

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 87-027

NPDES NO. CA0028771

WASTE DISCHARGE REQUIREMENTS FOR:

JONES CHEMICALS, INC.  
MILPITAS, SANTA CLARA COUNTY

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

1. Jones Chemicals, Inc. (hereafter called the discharger) by application dated December 8, 1986 has applied for issuance of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).
2. The discharger operates a facility at 985 Montague Expressway in Milpitas, Santa Clara County. The discharger receives chlorine gas, sulfur dioxide, anhydrous ammonia, various acids and bases by rail or tank truck and repackages these chemicals into cylinders or drums. The discharger also manufactures sodium hypochlorite and aqua-ammonia and ships these chemicals in tank truck or drums. Industrial solvents are received and shipped in closed drum containers.
3. Studies by the discharger show that groundwaters beneath the site and beyond the site boundaries have been contaminated by organic solvents such as trichloroethylene (TCE), 1,1,1-trichloroethane (TCA), perchloroethylene (PCE), and dichloroethylene (DCE). The apparent cause of said contamination was an explosion of a solvent tank that resulted in an estimated discharge of up to 4,000 gallons of organic solvents to the ground and to adjacent Berryessa Creek.
4. Waste waters generated by a drum rinsing operation are neutralized and discharged to the municipal sanitary sewer system. Sanitary wastes also are discharged to the sewer system. Up to 50,000 gallons per day of treated groundwater from onsite extraction wells are discharged to Berryessa Creek in accordance with current NPDES Permit (Order No. 84-83).
5. As of February 1987, the solvent contamination extended horizontally a distance of up to 1,500 feet downgradient beyond the property boundary and vertically to a depth less than 70 feet. Trichloroethylene and trichloroethane have been detected at concentrations exceeding 10,000 parts per billion. The discharger seeks to cleanup and to prevent the migration of offsite pollutants by expansion of the existing groundwater extraction and treatment system.

6. By letter dated January 2, 1986, the Executive Officer, in order to expedite the offsite groundwater cleanup, informed the discharger that if, prior to adoption of an NPDES permit, the discharger chose to begin discharging treated groundwater meeting quality limits which have now been incorporated into this Order, he would not recommend that the Board institute enforcement action.
7. Waste 001 consists of up to 432,000 gallons per day (gpd) of polluted groundwater which will be treated by packed tower air stripping prior to discharge to Berryessa Creek, tributary to Coyote Creek and South San Francisco Bay.
8. 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 South San Francisco Bay, and contiguous surface and groundwater.
9. The beneficial uses of Berryessa Creek and Coyote Creek include:
  - . Contact and non-contact water recreation
  - . Warm fresh water and cold fresh water habitat
  - . Wildlife habitat
  - . Fish spawning
10. The beneficial uses of South San Francisco Bay include:
  - . Contact and non-contact water recreation
  - . Wildlife habitat
  - . Preservation of rare and endangered species
  - . Estuarine habitat
  - . Fish spawning and migration
  - . Industrial service supply
  - . Shellfishing
  - . Navigation
  - . Ocean commercial and sport fishing
11. The Basin Plan prohibits discharge of wastewater which has "particular characteristics of concern to beneficial uses" (a) "at any point in San Francisco Bay south of the Dumbarton Bridge" and (b) "at any point where the wastewater does not receive a minimum initial dilution of at least 10:1 or into any nontidal water, deadend slough, similar confined water, or any immediate tributary thereof."
12. The Basin Plan allows for exceptions to the prohibitions referred to in Finding 11 above when it can be demonstrated that a net environmental benefit can be derived as a result of the discharge.
13. Exceptions to the prohibitions referred to in Finding 11 are warranted because the discharge is an integral part of a program to cleanup contaminated groundwater and thereby produce an environmental benefit, and because receiving water concentrations are expected to be below levels that would effect beneficial uses. Should studies indicate chronic effects, not currently anticipated, the Board will review the requirements of this Order based upon section B.1.e.

