

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 93-135

SITE CLEANUP REQUIREMENTS AND  
RECISION OF ORDER NO. 89-159

999 ARQUES CORPORATION  
SUBUNIT 1, OPERABLE UNIT 2  
SUNNYVALE, SANTA CLARA COUNTY

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

1. Study Area, Operable Unit and Subunit Locations and Descriptions A Study Area containing numerous sources of soil and ground water pollution in eastern Sunnyvale is shown in Figure 1. The Study Area is located in an area of low to flat relief about 6 miles south of San Francisco Bay (see Figure 2). This is an industrial park setting dominated by low rise industrial buildings common in the electronics industry of Santa Clara County. Mixed commercial and light industrial use are common immediately surrounding the industrial park area. Two residential neighborhoods are at the northern edge of the Study Area: one is south of Highway 101, west of Lawrence Expressway and the other is north of Highway 101, east of Lawrence Expressway.

This Study Area has been divided into Operable Units 1 and 2 (OU1 and OU2) because of additional field work necessary to define the extent of ground water pollution plumes originating from facilities in OU2 and to determine the extent that these pollution plumes may be commingled with those plumes originating from facilities in OU1. OU1 comprises the eastern portion of the Study Area and OU2 comprises the western portion, as shown in Figure 1.

The purpose of defining these two operable units is to allow facilities in OU1 to proceed with final cleanup while further characterization work in OU2 is completed. OU1 consists of the National Semiconductor Corporation (NSC) site at 2900 Semiconductor Drive, the former United Technologies Corporation (UTC) site at 1050 E. Arques Avenue, the Advanced Micro Devices site at 1165 E. Arques Avenue, and the area to the north. Final Remedial Action Plans (RAPs) were adopted by the Board in September 1991 (Order Nos. 91-137, 91-139, and 91-140) for the facilities in OU1.

The necessity for additional field work in OU2 renders the boundaries of the Study Area incomplete and the boundaries of OU1 inexact because additional information generated for OU2 may alter the Units' boundaries. It is the Board's intent that the boundaries of the operable units be defined such that, commingling notwithstanding, facilities located in OU1 are largely responsible for soil and ground water pollution in OU1, and facilities located in OU2 are largely responsible for soil and ground water pollution in OU2. As additional information is generated for OU2 and the Study Area, this intention may lead the Board to modify the Units' boundaries, this Order, and the list of dischargers named in this Order.

For purposes of the preliminary allocation of responsibility for soil and ground water pollution among the facilities in OU2, OU2 has been further subdivided into four subunits as shown in Figure 1. Subunit 1 consists of the 999 Arques Corporation site at 999 E. Arques Avenue and the southwestern parking lot portion of the Canadian Aviation Electronics-Link Corporation (CAE-Link) site to the east. Subunit 2 consists of the Sobrato Development site located at 968-970 Stewart Drive in Sunnyvale. Subunit 3 consists of the northern portion of the CAE-Link site located at 1077 E. Arques Avenue in Sunnyvale. Subunit 4 consists of the downgradient area from Subunits 2 and 3, which extends north to the area near the intersection of Highway 101 and Lawrence Expressway, the approximate extent of the plume. As noted above, as additional information is generated for OU2 and the Study Area, the Board may modify the Subunits' boundaries.

2. Regulatory Status for Subunits 1, 2, and 3 Separate Board Orders have been prepared for Subunits 1, 2, and 3 in OU2. These Board Orders comprise the remedial investigation workplan for Subunits 1, 2, and 3. The purpose of the further remedial investigations required for each subunit is to provide for the acquisition of adequate information upon which final remedial actions can be based. The Board will adopt the final RAPs for Subunits 1, 2, and 3 after the feasibility studies for these subunits have been completed. At that time, modifications to the preliminary allocation of responsibility may be made by the Board.
3. Regulatory Status for Subunit 4 The source(s) of Subunit 4 ground water pollution have not yet been determined. Subunits 1, 2, and 3, as well as other sites in the area, are considered potential contributors to Subunit 4 ground water pollution. This Order, and forthcoming orders for the study area, provides for the collection of information necessary to determine the parties responsible for completion of Subunit 4 investigation and cleanup. The Board anticipates that Subunit 4 responsible parties will be named after the completion of the remedial investigations required for Subunit 1, 2, and 3

and to be required of appropriate parties in and adjacent to OU1 and OU2.

