

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 93-075
SITE CLEANUP REQUIREMENTS

**BW/IP INTERNATIONAL INC.
1132 NORTH SEVENTH STREET
SAN JOSE, SANTA CLARA COUNTY**

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

Description of Discharger

1. BW/IP International, Inc. (hereinafter called the Discharger) owns and operates a facility to manufacture centrifugal pumps at 1132 North Seventh Street (hereinafter called the Facility) in the City of San Jose. The discharger has owned and operated the Facility since 1988. Prior to 1988 the site was owned and operated by United Centrifugal Pumps.
2. The ground surface of the Facility is generally level at about 50 feet above mean sea level. It is located about 1.6 mile east of Guadalupe Creek and 10 miles southeast of the San Francisco Bay. Approximately 100 ground water monitoring wells and water supply wells are within one-half mile of the Facility.

Previous Investigations

3. In 1985, a ground water monitoring well (MW-E) was installed near a 1,000 gallon underground gasoline storage tank. Petroleum hydrocarbons were found in the soil and groundwater near the tank. Seven additional ground water monitoring wells were installed during subsequent investigations, which included a soil gas and water survey. In addition a periodic ground water monitoring program was conducted.
4. The August 1992 Regional Survey Report concluded that Caltrans pumping for irrigation of Highway 101 and during construction of the Tenth Street overpass, north of the Facility, may have impacted hydraulic conditions such as gradient and direction of ground water at the Facility. There are active and inactive municipal ground water wells within one mile radius of the site.
5. The April 1993 First Quarterly Monitoring Report 1993 contained the results of the analysis of volatile organics by EPA Method 602 from samples taken in December 1992 reported Benzene as high as 850 ug/l (MW-3). The results of the analysis of hydrocarbons by EPA Method 8015 from samples taken in December 1992 reported TPH as high as 12,000 ug/l as gasoline (MW-3). The report contained the following results of the analysis of volatile organics by EPA Method 601 from samples taken in December 1992:
 - o TCE as high as 210 ug/l (MW-5);
 - o cis 1,2-DCE as high as 12,600 ug/l (MW-3);
 - o trans 1,2-DCE as high as 19 ug/l (MW-3);
 - o Vinyl Chloride as high as 3,200 ug/l (MW-3); and,
 - o PCE as high as 110 ug/l (MW-5).
6. The February 1993 Phase III Investigation Report concluded that the shallow aquifer beneath the Facility is contaminated with petroleum hydrocarbons and chlorinated solvents. The ground

water contamination appears to extend beyond the northern boundary of the Facility. Ground water samples from a deep well (MW-100) contained low concentrations of cis 1,2-DCE. The report recommended: that MW-100 be monitored routinely; an assessment of the potential offsite impact be made; and, a Feasibility Study be conducted to review possible remedial plans including interim and long-term remediation and clean-up goals.

Cost Recovery

7. The Discharger shall be liable to reimburse the State for its reasonable costs related to cleanup activities, not otherwise reimbursed, pursuant to Section 13304(c) of the California Water Code.

Basin Plan

8. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986 and amended it on August 19, 1987, July 18, 1989 and December 11, 1992. This Order implements the water quality objectives for the Basin Plan.

Beneficial Uses

9. The existing and potential beneficial uses of Guadalupe Creek and/or South San Francisco Bay are:
 - a. Water contact recreation;
 - b. Non-contact water recreation;
 - c. Wildlife Habitat;
 - d. Preservation of Rare and Endangered Species;
 - e. Estuarine Habitat;
 - f. Fish migration and spawning;
 - g. Industrial service supply;
 - h. Navigation; and,
 - i. Commercial and Sport Fishing.
10. The existing and potential beneficial uses of the ground water in the area are:
 - a. Municipal Supply;
 - b. Industrial Process and Service Supply; and,
 - c. Agricultural Supply.

California Environmental Quality Act

11. This action is an Order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321, Title 14, CCR.

Notice and Meeting

12. The Board has notified the Discharger and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

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

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the Discharger shall cleanup and abate the effects described in the above findings as follows:

A. Prohibitions

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of the waters of the State is prohibited.
2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.
3. Activities associated with subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.
4. The discharge of recovered free phase liquid petroleum hydrocarbons onto land, into ground waters or surface waters is prohibited.