14. The Basin Plan prohibits discharge of "all conservative toxic and deleterious substances, above those levels which can be achieved by a program acceptable to the Board, to waters of the Basin." The discharger's groundwater extraction and treatment system and associated operation, maintenance, and monitoring plan constitutes an acceptable control program for minimizing the discharge of toxicants to waters of the State.
15. Effluent limitations of this Order are based on the Basin Plan, State plans and policies, this Board's "Discharge of Polluted Groundwater to Surface Waters: Guidance Document, September 1985," and best engineering judgment.
16. The issuance of waste discharge requirements for this discharge 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.
17. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
18. 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 and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. Waste 001 shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Instantaneous Maximum</u>
trichloroethylene	mg/L	0.005
1,1,1-trichloroethane	mg/L	0.005
tetrachloroethylene	mg/L	0.005
1,1-dichloroethylene	mg/L	0.005
1,2-dichloroethylene	mg/L	0.005
1,1-dichloroethane	mg/L	0.005
1,2-dichloroethane	mg/L	0.005

2. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.
3. In any representative set of samples, the discharge of waste shall meet the following limit of quality:

TOXICITY: The survival of rainbow trout fishes in 96 hour bioassays of the effluent as discharged shall be a median of 90% survival and a 90 percentile value or not less than 70% survival.

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 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. The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause lesser concentration(s) than specified above, the discharge shall not cause further reduction in the concentration of dissolved oxygen.
  
  - b. pH: The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units.
  
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Board will revise and modify this Order in accordance with such more strigent standards.

Provisions

1. The discharger shall comply with all sections of this order immediately upon adoption.
2. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
3. The discharger shall also notify the Regional Board if any activity has occurred or will occur which would result in the discharge, on a frequent or routine basis, of any toxic pollutant which is not limited by this Order.
4. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986, except items A.10, B.2, B.3, C.8, and C.11.
5. This Order expires April 15, 1992. 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. Order No.84-83 is hereby rescinded.
7. 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.

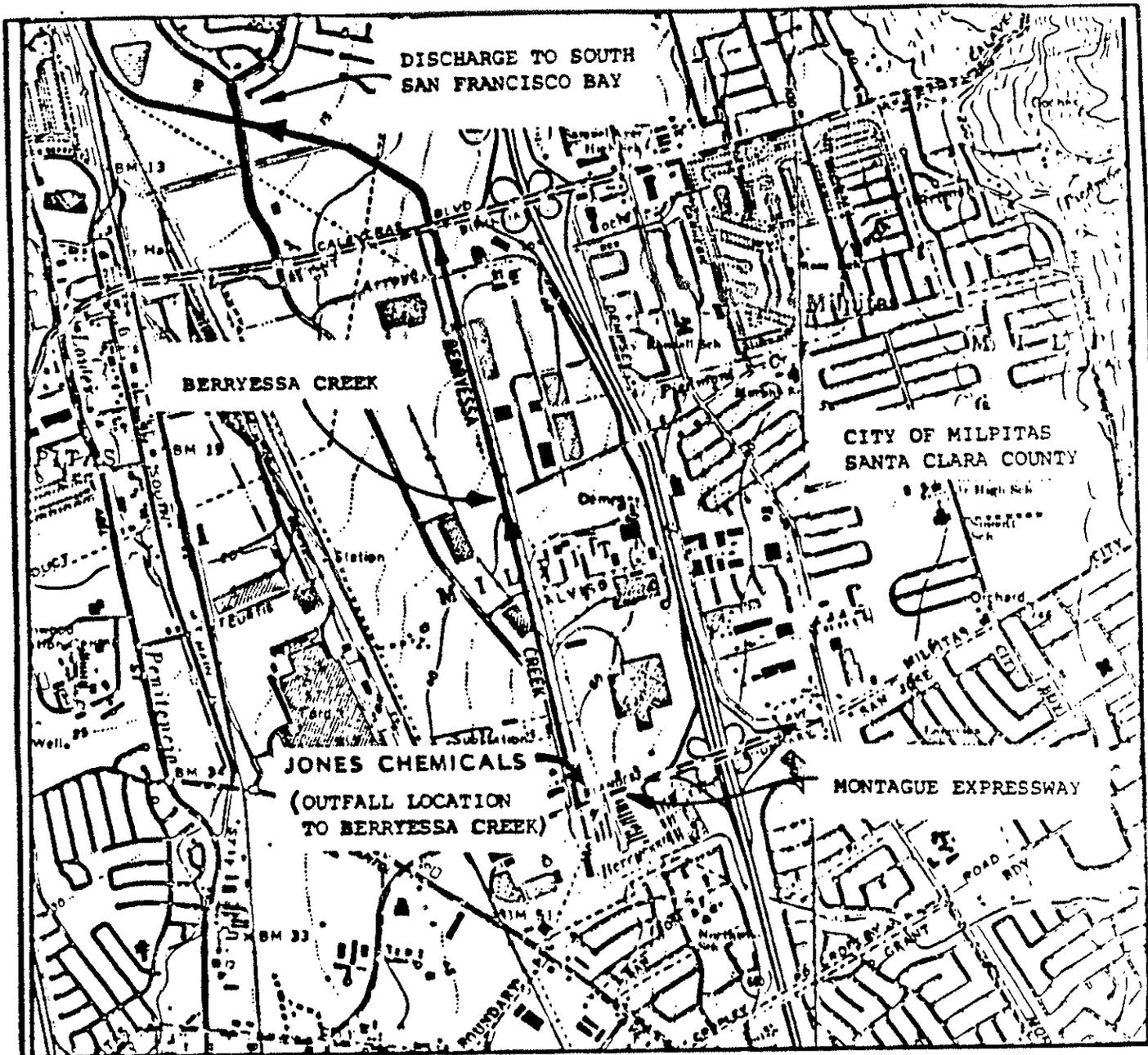
I, Roger B. James, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on April 15, 1987.



