

sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all parameters for which effluent limitations are specified. Monitoring for additional constituents, for which no effluent limitations are established, is also required to provide data for future completion of RPAs for them.

A. Influent Monitoring

Influent monitoring requirements for flow rate, BOD₅ and TSS allows determination of compliance with this Order's 85 percent removal requirement.

B. Effluent Monitoring

The MRP retains most effluent monitoring requirements from the previous permit. Changes in effluent monitoring are summarized as follows.

- Monitoring for settleable matter is no longer required, as the effluent limitation for this parameter has not been retained by the Order.
- This Order requires continuous monitoring of the effluent for pH. This is consistent with determining compliance with the federal technology-based requirements based on Secondary Treatment Standards at 40 CFR Part 133.
- Routine monitoring in effluent is required for copper, mercury, selenium, cyanide, dioxin-TEQ, bis(2-ethylhexyl)phthalate, and total ammonia - those toxic pollutants with effluent limitations established by the order. For mercury, however, subsequent to the adoption of the mercury watershed permit, mercury levels do not apply to this permit. Monitoring for all other priority toxic pollutants must be conducted in accordance with frequency and methods described in the August 6, 2001 Letter – Requirements for Monitoring of Pollutants in Effluent and Receiving Water to Implement New Statewide Regulations and Policy.

C. Bypasses or Sewer Overflow Monitoring

The MRP retains monitoring requirements to record observations related to bypasses or sewer overflows.

D. Whole Effluent Toxicity Testing Requirements

1. **Acute Toxicity.** Monthly 96-hour bioassay testing is required to demonstrate compliance with the effluent limitation for acute toxicity.
2. **Chronic Toxicity.** Chronic whole effluent toxicity testing is required annually in order to demonstrate compliance with the Basin Plan's narrative toxicity objective. The frequency of monitoring is increased for the term of this Order over that of the previous Order, which required chronic toxicity monitoring twice per the five year term of the permit. The increase in monitoring frequency reflects the importance placed by the Regional Water Board on chronic toxicity monitoring as a

measurement of the cumulative effect of toxic pollutants, which, by themselves, may not be at levels of concern.

E. Receiving Water Monitoring

On April 15, 1992, the Regional Water Board adopted Resolution No. 92-043 directing the Executive Officer to implement the Regional Monitoring Program for the San Francisco Bay. Subsequent to a public hearing and various meetings, Regional Water Board staff requested major permit holders in this region, under authority of section 13267 of California Water Code, to report on the water quality of the estuary. These permit holders responded to this request by participating in a collaborative effort, through the San Francisco Estuary Institute. This effort has come to be known as the San Francisco Bay Regional Monitoring Program for Trace Substances. This Order specifies that the Discharger shall continue to participate in the Regional Monitoring Program, which involves collection of data on pollutants and toxicity in water, sediment and biota of the estuary.

F. Other Monitoring Requirements

- 1. Sludge Monitoring.** The Discharger shall adhere to sludge monitoring requirements required by 40 CFR Part 503.
- 2. Bypass Monitoring.** During any time when bypassing occurs such that all wastewater does not receive full secondary treatment, other than wet weather discharges or bypasses addressed in the Order and self monitoring program, the discharge must be monitored for effluent quality.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions (Provision VI.A)

Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachments D and G of this Order.

NPDES regulations at 40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in this Order. 40 CFR 123.25(a)(12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified at 40 CFR 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code 13387(e).

B. Monitoring and Reporting Requirements (Provision VI.B)

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are contained in the MRP (Attachment E), Standard Provisions and SMP, Part A (Attachment G) of the Permit. This provision requires compliance with these documents and is based on 40 CFR 122.63. The Standard Provisions and SMP, Part A, are standard requirements in almost all NPDES permits issued by the Regional Water Board, including this Order. They contain definitions of terms, specify general sampling and analytical protocols, and set out requirements for reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board's policies. The MRP contains a sampling program specific for the facility. It defines the sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all parameters for which effluent limitations are specified. Monitoring for additional constituents, for which no effluent limitations are established, is also required to provide data for future completion of RPAs for them.

