CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 90 - 138

CEASE AND DESIST ORDER FOR:

CHEMICAL & PIGMENT CO.
PITTSBURG, CONTRA COSTA COUNTY

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

1. The Chemical and Pigment Co., hereinafter called the discharger, manufactures chemical products for agricultural fertilizers and soil amendments. The products consists primarily of zinc based compounds with sulfate, iron sulfate and ammonium.

2. The plant site is located in the City of Pittsburg at 600 Nichols Road. An unnamed ditch adjacent to the west side of the site drains to Suisun Bay. Groundwater is generally encountered between 20 and 45 feet below ground surface. The site consists of clayey soils with lenses and beds of fine grained silty and clayey sands.

3. In the past stormwater runoff, boiler blowdown, water softener solution, sodium hydroxide solution, and process drippings were discharged to a surface impoundment on the plant site as shown on Attachment A. The water in the impoundment is recycled back into the process. Sludge in the impoundment was occasionally excavated and stored on site in bunkers for eventual recycling back into the process. The bunkers were also used to store raw materials and intermediate process materials. Currently the impoundment is not used and a temporary plastic cover is used to minimize rainfall from percolating through the bottom of the impoundment.

4. The Waste Discharge Requirement Order No. 87-074 was adopted on June 17, 1987 and governed the discharge to the surface impoundment.

5. The discharger is exempt from the regulations contained in Title 23, Division 3, Chapter 15 of the California Code of Regulation for surface impoundment and storage bunkers pursuant to Section 2511(h) of Chapter 15 which exempts recycling operations.

6. Title 22 of the California Code of Regulations defines wastes with concentration of zinc in excess of 5,000 mg/kg as hazardous. Wastes stored and managed in the impoundment had or continues to have zinc concentrations up to 110,000 mg/kg. This unit poses a threat to water quality. The state drinking water maximum contaminant level standard is 5.0 mg/L for zinc. The groundwater beneath the impoundment had or continues to have zinc concentrations up to 6,250 mg/L.

7. The Toxic Pits Cleanup Act (TPCA) applies to the surface impoundment pursuant to Sections 25124(b) and 25121 of the Health and Safety Code (HSC).

8. The TPCA prohibits discharge to hazardous waste surface impoundments after June 30, 1988, if the impoundment is within one half-mile of a potential source of drinking water [Section 25208.4(a) of the

(HSC)]. The discharger's impoundment is within one-half mile of a potential source of drinking water.

9. Due to inadequate well construction the existing groundwater monitoring system is inadequate and does not meet the requirements of Section 25208.8 (f, k, l) of the TPCA.

10. The Board revised the Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986 and amended it on August 19, 1987 and on July 18, 1989 which contains water quality objectives. These requirements are consistent with that Basin Plan.

11. The beneficial uses of Suisun Bay in the vicinity of the site are:

    a. Contact and non-contact water recreation;
    b. Fish migration and spawning;
    c. Wild life and estuarine habitat;
    d. Preservation of Rare and endangered species;
    e. Industrial process supply;
    f. Contact and non contact recreation;
    g. Estuarine habitat;
    h. Navigation; and,
    i. Commercial and sport fishing.

12. The potential beneficial uses of the groundwater underlying the site are:

    a. Municipal water supply and service supply; and,
    b. Agricultural supply.

13. The discharger submitted a report dated May 21, 1990 and entitled "Preliminary Closure/Post Closure Monitoring Plan for the Surface Impoundment". The plan considers six soil remedial alternatives and identifies work needed to plan, design and construct closure of the pond. The plan however did not include any ground water remedial action plans. The discharger has proposed to conduct sampling and analysis of the impoundment soil which will lead to development of a final closure plan for the impoundment. The discharger submitted a report entitled "Sampling and Analysis Plan, Investigation of Vertical Extent of Zinc Containing Soil Beneath the Impoundment, June 15, 1990". Staff reviewed this report and approved the plan with some recommendations.

14. This action is an Order to enforce the laws and regulations administered by the Regional Board. This action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.

15. The Board notified the discharger and interested agencies and persons of its intent to consider adoption of a cease and desist order and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

16. The Board, in public hearing held on October 17, 1990, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13301 of the California Water Code that Chemical and Pigment Co. and any other person that owns the land or operates the facility, shall cease discharge at the TPCA regulated impoundment, and comply with the provisions of this Order as follows:

A. Prohibitions

    1. The operation of this facility shall not create a condition of pollution or nuisance as defined in Sections 13050 (l) and (m), of the California Water Code.

2. The discharge of wastes or hazardous material in a manner which will degrade the water quality or adversely affect the beneficial use of the waters of the state of California is prohibited

3. Discharge of hazardous wastes to the surface impoundment is specifically prohibited after the impoundment is closed according to the task and schedule in the provisions

B. Specifications

1. The impoundment shall be closed in manner acceptable to the Executive Officer.

2. Until the impoundment is closed according to the task and schedule of this Order, the impoundment shall be covered to prevent incident rainfall from percolating into the wastes and accumulating rainfall shall be removed from the impoundment. The impoundment may be uncovered for work related to closure.