B. Specifications

1. The storage, handling, treatment or disposal of soil or ground water containing pollutants shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The Discharger shall conduct free phase liquid petroleum hydrocarbons recovery activities, as needed, to remove all pools of free phase liquid petroleum hydrocarbons beneath the Facility.
3. The Discharger shall remediate soil and water contamination, which actually or threatens to degrade water quality or adversely affect the beneficial uses of the waters of the State.

C. Provisions

The Discharger shall comply with the Prohibitions and Specifications above according to the following time schedule:

1. Submission of a technical report, acceptable to the Executive Officer, related to the on site and off site hydrogeologic conditions including, but not necessarily limited, to the following:
 - a. The horizontal and vertical extent, estimated volume, rate and direction of movement of the contaminated ground water beneath or from the Facility;
 - b. Determination of the potential contamination of lower aquifers beneath the facility; and,

- c. Establish background values for petroleum hydrocarbons and VOCs.

REPORT DUE: No later than December 1, 1993.

2. Submission of a technical report, acceptable to the Executive Officer, related to the remediation of contaminated ground water and source areas, if any, including, but not necessarily limited, to the following:
 - a. Identification of contaminated areas requiring remediation including the mobility and toxicity of the contaminants; and,
 - b. Discussion of remedial alternatives that reduce the volume, mobility and toxicity of contaminants;
 - c. Cleanup goals based on site-specific conditions that consider a risk-based approach for all residual contamination; and,
 - d. A time schedule for the implementation of the acceptable remedial alternative.

REPORT DUE: No later than July 1, 1994.

3. The Discharger is required to reimburse the State for all reasonable costs of the State incurred in overseeing or contracting for cleanup or abatement efforts.
4. The Discharger shall maintain a copy of this order at the project field office so as to be available at all times to project personnel.
5. The Discharger's technical reports hereof shall include a projection of the cost, effectiveness, benefits, and impact on public health, welfare, and environment of each alternative measure. The reports shall consider the guidance provided by the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California".
6. Technical reports, submitted by the Discharger, in compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted to the Board on the schedule specified herein. These reports shall consist of a letter report that includes the following:
 - a. A summary of work completed since submittal of the previous report and work projected to be completed by the time of the next report;
 - b. Identification of any obstacles which 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 which 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 ground water monitoring system and a proposal for modifications as appropriate.
7. All submittals of hydrogeological plans, specifications, reports, and documents (except quarterly progress and self-monitoring reports), shall be signed by and stamped with the seal of a registered geologist, registered engineering geologist, or registered professional engineer.
8. 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.
9. The Discharger shall maintain in good working order, and operate as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.
10. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, submitted by the Discharger, shall also be provided to the following agencies:
 - a. Santa Clara Valley Water District (Tom Iwamura);
 - b. Santa Clara County Health Department (Lee Esquibel);
 - c. City of San Jose (Steve Gubber); and,
 - d. California Environmental Protection Agency, Department of Toxic Substances Control (Barbara Cook).
11. The Discharger shall permit the Board or its authorized representative, in accordance with Section 13267 (c) of the California Water Code, the following:
 - a. Entry upon premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept, which are relevant to this Order;
 - b. Access to copy all records required to be kept under the terms and conditions of this Order;
 - c. Inspection of any monitoring equipment or methodology implemented in response to this Order; and,
 - d. Sampling of any ground water or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the Discharger.
12. 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.
13. The Board considers the property owner and site operator to have a continuing responsibility for correcting any problems within their reasonable control which arise 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.

14. These requirements do not authorize the 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 the appropriate federal, state or local permits, authorizations, or determinations.
15. If any hazardous substance is discharged in or on any waters of the state, or discharged and deposited, or probably will be discharged in or on any waters of the state, the Discharger shall
 - a. Report such discharge to the following:
 - (1) This Regional Board at (510) 286-1255 on weekdays during office hours from 8 a.m. to 5 p.m.; and,
 - (2) The Office of Emergency Services at (800) 852-7550.
 - b. A written report shall be filed with the Regional Board within five working days and shall contain information relative to the following:
 - (1) The nature of waste or pollutant;
 - (2) The quantity involved and the duration of incident;
 - (3) The cause of spill;
 - (4) The estimated size of affected area;
 - (5) The corrective measures that have been taken or planned, and a schedule of these measures; and,
 - (6) The persons/agencies notified.
16. The Board will review this Order periodically and may revise the requirements when necessary.
17. If the Discharger is delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the Discharger shall promptly notify the Executive Officer and the Board shall consider revision to this Order.