C. Special Provisions (Provision VI.C)

1. Re-opener Provisions

These provisions are based on 40 CFR 123 and allow future modification of this Order and its effluent limitations as necessary in response to updated WQOs that may be established in the future.

2. Special Studies and Additional Monitoring Requirements

- a. Effluent Characterization Study. This Order does not include effluent limitations for the selected constituents addressed in the August 6, 2001 Letter that do not demonstrate Reasonable Potential, but this provision requires the Discharger to continue monitoring for these pollutants as described in the August 6, 2001 Letter and as specified in the MRP of this Order. If concentrations of these constituents increase significantly, the Discharger will be required to investigate the source of the increases and establish remedial measures, if the increases result in reasonable potential to cause or contribute to an excursion above the applicable WQC. This provision is based on the Basin Plan and the SIP.
- b. Ambient Background Receiving Water Study. This provision is based on the Basin Plan, the SIP, and the August 6, 2001 letter for priority pollutant monitoring. As indicated in the Order, this requirement may be met by participating in the collaborative BACWA study.
- c. Optional Mass Offset Plan: This option is provided to encourage the Discharger to further implement aggressive reduction of mass loads to Central San Francisco Bay. If the Discharger wishes to pursue a mass offset program, a mass offset plan for reducing 303(d) listed pollutants to the same receiving water body needs to be submitted for Regional Water Board approval. The Regional

Water Board will consider any proposed mass offset plan and potentially amend this Order accordingly.

3. Best Management Practices and Pollution Minimization Program

This provision is based on Chapter 4 of the Basin Plan and 2.4.5 of the SIP.

4. Construction, Operation, and Maintenance Specifications

- a. Wastewater Facilities, Review and Evaluation, Status Reports: This provision is based on the previous Order and the Basin Plan. See Section VI.C.4 of this Order for specific requirements.
- b. Operations and Maintenance Manual, Review and Status Reports: This provision is based on the Basin Plan, the requirements of 40 CFR §122, and the previous Order. See Section VI.C.4 of this Order for specific requirements.
- c. Contingency Plan, Review and Status Reports: This provision is based on the Basin Plan, the requirements of 40 CFR §122, and the previous Order. See Section VI.C.4 of this Order for specific requirements.

5. Special Provisions for Municipal Facilities (POTWs Only)

- a. Sludge Management Practices: This provision is based on the Basin Plan (Chapter 4) and 40 CFR Parts 257 and 503.
- b. Utility Analysis and Implementation Schedule for Wet Weather Bypass of Secondary Treatment: This provision is based on 40 CFR 122.41(m). It requires that the Discharger reevaluate prior to the next permit reissuance that it has explored every feasible alternative to eliminate blending.
- c. Sanitary Sewer Overflows and Sewer System Management Plan: This provision is to explain this Order's requirements as they relate to the Discharger's conveyance system, and to promote consistency with the State Water Resources Control Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Overflow (SSO WDRs) and a related Monitoring and Reporting Program (Order No. 2006-0003-DWQ). The bases for these requirements are described elsewhere in this Fact Sheet. See Section VI.C.5.c. of this Order for specific requirements.

6. Corrective Measures to Minimize Blending

This provision is based on NPDES regulations at 40 CFR 122.41(m). Seventeen blending events occurred from January 2004 through June 2007. The average volume of blended effluent during this period was 0.85 million gallons. The Discharger's infeasibility analysis indicates that elimination or reduction of blending is currently infeasible in the short-term. The provision is necessary to ensure the Discharger implements corrective measures to minimize or eliminate blending consistent with 40 CFR 122.41(m).

7. Compliance Schedule for dioxin-TEQ

The compliance schedule and the requirement to submit reports on further measures to reduce concentrations of dioxin-TEQ were issued to ensure compliance with final limits and are based on the Basin Plan Section 4.7.6, and 40 CFR 122.47(a)(3). As previously described, the Discharger submitted an Infeasibility Report, and the Regional Water Board staff confirmed its assertions. Based on this, a compliance schedule is appropriate for dioxin-TEQ because the Discharger has made good faith and reasonable efforts towards characterizing the sources. However, time to allow additional effort is necessary to achieve compliance. Maximum allowable compliance schedules are granted to the Discharger for this pollutant because of the considerable uncertainty in determining effective measures (e.g., pollution prevention, treatment upgrades) that should be implemented to ensure compliance with the final limit. It is appropriate to allow the Discharger sufficient time to first explore analytical and source control measures before requiring it to propose further actions, such as treatment plant upgrades, that are likely to be much more costly. This approach is supported by Basin Plan Section 4.13, which states: "In general, it is often more economical to reduce overall pollutant loadings into the treatment systems than to install complex and expensive technology at the plant."