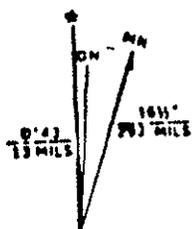
ROGER B. JAMES  
Executive Officer

Attachments:

Standard Provisions & Reporting Requirements, December 1986  
Self-Monitoring Program  
Site Map



Source: U.S. Geological Survey



UTM GRID AND 1980 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

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

SITE LOCATION MAP  
JONES CHEMICALS, INC.  
MILPITAS, SANTA CLARA COUNTY

DRAWN BY:

DATE:

DRWG NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

T E N T A T I V E  
SELF-MONITORING PROGRAM  
FOR

JONES CHEMICALS, INC.

MILPITAS

SANTA CLARA COUNTY

NPDES NO. CA0028771

ORDER NO. 87-027

CONSISTS OF

PART A, dated December 1986 and modified January 1987

PART B

SELF-MONITORING PROGRAM  
PART A

A. GENERAL

Basis

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16 and the Environmental Protection Agency's Discharge Monitoring Report (Form 3320-1).

Purpose

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the 40 CFR 136 or other methods approved and specified by the Executive Officer of this Regional Board. (See Appendix E, attached)

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Service (DOHS) or a laboratory waived by the Executive Officer from obtaining a certification for these analyses by the DOHS. The director of the laboratory whose name appears on the certification or his/her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work including appropriate quality assurance/quality control procedures in his or her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is defined as an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with daily maximum limits and instantaneous maximum limits. Grab samples represent only the condition that exists at the time the wastewater is collected.
2. A composite sample is defined as a sample composed of individual grab samples mixed in proportions varying not more than plus or minus five percent from the instantaneous rate (or highest concentration) of waste flow corresponding to each grab sample collected at regular intervals not greater than one hour, or collected by the use of continuous automatic sampling devices capable of attaining the proportional accuracy stipulated above throughout the period of discharge for 8 consecutive or of 24 consecutive hours, whichever is specified in Table 1 of Part B.
3. A flow sample is defined as the accurate measurement of the average daily flow volume using a properly calibrated and maintained flow measuring device.
4. Duly authorized representative is one whose:
  - a. Authorization is made in writing by a principal executive officer or ranking elected official;
  - b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general partner in a partnership, sole proprietor in a sole proprietorship, the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
5. Average values for daily and monthly values are obtained by taking the sum of all daily values divided by the number of all daily values measured during the specified period.
6. Daily Maximum limit is the total discharge in a calendar day for pollutants measured by mass or the average measurement obtained for other pollutants.
7. Instantaneous maximum is defined as the highest measurement obtained for the calendar day.
8. Median of an ordered set of values is that value below and above which there is an equal number of values, or which is the arithmetic mean of the two middle levels, if there is no one middle value.

9. A 6-month median means a moving median of daily values for any 180 day period in which daily values represent flow-weighted average concentrations within a daily or 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.

D. SPECIFICATIONS FOR SAMPLING AND ANALYSES

The discharger is required to perform sampling and analyses according to the schedule in Part B in accordance with the following conditions:

1. Influent

- a. Samples of influent shall be collected on varying days selected at random and shall not include any plant recirculation or other sidestream wastes. Deviation from this must be approved by the Executive Officer.