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 July 21, 1993.


Steven R. Ritchie
Executive Officer

Attachments:

- Figure 1: Site Location Map
Figure 2: Site Plan, Well Location Map
Self Monitoring Program

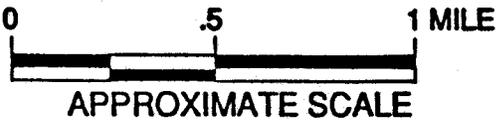
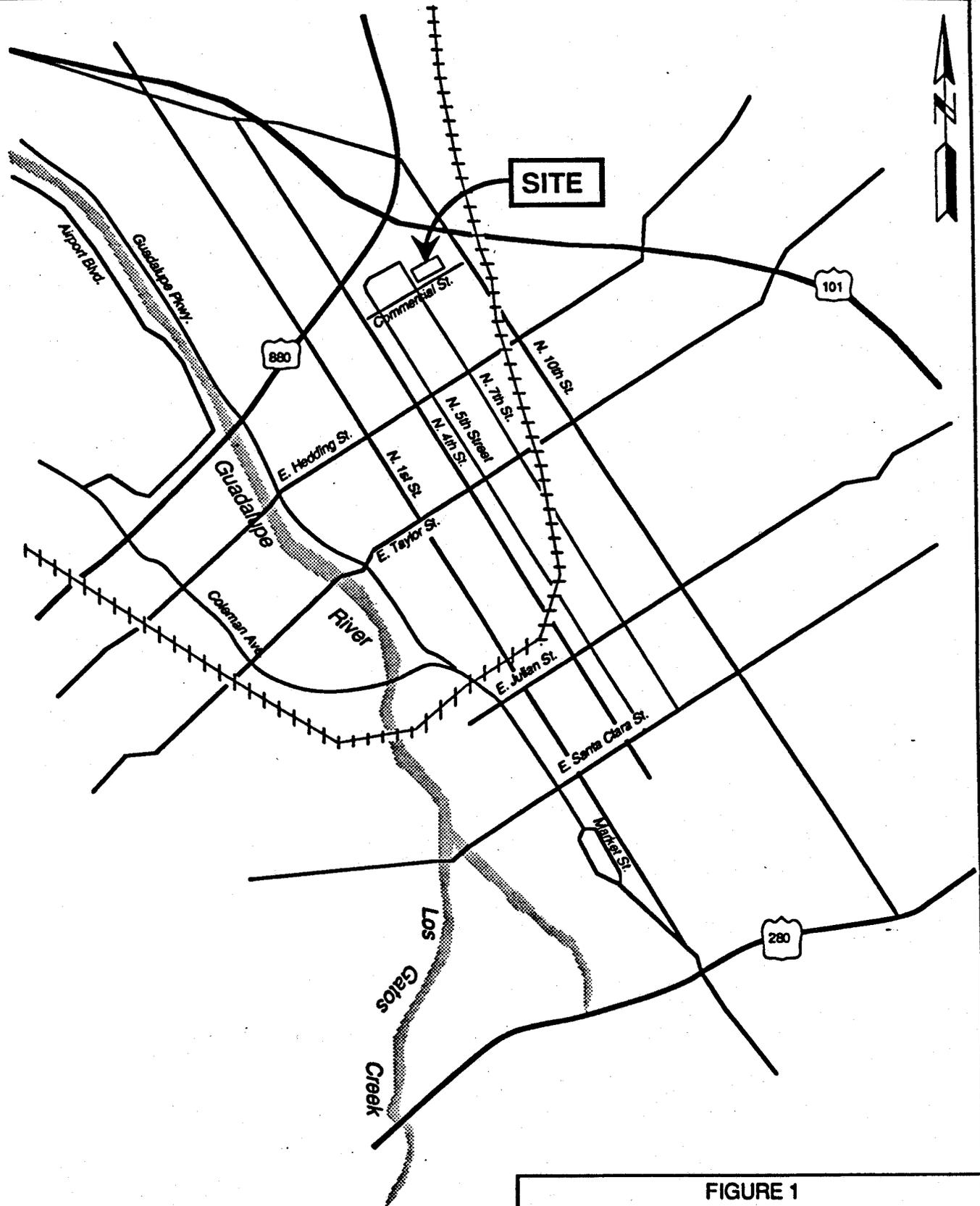


FIGURE 1
SITE LOCATION MAP
BW/IP INTERNATIONAL, INC.
SAN JOSE, CALIFORNIA
ENVIRONMENTAL SOLUTIONS, INC.