4. Other Potential Contributors to OU2 Pollution That Are Sources of Soil and/or Ground Water Pollution Several facilities exist to the south of OU2 that are sources of soil and/or ground water pollution. These facilities include, but may not be limited to, Hewlett-Packard, located at 974 E. Arques Avenue; Sunnyvale Corporation Yard, located at 221 Commercial Street; Sola/Barnes-Hind, located at 895 Kifer Road; and Mohawk Laboratories, located at 932 Kifer Road.

The Board has adopted orders requiring further characterization and cleanup of ground water for Hewlett-Packard, Sola/Barnes-Hind, and Mohawk Laboratories. The Board intends to update existing orders and adopt new orders for sites in the Study Area. As additional information is generated for these and other facilities in the Study Area, the Board may modify the boundaries of OU1 and OU2, this Order and the list of dischargers named in this Order.

Ground water pollution emanating from the former UTC facility in OU1 appears to have migrated into the area beneath the southeastern portion of the CAE-Link site. This ground water pollution plume may be potentially intermingling with the pollution plumes caused by releases in OU2. Investigation and cleanup of the plume emanating from the UTC facility will be addressed by future amendment of the final RAP for Subunit 1 of OU1.

5. Operable Unit 2, Subunit 1 Boundary As shown in Figure 1, Operable Unit 2, Subunit 1 consists of the 999 Arques Corporation site and the southwestern parking lot portion of the CAE-Link site to the east.
6. Subunit 1 Facility Description New England Mutual Life Insurance Company owns the site located at 999 East Arques Avenue, Sunnyvale, Santa Clara County, near the intersection of U.S. Highway 101 and the Lawrence Expressway (Figure 1). Currently, the site is occupied by an office complex. Previously, the site was occupied by a concrete, one-story building, a metal storage shed, and a small cinder block storage shed.

CAE-Link Corporation leases the site located at 1077 E. Arques Avenue. Currently, the site consists of a single building of tilt-up construction surrounded by asphalt paving and landscaping. The southwestern portion of the site, which is included in Subunit 1, consists of asphalt paving and landscaping.

Land use in the immediate area is almost exclusively

industrial. Within approximately a one mile radius, land use is industrial, commercial and residential.

7. Subunit 1 Site History Microwave Associates (West), Inc., now known as M/A-COM, Inc., owned and occupied the 999 E. Arques site from August 1967 to October 1973. During the years 1967 - 1971, M/A-COM, Inc. conducted ferrite processing and travelling wave tube fabrication. From 1968 to 1970, microwave semiconductors were fabricated and, beginning in 1970, radio frequency equipment was fabricated at the site. M/A-COM, Inc. ceased operations at the site in 1973.

Written manufacturing procedures used by M/A-COM, Inc. list cleaning processes (vapor degreasing and ultrasonic cleaning) that used trichloroethylene (TCE), the primary pollutant found in Subunit 1. A four-stage clarifier/sump, located on the exterior of the west end of the 999 E. Arques site's then-primary building, was found in 1987 to contain a sludge polluted with 87 parts per million (ppm) TCE. M/A-COM, Inc. is the only tenant still in existence known to have used this clarifier/sump.

In 1978, the 999 E. Arques site was sold to New England Mutual Life Insurance Company (NEM). Ametek Inc. became a tenant in 1979, remodelled parts of the facility, and installed an acid waste neutralization system. Ametek manufactured refurbished silicon crystals at the site from 1979 until it vacated the site in 1987. In 1990, the site's buildings were demolished, and the site was vacant until 1992, when the existing office complex was constructed.

CAE-Link and predecessor companies have leased the site at 1077 E. Arques Avenue since the 1960's. CAE-Link utilized the site for the development of aeronautical flight simulation. The southern portion of the site, including that portion of the site that is in Subunit 1, has been utilized only as a parking area since site development in the 1960's. CAE-Link vacated the site in 1992 and currently, the site is vacant.