2. Effluent

- a. Samples of effluent shall be collected on days coincident with influent composite sampling unless otherwise stipulated. At least one sampling event/day shall be taken during major unit operation shutdown or startup. The Board or Executive Officer may approve an alternative sampling plan if it is demonstrated to the Board's satisfaction that expected operating conditions for the facility warrant a deviation from the standard sampling plan.
- b. Grab samples of effluent shall be collected during periods of maximum peak flows and shall coincide with effluent sample days.
- c. Fish bioassay samples shall be collected on days coincident with effluent sampling.
- 1) Bioassay sample should be collected after chlorination, if chlorination is part of the treatment process. Bioassay test should be performed on dechlorinated samples. Dechlorination may be performed at the laboratory before testing.
- 2) Total ammonia nitrogen shall be analyzed and un-ionized ammonia calculated whenever fish bioassay test results fail to meet the specified percent survival.
- d. If two consecutive samples of a constituent monitored on a weekly or monthly basis in a 30 day period exceed the effluent limit for any parameter, (or if the required sampling frequency is once per month and the monthly sample exceeds the limit), the sampling frequency shall be increased to daily until the additional sampling shows that the most recent three (3) days are in compliance.

- e. If any instantaneous maximum limit is exceeded, the discharge shall be terminated until the cause of violation is found and corrected.
- f. If the final or intermediate results of any single bioassay test indicate a threatened violation (i.e. the percentage of surviving test organisms is less than the required survival percentage), a new test will begin and the discharger shall investigate the cause of the mortalities and report the finding in the next self-monitoring report.
- g. 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 collected at least every 30 minutes until compliance is achieved.
- h. When any type of bypass occurs, grab samples shall be collected on a daily basis for all constituents at all affected discharge points which have effluent limits for the duration of the bypass.

### 3. Receiving Waters

- a. Receiving water sampling shall be conducted on days coincident with sampling of effluent.
- b. Receiving water samples shall be collected at each station on each sampling day during the period within one hour following low slack water. Where sampling at lower slack water period is not practical, sampling shall be performed during higher slack water period. Samples shall be collected within the discharge plume and downcurrent of the discharge point so as to be representative, unless otherwise stipulated.
- c. Samples shall be collected within one foot below the surface of the receiving water body, unless otherwise stipulated.

## E. Standard Observations

### 1. Receiving Water

- a. Floating and suspended materials of waste origin (to include oil, grease, algae, and other macroscopic particulate matter): presence or absence, source, and size of affected area.
- b. Discoloration and turbidity: description of color, source, and size of affected area.
- c. Odor: presence or absence, characterization, source, distance of travel, and wind direction.

- d. Evidence of beneficial water use: presence of water-associated waterfowl or wildlife, fishermen, and other recreational activities in the vicinity of the sampling stations.
- e. Hydrographic condition:
  - 1) Time and height of corrected high and low tides (corrected to nearest NOAA location for the sampling date and time of sample and collection).
  - 2) Depth of water columns and sampling depths.
- f. Weather condition:
  - 1) Air temperatures.
  - 2) Wind - direction and estimated velocity.
  - 3) Precipitation - total precipitation during the previous five days and on the day of observation.

2. Wastewater Effluent

- a. Floating and suspended material of waste origin (to include oil, grease, algae, and other macroscopic particulate matter): presence or absence.
- b. Odor: presence or absence, characterization, source, distance of travel.

3. Beach and Shoreline

- a. Material of waste origin: presence or absence, description of material, estimated size of affected area, and source.
- b. Beneficial use: estimated number of people sunbathing, swimming, waterskiing, surfing, etc.

4. Land Retention or Disposal Area

This applies both to liquid and solid wastes confined or unconfined.

- a. For each impoundment determine amount of the freeboard at lowest point of dikes confining liquid wastes.
- b. Evidence of leaching liquid from area of confinement and estimated size of affected area. [Show affected area on a sketch and volume of flow (gpm, etc).]
- c. Odor: presence or absence, characterization, source, and distance of travel.

- d. Estimated number of waterfowl and other water-associated birds in the disposal area and vicinity.
5. Periphery of Waste Treatment and/or Disposal Facilities
- a. Odor: presence or absence, characterization, source and distance of travel.
  - b. Weather condition: wind direction and estimated velocity.