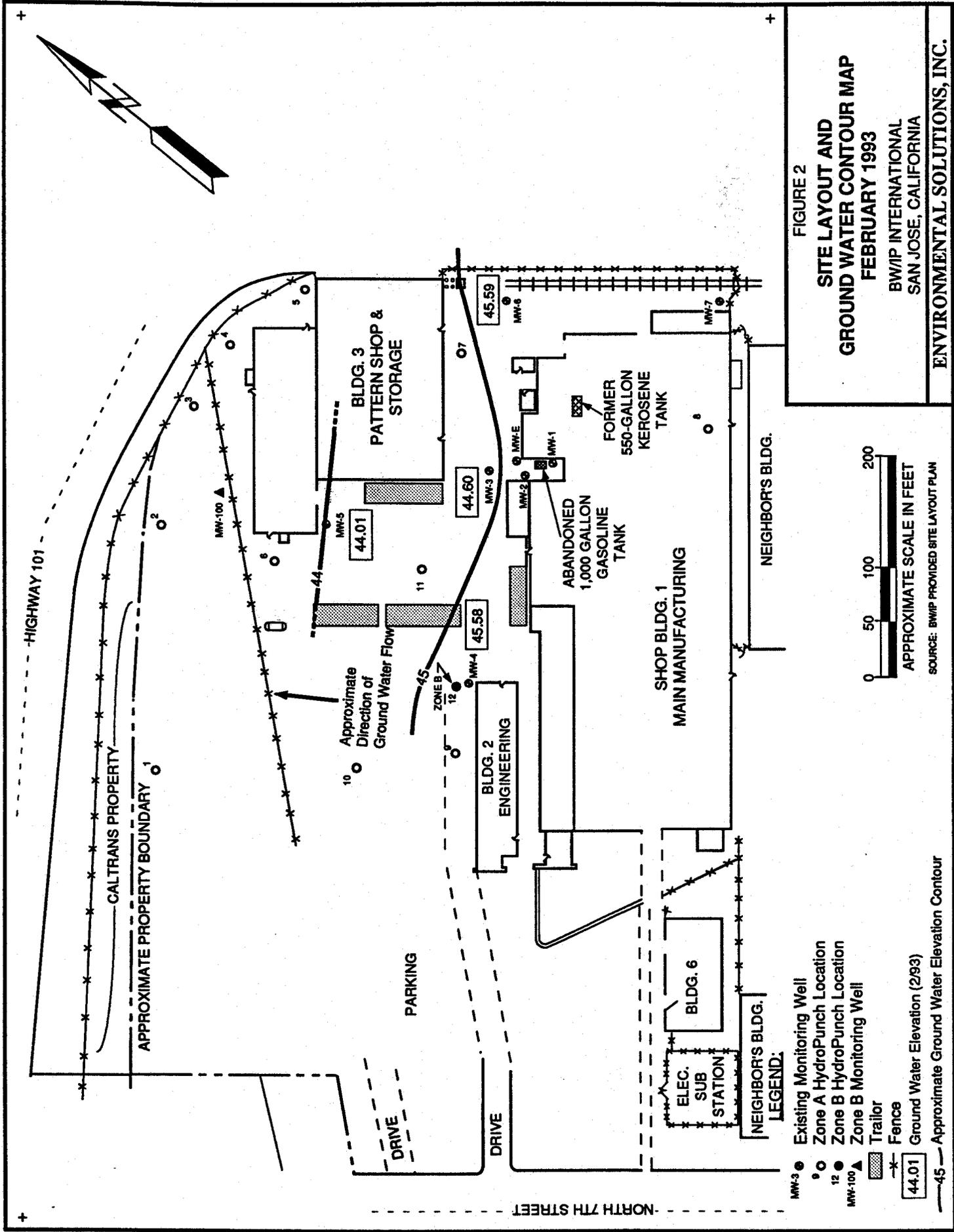


FIGURE 2
SITE LAYOUT AND
GROUND WATER CONTOUR MAP
FEBRUARY 1993
 BW/IP INTERNATIONAL
 SAN JOSE, CALIFORNIA
 ENVIRONMENTAL SOLUTIONS, INC.

