

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 87-12  
NPDES NO. CA 0029157

WASTE DISCHARGE REQUIREMENTS FOR:

THE CITY OF MOUNTAIN VIEW  
MOUNTAIN VIEW SANITARY LANDFILL DEWATERING SYSTEM  
MOUNTAIN VIEW, SANTA CLARA COUNTY

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

1. The City of Mountain View, hereinafter called the discharger, by application dated October 3, 1986, has applied for issuance of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).
2. The discharger has utilized a dewatering system to control groundwater during excavation of landfill cells since July 1971. Groundwater from the dewatering system is channeled into a French drain that surrounds the landfill and discharges at a rate of approximately 500,000 gallons per day from the southwest corner of the landfill into Permanente Creek tributary to Mountain View Slough and South San Francisco Bay. In the summer of 1985, the discharge water was sampled and organic solvents were detected.
3. The discharger plans to construct a storm water pump station adjacent to the Mountain View Sanitary Landfill, Attachment A, which is incorporated herein and made a part of this Order, that necessitates the continued dewatering of the landfill in order to maintain the pump station construction excavation in a dry condition. The pump station construction is anticipated to take 11 months. At the completion of the pump station construction, the discharger plans on discontinuing dewatering activities; however, landfill dewatering, and subsequent discharging, may continue if it is necessary for maintaining the operation of the landfill and for other reasons.
4. The sources of groundwater pollution in the vicinity of the landfill are currently under investigation. The discharge currently contains about 178 parts per billion of volatile organic compounds (VOCs). The VOCs consist of Trans 1, 2 - Dichloroethene (DCE), Trichloroethene (TCE), and other organic solvents. The majority of the VOCs is believed to originate from Teledyne Semiconductor's and Spectra-Physics' property located south of the landfill and upgradient with respect to the shallow aquifer (see Attachment A) and

possibly other facilities, including the landfill.

5. The City of Mountain View Sanitary Landfill site is located in a former low-lying flood plain which has been raised from the flood zone using municipal refuse as fill. The site is underlain by a series of poorly cemented conglomerates, sandstones, siltstones, and claystones. Three water bearing zones, perched, shallow, and deep, underlie the site. The perched ground water, which exists at depths of four to 20 feet, is of poor quality. The quality of shallow water pockets which exist at a depth of from 20 to 80 feet below the ground surface varies greatly with location. The deep, usable ground water is protected by a massive clay layer extending from 60 to 100 feet below the ground surface. No natural hydraulic continuity exists between the shallow and deep water tables.
6. The City of Mountain View Sanitary Landfill is currently governed by this Board's Order No. 78-11, which prescribe waste discharge requirements for the landfill operation.
7. The existing and potential beneficial uses of Permanente Creek, Mountain View Slough and South San Francisco Bay are:
  - a. Water Contact Recreation
  - b. Non-contact Water Recreation
  - c. Wildlife Habitat
  - d. Fish Spawning
  - e. Industrial Service Supply
  - f. Navigation
  - g. Fish migration
  - h. Ocean Commercial and Sport Fishing
  - i. Preservation of Rare and Endangered Species
  - j. Shellfish Harvesting
  - k. Estuarine Habitat
8. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for Permanente Creek, Mountain View Slough and South San Francisco Bay.
9. The Basin Plan prohibits discharge of any wastewater which has particular characteristics of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of 10:1 and also prohibits discharge of wastewater south of the Dumbarton Bridge. The Board finds that the proposed discharge does not have particular characteristics of concern, provided the discharge limitations contained in this Order are met. Should studies indicate chronic effects not currently anticipated, the Board will review the requirements of this Order based upon Receiving Water Limitation C.l.e.

10. The Basin Plan prohibits discharge of "all conservative toxic and deleterious substances, above those levels which can be achieved by a program acceptable to the Board, to waters of the Basin." The discharger's proposed treatment system and associated operation, maintenance and monitoring plan constitutes an acceptable control program for minimizing the discharge of concentrations of organic chemicals to waters of the State.
11. Effluent limitations and toxic effluent standards established pursuant to Sections 301, 304, and 307 of the Clean Water Act, and amendments thereto are applicable to the discharge.
12. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source discharge have not been promulgated by the U.S. Environmental Protection Agency. Effluent limitations of this Order are based on the Basin Plan, State Plans and Policies, and best professional judgement. The limitations are considered to be those attainable utilizing BAT, in the judgement of the Board.
13. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
14. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge 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.
15. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the City of Mountain View, and any other persons or organizations that currently or in the future operate this site shall meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and shall also comply with the following:

A. Prohibitions

1. The discharge of waste or hazardous materials in a manner which will degrade the water quality or adversely affect beneficial uses of the groundwaters of the State is prohibited.