8. Subunit 1 Discharger M/A-COM, Inc., Ametek, Inc., and NEM have settled all disputes between and among them regarding the pollution at and emanating from the site 999 E. Arques site, and have jointly formed the 999 Arques Corporation. The 999 Arques Corporation has assumed full responsibility for meeting all cleanup requirements and hereinafter is referred to as the discharger.

Although the Board has considered M/A-COM, Inc. and NEM to be the dischargers at the 999 E. Arques site, the Board recognizes 999 Arques Corporation to be the party primarily responsible for meeting the requirements of this Order. Should the 999 Arques Corporation fail to comply with the

prohibitions, specifications, and provisions of this Order, the Board will consider adding M/A-COM, Inc., Ametek, Inc., and/or NEM to this Order as secondarily responsible parties.

In addition to the parties described in Finding 7, the following are known to have been owners and/or operators of facilities at the 999 E. Arques site: Bank of America, N.T. & S.A.; Melvin Brown; Huggins Laboratories, Inc.; Mullen Equipment Company; Norsk Engineering, Inc.; Poly Mold Tool & Engineering; Realex Development Corporation; Washington Associates; and U.G.M., Inc.

Ground water pollution emanating from the 999 E. Arques site has migrated beneath the southwestern area of the CAE-Link site. The ground water pollution plume in this area may be potentially intermingling with pollution plumes caused by releases at the CAE-Link facility and/or at the former UTC facility. The additional soil and ground water investigation required by this Order is partially intended to define the source and extent of pollution in this portion of Subunit 1.

As indicated in Finding 4, other potential contributors to OU2 pollution may exist. If additional information becomes available showing that any party not currently named as a discharger caused or permitted any waste to be discharged or deposited in Subunit 1 where it entered or could have entered into the waters of the State, the Board will consider adding that party's name to this Order.

9. Hydrogeology The area in the vicinity of Subunit 1 is underlain by unconsolidated sedimentary deposits of clay, silt, sand, and gravel extending to depths of at least 1,000 feet below the ground surface. These deposits have been subdivided into three general aquifer (water producing) zones designated as the A, B, and C aquifers. The aquifer zones are separated by semi-permeable to relatively impermeable saturated zones (aquitards).

The unconfined, shallow A aquifer extends from the ground surface to depths of approximately 20 to 25 feet below the ground surface. The semi-confined to confined, intermediate B aquifer, which generally consists of coarser-grained sedimentary materials than those in the A aquifer, extends from depths of approximately 25 to 45 feet below the ground surface to a depth of approximately 90 feet below the ground surface in the site vicinity. The A and B aquifers are separated by an aquitard ranging in thickness from 5 to 20 feet, or more. Underlying the B aquifer is a thick clay aquitard. The confined, deep, C aquifer exists beneath this aquitard. The A and B aquifers contain limited ground water supplies with marginal water quality in most places. The C aquifer supplies most of the ground water produced for this

region. All aquifers have been determined to be actual or potential sources of drinking water.

The ground water gradient within the A aquifer generally slopes in a north-northeasterly direction in the vicinity of Subunit 1. Depth to the water table in this zone ranges from 10 to 13 feet below the ground surface in the general Subunit 1 area. The ground water gradient in the upper portions of the B aquifer slopes in a general northeast direction. In some locations, the elevations of the piezometric surface for the upper B aquifer generally correspond to the elevations of the piezometric surface for the A aquifer.

