

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
81 Higuera Street, Suite 200  
San Luis Obispo, California 93401

ORDER NO. R3-2002-0106  
NPDES NO. CA0048976

WASTE DISCHARGE REQUIREMENTS  
FOR  
SPECTRA-MAT, INC.  
100 WESTGATE DRIVE  
WATSONVILLE, SANTA CRUZ COUNTY

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board), finds:

1. Spectra-Mat, Inc. (hereafter Discharger), 100 Westgate Drive, Watsonville, California 95076, owns and operates an electronics manufacturing plant in the City of Watsonville, location of which is shown on Attachment "A."
2. Mismanagement of hazardous material at the plant has contaminated groundwater with Tetrachloroethylene (PCE) and other organic compounds.
3. Remediation of the contaminated groundwater is being addressed by means of an extraction and air stripper treatment system. A maximum of 13,000 gallons-per-day (gpd) is currently permitted. The discharger has applied to increase allowable discharge volume to 25,000 gallons per day based on treatment system capacity.
4. Discharge is to a storm drain tributary to the West Branch of Struve Slough (36°55' 30' N. Latitude, 121°47' 30' W. Longitude), a tributary to Watsonville Slough and the Pacific Ocean. The storm drain and discharge points are about 250 feet west of the plant as shown in Attachment "B."
5. Best available technology economically achievable for the organic compounds in groundwater at this site is packed tower aeration and/or granular activated carbon. Either, or a combination, of these treatment systems is capable of achieving 99 percent removal and an effluent limit of nondetectable for each organic compound.
6. An application for authorization to discharge wastes under the National Pollutant Discharge Elimination System (NPDES), was originally submitted by the Discharger on December 17, 1984, and a NPDES permit (No. CA0048976) was issued May 10, 1985 (Order No. 85-58). The NPDES permit was renewed on October 13, 1989 and September 9, 1994, and reissued on May 18, 2001, upon the Discharger's applications.
7. The Water Quality Control Plan, Central Coastal Basin (Basin Plan), was adopted by the Board on November 17, 1989 (revised on September 8, 1994), and approved by the State Water Resources Control Board (State Board) on August 16, 1990. The Basin Plan incorporates State Board plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
8. Present and anticipated beneficial uses of groundwater downgradient of the discharge include domestic, agricultural, and industrial supply, and surface water recharge.
9. Present and anticipated beneficial uses of Struve Slough and Watsonville Slough that could be affected by the discharge include non-contact water recreation, wildlife habitat, warm, freshwater habitat, and groundwater recharge.

10. Adoption of waste discharge requirements for this discharge is exempt from the provisions of the California Environmental Quality Act, (Public Resources Code, Section 21100 et seq.) in accordance with Section 13389 of the California Water Code.
  11. The Clean Water Enforcement and Pollution Prevention Act of 1999 (Senate Bill 709, also referred to as the "Migden Bill") became effective January 1, 2000. This Act requires the Regional Board to impose mandatory penalties for chronic and serious violations. Failure to comply with NPDES requirements and conditions may result in enforcement action by the Regional Board.
  12. The Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California (40 CFR Part 131, also referred to as the "California Toxics Rule"), became effective May 18, 2001. The Rule establishes ambient water quality criteria for priority toxic pollutants in the State of California.
  13. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (adopted by the State Water Resources Control Board, Resolution No. 2000-015), became effective March 2, 2000. The Policy details how water quality criteria will be implemented through NPDES Permits, waste discharge requirements, and other regulatory approaches. The Policy also requires additional monitoring to determine if an effluent limitation for a California Toxics Rule criterion is needed. For low volume discharges, the policy also provides that the Regional Board may choose to exempt low volume discharges, determined to have no significant adverse impact on water quality, from this monitoring requirement.
  14. The Order complies with Water Code section 13263, and contains effluent limitations that implement water quality objectives in the Basin Plan. These include the anti-degradation policy, numeric water quality objectives, and narrative water quality objectives.
  15. A permit and the privilege to discharge waste into waters of the State is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and the Clean Water Act (as amended or as supplemented by implementing guidelines and regulations) and with any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance.
  16. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act. Compliance with this Order should assure conditions are met and mitigate any potential changes in water quality due to the project.
  17. On July 19, 2002, the Board notified the Discharger and interested persons of its intent to reissue waste discharge requirements for the discharge, provided them with an opportunity to submit their written views and recommendations, and scheduled a public hearing.
  18. In a public hearing on November 1, 2002, the Board heard and considered all comments pertaining to the discharge and found this order consistent with the above findings.
- IT IS HEREBY ORDERED**, pursuant to authority in Section 13377 of the California Water Code, Spectra-Mat, Inc., its agents, successors, and assigns, may discharge waste from the above described groundwater treatment system providing it complies with the following:
- (General permit conditions, definitions and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January, 1985. Applicable paragraphs are referenced in paragraph D.3. of this Order.)
- A. Discharge Prohibitions**
1. Discharge of treated groundwater at a location other than 36°55'30" N. Latitude, 121°47'30" W. Longitude, is prohibited.