B. Effluent Limitations

1. The discharge of an effluent in excess of the following is prohibited:

	<u>Units</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>
a. Total VOCs*	ug/l	100	
b. Total Suspended Solids	mg/l	30	15

\* If the acute toxicity of any particular VOC is equal to or less than 0.5 mg/l, then the concentration in the discharge shall be equal to or less than 0.01 times the acute toxicity concentration.

2. The effluent shall not have a pH of less than 6.5 nor greater than 8.5.
3. In any representative set of samples, the waste as discharged shall meet the following limit of quality:

TOXICITY:

The survival of Rainbow Trout test fishes in 96 hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

C. Receiving Water Limitations

1. The discharge shall not cause the following conditions to exist in waters of the State at any place:
- a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended or deposited oil or other products of petroleum origin;
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. The discharger shall comply with all effluent and receiving water limitations and provisions of this Order immediately upon adoption, except Effluent Limitation B.1.a.
2. The discharger shall meet the following compliance time schedule in order to comply with Effluent Limitation B.1.a.

TASK	COMPLIANCE DATE
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a. Complete the installation of treatment facilities.	April 15, 1987
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b. Achieve full compliance.	May 1, 1987
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3. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:

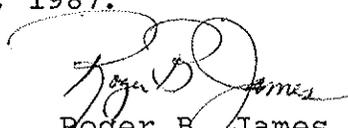
Mass Emission Limit in kg/d = Concentration Limit in mg/l x 3.79 x Actual Flow in mgd averaged over the time interval to which the limit applies.

4. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in the Self-Monitoring and Reporting Program adopted by the Board and as may be amended by the Executive Officer.
5. The discharger shall develop a contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
6. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulations

(40 CFR 122.41K).

7. The discharger shall comply with all the items of the attached "Standard Provisions" dated December 1986 except Provisions and Requirements A.12, B.2, B.3 and C.8.
8. Pursuant to Environmental Protection Agency regulations (40 CFR 122.42(a)) the discharger must notify the Regional Board as soon as it knows or has reason to believe that a discharge of a pollutant not limited by this permit has or will occur.
9. This order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator of the U.S. Environmental Protection Agency has no objections. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.
10. This Order expires on February 17, 1992. The discharger must file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9, of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

I, Roger B. James, 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 February 18, 1987.

  
Roger B. James  
Executive Officer

Attachments:  
Standard Provisions & Reporting  
Requirements dated December 1986  
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM  
FOR

CITY OF MOUNTAIN VIEW

MOUNTAIN VIEW SANITARY LANDFILL DEWATERING SYSTEM

MOUNTAIN VIEW, SANTA CLARA COUNTY

NPDES NO. CA 0029157

ORDER NO. 87-12

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

A. GENERAL

Basis

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383 and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16 and the Environmental Protection Agency's Discharge Monitoring Report (Form 3320-1).

Purpose

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DOHS) or a laboratory waived by the Executive Officer from obtaining a certification for these analyses by the DOHS. The director of the laboratory whose name appears on the certification or his/her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work including appropriate quality assurance/quality control procedures in his or her laboratory and shall sign all reports of such work submitted to the Regional Board.

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 defined as an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with daily maximum limits and instantaneous maximum limits. Grab samples represent only the condition that exists at the time the wastewater is collected.
2. A flow sample is defined as the accurate measurement of the average daily flow volume using a properly calibrated and maintained flow measuring device.
4. Duly authorized representative is one whose:
  - a. Authorization is made in writing by a principal executive officer or ranking elected official;
  - 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. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
5. Average values for daily and monthly values is obtained by taking the sum of all daily values divided by the number of all daily values measured during the specified period.
6. Daily Maximum limit is the total discharge in a calendar day for pollutants measured by mass or the average measurement obtained for other pollutants.

D. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Violation of Requirements

In the event the discharger is unable to comply with the conditions of the waste discharge requirements and prohibitions due to:

- a. Maintenance work, power failures, or breakdown of waste treatment equipment, or
- b. accidents caused by human error or negligence, or
- c. other causes, such as acts of nature,
- d. poor operation or inadequate system design,

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 two weeks of the telephone notification. The report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

The discharger shall file a written technical report at least 15 days prior to advertising for bid on any construction project which would cause or aggravate the discharge of waste in violation of requirements; said report shall describe the nature, costs and scheduling of all action necessary to preclude such discharge.

In addition, if the noncompliance caused by items (a), (b), (c) or (d) above is with respect to any of the effluent limits, the waste discharger shall promptly accelerate his monitoring program as required by the Board's Executive Officer for those constituents which have been violated. Such analyses shall continue until such time as the effluent limits have been attained, 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.

## 2. Bypass Reports

Bypass reporting shall be an integral part of regular monitoring program reporting. A report on bypassing of untreated units shall be made which will include cause, time and date, duration and estimated volume bypassed, method used in estimating volume, and persons and agencies notified. Notification to the Regional Board shall be made immediately by telephone (415-464-1255), followed by a written account within 15 days.

