

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 88-123

SITE CLEANUP REQUIREMENTS AND RESCISSION OF
ORDER NO. 86-90

FAIRCHILD SEMICONDUCTOR CORPORATION
MICRO POWER SYSTEMS, INC.
PRUDENTIAL REALTY GROUP
ALFRED STREET FACILITY
SANTA CLARA, SANTA CLARA COUNTY

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

1. Micro Power Systems, Inc., Fairchild Semiconductor Corporation, and Prudential Realty Group, (hereinafter referred to as the dischargers), are or have been involved with facilities located at 3080-3100 Alfred Street, Santa Clara, California. Micro Power Systems, Inc., is the current tenant of the facility involved in the handling of some of the chemicals that have been found in the groundwater at the site. Fairchild Semiconductor Corporation, is a former tenant involved in the handling of some of the chemicals that have been found in the groundwater at the site. The Prudential Realty Group is the current property owner. The facilities are and have been used with semiconductor manufacture, test and assembly.
2. Subsurface investigations initiated in March 1982 discovered volatile organic chemicals in both soils and groundwater beneath the site. Based upon chemical usage data and soil and groundwater sampling results from the site, it is determined that both Micro Power and Fairchild have contributed to the release of chemicals to the soil and groundwater. A portion of the chemicals in the groundwater may be migrating onto the property from an offsite source.
3. The principal pollutants detected in the groundwater are 1,1,1-trichloroethane (TCA), and trichloroethylene (TCE). Groundwater investigations at the site began in 1982, and to date a total of 35 "A" aquifer monitoring wells have been installed to define the lateral and vertical extent of chemical migration from the site. In 27 of the 35 "A" aquifer monitoring wells sampled regularly at the site, concentrations of TCE have not exceeded 510 parts per billion (ppb). Higher concentrations, up to 2300 ppb, of TCE have been detected in the other "A" aquifer wells. Concentrations of TCA in all "A" aquifer monitoring wells have not exceeded

140 ppb. Concentrations of TCE and TCA in "B" aquifer monitoring wells have been at or near detection limits (0.5 ppb).

4. On November 19, 1986 the Board adopted Order No. 86-90 prescribing Waste Discharge Requirements for the dischargers establishing tasks and a time schedule to complete definition of the source and the extent of the contamination plume, and to implement interim remedial action. That order was amended on June 18, 1987 to clarify the extent of the responsibilities of each of the dischargers. Modification of the requirements contained in Order 86-90, as amended, is needed to update the schedule to complete and evaluate interim remedial actions, and complete the remedial investigation, feasibility study and proposed remedial action plan.
5. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives and beneficial uses for South San Francisco Bay and contiguous surface and groundwaters.
6. The existing and potential beneficial uses of the groundwater underlying and adjacent to the facility include:
 - a. Industrial process water supply
 - b. Industrial service supply
 - c. Domestic supply
 - d. Agricultural supply
7. The dischargers have caused or permitted, and threaten 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.
8. 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.
9. The Board has notified the dischargers 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.
10. 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 dischargers 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 pollutants are prohibited.

B. SPECIFICATIONS

1. The storage, handling, treatment or disposal of polluted soil or groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. Fairchild Semiconductor Corporation and Micro Power Systems, Inc., shall conduct monitoring activities as needed to define the current local hydrogeologic conditions, and the lateral and vertical extent of soil and groundwater pollution. Should monitoring results show evidence of plume migration, additional plume characterization may be required. Within 60 days of the Executive Officer's determination and actual notice to Prudential Insurance Company that Fairchild Semiconductor Corporation or Micro Power Systems, Inc. has failed to comply with this paragraph, Prudential Insurance Company of America, as landowner, shall comply with this provision.

C. PROVISIONS

1. Fairchild Semiconductor Corporation and Micro Power Systems, Inc., shall submit to the Regional Board acceptable monitoring program reports containing results of work performed according to a program prescribed by the Board's Executive Officer. Within 60 days of the Executive Officer's determination and actual notice to Prudential Insurance Company that Fairchild Semiconductor Corporation or Micro Power Systems, Inc. has failed to comply with this paragraph, Prudential Insurance Company of America, as landowner, shall comply with this provision.