10. Subunit 1 Soil Pollution TCE is the predominant volatile organic compound (VOC) reported in soil samples collected from Subunit 1. However, other VOCs, including 1,1,1-trichloroethane (TCA), tetrachloroethene (PCE), methyl ethyl ketone (MEK), and toluene have been reported in some of the soil samples. TCE concentrations in vadose zone soil samples have ranged from below reporting limits to 12 ppm. In general, the greatest concentrations of VOCs have been reported in soil samples collected from the vicinity of the eastern portion of the 999 E. Arques site's former building. Elevated concentrations of VOCs were also reported in soil samples collected from the vicinity of the external clarifier on the western portion of the 999 E. Arques site's main building. Releases of VOCs to the subsurface soils were at or near the ground surface and some lateral migration of VOCs within the vadose zone has occurred along with the predominant vertical migration. In 1990, approximately 6000 cubic yards of VOC impacted soil in the vadose zone was excavated and removed from the 999 E. Arques site.
11. Subunit 1 Ground Water Pollution Eight VOCs have been found in A aquifer ground water samples, the most predominant of which are TCE, TCA, and cis-1,2-dichloroethene (cis-1,2-DCE). The highest concentrations of VOCs, primarily TCE, up to a concentration of 390,000 parts per billion (ppb), were detected in ground water samples collected from wells screened in the A aquifer zone located on the eastern portion of the 999 E. Arques site. The highest TCE concentrations detected in groundwater samples collected from the A aquifer zone in April 1993 were 36,000 ppb. Five VOCs have been reported in B aquifer ground water samples. The predominant VOCs reported in these samples are TCE and acetone, with the highest concentrations (up to 950,000 ppb TCE and 229,132 ppb acetone) reported in ground water samples collected from a well located on the east side of the 999 E. Arques site's main building.
12. Operable Unit For the purposes of this Order and future work at Subunit 1, the operable unit consists of soil at the 999 E. Arques site and ground water beneath the entire subunit.

Remedial actions taken to date for the operable unit include soil excavation and ground water extraction and are considered interim remedial actions.

13. Scope of this Order. On September 20, 1989, the Board adopted Order No. 89-159 which prescribed Site Cleanup Requirements for M/A-COM, Inc. and NEM for the 999 E. Argues site, established tasks and time schedules to define the extent of the pollutants and implement interim remedial actions at the site, and updated and rescinded Order No. 88-133. Order No. 88-133, adopted by the Board on August 17, 1988, was the original Site Cleanup Requirements for M/A-Com, Inc. and NEM for the 999 E. Argues site.

The intent of this Order is to supersede the requirements of Order No. 89-159 by further updating the status of the 999 E. Argues site and prescribing a time schedule both to completely define the source and extent of pollution in Subunit 1, and to evaluate final remedial action alternatives for Subunit 1. This Order rescinds Order No. 89-159.

14. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986 and subsequently amended it. This Order implements the water quality objectives for South San Francisco bay and contiguous surface and ground waters.
15. The Board adopted Resolution No. 89-39, "Incorporation of 'Sources of Drinking Water' Policy into the Water Quality Control Plan" on March 15, 1989. This policy defines ground water as suitable or potentially suitable for municipal or domestic supply as that which : 1) has a total dissolved solids content of less than 3,000 mg/l, and 2) is capable of providing sufficient water to supply a single well with at least 200 gallons a day. The ground water underlying and adjacent to Subunit 1 falls within this category.
16. The existing and potential beneficial uses of the ground water underlying and adjacent to the site include:
  - a. Industrial process water supply
  - b. Industrial service supply
  - c. Municipal and domestic supply
  - d. Agricultural supply.
17. The discharger has caused or permitted, and threatens to cause or permit, waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.
18. 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 of the Resources Agency Guidelines.

19. Pursuant to Section 13304 of the Water Code, the discharger is hereby notified that the Board is entitled to, and may seek reimbursement for all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. Upon receipt of a billing statement for such costs, the discharger shall reimburse the Board.
20. 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 the opportunity for a public hearing and an opportunity to submit their written views and recommendations.
21. 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 the subsurface investigation and cleanup which will cause significant adverse migration of the pollutants or distortion of portions of the plume under investigation are prohibited.

