

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

STAFF SUMMARY REPORT (Lou Gonzales)

DATE: March 12, 2008

ITEM: 13

SUBJECT: Fairchild Semiconductor System 19, 369 Whisman Road, Mountain View, Santa Clara County - Hearing to Consider Mandatory Minimum Penalty for Discharge in Violation of Effluent Limitations

CHRONOLOGY: The Board has not previously enforced against Fairchild for this facility.

DISCUSSION: Fairchild's discharge violated the General NPDES Permit for Extracted and Treated Groundwater three times in November and December 2006. Fairchild failed to replace the carbon in its treatment system in a timely fashion, which caused the violations identified in Table 1 of the attached complaint (Attachment A). Because Fairchild responded to correct the problem and prevent reoccurrence, the minimum penalty is appropriate.

In January 2008, we issued a complaint to Fairchild assessing \$9,000 in mandatory minimum penalties. Fairchild commented on the complaint and Board staff addressed all of Fairchild's issues (Appendices B and C). Fairchild has signed a waiver to a hearing (see Appendix D), and will pay the full penalty to the State's Cleanup and Abatement Account.

RECOMMENDATION: No action is necessary

File Number: 2189.8130 & 1210.48

Appendices: A. Complaint No. R2-2007-0080
B. Comments
C. Response to Comments
D. Signed Waiver

Appendix A

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

Complaint No. R2-2007-0080

**Mandatory Minimum Penalty
In the Matter of
Fairchild Semiconductor System 19
369 Whisman Road, Mountain View
Santa Clara County**

Overview

This complaint assesses \$9,000 in Mandatory Minimum Penalties (MMPs) to Fairchild Semiconductor System 19 (hereafter Discharger). The complaint is based on a finding of the Discharger's violations of Waste Discharge Requirements Order No. R2-2004-0055 (NPDES No. CAG912003) for the period between January 1, 2006, and June 30, 2007.

This MMP complaint is issued pursuant to Water Code Sections 13385(h)(1-2), 13385(i) and 13385.l. For a description of how MMPs are assessed, please see General Overview of MMP Calculations, attached.

A. Permit at the time of violations

On July 21, 2004, the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board) adopted Order No. R2-2004-0055 to regulate discharges of waste from facilities discharging extracted groundwater, treated to remove volatile organic carbons (VOCs). This permit is known as the VOC General Permit. The Discharger obtained coverage under the VOC General Permit on September 8, 2004.

B. Effluent Limitation

Order No. R2-2004-0055 specifies the following effluent limitation:

Parameter	Effluent Limit
vinyl chloride daily maximum	0.5 µg/L

C. Water Board Staff's Consideration of Violations

This complaint addresses three vinyl chloride violations, which were caused by breakthrough in the Discharger's treatment system. The Discharger sufficiently addressed the violations with followup monitoring and procedural changes.

The Discharger violated the vinyl chloride limit on November 17, 2006. In response, the Discharger accelerated its monitoring as required by the permit. Under the accelerated monitoring schedule, the Discharger violated the vinyl chloride limit on December 1, 2006, and again on December 4, 2006.

The Discharger determined that a breakthrough in the tertiary granular activated carbon (GAC) vessel had caused the three violations. The Discharger replaced the carbon in the

tertiary GAC vessel, to correct the immediate problem. The Discharger collected samples again on December 6, 2006, which showed a return to compliance.

To prevent future violations, the Discharger:

- Increased the frequency of GAC changes, and
- Evaluated the decrease of flow rates from low-concentration extraction wells that discharge into the treatment system, and

In sum, the minimum penalty is sufficient to address these violations because the Discharger acted appropriately to avoid reoccurrences.

D. Assessment of penalties

• **Serious Violations**

Vinyl chloride is a Group II pollutant. Serious violations for Group II pollutants are those that exceed the limitations by more than 20%. The three violations are serious, and therefore they are each subject to \$3,000 MMP, for a total of \$9,000.

• **Fourth or greater within running 180-day period**

MMPs also apply to violations that are the fourth or greater consecutive violation within a running 180-day period. The violations in this Complaint do not fall into this category.

• **Suspended MMP Amount**

Instead of paying the full penalty amount to the State Water Pollution Cleanup and Abatement Account, the Discharger may spend an amount of up to \$9,000 on a supplemental environmental project (SEP) acceptable to the Water Board. Any such amount expended to satisfactorily complete an SEP will be permanently suspended.

THE DISCHARGER IS HEREBY GIVEN NOTICE THAT:

1. The Executive Officer proposes that the Discharger be assessed MMPs in the total amount of \$9,000.
2. The Water Board will hold a hearing on this Complaint on March 11-12, 2008, unless the Discharger waives the right to a hearing by signing the included waiver and checks the appropriate box. By doing so, the Discharger agrees to:
 - a) Pay the full penalty as stated above within 30 days after the signed waiver becomes effective, or
 - b) Propose an SEP in an amount up to \$9,000. Pay the balance of the penalty within 30 days after the signed waiver becomes effective. The sum of the SEP amount and the amount of the fine to be paid to the State Water Pollution Cleanup and Abatement Account shall equal the full penalty as stated above.
3. If the Discharger chooses to propose an SEP, it must submit a preliminary proposal by the close of the public comment period, as stated in the attached public notice, to the Executive

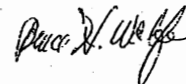
Officer for conceptual approval. Any SEP proposal shall also conform to the requirements specified in Section IX of the Water Quality Enforcement Policy, which was adopted by the State Water Resources Control Board on February 19, 2002, and the attached Standard Criteria and Reporting Requirement for Supplemental Environmental Project. If the proposed SEP is acceptable to the Executive Officer, the Discharger has 15 days, working with Water Board staff, to finish the proposal and establish SEP milestones. The final SEP proposal and milestones will then be posted for public comment and will be considered by the Water Board at its next scheduled hearing.