2. Fairchild Semiconductor Corporation and Micro Power Systems, Inc., shall comply with Prohibitions A.1., A.2., and A.3., and Specifications B.1. and B.2. above, in accordance with the following time schedule and tasks (Within 60 days of the Executive Officer's determination and actual notice to Prudential Insurance Company that Fairchild Semiconductor Corporation or Micro Power Systems, Inc. has failed to comply with this paragraph, Prudential Insurance Company of America, as landowner, shall comply with this provision.):

COMPLETION DATE/TASK:

- a. COMPLETION DATE: November 15, 1988

TASK: **COMPLETION OF INTERIM REMEDIAL ACTIONS:** Submit a technical report acceptable to the Executive Officer documenting installation of and commencement of interim remedial operations. These operations shall provide sufficient hydraulic control and/or treatment facilities of adequate design to contain and cleanup the entire pollutant plume.

- b. COMPLETION DATE: June 15, 1989

TASK: a) **EVALUATE INTERIM HYDRAULIC CONTAINMENT:** Submit a technical report satisfactory to the Executive Officer which evaluates the effectiveness of the interim hydraulic containment system. Such an evaluation shall include, but need not be limited to, an estimation of the flow capture zone of the extraction wells, establishment of the cones of depression by field measurements, and presentation of chemical monitoring data.

- c. COMPLETION DATE: February 15, 1990

TASK: **PROPOSED FINAL CLEANUP OBJECTIVES AND ACTIONS:** Submit a technical report acceptable to the Executive Officer containing the result of the remedial investigation; an evaluation of the installed interim remedial measures; a feasibility study evaluating alternative final remedial measures; the recommended measures (remedial action plan) necessary to achieve final cleanup objectives; and the tasks and time schedule necessary to implement the recommended final remedial measures.

This technical report will include a projection of the cost, effectiveness, benefits and impact on public health, welfare, and environment of each alternative measure. Even though this site is neither listed on nor

proposed for the National Priority List and compliance with Federal guidance is not required, the remedial investigation and feasibility study shall consider guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300); Superfund Amendments and Reauthorization Act of 1986; CERCLA/SARA guidance documents with reference to Remedial Investigations and Feasibility Studies; and the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California."

3. Technical reports on compliance with the Prohibitions, Specifications, and Provisions of this Order shall continue to be submitted to the Board. On a monthly basis these reports shall consist of a brief letter report that, (1) summarizes work completed since submittal of the previous report, and work projected to be completed by the time of the next report, (2) identifies any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles, and (3) includes, in the event of non-compliance with Provisions 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.

On a quarterly basis the monthly technical report shall include, but need not be limited to, updated water table and piezometric surface contour maps, pollution concentration contour maps for all affected water bearing zones, cross-sectional geological maps describing the hydrogeological setting of the site, and appropriately scaled and detailed base maps showing the location of all monitoring wells and extraction wells, and identifying adjacent facilities and structures.

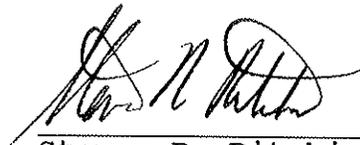
4. If the dischargers are delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the dischargers shall promptly notify the Executive Officer. In the event of such delays, the Board may consider modification of the task completion dates established in this Order.
5. All hydrogeological plans, specifications, reports, and documents shall be signed by or stamped with the seal of a registered geologist, engineering geologist or professional engineer.

6. 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
 - d. State Department of Health Services/TSCD
7. The discharger(s) shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:
 - a. Entry upon the dischargers' 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 groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the dischargers.
8. The discharger(s) shall file a report on any changes in site occupancy and ownership associated with the facility described in this Order.
9. The discharger(s) 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. 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. The dischargers shall direct all laboratories to maintain quality assurance/quality control records for a period of five years for Board review.
11. If any hazardous substance as defined in Section 13050(p) of the California Water Code 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 dischargers shall report such a discharge to this Board, at (415) 464-1255 on weekdays during office hours from 8 a.m. to 5 p.m., and to the Office of Emergency Services at (800)

852-7550 during non-office hours. A written report shall be filed with the 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.

12. The Board will review this Order periodically and may revise the requirements when necessary.
13. This Order supersedes Waste Discharge Requirements Order No. 86-90. Order No. 86-90 is no longer applicable and is hereby rescinded.

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 July 20, 1988.



Steven R. Ritchie
Executive Officer