CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

SAN FRANCISCO BAY REGION 2101 WEBSTER STREET, SUITE 500 OAKLAND, CA 94612 Phone: (510) 286-1255 Fex: (510) 286-1380

Date: December 14, 1992

SLIC File

Mr. Dennis Hunt District Manager Industrial Asphalt P. O. Box 636 Pleasanton, CA 94566

> NOTICE OF

TENTATIVE ORDER

FOR

INDUSTRIAL ASPHALT AND JAMIESON COMPANY

PLEASANTON

ALAMEDA COUNTY

Comments or recommendations you may have concerning the Tentative Order should be submitted in writing to this Regional Board by <u>January 21, 1993</u>. Comments received after this date cannot be given full consideration.

Sincerely

LESTER FELDMAN

Toxics Cleanup Section Leader

Enclosures

cc w/ enclosures: Mailing List

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION 2101 WEBSTER STREET, SUITE 500 OAKLAND, CA 94612 (510) 286-1255

STATEMENT OF BASIS

WASTE DISCHARGE REQUIREMENTS FOR INDUSTRIAL ASPHALT AND JAMIESON COMPANY FOR THE PROPERTY LOCATED AT 52 EL CHARRO ROAD, PLEASANTON, ALAMEDA COUNTY

I. <u>Description of Proposed Discharge</u>

Industrial Asphalt and Jamieson Company, by application dated August 12, 1992 and September 28, 1992, have applied for issuance of waste discharge requirements for reinfiltration of treated extracted groundwater. An estimated flow of between 31,000 and 51,000 gallons per day (gpd) of treated groundwater will be recharged to the upper groundwater bearing zone via one or two recharge ponds (Ponds R-11 and/or R-14). The attached Tentative Order is intended to regulate recharge of the treated groundwater.

Industrial Asphalt (IA) currently operates an asphalt manufacturing plant on part of a 177 acre parcel leased from the Jamieson Company (JC). JC harvests and processes sand and gravel at an adjacent site. Ponds R11 and R14 are located on this adjacent site.

Activities at the IA site have polluted the soil and the groundwater. Subsurface investigations have been conducted by IA since 1987. Groundwater samples have detected total petroleum hydrocarbons as diesel (TPH-d) concentrations as high as 1100 ppm, TPH as waste oil as high as 330 ppm, oil and grease concentrations as high as 360 ppm, and polychlorinated biphenyls (PCBs) concentrations as high as 62 ppb (parts per billion). The extent of groundwater and soil contamination beneath the site has been described and illustrated in the following Kleinfelder Inc. reports: "Remedial Investigation (RI) Report for Industrial Asphalt, Pleasanton, California," dated December 28, 1990 and "Feasibility Study for Soil and Ground Water Remediation, Industrial Asphalt, Inc., 52 El Charro Road, Pleasanton, California," dated August 14, 1991.

IA has proposed installing a groundwater extraction, treatment and reinfiltration system to control migration of polluted groundwater. The proposed treatment system consists of (a) eleven extraction wells to pump groundwater, (b) an oil/water separator to reduce the TPH concentrations to below 10 ppm, (c) filters to remove sediments, (d) a UV-lamp sterilizer to reduce biological fouling, (e) four granular activated carbon vessels (in a series of three), and (f) piping to transport the treated groundwater for discharge to Pond R11.

Pond R11 is used by JC for percolation of groundwater extracted from active quarry pits and is located about 1400 feet east of the IA facility. As the water level in R11 rises, water can be pumped from Pond R11 to Pond R14. Both

pond bottoms intersects a coarse gravel layer which facilitates percolation. R11 is about 20 feet deep and has a surface area of about five acres. R14 is about 15 to 20 feet deep and has a surface area of about 10 acres. The estimated capacity of R11 and R14 is about 32.6 million gallons and 57.0 million gallons.

II. Basis for Tentative Waste Discharge Requirements' Effluent Limitations

The proposed effluent limitations in the Tentative Order are based on the San Francisco Bay Basin's Water Quality Control Plan (Basin Plan), State and U. S. Environmental Protection Agency (EPA) plans and policies, best professional engineering and geologic judgement, and best available technolgy economically achievable (BATEA) and are intended to protect the existing and potential beneficial uses of the underlying groundwaters. For a discharge to a recharge area, the Board usually specifies effluent limitations based on Maximum Contaminant Levels (MCLs) or BATEA, whichever is lower. If BATEA can achieve effluent quality close to zero, effluent limits will usually be set at or near the method detection limit (MDL). In addition, the proposed monitoring program requires analyses for additional constituents to screen for unexpected chemicals. Specific rationale for the proposed effluent limitations are summarized below:

Constituents	Effluent Limits (ug/l)		
Carbon Tetrachloride	0.5 (SMCL)		
1,2-Dichloroethane	0.5 (SMCL)		
Vinyl Chloride	0.5 (SMCL)		
Benzene	1.0 (SMCL)		
Total Volatile Organic Compounds	5.0 (BATEA/DL)		
Total Petroleum Hydrocarbons as diese	l (as 50.0 (BATEA/DL)		
identified by modified EPA Method 801	5)/		
Total Petroleum Hydrocarbons as waste	oil 100 (BATEA/DL)		
Total Oil and Grease	500 (BATEA/DL)		
Polynuclear Aromatic Hydrocarbons (PA	Hs, 0.1/0.2 (BATEA/DL) (1)		
per constituent)			
Total Polychlorinated Biphenyls (PCBs) 0.5 (MCL/BATEA/DL) (2)		

LEGEND: SMCL - State Maximum Contaminant Level

BATEA - Best Available Technology Economically Achievable

DL - Detection Limit

(1) There are sixteen different PAHs, each with a different method detection limit. The primary MCL is 0.1 ppb for benzo(a)anthracene, 0.2 ppb for four other PAHs, 0.3 ppb for one other PAH, and 0.4 ppb for another PAH. In order to protect the beneficial uses of the underlying groundwaters, the proposed effluent limitation for benzo(a)anthracene is 0.1 ppb and the proposed effluent limitation for the other PAHs are 0.2 ppb.

