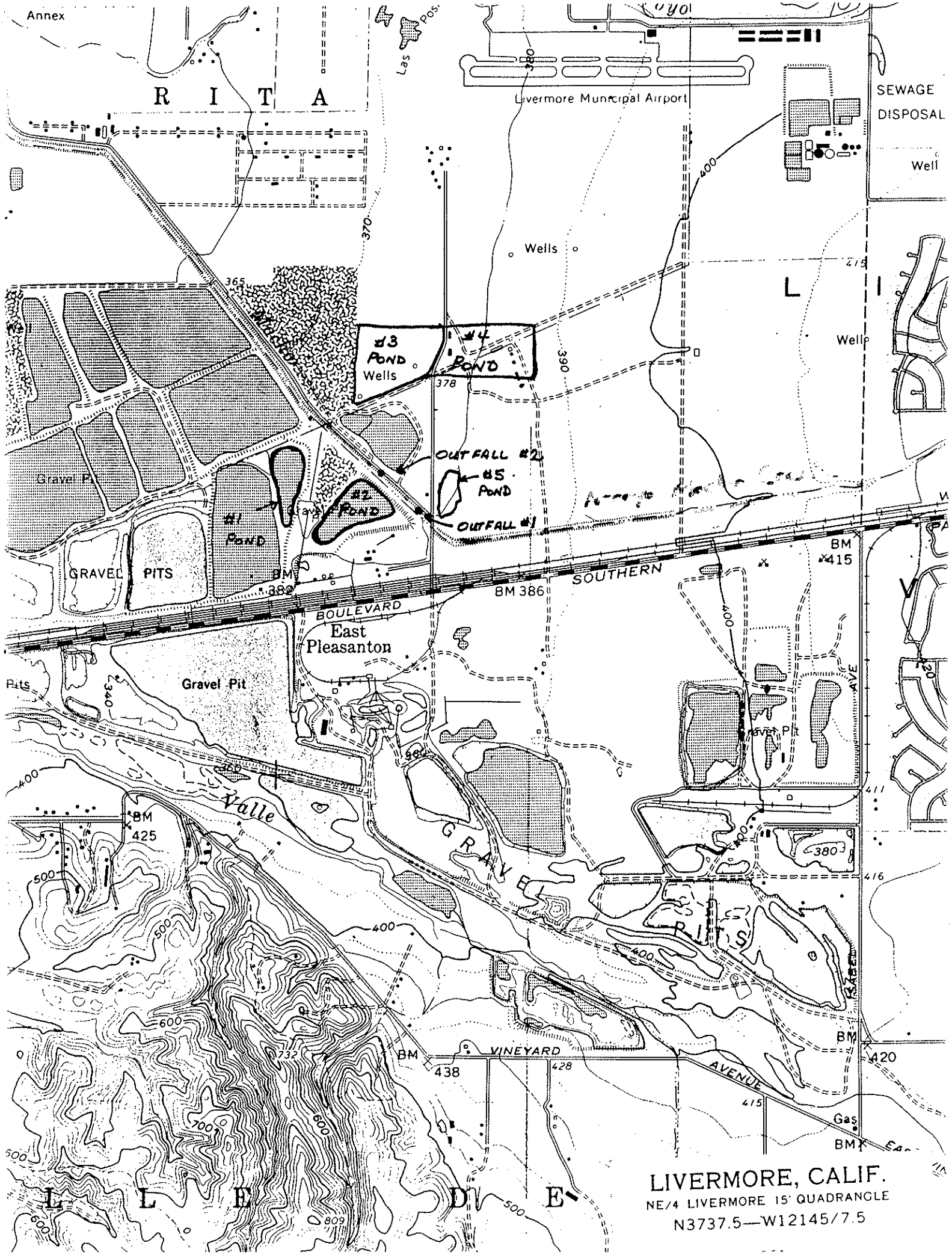
I, Loretta K. Barsamian, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on April 17, 1996.