If the proposed SEP is not acceptable to the Executive Director, the Discharger has 30 days to make a payment for the suspended portion of the penalty. All payments, including any money not used for the SEP, must be payable to the State Water Pollution Cleanup and Abatement Account. Regular reports on the SEP implementation shall be provided to the Executive Officer according to the milestone schedule set forth in the final SEP proposal. The completion report for the SEP shall be submitted to the Executive Officer within 60 days of project completion.

4. The signed waiver will become effective on the day after the public comment period for this Complaint is closed, provided that there are no significant public comments on this Complaint during the public comment period. If there are significant public comments, the Executive Officer may withdraw the Complaint and reissue it as appropriate.
5. If a hearing is held, the Water Board may impose an administrative civil liability in the amount proposed or for a different amount; decline to seek civil liability; or refer the matter to the Attorney General to have a Superior Court consider imposition of a penalty.

Digitally signed
by Bruce Wolfe

Date:
2008.01.18
14:59:19 -08'00'



Bruce H. Wolfe
Executive Officer

January 18, 2008

Attachments: Table 1, Violations
Waiver
Standard Criteria and Reporting Requirement for Supplemental Environmental
Project
General Overview of MMP Calculations

Table 1 - VIOLATIONS

Item	Date of Violation	Effluent Limitation Described	Effluent Limit	Reported Value	Type of Violations ¹	Penalty	Start of 180 Days ²
1	11/17/2006	Vinyl chloride effluent daily maximum (ug/L)	0.5	0.8	C1, S	\$3,000	05/22/2006
2	12/01/2006	Vinyl chloride effluent daily maximum (ug/L)	0.5	1.1	C2, S	\$3,000	05/08/2006
3	12/04/2006	Vinyl chloride effluent daily maximum (ug/L)	0.5	1.3	C3, S	\$3,000	05/11/2006
	TOTAL					\$9,000	

¹ C = Count - The number that follows represents the number of violations the Discharger has had in the past 180 days, including this violation. C4 or higher means that a penalty under Water Code Section 13385(i) applies.

S = Serious, which means that a penalty under Water Code Section 13385(h) applies.

² This column documents the start date for counting violations that have occurred within the past 180 days, for the purpose of determining whether a penalty under Water Code Section 13385(i) applies.

WAIVER

If you waive your right to a hearing, the matter will be included on the agenda of a Water Board meeting but there will be no hearing on the matter, unless a) the Water Board staff receives significant public comment during the comment period, or b) the Water Board determines it will hold a hearing because it finds that new and significant information has been presented at the meeting that could not have been submitted during the public comment period. If you waive your right to a hearing but the Water Board holds a hearing under either of the above circumstances, you will have a right to testify at the hearing notwithstanding your waiver. Your waiver is due no later than February 19, 2008.

- Waiver of the right to a hearing and agreement to make payment in full.
By checking the box, I agree to waive my right to a hearing before the Water Board with regard to the violations alleged in Complaint No. R2-2007-0080 and to remit the full penalty payment to the State Water Pollution Cleanup and Abatement Account, c/o Regional Water Quality Control Board at 1515 Clay Street, Oakland, CA 94612, within 30 days after the Water Board meeting for which this matter is placed on the agenda. I understand that I am giving up my right to be heard, and to argue against the allegations made by the Executive Officer in this Complaint, and against the imposition of, or the amount of, the civil liability proposed unless the Water Board holds a hearing under either of the circumstances described above. If the Water Board holds such a hearing and imposes a civil liability, such amount shall be due 30 days from the date the Water Board adopts the order imposing the liability.

- Waiver of right to a hearing and agree to make payment and undertake an SEP.
By checking the box, I agree to waive my right to a hearing before the Water Board with regard to the violations alleged in Complaint No. R2-2007-0080, and to complete a supplemental environmental project (SEP) in lieu of the suspended liability up to \$9,000 and paying the balance of the fine to the State Water Pollution Cleanup and Abatement Account (CAA) within 30 days after the Water Board meeting for which this matter is placed on the agenda. The SEP proposal shall be submitted no later than February 19, 2008. I understand that the SEP proposal shall conform to the requirements specified in Section IX of the Water Quality Enforcement Policy, which was adopted by the State Water Resources Control Board on February 19, 2002, and be subject to approval by the Executive Officer. If the SEP proposal is not acceptable to the Executive Officer, I agree to pay the suspended penalty amount within 30 days of the date of the letter from the Executive Officer rejecting the proposed/revised SEP. I also understand that I am giving up my right to argue against the allegations made by the Executive Officer in the Complaint, and against the imposition of, or the amount of, the civil liability proposed unless the Water Board holds a hearing under either of the circumstances described above. If the Water Board holds such a hearing and imposes a civil liability, such amount shall be due 30 days from the date the Water Board adopts the order imposing the liability. I further agree to satisfactorily complete the approved SEP within a time schedule approved by the Water Board at its next regularly-scheduled hearing. I understand failure to adequately complete the approved SEP will require immediate payment of the suspended liability to the CAA.