B. SPECIFICATIONS

1. The storage, handling, treatment or disposal of polluted soil or ground water shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The discharger shall conduct monitoring activities as needed to define the current local hydrogeologic conditions, and the lateral and vertical extent of ground water pollution. Should monitoring results show evidence of plume migration, additional plume characterization may be required.
3. Ground water cleanup standards shall be in accordance with State Water Resources Control Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California". Cleanup standards shall not exceed: a) the Federal or State Primary or Secondary Maximum Contaminant Level (MCL) or State Action Level (AL), whichever is more restrictive, or b) a more stringent level based upon a site specific risk assessment. If an MCL or AL has not been promulgated, the cleanup standard shall be based on the best available subunit- and chemical-specific health information and shall be protective of human health and the environment.
4. The unsaturated soil cleanup standard shall be 1 ppm for total VOCs. This cleanup standard may be modified by the Board if the discharger is able to demonstrate, with subunit-specific data, that higher levels of VOCs in the soils will not threaten the quality of waters of the State and that human health and the environment are protected.

C. PROVISIONS

1. The discharger shall comply with all Prohibitions and Specifications immediately, except as modified in accordance with the following time schedule and tasks:

a) COMPLETION DATE: December 1, 1993

TASK: REMEDIAL INVESTIGATION WORKPLAN Submit a technical report acceptable to the Executive Officer, which evaluates previous technical data and includes a workplan for additional soil and ground water investigation in order to completely define the sources and extent of pollution within and at the boundaries of Subunit 1. The workplan should also include a ground water monitoring and sampling plan.

b) COMPLETION DATE: February 1, 1994

TASK: IMPLEMENTATION OF REMEDIAL INVESTIGATION Submit a technical report acceptable to the Executive Officer documenting implementation of the remedial investigation identified in Provision

C.1.a. The report should include documentation of the occurrence of field investigations performed pursuant to the Remedial Investigation Workplan. Information regarding the results of the investigations performed, such as boring logs, CPT logs and laboratory analytical reports will not be required in this submittal.

c) COMPLETION DATE: May 1, 1994

TASK: COMPLETION OF REMEDIAL INVESTIGATION REPORT  
Submit a technical report acceptable to the Executive Officer, pursuant to the remedial investigation workplan identified in Provision C.1.a., containing the results of the remedial investigation. This report may be submitted as an addendum to the Remedial Investigation Report for the 999 E. Arques site, dated October 10, 1990.

d) COMPLETION DATE: August 1, 1994

TASK: COMPLETION OF FEASIBILITY STUDY REPORT AND PROPOSED REMEDIAL ACTION PLAN  
Submit a technical report acceptable to the Executive Officer, based on the results of the remedial investigation submitted for Provision C.1.c., containing the feasibility study and proposed remedial action plan. This technical report shall include 1) proposed soil and ground water cleanup standards based on Specifications B.3. and B.4., 2) a review of the remedial actions selected in the existing feasibility study and a proposal for modifications of the selected remedy based on the recent and prior investigations and proposed soil and ground water cleanup standards, and 3) the time schedule necessary to implement the proposed final remedial actions.

This report may be submitted as an addendum to the Feasibility Study Report for the 999 E. Arques site, dated November 20, 1991.

2. Technical reports evaluating proposed interim and final remedial actions will include a projection of the cost, effectiveness, benefits and impact on public health, welfare, and environment of each alternative action. The remedial investigation and feasibility study shall consider Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300 et seq.); Superfund Amendments and Reauthorization Act of 1986; CERCLA/SARA guidance documents with reference to Remedial Investigations and Feasibility Studies and

Removal Actions; and both the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California" and Resolution No. 92-49, "Policies and Procedures for Investigations and Cleanup and Abatement of Discharges Under Water Code Section 13304."

3. Any proposal for the discharge of extracted ground water must initially consider the feasibility of reclamation, reuse, or discharge to a publicly owned treatment works (POTW), as specified in Board Resolution No. 88-160. If it can be demonstrated that reclamation, reuse, or discharge to a POTW is technically and economically unfeasible, a proposal for discharge to surface water shall be considered. Such proposal for discharge to surface water shall include the above demonstration and a completed application for an NPDES permit.
4. 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. In the event of such delays, the Board may consider modification of the task completion dates established in this Order.
5. The discharger shall submit to the Board acceptable self-monitoring program reports containing results of work performed according to a program approved by the Executive Officer.
6. The self-monitoring program reports shall also summarize the status of compliance with the Prohibitions, Specifications, and Provisions of this Order and shall be submitted quarterly to the Board, according to the schedule below, commencing with the report for the fourth quarter, due January 31, 1994.