(2) PCBs encompass a class of chlorinated compounds that includes up to 209 variations or congeners with different physical and chemical characteristics. PCBs were commonly used as mixtures called Aroclors. The most common Aroclors are Aroclor-1254, Aroclor-1260, and Aroclor-1242. The effluent limitation in the proposed Tentative Order for Total PCBs is 0.5 ppb because the MCL for total PCBs is 0.5 ppb and laboratory detection limits can achieve 0.5 ppb for total PCBs. The MDL for Aroclor-1242 is 0.065 ppb using EPA Method 608 (the MDLs for the other Aroclors using EPA Method 608 were not determined).

III. Prohibitions

The Tentative Order contains the following prohibitions:

- The treatment, storage and discharge of treated waste groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code, nor degrade the quality of any useable groundwater.
- There shall be no bypass or overflow of untreated, partially treated or inadequately treated polluted groundwater to waters of the State from the dischargers' wastewater collection, treatment or distribution facilities.
- 3. No waste groundwater shall be allowed to escape from the designated disposal area(s) as either surface flow or as airborne spray nor be disposed of to an area other than that stipulated in this Order, except as pursuant to an approved contingency plan.
- 4. The discharge of waste other than treated groundwater, derived onsite from the extraction system or groundwater sampling purge water, as defined in this Order, is prohibited.
- 5. For treated waste groundwater discharged to Ponds R11 and/or R14:
 - a. A minimum of three feet of freeboard shall be maintained in the ponds at all times to prevent the threat of overflow.
 - b. The ponds shall be adequately protected from erosion and washout which may result from a rainfall event having a predicted frequency of once in 100 years.

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 proposed groundwater extraction, treatment and infiltration system and associated operation, maintenance, and monitoring plans constitute an acceptable control program for minimizing the discharge of toxicants to waters of the State.

IV. Review Procedures

Beneficial uses the underlying groundwaters are described in the attached Tentative Order. On the basis of preliminary staff review and application of lawful standards and regulations, the Regional Board proposes to adopt waste

discharge requirements for the discharger.

The proposed permit requirements, rationale, and other supporting information are on file at 2101 Webster Street, Suite 500, Oakland, CA 94612. They may be inspected between 10:00 a.m. and 3:00 p.m. on Tuesday, Wednesday, and Thursday. For further information please contact John Jang at (510) 286-0554.

The Board intends to hold a public hearing and consider adopting the Tentative Order during a public meeting on February 17, 1993 beginning at 9:30 a.m. The meeting will be held in the second floor Meeting Room of the BART Headquarters Building, 800 Madison Street, Oakland, California. Persons wishing to submit written comments or make oral comments at the hearing are requested to submit a written copy of their comments to Mr. John Jang of the Regional Board by January 21, 1993 (2101 Webster Street, Suite 500, Oakland, California 94612).

Attachments: Tentative Order and Tentative Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

TENTATIVE ORDER

WASTE DISCHARGE REQUIREMENTS FOR:

INDUSTRIAL ASPHALT AND JAMIESON COMPANY

FOR THE PROPERTY LOCATED AT:

52 EL CHARRO ROAD PLEASANTON ALAMEDA COUNTY

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

- 1. Industrial Asphalt and Jamieson Company, hereinafter called the dischargers, by application dated August 12, 1992 and September 28, 1992, have applied for issuance of waste discharge requirements for reinfiltration of treated extracted groundwater. An estimated flow of between 31,000 and 51,000 gallons per day (gpd) of treated groundwater will be recharged to the upper groundwater bearing zone via one or two recharge ponds (Ponds R-11 and/or R-14). This Order is intended to regulate recharge of the treated groundwater.
- 2. Industrial Asphalt (IA) currently operates an asphalt manufacturing plant on part of a 177 acre parcel leased from the Jamieson Company (JC). IA started its operation at this site in 1963. The site is located at 52 El Charro Road, Pleasanton, Alameda County. JC, the current property owner, is called a discharger and will be responsible for compliance only in the event that IA fails to comply with this Order. JC harvests and processes sand and gravel at an adjacent site. Ponds R11 and R14 are located on this adjacent site.
- 3. From 1963 to 1986, IA operated eight underground storage tanks (USTs) for storage of asphalt and diesel fuel (used as burner fuel in the asphalt batch plant). All eight tanks were removed in 1987. Currently there are no underground tanks at the IA facility. After 1984, natural gas replaced diesel fuel to feed the burners and asphalt is trucked to the site. During the USTs removal in 1987, free product was discovered and recovered from the bottom of the UST cavity and disposed of offsite. Analysis of the free product indicated that the diesel free product contained polychlorinated biphenyls (PCBs) at 12 parts per million (ppm). Subsurface investigations have been conducted by IA since 1987. Groundwater samples have detected total petroleum hydrocarbons as diesel (TPH-d) concentrations as high as 1100 ppm, TPH as waste oil as high as 330 ppm, oil and grease concentrations as high as 360 ppm, and PCB concentrations as high as 62 ppb (parts per billion). The extent of groundwater and soil contamination beneath the site has been described and illustrated in the following Kleinfelder Inc. reports: "Remedial Investigation (RI) Report for Industrial Asphalt, Pleasanton, California," dated December 28, 1990 and "Feasibility Study for Soil and Ground Water Remediation, Industrial