2. Discharge of effluent to the storm drain or nearby surface waters, which does not meet the requirements established in Effluent Limitation B.2., below, is prohibited.
3. Addition of chemicals to the extracted water is prohibited unless essential to maintain compliance with this Order and to protect all beneficial uses. Approval from the Executive Officer is required prior to any chemical addition to the extracted water.
4. Adverse effects of the discharge to beneficial uses of water or threatened or endangered species is prohibited.

#### B. Effluent Limitations

1. Discharged volume shall not exceed 25,000 gallons per day.
2. Discharge shall not exceed the following Effluent Limitations:

Constituent	Unit	Maximum Instantaneous Concentration
PCE	µg/L	1.61*
TCE	µg/L	5.0
1,1-DCE	µg/L	0.11*
1,1-DCA	µg/L	5.0
Cis 1,2-DCE	µg/L	5.0
Trans 1,2-DCE	µg/L	5.0
1,2-DCA	µg/L	0.5
Vinyl Chloride	µg/L	0.5

\* California Toxics Rule Limit, which is lower than other limitations such as MCL or WQO.

3. Discharge or reuse shall be discontinued immediately if effluent concentrations are found to exceed limits established in Effluent Limitations, above.
4. A legal and binding agreement between Discharger and any new landowner shall be developed and approved by the Executive Officer prior to any transfer of ownership. This agreement must provide clear assurance uses of the site by any party will not result in any interference with remedial actions deemed necessary, regardless of cleanup

duration. Modifications to the agreement must be approved by the Executive Officer prior to implementation.

5. Discharge during initial, and any subsequent startup period, shall not occur without approval of the Executive Officer. Startup period duration for sampling purposes must also receive Executive Officer approval.

#### C. Receiving Water Limitations

(Receiving water quality is a result of many factors, some unrelated to the discharge. This permit considers these factors and is designed to minimize the influence of the discharge on the receiving water.)

##### Discharge shall not cause:

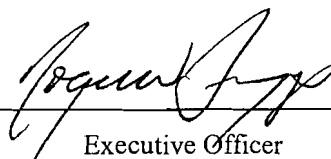
1. Floating particulates, foam, or grease and oil to be visible on the surface of receiving waters.
2. Aesthetically undesirable discoloration of receiving waters.
3. Turbidity of receiving waters to increase more than 20 percent.
4. Sludge deposits in receiving waters.
5. Objectionable aquatic growth or degradation of the indigenous biota of receiving waters.