<u>Quarter</u>	<u>1st quarter</u>	<u>2nd quarter</u>	<u>3rd quarter</u>	<u>4th quarter</u>
<u>Period</u>	<u>Jan-March</u>	<u>April-June</u>	<u>July-Sept</u>	<u>Oct-Dec</u>
<u>Due Date</u>	<u>April 30</u>	<u>July 31</u>	<u>October 31</u>	<u>January 31</u>

The quarterly reports shall include:

- a. a summary of work completed since the previous quarterly report,
- b. appropriately scaled and labeled maps showing the location of all monitoring wells, extraction wells, and existing structures,
- c. updated water table and piezometric surface maps for all affected water bearing zones, or alternatively, isoconcentration maps for key

- d. contaminants in all affected water bearing zones, a cumulative tabulation of all well construction data, ground water levels and chemical analysis results for site monitoring wells in the monitoring program approved by the Executive Officer,
  - e. a cumulative tabulation of volume of extracted ground water and chemical analysis for all site ground water extraction wells,
  - f. identification of potential problems which will cause or threaten to cause noncompliance with this Order and what actions are being taken or planned to prevent these obstacles from resulting in noncompliance with this Order, and
  - g. in the event of noncompliance with the Prohibitions, Provisions and Specifications of this Order, the report shall include written justification for noncompliance and proposed actions to achieve compliance.
7. Technical reports on compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted monthly by the 15th of the following month to the Board. These reports shall consist of a brief letter report that:
- a. summarizes work completed since submittal of the previous report, and work projected to be completed by the time of the next report,
  - b. identifies any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles, and
  - c. includes, in the event of non-compliance with Prohibitions, Provisions, and Specifications 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.

During those months when the self-monitoring program reports will be submitted, as described in Provision C.6., these technical reports may be submitted and combined with the self-monitoring reports.

8. All hydrogeological plans, specifications, reports, and documents shall be signed by or stamped with the seal of a registered geologist, certified engineering geologist or professional engineer.

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 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.
11. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, shall be provided to the following agencies:
  - a. Santa Clara Valley Water District
  - b. Santa Clara County Health Department
  - c. City of Sunnyvale

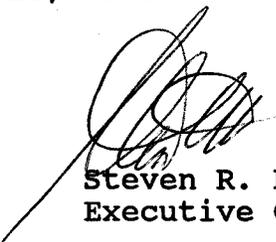
The Executive Officer may additionally require copies to be provided to the California Environmental Protection Agency - Department of Toxic Substances Control, the U.S. Environmental Protection Agency, Region IX, and/or a local repository for public use.

12. The discharger shall permit the Board or its authorized representatives, in accordance with Section 13267(c) of the California Water Code:
  - 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 any 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.
  - 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.
13. The discharger shall file a report on any changes in site occupancy and ownership associated with the 999 E. Argues site.
14. The discharger shall reimburse the Board for all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this

Order, upon receipt of a billing statement for such costs.

15. 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 Board, at (510) 286-1255 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 Board within five (5) working days and shall contain information relative to: the nature of waste or pollutant, quantity involved, duration of incident, cause of spill, Spill Prevention Control and Countermeasure Plan (SPCC) in effect, if any, estimated size of affected area, nature of effects, corrective measures that have been taken or planned, and a schedule of these activities, and persons notified.
16. Order No. 89-159 is hereby rescinded.
17. 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 October 20, 1993.