Name (print)

Signature

Date

Title/Organization

Appendix B



February 18, 2008

Via: Hand Delivery

California Regional Water Quality Control Board – San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

RE: MMP Appeal - Fairchild Semiconductor System 19
File No. 2189.8130 & 1210.48 (cc/lrg/ceb)
Order No. R2-2004-0055
NPDES General Permit No. CAG912003

Dear Mr. Wolfe:

Weiss Associates (Weiss), on behalf of Schlumberger Oilfield Services (Schlumberger), would like to appear before the California Regional Water Quality Control Board – San Francisco Bay Region (SFRWQCB) at their meeting on March 11-12, 2008, to appeal the imposition of three Mandatory Minimum Penalties (MMPs). Schlumberger was notified of the assessment of three MMPs for their ground water treatment system 19 at 369 Whisman Road, Mountain View, California, in a letter and complaint dated January 18 with the subject file, order and permit numbers. The SFRWQCB bases for these MMPs are detailed in that letter. Based on our review of the bases for the MMPs and the NPDES permit requirements we believe that the:

- permit limit imposed for this discharge is inappropriate, and
- if the current permit limit is supported, then there should be only two violations, not three.

We outline below the main reasons for our request for a review of this assessment.

Inappropriate Permit Limit

In reviewing this MMP Complaint we question whether the Table B.1 Effluent Limits for “Discharge to Drinking Water Areas,” is appropriate for this discharge. Unfortunately, Weiss was not in a capacity to review the permit when it was issued on September 8, 2004 and appeal the permit limit at that time. However, the permit limits are specified in the “discharge authorization letter,” dated September 8, 2004 (Attachment A), and the final NPDES permit issued states on page 9, Section E.3., last sentence:

“.....The discharge authorization letter may be terminated or revised by the Executive Officer at any time.”

Therefore, as part of this MMP appeal, we request that the Executive Officer rectify a past oversight in assigning an inappropriate permit limit for this site, and issue a revised “discharge authorization letter,” with the correct permit limit criteria as explained below.

Schlumberger has been operating the subject ground water treatment system under the requirements of the current permit since it was issued. In reviewing the permit limits that precipitated these MMPs, we see that the footnote to Table B.1 Effluent Limits "Discharge to Drinking Water Areas," explains:

"Drinking water areas are defined as surface waters with the existing or potential beneficial uses of 'municipal and domestic supply' and 'groundwater recharge' (the latter includes recharge areas to maintain salt balance or to halt salt water intrusion into fresh water aquifers)."

The receiving surface water for this discharge under this permit is Stevens Creek. According to the "San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)" Stevens Creek beneficial uses do not include "municipal and domestic supply" or "groundwater recharge." (Attachment B.) Therefore, according to the terms of the permit, it seems that designating "Discharge to Drinking Water Areas" criteria to a discharge to Stevens Creek was an oversight. According to the terms of the permit, Table B.1, the "Discharge to Other Surface Water Areas," criteria should have been designated. If the correct criteria are applied then none of the reported discharges would be over the permit limit and there would be no violations for System 19.

Furthermore, even if the A water-bearing zone beneath System 19 at the MEW site may initially be considered potentially a "municipal or domestic ground water supply" or a "groundwater recharge" area, upon looking at the details of the site we soon realize this is not the case. The State Water Resources Board and the Santa Clara Valley Water District, the local water agency responsible for managing the ground water resource in the South Bay, prohibits use of the shallowest water-bearing layer for municipal or domestic ground water supply. This prohibition results from the requirement for a minimum 50 foot annular seal for any water supply well¹. This 50 foot requirement extends completely through the A water-bearing zone, and substantially into the B water-bearing zone at the MEW site. Because the A zone cannot be used for water supply due to ordinance requirements, there is no usable water supply source immediately beneath System 19 or its conveyances to Stevens Creek.

In addition, the system discharges into a storm drain that flows to Stevens Creek. At the location the storm drain empties into the Stevens Creek receiving water, Stevens Creek is a concrete lined channel (Attachment C). The discharge conveyance pipes and concrete channel are designed to contain the water they convey and therefore would transmit virtually no recharge to ground water. In addition, the MEW site is so close to San Francisco Bay that any recharge to the shallowest water-bearing layer (the A zone) would likely discharge to the Bay and not migrate downward sufficiently to recharge a deeper, used or potentially usable water supply aquifer.

In summary, because:

- Stevens Creek has no beneficial uses requiring application of the "Discharge to Drinking Water Areas" criteria,
- there is no usable ground water supply zone immediately beneath the receiving water, and
- the storm drain and concrete channel conveying the discharge would not recharge ground water,

¹ http://www.valleywater.org/Business_Info_and_Permits/Well_permits_and_inspections/Well_construction_destruction_standards/Constructing_water_supply_wells.shtm and Chapter II and Appendix I of the Department of Water Resources Bulletin No. 74, "Water Well Standards: State of California," 2) Standards for the Construction and Destruction of Wells and other Deep Excavations in Santa Clara County," by the Santa Clara Valley Water District

there is no evidence that System 19 discharges to a “Drinking Water Area,” as defined in Table B.1. Hence, we request correcting the discharge limit criteria to the “Discharge to Other Surface Water Areas,” limit in Table B.1, and apply the correct limit to the discharge noted in the complaint. We do not believe it is the SFRWQCB’s or the State’s intent to penalize a discharger for exceeding erroneously low and inappropriate permit limits.