0 50 100 200
 APPROXIMATE SCALE IN FEET
 SOURCE: BW/IP PROVIDED SITE LAYOUT PLAN

- LEGEND:**
- MW-3 ● Existing Monitoring Well
 - Zone A HydroPunch Location
 - 12 ● Zone B HydroPunch Location
 - MW-100 ▲ Zone B Monitoring Well
 - ▨ Trailer
 - *- Fence
 - 44.01 Ground Water Elevation (2/93)
 - 45- Approximate Ground Water Elevation Contour

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

REVISED SELF-MONITORING PROGRAM FOR
SITE CLEANUP REQUIREMENTS ORDER NO. 93-075
ISSUED TO:

BW/IP INTERNATIONAL INC.

for the property located at:

1132 NORTH SEVENTH STREET
SAN JOSE
SANTA CLARA COUNTY

1. **Authority and Purpose:** The Board requests the technical reports required in this Revised Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 93-075 (Site Cleanup Requirements). This revision is incorporated under part B, provision 3 of the subject Order's Self-Monitoring Program.
2. **Monitoring:** The discharger shall measure groundwater elevations quarterly in all monitoring wells, and shall collect and analyze representative samples of groundwater according to the following schedule:

Well #	Sampling Frequency	Analyses	Well #	Sampling Frequency	Analyses
MW-3	Q	8015/8260	ITMW-8	Q	8015/8260
MW-5	Q	8015/8260	ITRW-1	Q	8015/8260
MW-7	Q	8015/8260	ITRW-2	Q	8015/8260
MW-100	Q	8015/8260	ITRW-4	Q	8015/8260
ITMW-1	Q	8015/8260	ITRW-7	Q	8015/8260
ITMW-2	Q	8015/8260	ITRW-8	Q	8015/8260
ITMW-5	Q	8015/8260	ITRW-9	Q	8015/8260
ITMW-6	Q	8015/8260			

Key: Q = Quarterly 8010 = EPA Method 8010 or equivalent
 SA = Semi-Annually 8020 = EPA Method 8020 or equivalent
 A = Annually 8240 = EPA Method 8240 or equivalent
 8015/8260 = EPA modified method 8015 and EPA Method 8260 per IT Corp. 4/11/95 plan.

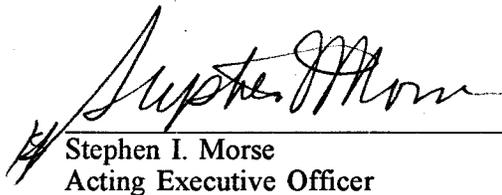
The discharger shall sample any new monitoring or extraction wells quarterly and analyze groundwater samples for the same constituents as shown in the above table. The discharger may propose changes in the above table; any proposed changes are subject to Executive Officer approval.

3. **Quarterly Monitoring Reports:** The discharger shall submit quarterly monitoring reports to the Board no later than 30 days following the end of the quarter (e.g. first quarter report due on April 30). The first quarterly monitoring report required by this revised self-monitoring program shall be due on October 30, 1995. The reports shall include:
 - a. **Transmittal Letter:** The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the discharger's principal executive officer or his/her duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.
 - b. **Groundwater Elevations:** Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year.
 - c. **Groundwater Analyses:** Groundwater sampling data shall be presented in tabular form, and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping - below).
 - d. **Groundwater Extraction:** If applicable, the report shall include groundwater extraction results in tabular form, for each extraction well and from the site as a whole, expressed in gallons per minute and total groundwater volume for the quarter. The report shall also include contaminant removal results, from groundwater extraction wells and from other remediation systems (e.g. soil vapor extraction), expressed in units of chemical mass per day and mass for the quarter. Historical mass removal results shall be included in the fourth quarterly report each year.
 - e. **Status Report:** The quarterly report shall describe relevant work completed during the reporting period (e.g. site investigation, interim remedial measures) and work planned for the following quarter.
4. **Violation Reports:** If the discharger violates requirements in the Site Cleanup Requirements, then the discharger shall notify the Board office by telephone as soon as practicable once the discharger has knowledge of the violation. Board staff may, depending on violation severity, require the discharger to submit a separate technical report on the violation within five working days of telephone notification.
5. **Other Reports:** The discharger shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation.
6. **Record Keeping:** The discharger or his/her agent shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six years after origination and shall make them available to the Board upon request.