#### D. Provisions

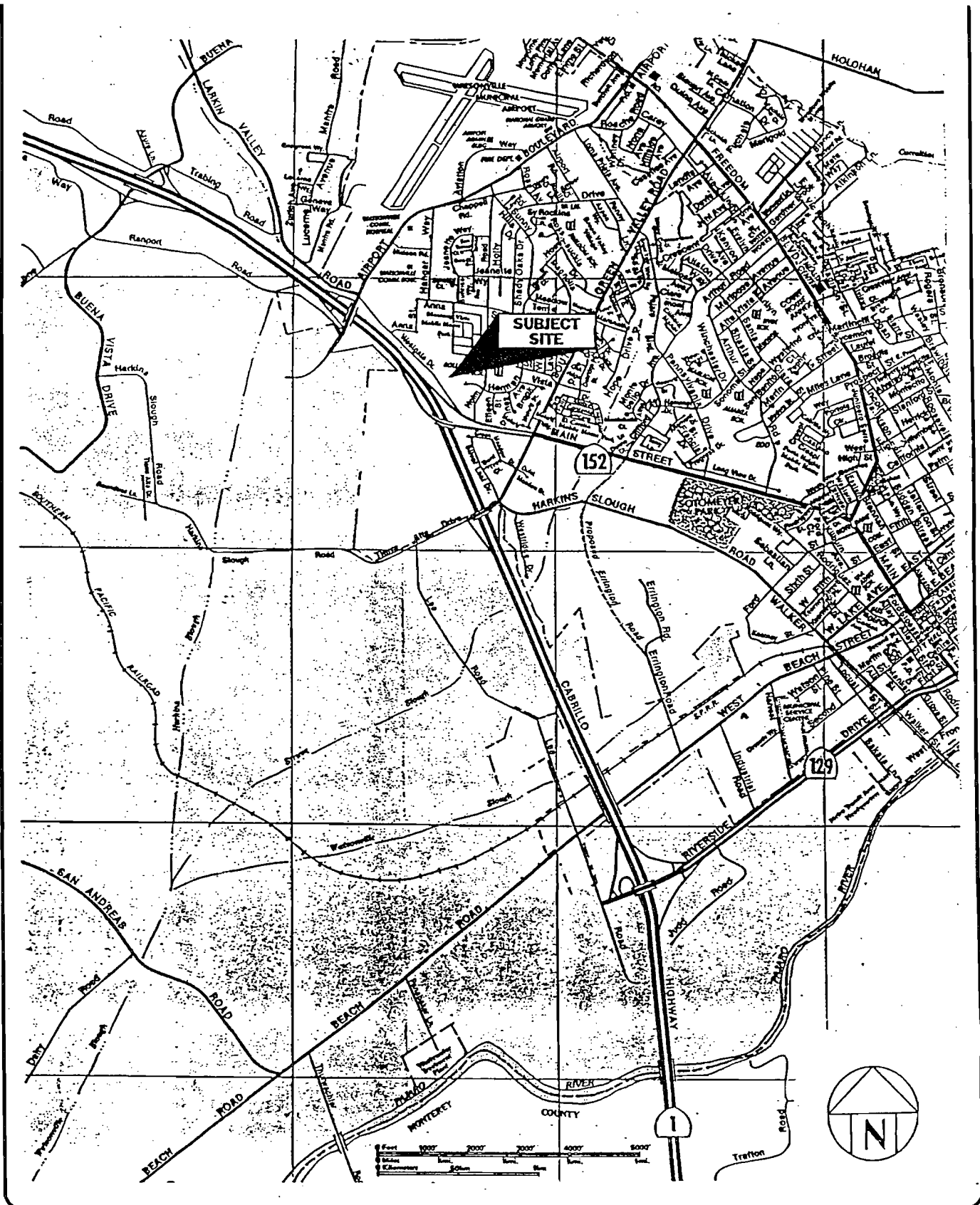
1. Requirements prescribed by this Order supersede requirements prescribed by Order No. 01-072, adopted by the Board on May 18, 2001. Order No. 01-072 is hereby rescinded.
2. The Discharger shall comply with "Monitoring and Reporting Program No. 01-073," as ordered by the Executive Officer.
3. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January, 1985 (also referred to as "Standard Provisions"), except Item Nos. A.5, 6, 7, 12, 13; C.3, 9, 17; and D.1.


4. Other volatile organic compounds may be present in the extracted water due to chemical breakdown and the possibility that other compounds were discharged. In addition, research on hazardous compounds is complex and constantly generating new information that may necessitate a revision of guidelines upon which this Order is based. This permit may be reconsidered for additional volatile organics in the aquifer and for updated information on the health risks of the pollutants that are present.
5. If effluent limits are not met, or the treatment system malfunctions, discharge shall cease until the problem is corrected. Notification to the Executive Officer is required within four hours of shut-down for such reasons, or by 9 a.m. the next working day if shutdown is after 5 p.m. Similar notification is required concerning results of investigation into a malfunction, including the necessary corrective action. Discharge shall resume as soon as feasible.
6. Discharger must maintain, and update as necessary, an operation plan that describes the extraction, treatment and disposal processes; assures system reliability through unit redundancy and operating controls; describes maintenance, monitoring and reporting requirements; and provides contingencies for foreseeable emergencies.
7. Operation and maintenance of the extraction, treatment and disposal systems shall conform to specifications contained in the operation plan developed for the system, except where otherwise controlled by this order.
8. The treatment system shall be operated in a manner consistent with manufacturer's recommendations and/or engineering design. Any modifications to the operation plan shall be approved by the Executive Officer prior to implementation.
9. If monitoring data indicates the extraction process is creating a substantial, irreversible impact on the aquifer, as determined by the Executive Officer, this permit shall be suspended and the matter, and a proposed remedy, returned to the Board for review.
10. The Discharger shall restrict access to the extraction and treatment systems to preclude public contact with contaminants.
11. Plant use of treated groundwater shall be implemented and optimized where and when feasible to do so.
12. This permit may be modified in accordance with the requirements set forth at 40 Code of Federal Regulations, Parts 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any EPA-approved new State water quality objectives.
13. This Order expires November 1, 2007, and the Discharger must file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9, of the California Code of Regulations, not later than May 1, 2007, if it wishes to continue the discharge.