Number of Violations

The Self-Monitoring Program for Order No. R2-2004-0055, NPDES No. CAG912003, states in section D.2.c.:

“If analytical results are received showing any limit (Effluent Limitation B.1) is exceeded, a confirmation sample shall be taken within 24 hours and results known within 24 hours of the sampling. If any limit for a constituent is exceeded in the confirmation sample, the discharge shall be terminated until the cause of the violation is found and corrected. In this case, the initial and confirmed exceedances will both be considered violations.....”

We accept the determination for these two violations, if the existing permit limits must be enforced. However, we do not believe the alleged third violation, resulting from the required receiving water sampling, is appropriate. This sample was required in Table A of the Self-Monitoring for VOC General NPDES Permit, as shown in the column labeled “RD-1/RU-1” (Attachment D). The “V” notation is defined as:

“ReceivingWater sampling should be performed within 24 hour after an exceedance is confirmed in E-1 and analyzed for that specific exceeded compound and the Dissolved Oxygen level.”

Hence, this sample was only taken because the terms of the permit required collecting a sample 50 feet upstream (RU-1) and 50 feet downstream (RD-1) of the effluent discharge point into Stevens Creek. To comply with the permit requirements we had to turn the system on and let the effluent flow to the receiving water to collect the sample. Therefore, we could not collect the effluent to treat it or dispose of it elsewhere to avoid the discharge. We turned the system off immediately after we collected the receiving water samples. No volatile organic compounds (VOCs) were detected in either of the receiving water samples.

We collected an effluent sample at this time only because of the Self-Monitoring Program permit requirement D.3.a. which states:

“Receiving water samples shall be collected on days coincident with sampling effluent.”

It seems quite unfair to assess another MMP because we complied with additional terms of the permit. The system was turned on for a brief time, sufficient only to collect the required samples, and was not continuing to discharge in violation of the permit. Therefore, we request that the Water Board rescind the third MMP because it is penalizing a discharger for complying with the terms of the NPDES permit.

Conclusion

We respectfully request the Water Board consider our claims and:

- Grant Fairchild System 19 appropriate discharge requirements consistent with the surface water beneficial uses, and

- Recognize that the current discharge requirements are not appropriate and should not have been used to assess the currently imposed penalties, or
- If the forgoing cannot be currently granted, then, at a minimum, rescind the third violation that was incurred not because the system was running and producing out-of-compliance effluent, but rather only because of strict compliance with the terms of permit sampling upon a confirmed exceedance.

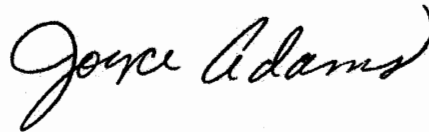
We would appreciate the opportunity to discuss the technical merits or deficiencies of our appeal with the SFRWQCB staff prior to the March 11-12, 2008 Water Board meeting, and would be pleased to meet with the appropriate staff at their earliest convenience.

If you have any questions, or would like to discuss any aspect of this appeal, please contact me at 510-450-6162 or jea@weiss.com, or Richard Weiss at 510-450-6133 or rbw@weiss.com.

Thank you for your time and consideration.

Sincerely,

Weiss Associates



Joyce Adams
Senior Project Manager

Enclosures:

Attachment A. – Discharge Authorization Letter dated September 8, 2004.

Attachment B. – Excerpt from Table 2-1: Existing and Potential Beneficial Uses of Water Bodies in the San Francisco Bay Region Showing Beneficial Uses of Stevens Creek. (From SFRWQCB Basin Plan dated January 18, 2007)

Attachment C. – Photo of Concrete Lined Stevens Creek Receiving Water at System 19 Discharge Location.

Attachment D. – Table A – Schedule for Sampling, Measurements, and Analyses from Self-Monitoring Program for Order No. R2-2004-0055, NPDES No. CAG912003.

JEA:caz

R:\Schlumberger\02-MEW Fairchild\corresp.08\Sys 19 WQCB MMP Appeal_fnl.doc

ATTACHMENT A

DISCHARGE AUTHORIZATION LETTER DATED SEPTEMBER 8, 2004

MMP Appeal-Fairchild Semiconductor System 19
February 19, 2008



California Regional Water Quality Control Board

San Francisco Bay Region



Terry Tamminen
Secretary for
Environmental
Protection

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
<http://www.swrcb.ca.gov/rwqcb2>

Arnold Schwarzenegger
Governor

Date: September 8, 2004
File No: 2189.8130 (DW)

Fairchild Semiconductor Corporation
Attn: Clifford Kirchof
225 Schlumberger Drive
Sugarland, TX 77478

Subject: Authorization to discharge treated groundwater under the requirements of Order No. R2-2004-0055, NPDES Permit No. CAG912003 (VOC)

Facility: Fairchild Semiconductor Corporation, Groundwater Treatment System No. 19 located at 369 North Whisman Road, Mountain View, Santa Clara County, CA 94043

Dear Mr. Kirchof:

Water Board staff has reviewed your application dated January 21, 2004 for the above facility. We have determined that the discharge is eligible under the requirements of Order No. R2-2004-0055, for discharge or reuse of extracted and treated groundwater resulting from the cleanup of groundwater polluted by volatile organic compounds. Authorization to discharge treated groundwater from the above facility is hereby granted providing the following conditions are met:

1. You must comply with all applicable requirements of Order No. R2-2004-0055 and the associated Self-Monitoring Program (SMP). **The effluent shall not contain constituents in excess of the limits listed under the column titled "Discharge to Drinking Water Areas" in the table B.1, on page 6, of the Order.** A copy of Order No. R2-2004-0055 and the SMP are attached. You may also obtain an electronic copy of this Order and the SMP from http://www.swrcb.ca.gov/rwqcb2/npdes_gen_permit.htm.
2. A system including three 5,000-pound GAC units connected in series will treat the extracted groundwater. Treated water will be discharged through a storm sewer to Stevens Creek (Latitude 37 Deg. 25 Min. 04 Sec; Longitude 122 Deg. 03 Min. 21 Sec.)
3. **The maximum discharge from the groundwater treatment system shall not exceed 225 gallons per minute.** The discharge shall not cause pollution, contamination, or nuisance.
4. Self-Monitoring Reports shall be submitted on a calendar quarter basis, no later than 30 days following the last day of the quarter. These reports should be directed to the responsible staff member at this office, Derek Whitworth. Reports should be submitted as an electronic PDF file to the Water Board's FTP site. Details for submitting electronic documents are given in the link "FTP Guide for Dischargers" at

Preserving, enhancing, and restoring the San Francisco Bay Area's waters for over 50 years



Recycled Paper

Mr. Clifford Kirchof

- 2 -

September 8, 2004

<http://www.swrcb.ca.gov/rwqcb2/>. Please note that effective January 1, 2004, monitory penalties will be assessed for submitting late monitoring reports pursuant to Water Code Section 13385.1 (you may review California Assembly Bill 1541 for more information).

This authorization letter shall be effective immediately and expires on July 21, 2009, the expiration date of Order No. R2-2004-0055. If you need to continue discharging after that date, you must file an application as explained in Provision E.20 of the Order not later than January 21, 2009.

Notice is hereby given that it is the responsibility of any person proposing to discharge to a storm drain system or other watercourses to obtain authorization to discharge from the agency having jurisdiction over the use of the storm drain system or watercourse. This discharge authorization is conditional and may be terminated at any time.

Please contact Derek Whitworth of my staff at (510) 622-2349 or dw@rb2.swrcb.ca.gov if you have any questions.

Sincerely,

Bruce H. Wolfe
Executive Officer

Attachment:
Order No. R2-2004-0055

Cc w/ attachment:
Maile Smith, R.G.
Weiss Associates
350 E. Middlefield Road
Mountain View, CA 94043-4004

W/o attachment:
Suzanne McNulty, Water Board

ATTACHMENT B

**EXCERPT FROM TABLE 2-1:EXISTING AND POTENTIAL BENEFICIAL
USES OF WATER BODIES IN THE SAN FRANCISCO BAY REGION
SHOWING BENEFICIAL USES OF STEVENS CREEK
(From SFRWQCB Basin Plan Dated January 18, 2007)**

MMP Appeal-Fairchild Semiconductor System 19
February 19, 2008



**SAN FRANCISCO BAY BASIN (REGION 2)
WATER QUALITY CONTROL PLAN
(BASIN PLAN)**

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

1515 Clay Street, Suite 1400
Oakland, CA 94612
(510) 622-2300

Incorporating all amendments approved by the Office of
Administrative Law as of January 18, 2007.

0 20
Miles



Table 2-1: Existing and Potential Beneficial Uses of Water Bodies in the San Francisco Bay Region

COUNTY	Human Consumptive Uses										Aquatic Life Uses						Wildlife Use			Recreational Uses	
	AGR	MUN	FRSH	GWR	IND	PROC	COMM	SHEL	COLD	EST	MAR	MIGR	RARE	SPWN	WARM	WILD	REC-1	REC-2	NAV		
<i>MARIN COUNTY</i>																					
Pacific Ocean (Marin)					E		E	E		E	E	E	E	E		E	E	E	E		
Abbotts Lagoon										E						E	E	E	E		
Drakes Estero							E	E		E		E	E	E		E	E	E	E		
East Schooner Creek							E	E	E							E	P	E	E		
Limantour Estero							E	E		E		E	E	E		E	E	E	E		
Coast Creek							E	E	E							E	E	E	E		
Alamere Creek								E								E	P	E	E		
Crystal Lake								E								E	P	P	E		
Bolinas Lagoon							E	E		E	E	E	E	E		E	E	E	E		
Pine Gulch Creek									E							E		E	E		
Easkoot Creek																					
McKenna Gulch Creek																					
Morses Gulch Creek																					
Pike County Gulch Creek																					
Redwood Creek (Marin)	E	E	E					E	E							E	E	E	E		
Rodeo Lagoon								E	E							E	E	E	E		
Rodeo Creek								E	E	E			E	E		E	E	E	E		
Tomales Bay							E			E	E	E	E	E		E	E	E	E		
Millerton Gulch																					