3. Ground water monitoring wells shall be constructed in order to properly delineate the extent and nature of contamination in the soil and groundwater, as well as the groundwater gradient.

4. The discharger shall conduct groundwater monitoring of the impoundment in accordance with the Self Monitoring Program attached to this Order.

C. Provisions

1. Compliance with Specifications shall be in accordance with the following tasks and time schedule:

   a. The discharger shall submit a technical report, acceptable to the Executive Officer, proposing a ground water monitoring system, including but not necessarily limited to, one additional upgradient well and three additional downgradient wells monitoring the upper and lower groundwater aquifers(sand units). The wells shall be continuously cored and logged to enable the identification of lithology cross section to no more than 0.1 ft.
   Report Due: No later than December 14, 1990.

   b. The discharger shall submit a technical report acceptable to Executive officer, containing record of the construction and operation of the additional groundwater monitoring wells.
   Report Due: No later than February 15, 1991.

   c. Remove and or excavate all contaminated sludge material from the existing surface impoundment by **February 15, 1991.**

   d. The discharger shall submit a technical report acceptable to the executive officer containing the results of the soil sampling and analysis.
   Report Due: No later than November 26, 1990.

   e. The discharger shall submit a technical report, acceptable to the Executive Officer containing a complete closure plan including, but not necessarily limited to soil and ground water remedial proposals.
   Report Due: No later than February 15, 1991.

   f. The discharger shall submit a technical report, acceptable to the Executive Officer documenting closure or completion of necessary tasks related to closure. The report shall include but not be limited to certification of construction methods and materials used. **Report Due: No later than October 30, 1992.**

g. The discharger shall submit a technical report acceptable to the Executive Officer including the design and construction methods for the proposed closure alternative and any post closure construction within the perimeters of the impoundment.
Report Due: No later than July 31, 1991.

2. Reports pursuant to compliance with the prohibitions, specifications, or provision of this Order shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.

3. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours, or ownership of the disposal areas.

4. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

5. The Board considers the property owner and discharger to have continuing responsibility for correcting any problems within their reasonable control which arises in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.

6. The discharger shall comply with any amendments to the self monitoring program as directed by the Executive Officer.

7. The discharger shall permit the Board:

   a. Entry upon premises on which wastes and impoundment are presently or previously located or in which any required records are kept;

   b. Access to copy of any records required to be kept under terms and conditions of this Order;

   c. Inspection of monitoring equipment or records; and,

   d. Sampling of any discharge.

8. The requirements do not authorize commission of any act causing injury to the property of another or of the public, do not convey any property rights, do not remove liability under federal, state or local laws, and do not authorize the discharge of waste without appropriate federal, state, or local permits, authorizations, or determinations.

9. Technical reports submitted by the discharger, in compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted according to the schedule specified herein. These reports shall consist of a letter report that includes the following:

   a. A summary of the work completed since submittal of the previous report and work projected to be completed by the time of next report;

   b. Identification of any obstacles that may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles;

   c. In the event of non compliance with any Prohibition, Specification or Provision of this Order, written notification which clarifies the reasons for non-compliance and proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non compliance on achieving compliance with the remaining requirements of this order; and,