- Asphalt, Inc., 52 El Charro Road, Pleasanton, California, dated August 14, 1991.
- 4. IA has proposed installing a groundwater extraction, treatment and reinfiltration system to control migration of polluted groundwater. The proposed treatment system consists of (a) eleven extraction wells to pump groundwater, (b) an oil/water separator to reduce the TPH concentrations to below 10 ppm, (c) filters to remove sediments, (d) a UV-lamp sterilizer to reduce biological fouling, (e) four granular activated carbon vessels (in a series of three), and (f) piping to transport the treated groundwater for discharge to Pond R11.
- 5. Pond R11 is used by JC for percolation of groundwater extracted from active quarry pits and is located about 1400 feet east of the IA facility. As the water level in R11 rises, water can be pumped from Pond R11 to Pond R14. Both pond bottoms intersects a coarse gravel layer which facilitates percolation. R11 is about 20 feet deep and has a surface area of about five acres. R14 is about 15 to 20 feet deep and has a surface area of about 10 acres. The estimated capacity of R11 and R14 is about 32.6 million gallons and 57.0 million gallons.
- 6. The dischargers have considered the feasibility of reclamation, reuse, and discharge to a publicly owned treatment works (POTW), as specified in Board Resolution No. 88-160. The dischargers have determined that reuse is feasible and proposes to operate the reinfiltration system described in Finding 5 above. Regional Board staff concurs with the proposed reuse plan.
- 7. The dischargers have proposed submitting an Operations and Maintenance (O & M) Manual after the treatment system design is completed and the treatment system installed. This manual will be finalized during the first year of operations.
- 8. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986, as well as several subsequent amendments. The Basin Plan contains water quality objectives for Alameda Creek, Alameda Creek Quarry Ponds, and the underlying groundwater.
- 9. The existing and potential beneficial uses of the underlying groundwaters
 - a. municipal and domestic supply
 - b. industrial process and service supply
 - c. agricultural supply
- 10. 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 proposed groundwater extraction, treatment and infiltration system and associated operation, maintenance, and monitoring plans constitute an acceptable control program for minimizing the discharge of toxicants to waters of the State.
- 11. The Basin Plan also prohibits discharge to Alameda Creek, including its

tributaries, during the dry weather period (May 1 through October 31 of each year).

- 12. Effluent limitations of this Order are based on the Basin Plan, State and U. S. Environmental Protection Agency (EPA) plans and policies, best professional engineering and geologic judgement, and best available technology economically achievable (BATEA). For a discharge to a recharge area, the Board usually specifies effluent limitations based on Maximum Contaminant Levels (MCLs) or BATEA, whichever is lower. If BATEA can achieve effluent quality close to zero, effluent limits will usually be set at or close to the method detection limit.
- 13. This project constitutes a minor modification to land and such activity is thereby exempt from the provisions of the California Environmental Quality Act in accordance with Section 15304, Title 14, of the California Administrative Code.
- 14. The dischargers are not required to comply with the Underground Injection Control Program (40 CFR Part 144) because the depth of the percolation ponds does not exceed the largest surface dimension.
- 15. The Board has notified the dischargers and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 16. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Industrial Asphalt and Jamieson Company, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder shall comply with the following:

A. EFFLUENT LIMITATIONS

- 1. Purge water generated during groundwater sampling at the IA site may be introduced into the groundwater treatment system.
- 2. Upon adoption, the effluent shall not contain constituents in excess of the following INSTANTANEOUS MAXIMUM LIMITS:

Constituents	Effluent	Limits	(ug/1)
Carbon Tetrachloride		0.5	
1,2-Dichloroethane		0.5	
Vinyl Chloride		0.5	
Benzene		1.0	
Total Volatile Organic Compounds		5.0	
Total Petroleum Hydrocarbons as dies identified by modified EPA Method 80	•	50.0	
Total Petroleum Hydrocarbons as wast	e oil	100	

Total Oil and Grease

500

Polynuclear Aromatic Hydrocarbons (PAHs, per constituent)

0.1/0.2 (a)

Total Polychlorinated Biphenyls

0.5

- (a) 0.1 ppb for benzo(a)anthracene, 0.2 ppb for the other PAHs
- 3. The pH of the discharges shall not exceed 8.5 nor be less than 6.0.
- 4. The dischargers shall report any other organic constituents identified during any required analyses, or in the course of other site investigations, that may be or become a constituent in the purge or extracted groundwater regulated by this Order.

B. PROHIBITIONS

- 1. The treatment, storage and discharge of treated waste groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code, nor degrade the quality of any useable groundwater.
- 2. There shall be no bypass or overflow of untreated, partially treated or inadequately treated polluted groundwater to waters of the State from the dischargers' wastewater collection, treatment or distribution facilities.
- 3. No waste groundwater shall be allowed to escape from the designated disposal area(s) as either surface flow or as airborne spray nor be disposed of to an area other than that stipulated in this Order, except as pursuant to an approved contingency plan.
- 4. The discharge of waste other than treated groundwater, derived onsite from the extraction system or groundwater sampling purge water, as defined in this Order, is prohibited.
- 5. For treated waste groundwater discharged to Ponds R11 and/or R14:
 - a. A minimum of three feet of freeboard shall be maintained in the ponds at all times to prevent the threat of overflow.
 - b. The ponds shall be adequately protected from erosion and washout which may result from a rainfall event having a predicted frequency of once in 100 years.

C. PROVISIONS

- 1. The dischargers shall comply with all sections of this Order upon adoption by the Board and upon starting any discharge.
- 2. The dischargers shall comply with the Self-Monitoring Program as adopted by the Board and as may be amended by the Executive Officer.