F. RECORDS TO BE MAINTAINED

- 1. Written reports, strip charts, calibration and maintenance records, and other records shall be maintained by the discharger and accessible (at the waste treatment plant), and retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board or Regional Administrator of the U.S. Environmental Protection Agency, Region IX. Such records shall show the following for each sample:
  - a. Identity of sampling and observation stations by number.
  - b. Date and time of sampling and/or observations.
  - c. Method of sampling (See Section C - Definition of Terms).
  - d. Type of fish bioassay test (96 hour static or flow-through bioassay).
  - e. Date and time that analyses are started and completed, and name of personnel performing the analyses.
  - f. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to a specific section of Standard Methods is satisfactory.
  - g. Calculations of results.
  - h. Results of analyses and/or observations.
- 2. A tabulation shall be maintained showing the following flow data for influent and effluent stations and disposal areas:
  - a. Total waste flow or volume for each day.
  - b. Maximum and minimum daily flows for each month.
- 3. A tabulation reflecting bypassing and accidental waste spills shall be maintained showing information items listed in Sections F-1 and F-2 for each occurrence.

G. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Spill Reports

If any hazardous substance is discharged in or on any waters of the state, or discharged and deposited where it is, or probably will be discharged in or on any waters of the state, the discharger shall report such a discharge to this Regional Board, at (415) 464-1255 on weekdays during office hours from 8 a.m. to 5 p.m., and to the Office of Emergency Services at (800) 852-7550 during non-office hours. A written report shall be filed with the Regional Board within five (5) working days and shall contain information relative to:

- a. nature of waste or pollutant,
- b. quantity involved,
- c. duration of incident,
- d. cause of spilling,
- e. Spill Prevention, Control, and Countermeasure Plan (SPCC) in effect, if any,
- f. estimated size of affected area,
- g. nature of effects (i.e., fish kill, discoloration of receiving water, etc.),
- h. corrective measures that have been taken or planned, and a schedule of these activities, and
- i. persons/agencies notified.

2. Reports of Plant Bypass, Treatment Unit Bypass and Permit Violation

In the event the discharger violates or threatens to violate the conditions of the waste discharge requirements and prohibitions or intends to permit a plant bypass or treatment unit bypass due to:

- a. Maintenance work, power failures, or breakdown of waste treatment equipment, or
- b. accidents caused by human error or negligence, or
- c. other causes, such as acts of nature,

The discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within 5 working days of the telephone notification. The written report shall include time, date, duration and estimated volume of waste

bypassed, method used in estimating volume and person notified of the incident. The report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

In addition, the waste discharge shall promptly accelerate his monitoring program to analyze the discharge at least once every day (Section D.2.h). Such daily analyses shall continue until such time as the effluent limits have been attained, until bypassing stops or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Self-Monitoring Report.

3. The discharger shall file a written technical report to be received at least 30 days prior to advertising for bid (or 60 days prior to construction) on any construction project which would cause or aggravate the discharge of waste in violation of requirements; said report shall describe the nature, cost, and scheduling of all action necessary to preclude such discharge. In no case will any discharge of wastes in violation of permit and order be permitted unless notification is made to the Executive Officer and approval obtained from the Regional Board.

4. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar month (unless specified otherwise) and filed no later than the fifteenth day of the following month. The reports shall be comprised of the following:

- a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include:

- 1) Identification of all violations of waste discharge requirements found during the reporting period,
- 2) Details of the magnitude, frequency, and dates of all violations,
- 3) The cause of the violations, and
- 4) Discussion of the corrective actions taken or planned and the time schedule for completion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory.

Monitoring reports and the letter transmitting reports shall be signed by a principal executive officer or ranking elected official of the discharger, or by a duly authorized representative of that person.

The letter shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be prepared following the example shown in APPENDIX A (attached). The discharger will prepare the format using those parameters and requirement limits for influent, effluent and receiving water constituents specified in the permit.

c. Map or-Aerial Photograph

A map or aerial photograph shall accompany the report showing sampling and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Part B by date, time, type of sample, detection limit and station, signed by the laboratory director. The report format will be prepared using the examples shown in APPENDIX B.

- 1) If the permittee monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Self-Monitoring Report.
- 2) Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- 3) The report shall also identify a table identifying by method number the analytical procedures used for analyses. Any special methods shall be identified and should have prior approval of the Board's Executive Officer.
- 4) Lab results shall be copied and submitted as an appendix to the regular report.

e. Influent and Effluent Data Summary

Summary tabulations of the data to include for each constituent total number of analyses, maximum, minimum, and average values for each period. The report format will be the NPDES Discharge Monitoring Report, EPA Form 3320-1. Flow data shall be included.