MARIN COASTAL BASIN

COUNTY	Human Consumptive Uses										Aquatic Life Uses						Wildlife Use			Recreational Uses		
	AGR	MUN	FRSH	GWR	IND	PROC	COMM	SHEE	COLD	EST	MAR	MIGR	RARE	SPWN	WARM	WILD	REC-1	REC-2	NAV			
San Francisco Bay South				E			E	E	E	E		E	E	P	E	E	E	E	E			
ALAMEDA COUNTY																						
Lake Elizabeth								E					E	E	E			E				
SAN MATEO AND SANTA CLARA COUNTIES																						
San Francisco Creek								E			E		E	E	E	E	P	P				
Felt Lake	E												E	E	E	E	E	E				
Los Trancos Creek																						
West Union Creek																						
Searsville Lake	E							E					E	E	E	E	E	E				
SANTA CLARA COUNTY																						
Madero Creek								E			E		E	E	E	E	E	E				
Permanente Creek								E					E	E	E	E	E	E				
Stevens Creek								E			E		E	P	E	E	E	E				
Stevens Reservoir	E			E				E			E		E	E	E	E		E				
Calabazas Creek	E			E				E					E	E	E	E	E	E				
Saratoga Creek	E		E	E				E					E	E	E	E	E	E				
Guadalupe Reservoir								E			P		P	E	E	E	P	E				
Los Gatos Creek	E	E		E				E			P		P	E	E	E	P	E				
Vasona Lake				E				E					E	E	E	E	E	E				
Lexington Reservoir	E							E					E	E	E	E	E	E				
Lake Elsman	E							E					E	E	E	E	P	E				
Campbell Percolation Pond				E				E					E	E	E	E	E	E				
Guadalupe Creek				E				E					E	E	E	E	E	E				
Guadalupe Reservoir	E			E				E					E	E	E	E	E	E				
Alamitos Creek																						
Calero Reservoir	E			E									E	E	E	E	E	E				
Almaden Reservoir	E			E									E	E	E	E	E	E				
Herbert Creek								E														

SANTA CLARA BASIN

County	Groundwater Basin Name ¹	Groundwater Sub-Basin ¹	Basin Number ¹	MUN ²	PROC ³	IND ⁴	AGR ⁵	FRESH ⁶
San Mateo	Westside D ⁷	--	2-35D	E	E	E	P	--
San Mateo	Santa Clara Valley	San Mateo Plain	2-9.03	E	E	E	P	--
San Mateo and Santa Clara	Santa Clara Valley ⁸	Santa Clara	2-9.02	E	E	E	E	--
San Mateo	Half Moon Bay Terrace	--	2-22	E	P	P	E	--
San Mateo	San Gregorio Valley	--	2-24	E	P	P	E	--
San Mateo	Pescadero Valley	--	2-26	E	P	P	E	--
San Mateo	San Pedro Valley	--	2-36	P	P	P	P	--
Solano	Suisun-Fairfield Valley	--	2-3	E	E	E	E	--
Sonoma and Marin	Petaluma Valley	--	2-1	E	P	P	E	--
Sonoma	Napa-Sonoma Valley	Sonoma Valley	2-2.02	E	P	P	E	--
Sonoma and Marin	Wilson Grove Formation Highlands	--	1.59	E	P	P	E	--
Sonoma and Marin	Wilson Grove Formation Highlands	--	1.59		See RB1 Basin Plan ⁹			
Sonoma	Kenwood Valley	--	2-19	E	P	P	E	--
Sonoma	Napa - Sonoma Volcanic Highlands	--	2-23	X	X	X	X	X
Santa Clara	Gilroy - Hollister Valley	Llagas Area	3-3.01		See RB3 Basin Plan ¹⁰			

Notes:

1. Department of Water Resources (DWR) Bulletin 118 "California Groundwater", 2003.
2. MUN = Municipal and domestic water supply.
3. PROC = Industrial process water supply.
4. IND = Industrial service water supply.
5. AGR = Agricultural water supply.
6. FRESH = Freshwater replenishment to surface water; designation will be determined at a later date; for the interim, a site-by-site determination will be made.
7. The existing and potential beneficial uses for groundwater basins listed in the 1995 Basin Plan (Table 2-3) were assigned to the new groundwater basins based on the geographic location of the old basins compared to the new basins. The basin names, such as Westside A,

Westside B, etc., are informal names assigned by the Water Board to preserve the beneficial use designations in the 1995 Basin Plan and do not represent sub-basins identified by the Department of Water Resources.

- 8. The Santa Clara Valley groundwater basin/Santa Clara groundwater sub-basin is also known as Coyote Valley.
- 9. This groundwater basin is also located in the North Coast Region (RB1); beneficial uses of groundwater are specified in the Basin Plan for RB1.
- 10. This groundwater basin is also located in the Central Coast Region (RB3); beneficial uses of groundwater are specified in the Basin Plan for RB3.

E = Existing beneficial uses; based on best available information.

P = Potential beneficial uses; based on best available information.

X = This groundwater basin was not listed in the 1995 Basin Plan; designation will be determined at a later date; for the interim, a site-by-site determination will be made.

See DWR Bulletin 118 (2003) for groundwater basin characteristics.