- 3. The dischargers shall 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. This Order may be modified by the Board to include effluent or receiving water limitations for toxic constituents determined to be present in significant amounts in the discharge regulated by this Order.
- 5. Any discharge to a location other than the discharge point(s) specified in this Order will require a modification to this Order or submission of a second WDR application.
- 6. The dischargers shall maintain a copy of this Order at the site so as to be available at all times to site operators.
- 7. The dischargers shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the dischargers to achieve compliance with the conditions in this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of this Order. All systems, both those in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Regional Board. All of the above procedures shall be described in an Operation and Maintenance (O & M) Manual. The O & M Manual shall also contain a description of the safeguards to assure that, should there be reduction, loss, or failure of electric power, the dischargers will be able to comply with the terms and conditions of this Order. The O & M Manual shall describe preventive (fail-safe) and contingency (cleanup) plans for controlling accidental discharges, for actions to be taken if effluent fails to meet the requirements contained in this Order, and for minimizing the effect of such events. These plans shall identify the possible sources of accidental loss, untreated or partially treated waste bypass, and polluted drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes shall be considered. The dischargers shall submit an O & M Manual that is acceptable to the Executive Officer within one year of treatment system startup.
- 8. The dischargers shall comply with all applicable items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986 except Items B.2, B.3, C.8 and C.11. Item C.10(b)(C) shall be modified by substituting instantaneous maximum for maximum daily.
- 9. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.

- 10. The Board will review this Order periodically and may revise the requirements when necessary.
- I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on

STEVEN R. RITCHIE Executive Officer

Attachments: Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

TENTATIVE
SELF-MONITORING PROGRAM

FOR

INDUSTRIAL ASPHALT AND JAMIESON COMPANY
52 EL CHARRO ROAD, PLEASANTON, ALAMEDA COUNTY

WASTE DISCHARGE REQUIREMENT ORDER NO.

CONSISTS OF

PART A (dated December 1986 Mod. SBTD 1/23/87)

AND

PART B

PART B

SELF MONITORING PROGRAM FOR INDUSTRIAL ASPHALT AND JAMIESON COMPANY

A. Start Up Phase and Reporting

- 1. The Board's Executive Officer shall be notified in writing of the date of start up within 7 to 14 days before start up begins.
- 2. During the original start up for the treatment system, sampling of the effluent must occur on the first and fifth day. On the first day of the original start up, the system shall be allowed to run until at least three to five well volumes are removed and until three consecutive readings for pH, conductivity, and temperature are within five percent of each other; then, the influent and effluent shall be sampled and submitted for analyses. Prior to receipt of the results of the initial samples, all effluent shall be discharged into a holding tank (that is contained, not discharged to the receiving water) until the results of the analyses show the discharge to be within the effluent limits established in this Order. The treatment system may be shut down after the first day's sampling to await the analytical results and, thereby, reduce the amount of storage needed. For the stored effluent, if the results of the analyses show the discharge to be in violation, the effluent shall: (1) be retreated until the retreated effluent is in compliance, or (2) be disposed in accord with the provisions of Chapter 15, Title 23, California Code of Regulations.

If the first day's sampling shows compliance, the treatment system shall be operated for a total of five days and be sampled again. While the fifth day's samples are being analyzed, the effluent may be discharged to the receiving water as long as the analyses are received within 96 hours of sampling, and then, continue to be discharged to the receiving water if the analyses show compliance. If the treatment system is shut down more than 96 hours during the original start up (awaiting analyses results, etc.), the original start up procedures and sampling must be repeated.

A report on the start up phase shall be submitted to the Regional Board that presents the results of the laboratory analyses, flow rates, chain of custody forms, and describes any changes or modifications to the treatment system. This report shall be submitted to the Regional Board no more than fifteen days after the end of the start up phase.

B. Specifications for Sampling and Analysis

- 1. The dischargers are required to perform sampling and analysis at the points listed below and according to the schedule in Table 1.
- 2. Description of Sampling Stations:
 - I-1 At a point after groundwater extraction and immediately prior to discharge into the treatment system.

- E-1 At a point after full treatment but before it is discharged to Pond R11.
- C-1 At a point one foot below the water surface, no less than two feet from the bank of Pond R11.

TABLE 1 I-1 & E-1 C-1 Treated groundwater flow rate Continuous (gallons/day) D Freeboard (feet) All applicable standard observations M M I/Y & V VOCs (EPA 8240 or equivalent) (1) D/M/Q TPH as diesel and as waste oil D/M/Q I/Y & V (modified EPA 8015 or equivalent) D/M/Q I/Y & V Total Oil & Grease (EPA 5520 or equivalent) PCBs (EPA 8080 or equivalent) D/M/Q I/Y & V Nitrate D/Y pH, units D/M/QI/Y & V

D - daily

D/M/Q = Once during the first and fifth day of startup, then monthly for three months, then quarterly

I/Y

I/Y - initially upon commencement of discharge to Pond R11, then yearly

- V = Sampling shall be performed within 24 hours whenever the effluent (E-1) is in violation.
- (1) Concentrations of the ten largest peaks in the chromatogram other than the priority pollutants listed in the method shall be identified.
- (2) antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc. The maximum method detection limit shall be 10 ug/l each.

Priority pollutant metals (2)

C. Reports to be Filed with the Regional Board

1. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar quarter, and shall be submitted by the last day of the month following the quarter.