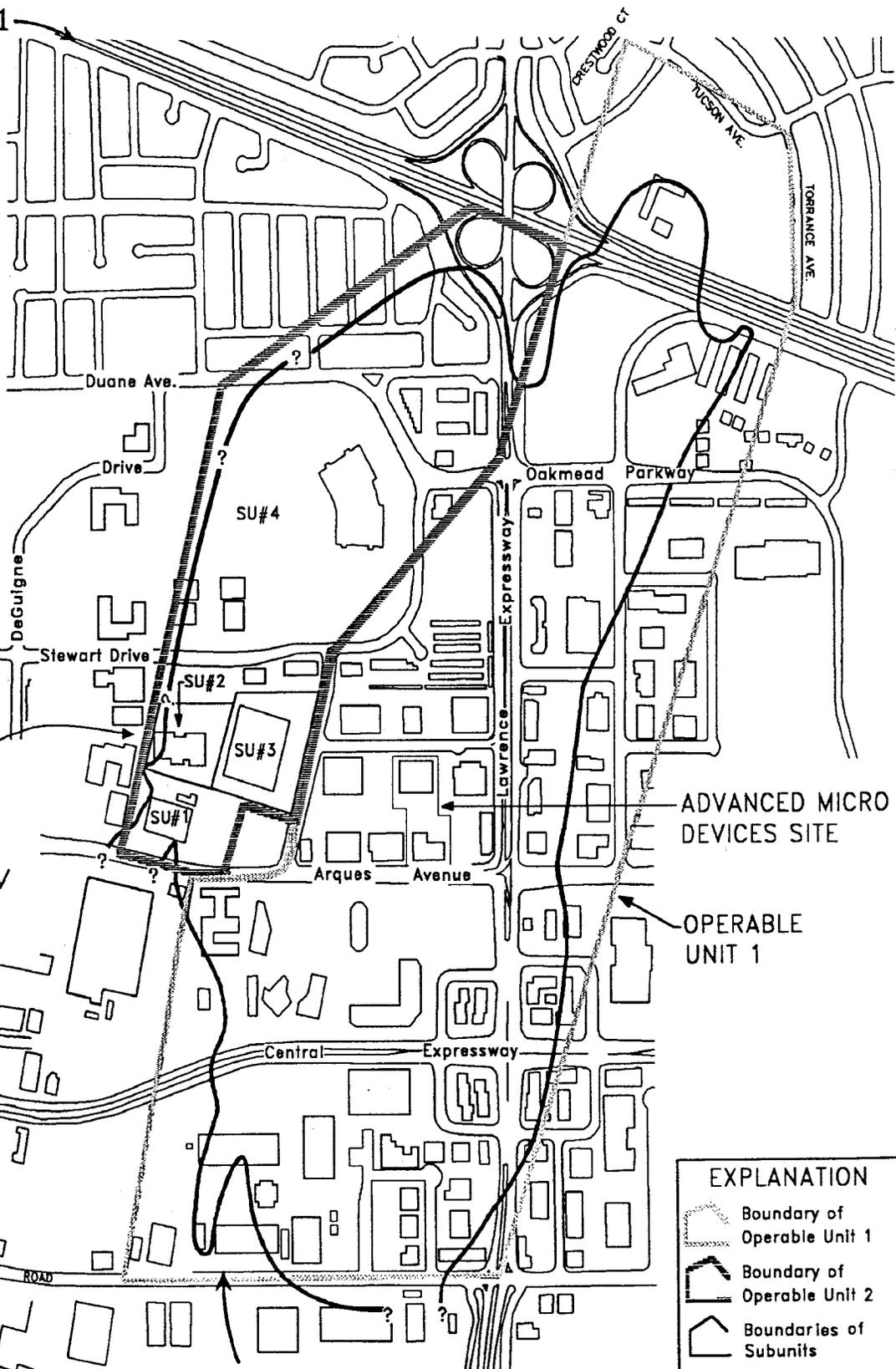


Steven R. Ritchie  
Executive Officer

**Attachments:**

- Figure 1. Study Area Map
- Figure 2. General Location Map

Highway 101



0 500 1000  
Scale in Feet

OPERABLE UNIT 2  
 SUBUNIT#1 = 999 Arques Corp.  
 SUBUNIT#2 = Sobrato Devel./ Inprint Corp.  
 SUBUNIT#3 = CAE - Link