8. Action Plan for Cyanide

The proposed cyanide site-specific objectives, if approved, will require action plans for source control. Implementation of a similar action plan for cyanide at this time would ensure that any increase in cyanide limits would be consistent with limits expected with the site-specific objectives. Therefore, the antidegradation analysis prepared for the site-specific objectives could also apply to these limits, which would therefore comply with antidegradation policies (i.e., increasing the limits would not degrade the quality of the receiving water).

9. Action Plan for Copper

Since the proposed SSO for copper has associated action plans for source control, this provision requires an action plan to implement source control requirements once the alternate limits become effective.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, the San Francisco Bay Regional Water Board, is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Sanitary District No. 5 of Marin County Wastewater Treatment Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through an advertisement in the Marin Independent Journal on February 21 and March 5, 2008.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order, Attention: Derek Whitworth or by email: dwhitworth@waterboards.ca.gov.

To receive a full response from Regional Water Board Staff and to be considered by the Regional Water Board, written comments must have been received at the Regional Water Board offices by 5:00 p.m. on **Monday, March 24, 2008**.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: July 9, 2008
Time: 9:00 a.m.
Location: Elihu Harris State Office Building
1515 Clay Street, 1st Floor Auditorium
Oakland, CA 94612

Contact: Derek Whitworth, (510) 622-2349, email DWhitworth@waterboards.ca.gov

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/sanfranciscobay> where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., except from noon to 1:00 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling 510-622-2300.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Derek Whitworth at 510-622-2349 (e-mail at DWhitworth@waterboards.ca.gov).

Attachment to Fact Sheet

Table

- 1 Criteria**

- 2 Data Input for Reasonable Potential Analysis**

- 3 Reasonable Potential Analysis**

- 4 Water Quality Based Effluent Limits**

- 5 Feasibility Analysis**

Marin County Sanitary District
Applicable Water Quality Objectives/Criteria

# In CTR	PRIORITY POLLUTANTS	Most Stringent Criteria				Basin Plan Criteria				CTR Water Quality Criteria (ug/L)				RITDS for WRAIAs			Conversion Factor (CF)			Site-Specific Translators							
		Lowest (most stringent) Criteria	Human Health Criterion	Lowest Chronic Criterion	Lowest Acute Criterion	4-day	1-hr	24-hr Max	1-hr	24-hr	1-hr	24-hr	1-hr	24-hr	1-hr	24-hr	1-hr	24-hr	1-hr	24-hr	1-hr	24-hr	1-hr	24-hr	1-hr	24-hr	
6	Barium	0.05	0.05	0.05	0.05																						
6	Chloride	No Criteria																									
6	Chlorine	0.05	0.05	0.05	0.05																						
6	Cadmium	0.005	0.005	0.005	0.005																						
6	Chromium (VI)	0.05	0.05	0.05	0.05																						
6	Copper	0.05	0.05	0.05	0.05																						
6	Lead	0.05	0.05	0.05	0.05																						
6	Nickel	0.05	0.05	0.05	0.05																						
6	Phenol	0.05	0.05	0.05	0.05																						
6	Selenium	0.05	0.05	0.05	0.05																						
6	Sulfate	No Criteria																									
6	Turbidity	No Criteria																									
6	Zinc	0.05	0.05	0.05	0.05																						
7	Aluminum	0.05	0.05	0.05	0.05																						
7	Boron	0.05	0.05	0.05	0.05																						
7	Calcium	No Criteria																									
7	Carbon Dioxide	No Criteria																									
7	Chlorine	0.05	0.05	0.05	0.05																						
7	Copper	0.05	0.05	0.05	0.05																						
7	Iron	0.05	0.05	0.05	0.05																						
7	Magnesium	No Criteria																									
7	Manganese	0.05	0.05	0.05	0.05																						
7	Nitrate	0.05	0.05	0.05	0.05																						
7	Nitrite	0.05	0.05	0.05	0.05																						
7	Phosphate	0.05	0.05	0.05	0.05																						
7	Sulfate	No Criteria																									
7	Total Dissolved Solids	No Criteria																									
7	Total Suspended Solids	No Criteria																									
7	Zinc	0.05	0.05	0.05	0.05																						
8	Ammonia	0.05	0.05	0.05	0.05																						
8	Ammonium	0.05	0.05	0.05	0.05																						
8	Boron	0.05	0.05	0.05	0.05																						
8	Calcium	No Criteria																									
8	Chlorine	0.05	0.05	0.05	0.05																						
8	Copper	0.05	0.05	0.05	0.05																						
8	Iron	0.05	0.05	0.05	0.05																						
8	Magnesium	No Criteria																									
8	Manganese	0.05	0.05	0.05	0.05																						
8	Nitrate	0.05	0.05	0.05	0.05																						
8	Nitrite	0.05	0.05	0.05	0.05																						
8	Phosphate	0.05	0.05	0.05	0.05																						
8	Sulfate	No Criteria																									
8	Total Dissolved Solids	No Criteria																									
8	Total Suspended Solids	No Criteria																									
8	Zinc	0.05	0.05	0.05	0.05																						