2. Quarterly reports shall include:

- a) Letter of Transmittal A letter transmitting each self-monitoring report shall include any requirement violations occurring during the last report period, and actions taken or planned for correcting the violations. If no violations have occurred in the current report period this shall be stated in the letter of transmittal. Include reference to past reporting violations and corrective measures taken.
- b) Data All monitoring and operational data is to be submitted in tabular form, and should include at least the following:
 - i) Table 1 Results including flowrate and sampling analytical results. Table 1 results shall be presented by station, date and type of sample.
 - ii) Treatment System Performance Data summary of monthly performance data for the quarter to include month, daily/cumulative daily extraction in gallons, influent concentrations, total pounds of VOCs removed, and the total amount of separate phase fuel (free product) removed in gallons. Cumulative total pounds of VOCs removed and cumulative total amount of separate phase fuel removed to date shall also be reported.
 - iii) Purge Water Characteristics volume, constituents and their concentrations, and date introduced to treatment system, of purge water generated from sampling.
- c) Site map A site map for all discharge areas shall accompany quarterly reports. Show locations of sample and observation stations, and any location and/or areas where violations have occurred.
- d) Discussion of Monitoring Activities the report shall include a detailed discussion of the following monitoring activities:
 - i) Order Violations any violations of requirements of this order which occurred during this reporting period, cause of violation, and actions taken or planned to achieve compliance.
 - ii) Sampling and Monitoring all sampling and monitoring points and methodologies areto be detailed in the start up phase report. Thereafter, only changes in sampling and monitoring points and methodologies need be discussed.
- e) Signature All reports shall be signed by a principal executive of at least the level of vice president or his duly authorized representative. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge

the report is true, complete, and correct. The letter shall contain the following certification: " I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

3. The dischargers shall notify the Board within one day if the self-monitoring program results exceed effluent limitations, or if any activity has occurred or will occur that would result in a frequent or routine discharge of any toxic pollutant not limited by this Order. If a violation of INSTANTANEOUS MAXIMUM LIMITS should occur (and be confirmed), the discharge shall be directed to a holding tank and contained, or the extraction and treatment system shall be shut down. The content of the holding tank shall be retreated until the retreated effluent is in compliance, or be disposed in accord with the provisions of Chapter 15, Title 23, California Code of Regulations.

If the treatment system is shut down for more than 120 consecutive hours after the start up period (maintenance, repair, violations, etc.) the reason(s) for shut down, proposed corrective action(s) and estimated start up date shall be orally reported to the Board within five days of shut down and a written submission shall also be provided within 15 days of shut down.

If feasible, the corrective action(s) taken and the proposed start up procedures shall be reported to the Board at least 15 days before start up.

- 4. A report describing the need, method of chemical application and disposal shall be submitted to the Board at least 30 days before the use of any chemicals in the treatment, or operation and maintenance of the treatment units, is to begin. This report shall include toxicity data. The Executive Officer must approve the use of any chemicals prior to the usage of any chemicals in the treatment, operation, and/or maintenance of the treatment units.
- 5. The dischargers shall submit quarterly reports summarizing work accomplished toward groundwater pollution cleanup. The Executive Officer may waive this requirement if adequate reporting to the local agency(ies) or the Regional Board is already being required. The quarterly reports shall include the following information:
 - (a) The results of all investigations completed to date to determine the extent of soil and/or groundwater and/or surface water pollution due to the release(s) of hazardous substance(s);
 - (b) The method of cleanup implemented to date and an assessment as to whether remediation action taken to date has been adequate and its degree of effectiveness;
 - (c) Groundwater levels, and chemical analysis results presented in tabulated form for all on-site and off-site monitoring wells;
 - (d) Updated potentiometric surface maps for all water bearing zones, and updated maps and cross-sections depicting isoconcentration and

isothickness contours;

- (e) Description and schedule of any additional site work and/or modifications anticipated for the coming quarter; and
- (f) The method and location of disposal of the released hazardous substance(s) and any polluted soils and/or groundwater and/or surface water (indicate whether a hazardous waste manifest(s) is utilized).
- 6. The daily status (e.g., personnel onsite, in operation/on standby, shut down, standard observation results, etc.) of the treatment system used to achieve compliance with this Order shall be included in the Self-Monitoring Report submittal. The reason(s) for the treatment system being shut down shall also be included in this submittal.
- D. Modification to Part A of the Self-Monitoring Program
 - 1. Delete Sections:

D.1.a., D.2.a. through D.2.g., D.3., E.1.d., E.1.e., E.3., E.4., F.1., F.2., and G.4.

- 2. Insert Sections:
- D.2.a. Samples of effluent and receiving waters shall be collected at times coincident with influent sampling unless otherwise stipulated. The Executive Officer may approve an alternative sampling plan if it is demonstrated to the Executive Officer's satisfaction that expected operating conditions warrant a deviation from the standard sampling plan.
- D.2.d. If analytical results are received showing any instantaneous maximum limit (Effluent Limitations A.2 and A.3) is exceeded, a confirmation sample shall be taken within 24 hours and results known within 24 hours of the sampling.
- D.2.e. If any instantaneous maximum limit for a constituent is exceeded in the confirmation sample described in Section D.2.d., the discharge shall be terminated until the cause of the violation is found and corrected.
- E.6. Waste Treatment Facilities
 - a. Deposits, discolorations, and/or plugging in the treatment system (stripping tower, carbon filters, etc.) which could adversely affect the system reliability and performance.
 - b. Operation of the float and/or pressure shutoff valves installed to prevent system overflow or bypass.
- F.2. Discharge flow rates shall be recorded and average daily flow rates reported for each month.