- 1) The original is to be submitted to EPA:

Regional Administrator  
U.S. Environmental Protection Agency  
Attention: Enforcement Division (W-5)  
215 Fremont Street  
San Francisco, CA 94105

- 2) with a copy to the Regional Board:

Executive Officer  
California Regional Water Quality Control Board  
San Francisco Bay Region  
1111 Jackson Street, Room 6000  
Oakland, CA 94607

f. List of Approved Analyses

- 1) Listing of analyses for which the discharger is approved by the State Department of Health Services.
- 2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).
- 3) List of "waived" analyses, as approved by the Executive Officer.

g. Flow data

- 1) The tabulation pursuant to Section F-2.

5. Annual Reporting

By January 30 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the report shall contain a comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements. The report format will be prepared by the discharger using the examples shown in APPENDIX C (attached) and should be maintained and submitted with each regular self-monitoring report.

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT

Stations

Description

I-1                      At a point in the groundwater extraction/  
treatment system immediately prior to treatment.

B. EFFLUENT

E-1                      At a point in the groundwater extraction/  
treatment system immediately following treatment.

C. RECEIVING WATERS

C-1                      At a point in the Berryessa Creek at least 100  
feet but no more than 200 feet down-stream from  
the storm sewer discharge point.

II. SCHEDULE OF SAMPLING AND ANALYSIS

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

III. MODIFICATION OF PART A, DATED JANUARY 1987

A. Section D.2.e shall be changed to read as follows:

If the total concentration of the seven chlorinated hydrocarbon  
compounds specified in the Order under Section A.1 exceeds  
35 ppb, the discharge shall be terminated until the cause of  
violation is found and corrected.

B. Delete Sections D.2.g, E.3, and E.4.

C. Written reports under G.4 shall be filed no later than the last  
day of the following month.

- D. Section G.4.b shall be changed to read as follows:

Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be prepared similar to the example shown in APPENDIX A (attached). The discharger will prepare the format substituting for the example parameters those parameters and requirement limits for influent, effluent and receiving water constituents specified in the permit.

- E. The first paragraph of Section G.4.d shall be changed to read as follows:

Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Part B by date, time, type of sample, detection limit and station. The report format will be prepared similar to the examples shown in APPENDIX B, substituting those parameters specified in the permit for the parameters given in the example.

- F. Information requested under Section G.4.e shall be prepared in a format similar to EPA Form 3320-1, and shall be submitted only to the Regional Board.

- G. Section G.5 shall be modified to read as follows:

Annual Reporting

By January 30 of each year, the discharger shall submit in place of the end of the year monthly report, an annual report to the Regional Board covering the previous calendar year. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the report shall contain a comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements. The report format will be prepared by the discharger similar to the examples shown in APPENDIX D (attached) substituting those parameters specified in the permit for the parameters given in the example and should be maintained and submitted with each regular self-monitoring report.

IV. MISCELLANEOUS REPORTING

If any chemical additives are proposed to be used in the operation of the treatment system it shall be reported 30 days prior to their use.

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 No.
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 upon request from the discharger, and revisions will be ordered by the Executive Officer.

  
for  
ROGER B. JAMES  
Executive Officer

Effective Date: April 15, 1987

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	I-1	E-1	C-1						
TYPE OF SAMPLE	G	G	G						
Flow Rate (Gal/Day)	D	D							
BOD, 5-day, 20°C, or COD (mg/l)									
pH (units)		D	2/Y						
Dissolved Oxygen (mg/l and % Saturation)		M	2/Y						
Temperature (°C)		M	2/Y						
Total Suspended (mg/l)									
Fish Tox'y 96-hr. TL & Surv'l in undiluted waste		2/y							
GC/MS Scan (EPA 624/625) (mg/l)									
Volatile Chlorinated Hydrocarbons (mg/l) (1)	M	2/M	2/Y						

LEGEND FOR TABLE

- G = Grab Sample
- D = Once each day
- M = Once each month
- Q = Quarterly, once in March, June, September, and December
- 2/Y = Once in March and September
- 2/M = Weekly for the first six (6) months of startup of operation; reduced to twice a month thereafter.

(1) Defined as trichloroethylene, tetrachloroethylene, 1,1,1-trichloroethane, 1,1-dichloroethylene, 1,2-dichloroethylene, 1,1-dichloroethane, 1,2-dichloroethane.