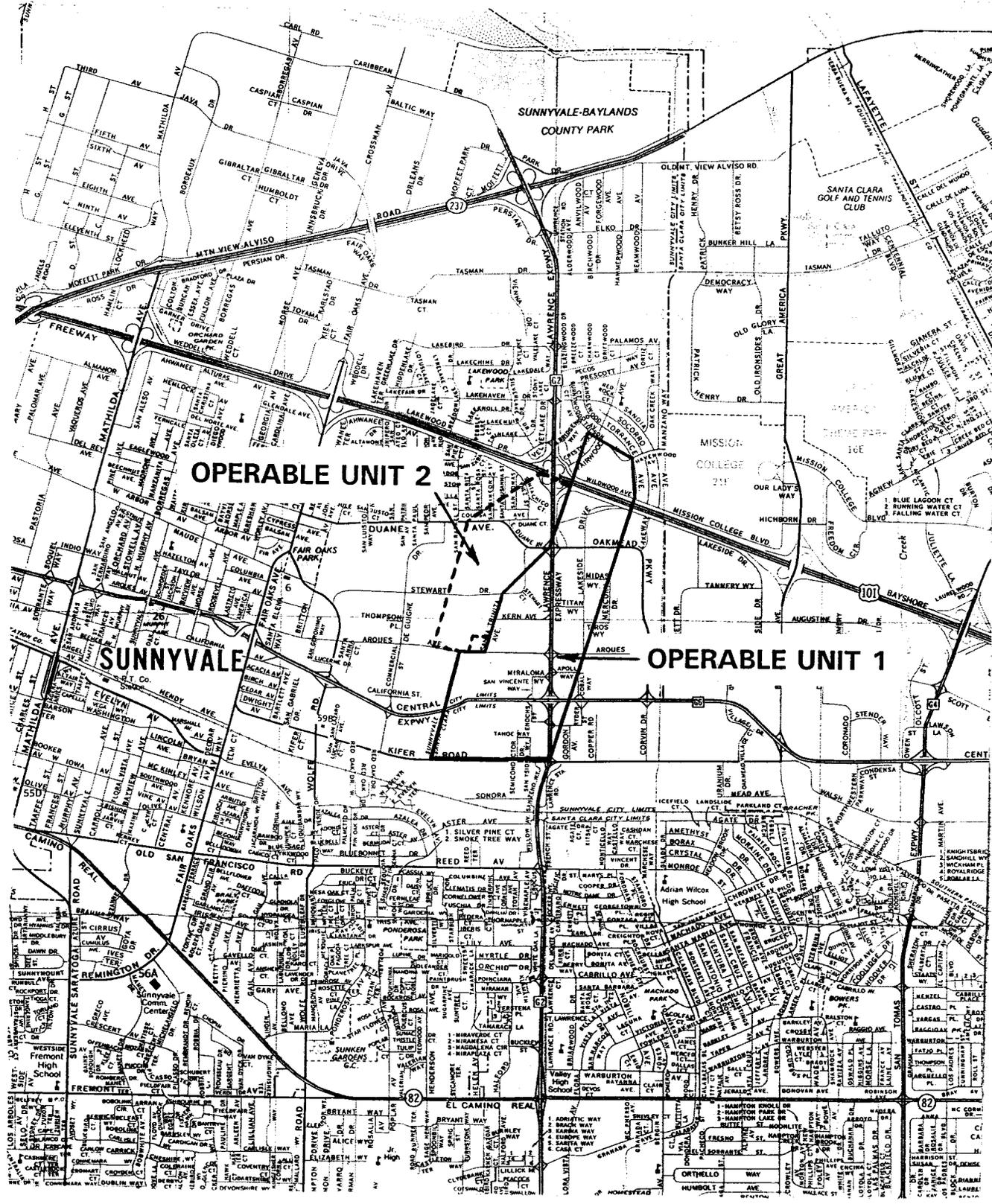
ADVANCED MICRO DEVICES SITE  
 OPERABLE UNIT 1

EXPLANATION	
	Boundary of Operable Unit 1
	Boundary of Operable Unit 2
	Boundaries of Subunits
	Approximate Lateral Extent of Known VOC Plume

STUDY AREA

NATIONAL SEMICONDUCTOR SITE

EASTERN SUNNYVALE, CA



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

**FIGURE 2**  
**GENERAL LOCATION MAP**

BASE MAP: H.M. GOUSHA CO., 1990