- 3. Modify Sections:
- F.1. Written reports, calibration and maintenance records, sampling and analytical records, and other compliance records shall be maintained by the dischargers for a period equal to the life of this Order, but not less than three years. The most recent three years' worth of records shall be available at the discharge facility named in this Order, and the balance of the records, three years and older may be retained elsewhere. The period of retention may be extended due to unresolved litigation or by request from the Regional Board. Records three years and older maintained offsite shall be made available to the Board at their office upon request by the Executive Officer....
- G.1. ...Regional Board, at (510) 286-1255...
- G.4.b. The report format shall be a format that is acceptable to the Executive Officer.
- G.4.d. The report format shall be a format that is acceptable to the Executive Officer.
- G.4.e. The report format shall be a format that is acceptable to the Executive Officer. Address the copy to the Regional Board as follows:

Executive Officer
California Regional Water Quality Control
Board, San Francisco Bay Region
2101 Webster Street, 5th Floor
Oakland, CA 94612

- I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:
- 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. ________.
- 2. Was adopted by the Board on _____.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the dischargers, and revisions may be ordered by the Executive Officer or Regional Board.

STEVEN R. RITCHIE Executive Officer

Attachments

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 Services (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 <u>flow sample</u> 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. <u>Daily Maximum</u> 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) Bicassay sample should be collected after chlorination, if chlorination is part of the treatment process. Bicassay 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

- 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 1 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 sumbathing, swimming, waterskiing, surfing, etc.

4. <u>Land Retention or Disposal Area</u>

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.
 - 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 <u>Standard Methods</u> is satisfactory
 - g. Calculations of results.
 - h. Results of analyses and/or observations.
- 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
- 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 discharger 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. <u>Letter of Transmittal</u>:

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,
- 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 <u>duly authorized representative</u> 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. ResultWof Analyses and Observations

Tabulations of the results from each required analysis specified in <u>Part B</u> 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.

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

- 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 31 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.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION DECEMBER 1986

STANDARD PROVISIONS AND REPORTING REQUIREMENTS

A. General Provisions

- 1. All Provisions and Reporting Requirements apply to all regulated discharges unless otherwise noted.
- Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or muisance as defined by Section 13050 of the California Water Code.
- 3. The discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this order and permit which has a reasonable likelihood of adversely affecting public health or the environment, including such accelerated or additional monitoring as requested by the Regional Board or Executive Officer to determine the nature and impact of the violation. [40 CFR 122.41(d)]
- 4. All discharges authorized by this Order shall be consistent with the terms and conditions of this Order.
- 5. Pursuant to Environmental Protection Agency regulations the discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of toxic pollutants not limited by this permit has occurred, or will occur, in concentrations that exceed the limits specified in 40 CFR 122.42(a).
- 6. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307 (a) of the Clean Water Act, or amendments thereto, for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in a Board adopted Order, discharger must comply with the new standard or prohibition. the Board will revise or modify the Order in accordance with such toxic effluent standard or prohibition and so notify the discharger.
- 7. If more stringent applicable water quality standards are approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the discharger must comply with the new standard. The Board will revise and modify this Order in accordance with such more stringent standards.
- 8. The discharge of any radiological, chemical, or biological warfare agent waste is prohibited.

- 9. Solids storage prior to final disposal shall be maintained to minimize runoff, to prevent leaching, and shall comply with all requirements contained in Title 23, Chapter 3, Subchapter 15 of the California Administrative Code.
- 10. All facilities used for transport, treatment, or disposal of wastes shall be adequately protected against overflow or washout as the result of a 100-year frequency flood.
- 11. Collection, treatment, storage and disposal systems shall be operated in a manner that precludes public contact with wastewater, except where excluding the public is inappropriate, warning signs shall be posted.
- 12. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the provisions of Chapter 15 of Title 23 of the California Administration Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed or waived by a Regional Water Quality Control Board and which is in full compliance therewith.
- 13. This Order and Permit does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under federal, state or local laws, nor create a vested right for the discharge to continue the waste discharge or guarantee the discharger a capacity right in the receiving water. [40 CFR 122.41(g)]
- 14. The Regional Board or its authorized representatives shall be allowed:
 - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of the order and permit;
 - b. Access to and copy at reasonable times any records that must be kept under the conditions of the order and permit;
 - c. To inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under the order and permit; and
 - d. To photograph, sample, and monitor at reasonable times for the purpose of assuring compliance with the order and permit or as otherwise authorized by the Clean Water Act any substances or parameters at any locations. [40 CFR 122.41(i)]

- 15. This Order and Permit may be modified, revoked and reissued, or terminated in accordance with applicable State and/or Federal regulations. Cause for taking such action includes, but is not limited to any of the following:
 - a. Violation of any term or condition contained in the Order and Permit;
 - Obtaining the Order and Permit by misrepresentation, or by failure to disclose fully all relevant facts;
 - c. Endangerment to public health or environment that can only be regulated to acceptable levels by order and permit modification or termination; and
 - d. Any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 16. The filing of a request by the discharger for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit conditon.

 [40 CFR 122.41(f)]
- 17. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by its permit. [40 CFR 122.41(h)]
- 18. <u>Bypass</u> (the intentional diversion of waste streams from any portion of a treatment facility) is prohibited. The Regional Board may take enforcement action against the discharger for plant bypass unless:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.);
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted advance notice of the need for a bypass to the Regional Board. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass as required by 40 CFR 122.41(1)(6) (24 hour notice), as required in paragraph C.10.

The permittee may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable.