Main, County, County District
 HPASS Final Report
 Data Input for RPA

CTR No	Entity Data (0/0/0)	Are all data points non- missing (0/0/0)	EFFICIENT DATA		IMPROVED DATA		Any of Error Fields (0/0/0)	Enter the max value (0/0/0)	Enter the min value (0/0/0)	Input Check	If the data is not correct enter the reason (0/0/0)	If the data is not correct enter the reason (0/0/0)
			Enter the value (0/0/0)	Enter the value (0/0/0)	Enter the value (0/0/0)	Enter the value (0/0/0)						
1	Agency	Y	Y	0.7	0.7	Y	Y	1.8	No Checks			
2	Agency	Y	Y	6.4	6.4	Y	Y	2.81	No Checks			
3	Agency	Y	Y	0.05	0.05	Y	Y	0.15	No Checks			
4	Agency	Y	Y	1.0	1.0	Y	Y	4.4	No Checks			
5	Agency	Y	Y	0.3	0.3	Y	Y	2.4	No Checks			
6	Agency	Y	Y	0.5	0.5	Y	Y	0.33	No Checks			
7	Agency	Y	Y	0.033	0.033	Y	Y	0.088	No Checks			
8	Agency	Y	Y	8.9	8.9	Y	Y	3.73	No Checks			
9	Agency	Y	Y	6	6	Y	Y	0.38	No Checks			
10	Agency	Y	Y	0.2	0.2	Y	Y	0.92	No Checks			
11	Agency	Y	Y	0.2	0.2	Y	Y	0.71	No Checks			
12	Agency	Y	Y	70	70	Y	Y	5.1	No Checks			
13	Agency	Y	Y	13	13	Y	Y	0.4	No Checks			
14	Agency	Y	Y	6.37E-07	6.37E-07	Y	Y	0.0015	No Checks			
15	Agency	Y	Y	3.01E-09	3.01E-09	Y	Y	0.0015	No Checks			
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17	Agency	Y	Y	0.7	0.7	Y	Y	0.83	No Checks			
18	Agency	Y	Y	1.0	1.0	Y	Y	0.05	No Checks			
19	Agency	Y	Y	0.27	0.27	Y	Y	0.5	No Checks			
20	Agency	Y	Y	0.45	0.45	Y	Y	0.08	No Checks			
21	Agency	Y	Y	0.19	0.19	Y	Y	0.5	No Checks			
22	Agency	Y	Y	0.34	0.34	Y	Y	0.05	No Checks			
23	Agency	Y	Y	0.31	0.31	Y	Y	0.5	No Checks			
24	Agency	Y	Y	5.8	5.8	Y	Y	0.05	No Checks			
25	Agency	Y	Y	0.28	0.28	Y	Y	0.04	No Checks			
26	Agency	Y	Y	0.37	0.37	Y	Y	0.5	No Checks			
27	Agency	Y	Y	0.2	0.2	Y	Y	0.05	No Checks			
28	Agency	Y	Y	0.2	0.2	Y	Y	0.5	No Checks			
29	Agency	Y	Y	0.42	0.42	Y	Y	0.5	No Checks			
30	Agency	Y	Y	0.98	0.98	Y	Y	0.5	No Checks			
31	Agency	Y	Y	0.32	0.32	Y	Y	0.5	No Checks			
32	Agency	Y	Y	1.6	1.6	Y	Y	0.5	No Checks			
33	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
34	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
35	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
36	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
37	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
38	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
39	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
40	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
41	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
42	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
43	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
44	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
45	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
46	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
47	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
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49	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
50	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
51	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
52	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
53	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
54	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
55	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
56	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
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61	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
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64	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
65	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
66	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
67	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
68	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
69	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
70	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
71	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
72	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
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74	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
75	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
76	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
77	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			
78	Agency	Y	Y	0.3	0.3	Y	Y	0.5	No Checks			