TABLE 1 (5)  
Requirement Compliance Summary - An Example

RECEIVING WATER		WASTE EFFLUENT	
ATMOSPHERIC ODOR			
DISCOLORATION			
TURBIDITY AND/OR			
FLOATING OIL			
FLOATING SOLIDS OR FOAM			
COLIFORM ORGANISMS	Not more than 20% of the samples from any station shall exceed a mean of 1000/100ml in any 30-day period		
DISSOLVED SULFIDES	Maximum of 0.1 mg/L		
pH	Minimum of 7.0 Maximum of 8.5		
DISSOLVED OXYGEN	Minimum of 5.0 mg/L	2/2(4)	2/2(4)
BYPASSES	Number of occurrences		
ZINC	5 kg/day maximum		
	4 kg/day mean 30 days		
	0.5 mg/L maximum		
TEMPERATURE	Δ20° F of R/W ambient		
	66° F maximum		
TOXICITY	TER - X <sub>3</sub> mgd		
	Tc - X <sub>2</sub> mean		
	Tc - X <sub>1</sub> maximum	4/3(1)	
pH	7.0 - 8.5		
FECAL COLIFORM BACTERIA	400 per 100ml consecutive days - 7		
	200 per 100ml consecutive days - 30	0/1	0/1
SUSPENDED SOLIDS	30 consecutive days	0/1	0/1(2)
	Percent removal - 85%		
	Arithmetic mean - 7 consecutive days 45mg/L	0/1 0/4	1/1 4/4
BOD	30 consecutive days	0/1 0/4	1/1 4/4 (3)
	Percent removal - 85%		
	Arithmetic mean - 7 consecutive days 45mg/L		
	Arithmetic mean - 30 consecutive days 30mg/L		
	Arithmetic mean - 7 consecutive days 30mg/L		
	Arithmetic mean - 30 consecutive days 30mg/L		

FOOTNOTES:

- (1) 4/30 means that on 4 of 30 days sampled during the indicated month, the pH requirement was violated.
- (2) 0/1 means that the geometric mean for the 30 consecutive days in this month was less than 200/100ml Fecal Coliform.
- (3) 4/4 means that all of 4 weekly arithmetic means exceeded 45 mg/L Suspended Solids.
- (4) 2/2 means DO samples were collected on two days during each of the indicated months and on each sampling day at least one station was found in violation of requirement.
- (5) Each discharger shall prepare his compliance summary using constituents and requirement limits specified in his permit.















FISH BIOASSAY REPORT

Description of Samples: \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Source: \_\_\_\_\_ Collected by: \_\_\_\_\_

SUMMARY OF RESULTS

SAMPLE AS RECEIVED

TLm  
 24 Hours \_\_\_\_\_ %  
 48 Hours \_\_\_\_\_ %  
 72 Hours \_\_\_\_\_ %  
 96 Hours \_\_\_\_\_ %

pH \_\_\_\_\_  
 Temp °C \_\_\_\_\_  
 Dissolved  
 Oxygen (mg/l) \_\_\_\_\_

Residual Cl<sub>2</sub> \_\_\_\_\_  
 (mg/l)  
 Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

ANALYTICAL DATA

Test Species: \_\_\_\_\_ Source of Fishes: \_\_\_\_\_  
 Size: \_\_\_\_\_ inches Source of Dilution Water: \_\_\_\_\_  
 Sample Dilution Portions (were) (were not) aerated.  
 \_\_\_\_\_ fishes per \_\_\_\_\_ liters of test solutions were tested.  
 Test started: \_\_\_\_\_ Test ended: \_\_\_\_\_

BIOASSAY RESULTS

Percent Sample	24 Hours		48 Hours		72 Hours		96 Hours		% Survival Final
	Deaths	Survivors	Deaths	Survivors	Deaths	Survivors	Deaths	Survivors	
Control									
Temp °C									

CHEMICAL ASSAY DATA

Percent Sample	0 Hour				24 Hours			48 Hours			72 Hours			96 Hours		
	pH	ALK	mg/l Diss. O <sub>2</sub>	Hardness (mg/l CaCO <sub>3</sub> )	pH	ALK mg/l CaCO <sub>3</sub>	DO	pH	ALK	DO	pH	ALK	DO	pH	ALK	DO
Control																

Tested by: \_\_\_\_\_

**INSTRUCTIONS**

1. Provide data for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing "AVERAGE" to average computed over actual data disclosed to operator. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) limit conditions in the column labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equal to 3 analyses performed every 7 days.) If continuous enter "CONT".
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency data conditions, enter "RA".
6. Appropriate digitization is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