B. <u>Treatment Reliability</u>

1. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment disposal and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with this order and permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. All of these procedures shall be described in an Operation and Maintenance Manual. The discharger shall keep in a state of readiness all systems necessary to achieve compliance with the conditions of this order and permit. All systems, both those in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the tests and made available to the Regional Board. [40 CFR 122.41(e)]

2. Safeguard to electric power failure:

a. The discharger shall, within ninety (90) days of the effective date of this permit, submit to the Regional Board for approval a description of the existing safeguards provided to assure that, should there be reduction, loss, or failure of electric power, the discharger shall comply with the terms and conditions of its Order. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past five years on effluent quality and on the capability of the discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Regional Board.

- b. Should the Regional Board not approve the existing safeguards, the discharger shall, within ninety (90) days of having been advised by the Regional Board that the existing safeguards are inadequate, provide to the Regional Board and the Environmental Protection Agency a schedule of compliance for providing safeguards such that in the event of reduction, loss, or failure of electric power, the permittee shall comply with the terms and conditions of this permit. The schedule of compliance shall, upon approval of the Regional Board Executive Officer, become a condition of the Order.
- c. If the discharger already has approved plan(s), the plan shall be revised and updated as specified in the plan or whenever there has been a material change in design or operation. A revised plan shall be submitted to the Regional Board within ninety (90) days of the material change.
- 3. POTW facilities subject to this order and permit shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23 of the California Administrative Code.

C. General Reporting Requirements

- 1. All reports required by the order and permit and other information requested by the Regional Board or EPA Region 9 shall be signed by a principal executive officer or ranking elected official of the discharger, or by a duly authorized representative of that person. [40 CFR 122.22(b)]
- 2. All reports signed by a <u>duly authorized representative</u> 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. [40 CFR 122.22(d)]
- 3. Should the discharger discover that it failed to submit any relevant facts or that it submitted incorrect information in any report, it shall promptly submit the missing or correct information. [40 CFR 122.41(1)(8)]

- 4. Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall be subject to enforcement procedures as identified in Section D of these Provisions.
- 5. This permit is not transferable to any person except after notice to the Regional Board. The Regional Board may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
- 6. Transfer of control or ownership of a waste discharge facility under an National Pollutant Discharge Elimination System permit must be preceded by a notice to the Regional Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing discharger and proposed discharger containing specific dates for transfer of responsibility, coverage, and liability between them. Whether an order and permit may be transferred without modification or revocation and reissuance is at the discretion of the Regional Board. If order and permit modification or revocation and reissuance is necessary, transfer may be delayed 180 days after the Regional Board's receipt of a complete application for waste discharge requirements and an NPDES permit.
- 7. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material charge or proposed charge in the character, location or volume of the discharge.
- 8. The discharger shall file with the Board, for Executive Officer review and approval within ninety (90) days after the effective date of this Order, a technical report or a statement that the existing plan(s) was reviewed and updated, as appropriate, on preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report or updated revisions should:
 - a. Identify the possible sources of accidental loss, untreated or partially treated waste bypass, and polluted drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
 - b. Evaluate the effectiveness of present facilities and procedures and state when they became operational.
 - c. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational.

This Board, after review of the technical report or updated revisions, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the discharger. If the discharger already has an approved plan(s) he shall update them as specified in the plan(s).

9. Reports of compliance or noncompliance with, or any progress reports on, interim and final compliance dates contained in any compliance schedule shall be submitted within 10 working days following each scheduled date unless otherwise specified within this order and permit. If reporting noncompliance, the report shall include a description of the reason for failure to comply, a description and schedule of tasks necessary to achieve compliance and an estimated date for achieving full compliance. A final report shall be submitted within 10 working days of achieving full compliance, documenting full compliance

10. Twenty-four hour reporting:

- (a) The permitt shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five working days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- (b) The following shall be included as information that must be reported within 24 hours under this paragraph:
 - (A) Any unanticipated bypass that exceeds any effluent limitation in the permit.
 - (B) Any upset that exceeds any effluent limitation in the permit.
 - (C) Violation of a maximum daily discharge limitation for any of the pollutants listed in this permit to be reported within 24 hours.
- (c) The Regional Board may waive the above-required written report on a case-by-case basis.

- 11. All POTWs must provide adequate notice to the Regional Board of:
 - (a) Any introduction of new pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants.
 - (b) Any substantial or material change in the volume or character of pollutants being introduced into that POTW by an input source at the time of issuance of the permit.

Adequate notice shall include information on the quality and quantity of influent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

D. Enforcement

- 1. The provision contained in this enforcement section shall not act as a limitation on the statutory or regulatory authority of the Regional Board.
- 2. Any violation of the permit constitutes violation of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act, and is the basis for enforcement action, permit termination, permit revocation and reissuance, denial of an application for permit reissuance; or a combination thereof.
- 3. The Regional Board may impose administrative civil liability, may refer a discharger to the State Attorney General to seek civil monetary penalties, may seek injunctive relief or take other appropriate enforcement action as provided in the California Water Code or federal law for violation of Regional Board orders.
- 4. It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this order and permit.
- 5. A discharger seeking to establish the occurrence of any <u>upset</u> (See Definitions, E.23) has the burden of proof. A discharger who wishes to establish the affirmative defense of any upset in an action brought for noncompliance shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - a. an upset occurred and that the permittee can identify the cause(s) or the upset;
 - b. the permitted facility was being properly operated at the time of the upset;

- c. the permittee submitted notice of the upset as required in paragraph c.10.; and
- d. the permittee complied with any remedial measures required under A.3.

No determination made before an action for noncompliance, such as during administrative review of claims that noncompliance was caused by an upset, is final administrative action subject to judicial review.