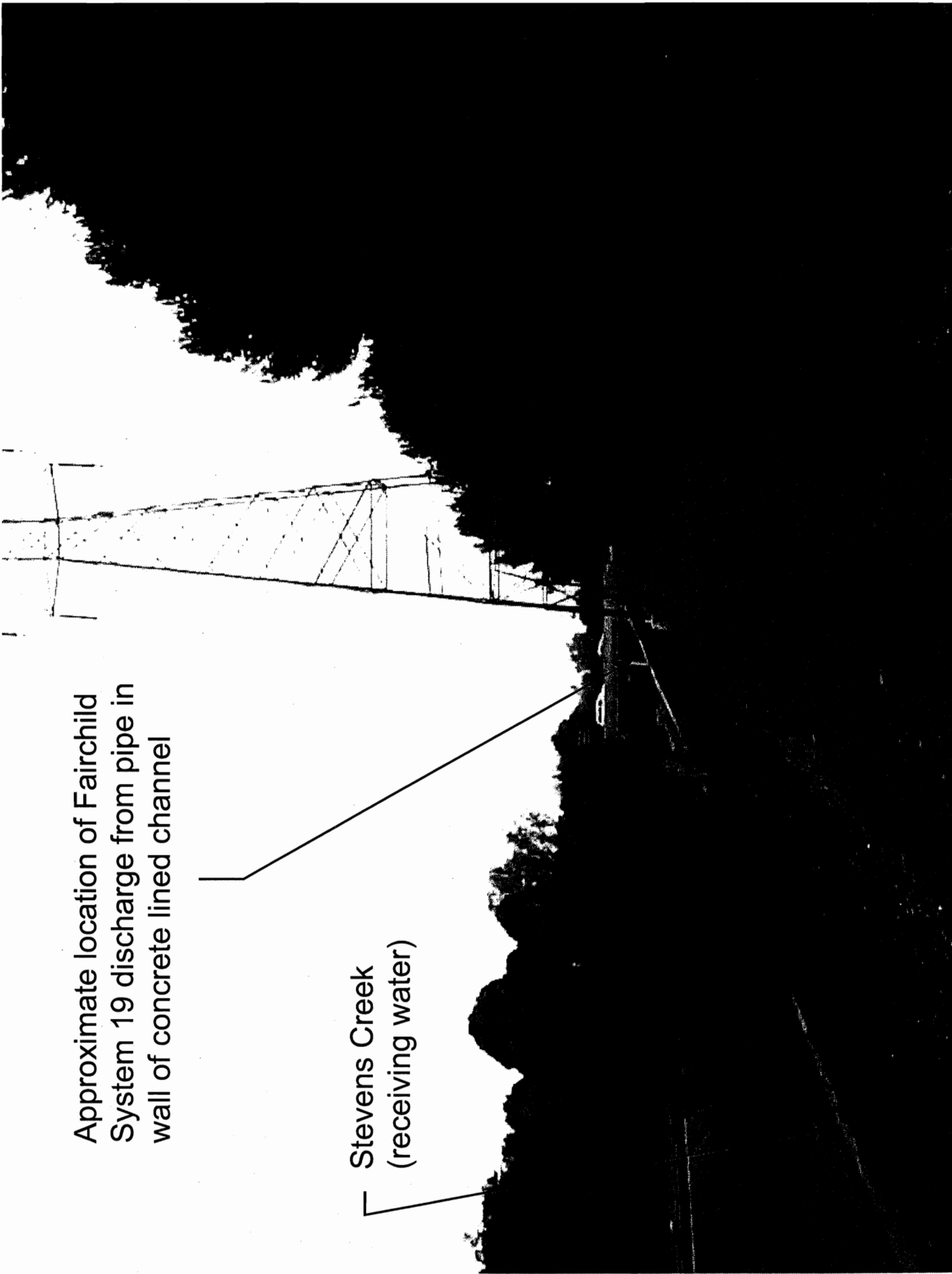
ATTACHMENT C

**PHOTO OF CONCRETE LINED STEVENS CREEK RECEIVING WATER AT
SYSTEM 19 DISCHARGE LOCATION**

MMP Appeal-Fairchild Semiconductor System 19
February 19, 2008

Approximate location of Fairchild
System 19 discharge from pipe in
wall of concrete lined channel

Stevens Creek
(receiving water)



Attachment C Photo of Concrete Lined Stevens Creek Receiving Water at System 19 Discharge Location



ATTACHMENT D

**TABLE A —SCHEDULE FOR SAMPLING, MEASUREMENTS, AND
ANALYSES FROM SELF-MONITORING PROGRAM FOR
ORDER NO. R2-2004-0055, NPDES NO. CAG912003**

MMP Appeal-Fairchild Semiconductor System 19
February 19, 2008

Self-Monitoring Program for VOC General NPDES Permit, Order No. R2-2004-0055, NPDES Permit No. CAG912003