7. **SMP Revisions:** Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the discharger. Prior to making the SMP revisions, the Executive officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

Pursuant to California Water Code Sections 13304, 13350, 13385, 13386, and 13387 if the dischargers fail to comply with the provisions of this revision to Site Cleanup Requirements (Order No. 93-075), the Executive Officer may request the Attorney General to take appropriate enforcement action against the dischargers including injunctive relief; or the Regional Board may schedule a hearing to consider requesting the Attorney General to take appropriate enforcement action against the dischargers, including injunctive and civil monetary remedies; or the Board may schedule a hearing to administratively impose civil liability not to exceed five thousand dollars (\$5,000) for each day the Order is violated.

I, Stephen I. Morse, Acting Executive Officer, hereby certify that the foregoing Self-Monitoring Program is effective on the date shown below.



Stephen I. Morse
Acting Executive Officer

August 17, 1995
Date Ordered

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

SELF-MONITORING PROGRAM

FOR

BW/IP INTERNATIONAL INC.

1132 NORTH SEVENTH STREET

SAN JOSE, SANTA CLARA COUNTY

SITE CLEANUP REQUIREMENTS

ORDER NO. 93-075

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 Site Cleanup 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 standards of performance, 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.
2. Water and waste analysis (except total suspended solids) 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 to the 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 a duly authorized representative may thus be 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 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.

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 Article 5 of Chapter 15.
2. A statistical analysis shall be performed and reported annually as described in the current revision of Appendix II of Chapter 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. Method of composite sampling (See Section C-Definition of Terms);
 - d. Date and time that analyses are started and completed, and name of the personnel performing the analyses;
 - e. Complete procedure used, including 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;
 - f. Calculation of results;
 - g. Results of analyses, and detection limits for each analyses; and,
 - h. Chain of custody forms for each sample.

F. Reports To Be Filed With The Board

1. Ground water monitoring results shall be filed monthly unless the schedule in Part B allows quarterly samples, then reports shall be quarterly. Written self-monitoring reports shall be filed no later than 45 calendar days following the end of the report period. In addition an annual report shall be filed as indicated. The reports shall be comprised of 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 requirement 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 or 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 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 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. Each monitoring report shall include a compliance evaluation summary sheet. Until the Order's amended to specify ground water protection standards, the following shall apply and the compliance sheet shall contain:
 - i. 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, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water; and,
 - ii. 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; the chain of custody record.

- c. A summary of the status of any remediation work performed during the reporting period. This shall be a brief and concise summary of the work initiated and completed as follows:
 - i. As interim corrective action measures; and,
 - ii. 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 well onsite. The description shall include the following:
 - i. The source of the increase;

- ii. How the Discharger determined or will investigate the source of the increase; and,
 - iii. What source removal measures have been completed or will be proposed.
 - e. A map or aerial photograph showing observation and monitoring station locations, and plume contours for each chemical in each aquifer shall be included as part of the quarterly Self-Monitoring 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:
 - i. 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,
 - ii. 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 80%; 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:
 - i. Tabular and graphical summaries of the monitoring data obtained during the previous year;
 - ii. 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 Site Cleanup Requirements; and,
 - iii. A written summary of the ground water analyses indicating any change in the quality of the ground water.
- G. In the event the Discharger violates or threatens to violate the conditions of the Site Cleanup Requirements and prohibitions or intends to experience a plant bypass or treatment unit bypass due to:
 - 1. Maintenance work, power failures, or breakdown of waste treatment equipment, or;
 - 2. Accidents caused by human error or negligence, or;

3. 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 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. 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.

Part B

A. Description Of Observation Stations And Schedule Of Observations

1. The observation stations shall consist of 7 existing ground water monitoring wells (MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-100) and any additional ground water monitoring wells added during the soil and ground water characterization or the evaluation of remediation work.
2. The schedule of well observations and grab sampling shall be conducted quarterly after July 1993 and within the months of January, April, July and October except for MW-4, MW-7 and MW-100, which shall be sampled only within the months of April and October.

B. Observations and Test Procedures

1. The ground water well 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 and soil samples shall be as described herein. The following section shall not apply to ground water samples taken from wells with more than 0.1 inch thickness of free phase petroleum hydrocarbon product:
 - a. Volatile aromatic compound analysis, including benzene, ethylbenzene, toluene and xylene using the EPA Method 5030/8020;
 - b. Total Petroleum Hydrocarbons and Fuel Hydrocarbons using the EPA Method 5030/8015 (Modified); and,
 - c. Volatile Organic Compound analysis, using EPA Methods 8240.

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;
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

July 21, 1993
Date Ordered