17-11	12-11	12-11	12-11
DAY	MO	DAY	MO
LAVIQUOR		CONCENTRATION	
12-11	12-11	12-11	12-11
YEAR	MO	DAY	MO

REPORTING PERIOD FROM

PARAMETER	12-11		12-11		12-11		12-11		FREQUENCY OF ANALYSIS	SAMPLE TYPE
	MINIMUM	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		
REPORTED										
EXCEEDS										
NO. EX.										
REPORTED										
EXCEEDS										
NO. EX.										
REPORTED										
EXCEEDS										
NO. EX.										
REPORTED										
EXCEEDS										
NO. EX.										

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

TITLE OF THE OFFICER: \_\_\_\_\_ DATE: \_\_\_\_\_

TITLE: \_\_\_\_\_ YEAR: \_\_\_\_\_ MO: \_\_\_\_\_ DAY: \_\_\_\_\_

SIGNATURE OF MUNICIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: \_\_\_\_\_

PAGE: \_\_\_\_\_ OF \_\_\_\_\_ ORIGINAL



TABLE 3  
ANNUAL RECEIVING WATER DATA  
SERIAL  
-- AN EXAMPLE --

PARAMETER 1975 MONTH		DISSOLVED OXYGEN - MG/L								
		C-R			C-1			No. of Samples		
		Maximum	Minimum	Average	No. of Samples Showing Violation	Total Analyzed	Maximum	Minimum	Average	Showing Violation
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										
ANNUAL MAXIMUM										
ANNUAL MINIMUM										
ANNUAL AVERAGE										
TOTAL										

FOOTNOTE: C-R = Reference Station.  
C-1 = Receiving Water Station closest to the discharge point.

TABLE 4  
ANNUAL WASTE CHARACTERISTIC AND LOADING SUMMARY  
-- AN EXAMPLE --

PARAMETER 1975 MONTH		B O D									
		CONCENTRATION (mg/l)					LOADING (lbs/day)				
		Maximum	Minimum	Average	No. of Samples Showing Violation	Samples Total Analyzed	Maximum	Minimum	Average	No. of Samples Showing Violation	Samples Total Analyzed
JANUARY											
FEBRUARY											
MARCH											
APRIL											
MAY											
JUNE											
JULY											
AUGUST											
SEPTEMBER											
OCTOBER											
NOVEMBER											
DECEMBER											
ANNUAL MAXIMUM					↓	↓				↓	↓
ANNUAL MINIMUM					↓	↓				↓	↓
ANNUAL AVERAGE					↓	↓				↓	↓
TOTAL											

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater, prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

Federal regulations were published (Table I, 40 CFR136, Federal Register 12/1/76) governing the methods that are to be used in analyzing wastes for pollutants. Dischargers are required to use Standard Methods for all parameters for which EPA and State Department of Health approves Standard Methods. Table II lists those constituents for which a test in Standard Methods was not deemed acceptable and lists the method and reference that is considered acceptable.

If a discharger wishes to use an alternate method to Standard Methods which is approved by EPA, this request may be approved by the Executive Officer.

Under certain circumstances other methods will be approved by EPA on a case-by-case basis and upon request by the discharger.

Such a request may be made by letter until printed application forms are made available. The letter or application should contain the following information:

1. The name and address of the responsible person or firm making the discharge (if not the applicant), the permit number, the issuing agency, and the discharge serial number;
2. Identify the pollutant or parameter for which approval of an alternate testing procedure is being requested;
3. Justification for using testing procedures other than those specified;
4. A detailed description of the proposed alternate test procedure, together with references to published studies of the applicability of the alternate test procedure to the effluents in question.

The regional board executive officer should forward the application letter to the State Board. The application will then be transmitted to the Department of Health with a request for comments and recommendations.

The State Board will consider the comments and recommendations received from the regional board, the Department of Health, and other agencies if appropriate, to formulate its recommendations to the Regional Administrator.

Within 30 days of receipt of an application, the State Board will forward such application, together with its recommendations, to the Regional Administrator, EPA. Within 90 days of receipt by the Regional Administrator of an application for an alternate test procedure, the Regional Administrator shall notify the applicant and regional board of approval or rejection, or shall specify the additional information which would be required to determine whether to approve the proposed test procedure.