Loretta K. Barsamian

LORETTA K. BARSAMIAN
Executive Officer

Attachments:
Location Map
Standard Provisions & Reporting Requirements, August 1993
Self-Monitoring Program

[File No. 2199.9163]
[Originator/VBP]
[Reviewer/JDW]



LIVERMORE, CALIF.

NE/4 LIVERMORE 15' QUADRANGLE

N3737.5—W12145/7.5

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

CALMAT COMPANY
PLEASANTON, ALAMEDA COUNTY

NPDES NO. CA0027821
ORDER NO. 96-046

CONSISTS OF
PART A
AND
PART B

PART B

I. Description of Sampling Stations

A. EFFLUENT

Station	Description
E-1	At any point in the outfall containing waste "001" between the point of discharge to Arroyo Mocho and the point at which all waste tributary to that outfall is present.
E-2	At any point in the outfall containing waste "002" between the point of discharge to Arroyo Mocho and the point at which all waste tributary to that outfall is present.

B. RECEIVING WATERS

Station	Description
C-1	At a point in Arroyo Mocho located 50 feet upstream of Discharge Point 001.
C-2	At a point in Mocho located 50 feet downstream of Discharge Point 002.

II. Schedule of Sampling and Analysis

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

B. A map showing the location and identity of each station sampled shall be submitted with each monitoring report.

III. MODIFICATION OF PART A (dated August 1993)

A. Paragraph F.4. is modified to include the following: "If no discharge occurred during the monthly reporting period, a letter certifying this shall be submitted to the Regional Board. The letter may be submitted quarterly after the facility has not discharged for at least one year."

B. Paragraph F.4.c. is modified to read as follows:

Summary tabulations of the data shall include for each constituent total numbar of analyses, maximum, minimum, and average values for each period. Flow data shall be included. The original is to be submitted to:

Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

and a copy is to be submitted to:

General Manager
Zone 7 Water Agency
5997 Parkside Drive
Pleasanton, CA 94588

Groundwater Resources Supervisor
Alameda County Water District
P.O.Box 5110
Fremont, CA 94537

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 96-046.

2. Is effective on April 17, 1996.

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.

Loretta K. Barsamian
LORETTA K. BARSAMIAN
Executive Officer

Attachments:
Part A (August 1993)

TABLE 1
SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS
ORDER NO. 96-046

Sampling Station	E-1,E-2,E-3[C]			C-1[a]		C-2[a]	
Type of Sample	C-24	G	O	G	O	G	O
Flow Rate (mgd)	D						
Settleable Matter (mg/l & Kgs/day)		W					
Fish Toxicity, 96-hr. TL-50[b] % Survival in undiluted waste		2/Y					
Turbidity (NTU)		W		W		W	
Chloride (mg/l & Kgs/day)		M		M		M	
pH (units)		W		W		W	
Dissolved Oxygen (mg/l & % saturation)		M					
Temperature (°C)		M					
Total Dissolved Solids (mg/l & Kgs/day)		M		M		M	
All Applicable Standard Observations			D		D		D

TYPES OF SAMPLES

G = grab sample
C-24 = composite - 24-hour
O = observation

TYPES OF STATIONS

E = waste effluent stations
C= receiving water stations

FREQUENCY OF SAMPLING

D = daily when discharging
W = once per week during each week in which discharge occurs
M = once per month during each month in which discharge occurs
Y = once per year during each year in which discharge occurs
2/Y = twice per year, during each spring (March-May) and fall (September - November) period in which discharge occurs

TABLE 1 FOOT NOTES

a. The "C" stations shall be sampled only when a discharge occurs and when there is naturally occuring surface flow at these stations.

b. Fish toxicity shall be determined using 96-hour static bioassays representative of the discharged effluent. One species shall be three-spined stickleback, and the other shall be either rainbow trout or fathead minow. Effluent used for fish bioassays must be undiluted and dechlorinated effluent.

c. The "E" stations shall be sampled only when there is a discharge. Stations E-1, E-2, and E-3 shall be sampled separately when both have a discharge. Each sample shall be analyzed separately for all parameters except Fish Toxicity, for which a single flow-proportioned sample may be used.