I, **Roger W. Briggs, 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, Central Coast Region, on November 1, 2002.



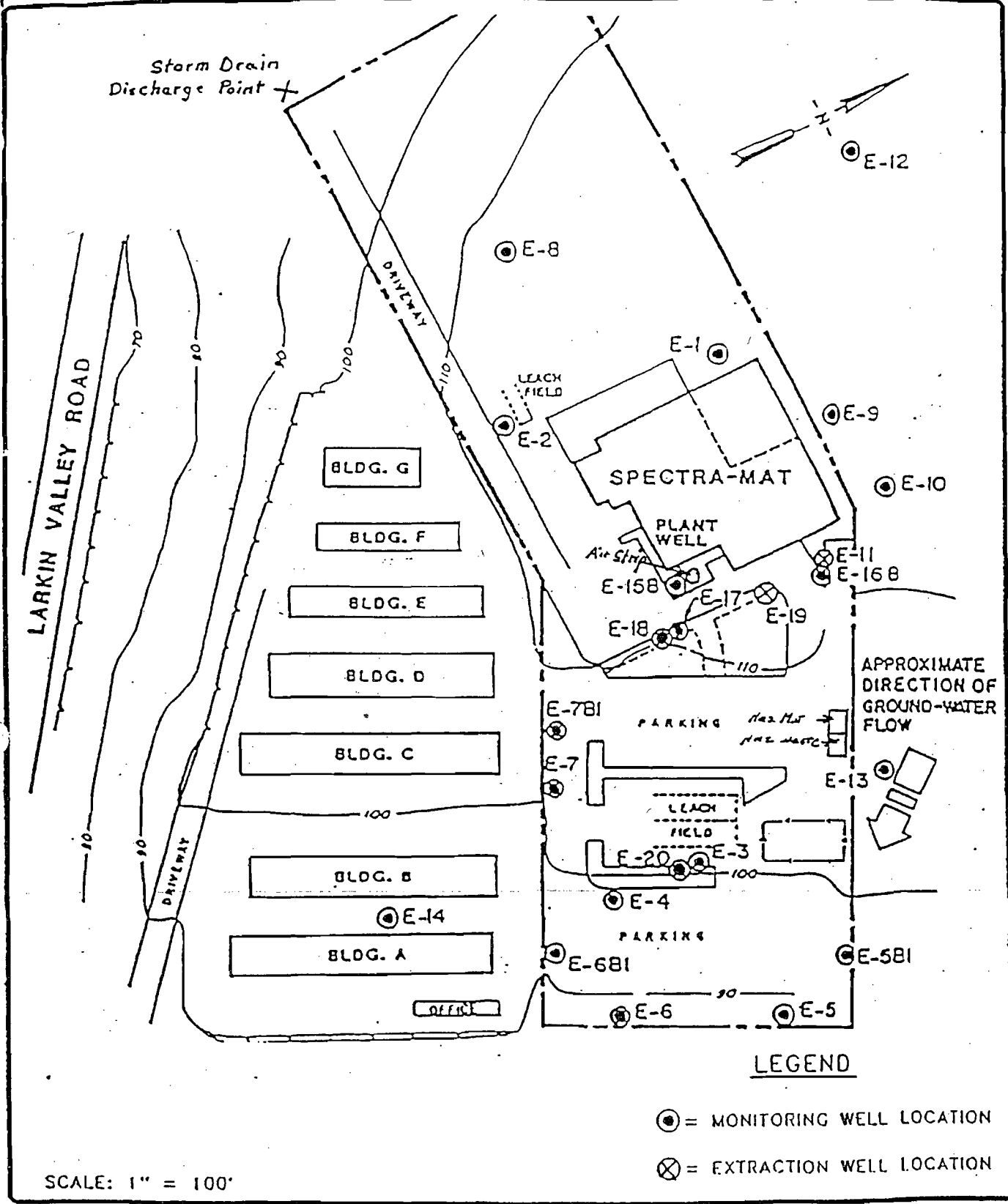
Executive Officer




**SAMPSON ENGINEERING INC.**  
 6 HANGAR WAY  
 WATSONVILLE, CA. (831) 761-6222

VICINITY MAP  
 SPECTRA-MAT, INC.  
 100 WESTGATE DRIVE  
 WATSONVILLE, CALIFORNIA

FIGURE NO.  
 1  
 3/1/00  
 PROJECT 99191-03



ATTACHMENT "B"

SITE PLAN  
 MONITORING-EXTRACTION WELL NETWORK  
 SPECTRA-MAT, INC.  
 WATSONVILLE, CALIFORNIA

2/00