## 3. Self-Monitoring Reports

### a. Reporting Period

Written reports shall be filed regularly for each month by the thirtieth of the following month.

### b. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include:

- 1) Identification of all violations of waste discharge requirements found during the reporting period,
- 2) Details of the magnitude, frequency, and dates of all violations,
- 3) The cause of the violations, and
- 4) Discussion of the corrective actions taken or planned and the time schedule for completion. 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.

Monitoring reports and the letter transmitting reports shall be signed by a principal executive officer or his duly authorized representative of that person.

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."

c. Data Results

- 1) Results from each required analysis and observation shall be submitted in the monthly self-monitoring report. Results shall also be submitted for any additional analyses performed by the discharger for parameters for which effluent limits have been established by the Board.
- 2) The report shall also include a discussion of unexpected operational changes which could affect performance of the treatment system, such as flow fluctuations, maintenance shutdown, etc.
- 3) The report shall also include a table identifying by method number the analytical procedures used for analyses. Any special methods shall be identified and should have prior approval of the Board's Executive Officer.
- 4) Lab results should be copied and submitted as an appendix to the regular report.
- 5) A map accompanying the report, showing sampling locations and flow path to receiving waters.
- 6) The report shall include an annual waste summary by month for the current year for each parameter of the attached Table I, showing the minimum, maximum, and average for the month. The report for December shall include minimum, maximum, and average for the year.

E. DESCRIPTION OF SAMPLING STATIONS

1. INFLUENT

<u>Station</u>	<u>Description</u>
I-1	At any point in the groundwater collection system prior to treatment.

2. EFFLUENT

<u>Station</u>	<u>Description</u>
E-1	At any point in the outfall, at which all wastes tributary to the outfall are present.

3. RECEIVING WATER

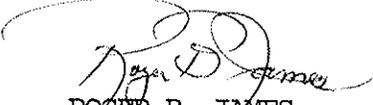
<u>Station</u>	<u>Description</u>
P-1	At any point in Permanente Creek about 25 feet downstream from where the discharge occurs.

F. SCHEDULE FOR SAMPLING, ANALYSES, AND MEASUREMENTS

The schedule for sampling, analyses, and measurements shall be that given as Table I.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 87-12.
2. Is effective on the date shown below.
3. May be revised at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

  
ROGER B. JAMES  
Executive Officer

Effective Date FEBRUARY 18, 1987

Attachments (2):

Table I

Attachment A: Location Map

**TABLE 1**

**SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS**

Sampling Station	I-1	E-1	P-1										
Type of Sample	G	G	G										
EPA 601/602	M	M	M										
pH (units)	M	M	M										
Flow Rate (gal/day)		D											
Temperature (°C)		M											
Toxicity		O											
Total Dissolved Solids (mg/l)		M											
Standard Observations		W											
Total Suspended Matter (mg/l)		M											

**LEGEND FOR TABLE**

**TYPES OF SAMPLES**

- G = grab sample
- C-24 = composite sample - 24-hour
- C-X = composite sample - X hours  
(used when discharge does not continue for 24-hour period)
- Cont = continuous sampling
- DI = depth-integrated sample
- BS = bottom sediment sample
- O = observation

**TYPES OF STATIONS**

- I = intake and/or water supply stations
- A = treatment facility influent stations
- E = waste effluent stations
- C = receiving water stations
- P = treatment facilities perimeter stations
- L = basin and/or pond levee stations
- B = bottom sediment stations
- G = groundwater stations

**FREQUENCY OF SAMPLING**

- |                     |  |                     |
|---------------------|--|---------------------|
| E = each occurrence | 2/H = twice per hour   | 2H = every 2 hours  |
| H = once each hour  | 2/W = 2 days per week  | 2D = every 2 days   |
| D = once each day   | 5/W = 5 days per week  | 2W = every 2 weeks  |
| W = once each week  | 2/M = 2 days per month                                       | 3M = every 3 months |
| M = once each month | 2/Y = once in March and<br>once in September                 | Cont = continuous   |
| Y = once each year  | Q = quarterly, once in<br>March, June, Sept.<br>and December |                     |

Bill Graham Presents Amphitheater Discharge

Ferrari discharge

City of Mountain View Landfill

Ferrari Parcel

Perimeter Drain

Amphitheatre Groundwater Barrier

Existing Mountain View Landfill Discharge

Groundwater Flow

PERMANENTE CREEK

Highway 101

TELEDYNE SPECTRA-PHYSICS COMPLEX

West Middlefield Road

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

ATTACHMENT A:  
Location Map -  
Mtn. View Sanitary Landfill  
Dewatering System

Scale 1" = 1000'

DRAWN BY: DATE: DRWG. NO.