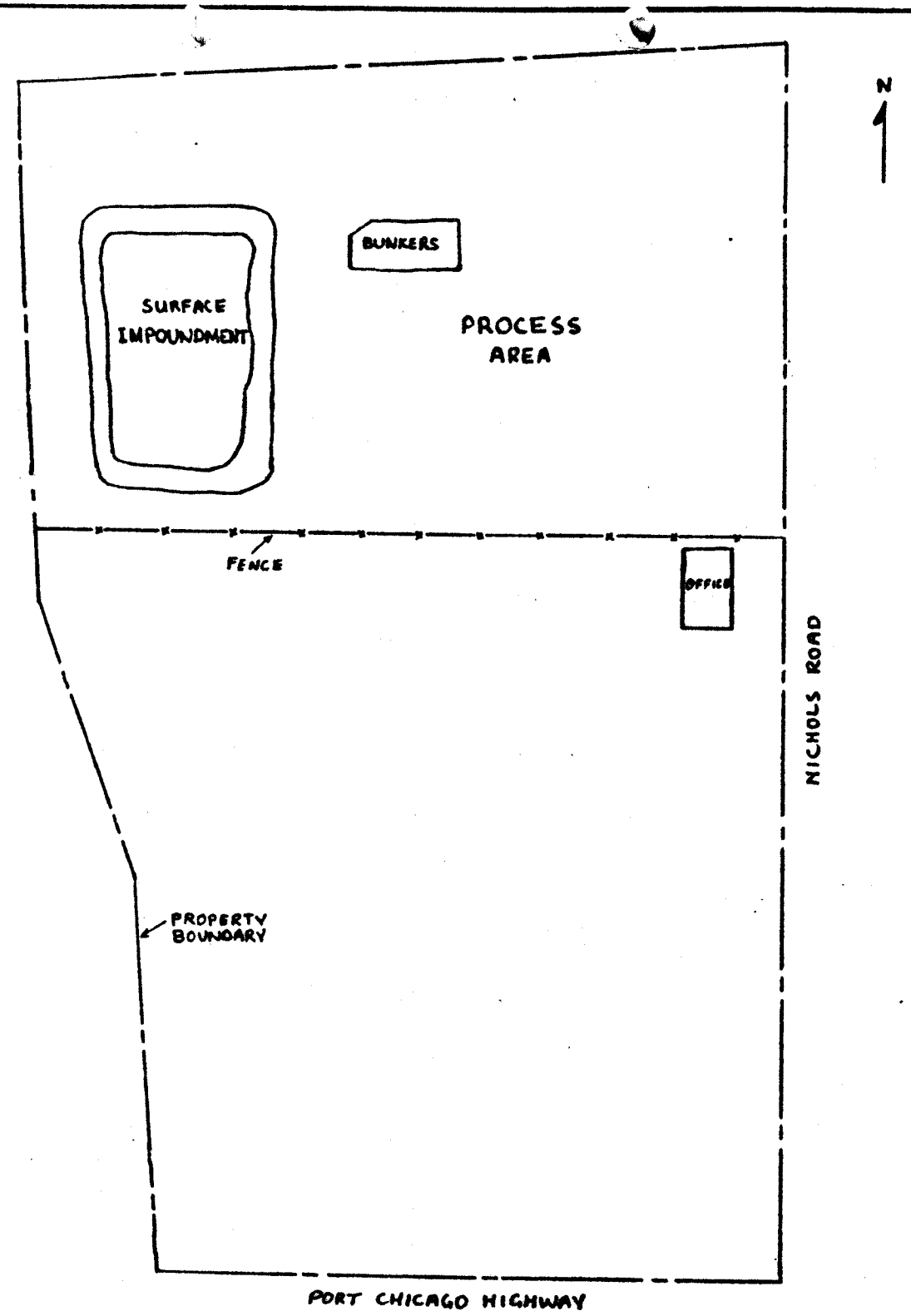
d. In the first self monitoring report, an evaluation of the current groundwater monitoring system and a proposal for modifications as appropriate.

I, Steven R. Ritchie, 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 October 17, 1990

STEVEN R. RITCHIE
Executive Officer

Attachments:

Attachment A - Site Map
Self Monitoring Program.



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SCALE

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

CHEMICAL AND PIGMENT COMPANY
ATTACHMENT A
ORDER NO. 87-074

DRAWN BY: LWT	DATE: 5-12-87	DRWG. NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

CHEMICAL & PIGMENT CO.

600 NICHOLS ROAD, PITTSBURG, CALIFORNIA, 94565

CLASS I SURFACE IMPOUNDMENT.

PITTSBURG, CONTRA COSTA COUNTY

CEASE AND DESIST ORDER

CONSISTS OF

PART A

AND

PART B

PART A

A. General

1. Reporting responsibilities of waste dischargers are specified in Sections 13225 (a), 13267 (b), 13383, and 13387 (b) of the California Water Code and this Regional Board's Resolution No. 73-16.

2. The principal purposes of a self-monitoring program by a waste discharger are the following:

   a. To document compliance with waste discharge requirements and prohibitions established by the Board;

   b. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge;

   c. To develop or assist in the development of effluent standards of performance, pretreatment and toxicity standards, and other standards; and,

   d. To prepare water and wastewater quality inventories.

B. Sampling and Analytical Methods

1. Sample collection, storage, and analyses shall be performed according to the most recent version of Standard Methods for the Analysis of Wastewater, and Test Methods for Evaluating Solid Waste EPA Document SW-846, or other EPA approved methods and in accordance with an approved sampling and analysis plan. Soil sampling shall be by Waste Extraction Technique (WET) or other standard methods submitted for approval.

2. Water and waste analysis except total suspended solids (TDS) shall be performed by a laboratory approved for these analyses by the State Department of Health. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted this Regional Board.

3. 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 a discrete sample collected at any time.

2. Duly authorized representative is either a named individual or any individual occupying a named position such as the following:

   a. Authorization is made in writing by a principal executive officer; or,

   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 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.

D. Schedule of Sampling, Analysis, and Observations

1. The discharger is required to perform sampling, analysis, and observations according to the schedule specified in Part B, and the requirements in Subchapter 15.