TABLE A - SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	U.S. EPA Std. Method*	I-1	E-1	RD-1/RU-1
Type of sample (unit is µg/L unless noted differently)		Grab	Grab	Grab
Flow Rate (gpm & gpd) ¹			Continuous	
Fish Toxicity, 96-hr (% survival)			Q/Y	
Turbidity (NTU)			D/Q/Y	
pH (units)		D/M/Q/Y	D/M/Q/Y	V
Dissolved Oxygen (mg/L & % saturation)				V
Total Dissolved Solids (mg/L) (construction and dewatering projects)			D/M	
All Applicable Standard Observations ^{2&3} (no unit)			M	V
Temperature (°C)			D/M/Q/Y	
Hardness (mg/L as CaCO ₃)				T
Salinity (parts per thousand)				T
Volatile Organic Compounds	8260	2/Y	D/M	V
1,4-Dioxane ^{7&8}	8270		2/Y	
Semi Volatile Organic Compounds ⁸	8270		2/Y	
Antimony Total ⁴	204		3Y	
Arsenic Total ⁴	206		3Y	
Beryllium Total ⁴	210		3Y	
Cadmium Total ⁴	213		3Y	
Chromium Hexavalent ^{4&5}	218		3Y	
Copper Total ⁴	220		3Y	
Cyanide Total ⁴	335		3Y	
Lead Total	239		3Y	
Mercury Total (nanogram/L)	1631**		3Y	
Nickel Total ⁴	249		3Y	
Selenium Total ⁴	270		3Y	
Silver Total ⁴	272		3Y	
Thallium Total ⁴	279		3Y	
Zinc Total ⁴	289		3Y	
Polynuclear Aromatic Hydrocarbons (PAHs) ⁶	8310	Y	2/Y	
Benzene, Toluene, Ethylbenzene, and/or Total Xylenes ⁶	8020	D/M	D/M	V
Methyl Tertiary Butyl Ether (MTBE) ⁶	8020	D/M	D/M	V
Total Petroleum Hydrocarbons ⁶ (as Gasoline and Diesel)	8015 Modified	D/M	D/M	V

Sampling Station	U.S. EPA Std. Method*	I-1	E-1	RD-1/RU-1
Type of sample (unit is µg/L unless noted differently)		Grab	Grab	Grab
Ethylene Dibromide (EDB) ⁶	504	Y	2/Y	V
Tertiary Amyl Methyl Ether (TAME), DiIsopropyl Ether (DIPE), Ethyl Tertiary Butyl Ether (ETBE), Tertiary Butyl Alcohol (TBA), Ethanol, and/or Methanol ⁶	8260	Y	2/Y	
Asbestos (MFL) (if required in the authorization letter)	100.1	A	A	
Dioxin/Furan (if required in the authorization letter)	1613		A	
Organochlorine Pesticides and PCBs ⁶ (if required in the authorization letter)	608	A	A	
Definitions: ug/L = microgram per liter or parts per billion (ppb), g/day = grams per day, gpm = gallons per minute, mg/L = milligram per liter or parts per million (ppm), gpd = gallons per day, MFL = million fibers per liter				
Types of Stations: I=Influent, E=Effluent, RD=Receiving Water Downstream, RU=Receiving Water Upstream				
Frequency of Sampling				
M Once each month				
Y Once during the first week of start up; annually thereafter				
2/Y Once during the first week of start up; twice per year thereafter				
3Y Once during the first week of start up; every three years thereafter				
D/M Once during the first and last day of start up; monthly thereafter				
D/Y Once during the first and last day of start up; annually thereafter				
Q/Y Quarterly for first year of operation, annually thereafter				
D/Q/Y Once during the first and last day of start up; quarterly for first year of operation, annually thereafter				
D/M/Q/Y Once during the first and last day of start up; monthly for first year of operation, quarterly for the second year, and annually thereafter. In case of pH analysis, only for facilities not performing pH-adjusting chemical addition				
V Receiving Water sampling should be performed within 24 hours after an exceedance is confirmed in E-1 and analyzed for that specific exceeded compound and the Dissolved Oxygen level				
A Once during the first year of operation; annually thereafter if compounds present in first sample				
T Sampling should be performed when Cadmium, Chromium (total), Copper, Lead, Nickel, Silver, or Zinc triggers are exceeded				
Notes				
* U. S. EPA Standard Method or equivalent				
** The Mercury samples shall be analyzed by U.S. EPA Method 1631 with a recommended reporting limit of 0.2 nanogram per liter. The ultra clean sampling technique shall be used in compliance with U.S. EPA Method 1669. The ultra-clean <i>sampling</i> technique is integral to this effort and will require specially cleaned containers and special sampling procedures. Method 1631 contains specific requirements for including field blanks, trip blanks, and equipment blanks. The method also specifies a maximum 48-hour holding time for samples prior to acidification				
Footnotes				
1. dischargers may report weekly flow volume (from flow-totalizers) in lieu of reporting instantaneous flow, provided that the instantaneous flow rate does not exceed the permitted maximum flow rate. If a portion of the effluent is being reclaimed, report the total flow and the volume diverted to reclamation				
2. see Section G Standard Observations				
3. also for reclaimed water, if applicable				
4. metal samples shall be analyzed for total (unfiltered) constituents with a recommended reporting limits of 0.2 ng/l for mercury; 0.25 ug/l for cadmium and silver; 1 ug/l for nickel, thallium, and zinc; 2 ug/l for Arsenic and selenium, and 0.5 ug/l for other metals				
5. or optional total chromium analysis				
6. if known to be present in the influent				
7. reporting limit shall not exceed 3 ug/l (some laboratories use selective ion mode or isotope dilution to achieve reporting limits such as 0.5, 1, or 2 ug/l for 1, 4 Dioxane)				
8. if not detected, with adequate laboratory reporting limits, the dischargers may request to reduce the monitoring schedule to once every three years				

Appendix C