In any enforcement proceeding, the permittee seeking to establish the occurrence of any upset has the burden of proof. [40 CFR 122.41(n)]

E. <u>Definitions</u>

1. Bypass means the intentional diversion of waste streams from any portion of treatment facility.

2. Daily discharge means:

- a. For flow rate measurements, the average flow rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.
- b. For pollutant measurements, the concentration or mass emission rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.
- 3. <u>Daily Maximum</u> Limit means the maximum acceptable <u>daily discharge</u>. For pollutant measurements, unless otherwise specified, the results to be compared to the daily maximum limit are based on <u>composite samples</u>.
- 4. DDT and Derivatives shall mean the sum of the p,p' and o,p' isomers of DDT, DDD (TDE), and DDE.

5. <u>Duly authorized representative is one whose:</u>

- 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 manager in a partnership, 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.); and

- c. Written authorization is submitted to the Regional Board and EPA Region 9. If an authorization becomes no longer accurate because a different individual or positon has responsibility for the overall operation of the facility, a new authorization satisfying the requirements above must be submitted to the Regional Board and EPA Region 9 prior to or together with any reports, information, or applications to be signed by an authorized representative.
- 6. <u>Hazardous</u> substance means any substance designated under 40 CFR 116 pursuant to Section 311 of the Clean Water Act.
- 7. HCH shall mean the sum of the alpha, beta, gama (Lindane), and delta isomers of hexachlorocyclohexane.
- 8. <u>Inadequately Treated Waste</u> is wastewater receiving partial treatment but failing to meet discharge requirements.
- 9. <u>Incompatible pollutants are:</u>
 - a. Pollutants which create a fire or explosion hazard in the POTW;
 - b. Pollutants which will cause corrosive structural damage to the POTW, or wastewaters with pH lower than 5.0 pH units, unless the facilities are specifically designed to accommodate such wastewater;
 - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;
 - d. Any pollutant, including oxygen-demanding pollutants (e.g., BOD) released into the wastewater system at a flow rate and/or pollutant concentration which will cause interference with the POTW.
 - e. Heat in amounts which will inhibit biological activity in the POTW and result in interference, or heat in such quantities that the temperature at the POTW treatment plant exceeds 40°C (104°F) unless the works is designed to accommodate such heat or the Regional Board approves alternate temperature limits.
- 10. <u>Indirect discharger</u> means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.
- 11. <u>Initial dilution</u> is the process which results in the rapid and irreversible turbulent mixing of wastewater with receiving water around the point of discharge.

12. <u>Mass emission</u> rate is obtained from the following calculation for any calendar day:

Mass emission rate (lb/day) =
$$\frac{8.345}{N}$$
 $\sum_{i=1}^{N} Q_i C_i$

Mass emission rate (kg/day) =
$$\frac{3.785}{N}$$
 $\sum_{i=1}^{N} Q_i C_i$

in which 'N' is the number of samples analyzed in any calendar day. ' Q_i ' and ' C_i ' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples which may be taken in any calendar day. If a composite sample is taken, ' C_i ' is the concentration measured in the composite sample and ' Q_i ' is the average flow rate occurring during the period over which samples are composited. The daily concentration measured over any calendar day of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$C_d$$
 = Average daily concentration = $\frac{1}{Q_t}$ $\sum_{i=1}^{N} Q_i C_i$

in which 'N' is the number of component waste streams. 'Q' and 'C' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. ' Q_t ' is the total flow rate of the combined waste streams.

- 13. Maximum allowable mass emission rate, whether for a 24-hour, weekly 7-day, monthly 30-day, or 6-month period, is a limitation expressed as a daily rate determined with the formulas in paragraph above, using the effluent concentration limit specified in the order and permit for the period and the specified allowable flow. (Refer to Section C of Part A of Selfmonitoring Program for definitions of limitation period)
- 14. Overflow is defined as the intentional or unintentional spilling or forcing out of untreated or partially treated wastes from a transport system (e.g. through manholes, at pump stations, and at collection points) upstream from the plant headworks caused by excess flow in the transport system.
- 15. POTW means Publically Owned Treatment Works.

16. POTW Removal efficiency is expressed as the percentage of the ratio of pollutants removed by the treatment facilities to pollutants entering the treatment facilities. Removal efficiencies of a treatment plant shall be determined using monthly averages of pollutant concentration of influent and effluent samples collected at about the same time and using the following equation (or its equivalent):

Removal Efficiency (%) = 100 X [1-(Effluent Conc/Influent Conc)]

When preferred, the discharger may substitute mass loadings and mass emissions for the concentrations.

- 17. <u>Priority pollutants</u> are those constituents referred to in 40 CFR S122, Appendix D and listed in the EPA NPDES Application Form 2C, (dated 6/80) Items V-3 thru V-9.
- 18. Sludge means the solids, semi-liquid suspensions of solids, residues, screenings, grit, scum, and precipitates separated from, or created in wastewater by the unit processes of a treatment system. It also includes but is not limited to, all supernatant, filtrate, centrate, decantate, and thickener overflow/underflow in the solids handling parts of the wastewater treatment system.
- 19. <u>Toxic pollutant</u> means any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act or under 40 CFR S401.15.
- 20. <u>Total Identifiable Chlorinated HydroCarbons</u> (TICH) shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, PCBs and other indentifiable chlorinated hydrocarbons.
- 21. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass or overflow. It does not mean economic loss caused by delays in production.
- 22. Untreated waste is defined as raw wastewater.
- 23. <u>Upset</u> means an exceptional incident in which there is unintentional temporary noncompliance with effluent technology based permit limitations in the order and permit because of factors beyond the reasonable control of the discharger. It does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

24. <u>Waste, waste discharge, discharge of waste</u>, and <u>discharge</u> are used interchargeably in this order and permit. The requirements of this order and permit are applicable to the entire volume of water, and the material therein, which is disposed of to surface and ground waters of the State of California.