E. Records to be Maintained by the Discharger

1. Written reports shall be maintained by the discharger for ground water monitoring and wastewater sampling, and shall be 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 Board. Such records shall show the following for each sample:

   a. Identity of sample and sample station number;
   b. Date and time of sampling;
   c. Date and time that analyses are started and completed, and the name of the personnel performing the analyses;
   d. Complete procedure used, including the method of preserving the sample, and the identity and volumes of reagents used (A reference to a specific section of a reference required in Part A Section B is satisfactory);
   e. Calculation of results;
   f. Results of analyses, and detection limits for each analyses; and,
   g. Chain of custody forms for each sample.

F. Reports to be Filed with the Board

1. The report period shall be done on a calendar quarterly basis. For quarterly ground water monitoring reports, written reports shall be filed regularly each quarter within forty-five days from the end of the quarter monitored. In addition an annual report shall be filed as indicated in section F.1.g. The fourth quarterly report may be attached as an appendix to the annual report. The reports shall include the following:

   a. Letter of Transmittal - A letter transmitting the essential points in each self-monitoring report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations, such as, operation and/or facilities modifications. If the discharger has previously submitted a detailed time schedule for correcting requirements violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president of his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement of 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 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 of 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. Summary Sheet - Each monitoring report shall include a compliance evaluation summary sheet. Until the Order's amended to specify groundwater protection standards, the following shall apply and the compliance sheet shall contain:

(1) The method and time of water level measurement; the type of pump used for purging, pump placement in the well, method of purging, pumping rate; equipment and methods used to monitor field pH, temperature, turbidity, and conductivity during purging; calibration of the field equipment, results of the pH, temperature, turbidity, and conductivity testing; well recovery time, and method of disposing of the purge water; and,

(2) Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations; and, the chain of custody record.

c. A summary of the status of any remediation work performed during that quarter. This shall be a brief and concise summary of the work initiated and completed as follows:

(1) As interim corrective action measures; and,

(2) To define the extent and rate of migrations of waste constituents in the soil and ground water at the site.

d. The discharger shall describe, in the quarterly report, the reasons for significant increases in a pollutant concentration at a ground water monitoring well. The description shall include the following:

(1) The source of the increase;

(2) How the discharger determined or will investigate the source of the increase; and,

(3) What source removal measures have been completed or will be proposed.

e. On a semi-annual basis, a map or aerial photograph showing observation and monitoring station locations, and plume contours (if any) for each chemical in each aquifer shall be included as part of the quarterly Report.

f. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board. The following information shall be provided:

(1) The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review; and,

(2) In addition to the results of the analyses, laboratory quality control/quality assurance (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 90%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

g. By January 31 of each year the discharger shall submit an annual report to the Board covering the previous calendar year. This report shall contain:

(1) Tabular and graphical summaries of the monitoring data obtained during the previous year;

(2) 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; and,

(3) A written summary of the ground water analyses indicating any change in the quality of the ground water.

2. In the event the discharger violates or threatens to violate the conditions of the waste discharge requirements and prohibitions or experiences a leachate generation due to:

a. Maintenance work or breakdown of waste containment facility 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 7 working days of the telephone notification. The written report shall include time and date, duration and estimated volume of leachate generated, 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. Such daily analyses shall continue until such time as the leachate generation has ceased, 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 Quarterly Report.

A. Description of Observation Stations and Schedule of Observations

1. The observation stations shall consist of the ground water monitoring wells. At least one upgradient well and three downgradient wells shall be installed for each water body beneath the impoundment.

2. The schedule of observations and grab sampling shall be quarterly and shall be conducted within the months of January, April, July and October.

B. Observations and Test Procedures

1. The observations shall consist of the following:

   a. Water elevation reported to the nearest 0.1 inch for both depth to water from the ground surface and the elevation of the ground water level;

   b. Ground water temperature measured at the time of sampling and reported in degrees Fahrenheit;

   c. Ground water conductivity measured at the time of sampling as per Standard Methods 205 using potentiometric methodology;

   d. Ground water pH measured at the time of sampling as per Standard Methods 423 using potentiometric methodology; and,

   e. Ground water turbidity measured at the time of sampling.

2. The test procedures for the ground water samples shall consist of the following:

   a. Groundwater analysis for zinc, copper and lead shall be performed using EPA methods numbers 7950, 7210 and 7421 respectively and / or the most current revised methods approved by EPA.

   b. In the event of increased pollutant concentration in the ground water samples, revised monitoring program proposal to assure adequate definition of the extent of contamination of pollutants in groundwater wells shall be submitted along with test results.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program is as follows:

1. Developed in accordance with the procedures set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in this Board's Order No. 90 - 138;

2. Effective on the date shown below; and,

3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer, or request from the discharger.

Steven R. Ritchie
Executive Officer

October 17, 1990.
Date Ordered