CTR No.	EFFLUENT DATA		BACKGROUND DATA		7) Enter other information in the SIP Page 4. If information is not available, enter "N/A".
	Effluent Data 1/1/79	Effluent Data 1/1/79	Background Data 1/1/79	Background Data 1/1/79	
80	Y	0.4	Y	0.24	No Criteria
81	Y	0.4	Y	0.24	No Criteria
82	Y	0.4	Y	0.24	No Criteria
83	Y	0.3	Y	0.29	No Criteria
84	Y	0.4	Y	0.36	No Criteria
85	Y	0.3	Y	0.337	No Criteria
86	Y	0.03	Y	0.011	No Criteria
87	Y	0.4	Y	0.00022	No Criteria
88	Y	0.2	Y	0.3	No Criteria
89	Y	0.1	Y	0.31	No Criteria
90	Y	0.2	Y	0.2	No Criteria
91	Y	0.3	Y	0.3	No Criteria
92	Y	0.05	Y	0.0215	No Criteria
93	Y	0.4	Y	0.25	No Criteria
94	Y	0.4	Y	0.3	No Criteria
95	Y	0.4	Y	0.3	No Criteria
96	Y	0.4	Y	0.001	No Criteria
97	Y	0.4	Y	0.001	No Criteria
98	Y	0.03	Y	0.001	No Criteria
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101	Y	0.3	Y	0.3	No Criteria
102	Y	0.03	Y	0.001	No Criteria
103	Y	0.03	Y	0.001	No Criteria
104	Y	0.001	Y	0.000413	No Criteria
105	Y	0.001	Y	0.0007534	No Criteria
106	Y	0.001	Y	0.000053	No Criteria
107	Y	0.001	Y	0.000053	No Criteria
108	Y	0.001	Y	0.00117	No Criteria
109	Y	0.001	Y	0.000453	No Criteria
110	Y	0.001	Y	0.000213	No Criteria
111	Y	0.002	Y	0.000254	No Criteria
112	Y	0.001	Y	0.000453	No Criteria
113	Y	0.001	Y	0.000453	No Criteria
114	Y	0.001	Y	0.000453	No Criteria
115	Y	0.002	Y	0.0004	No Criteria
116	Y	0.002	Y	0.000453	No Criteria
117	Y	0.002	Y	0.000453	No Criteria
118	Y	0.002	Y	0.000453	No Criteria
119	Y	0.002	Y	0.000453	No Criteria
120	Y	0.002	Y	0.000453	No Criteria
121	Y	0.002	Y	0.000453	No Criteria
122	Y	0.002	Y	0.000453	No Criteria
123	Y	0.002	Y	0.000453	No Criteria
124	Y	0.002	Y	0.000453	No Criteria
125	Y	0.002	Y	0.000453	No Criteria
126	Y	0.002	Y	0.000453	No Criteria
127	Y	0.002	Y	0.000453	No Criteria
128	Y	0.002	Y	0.000453	No Criteria
129	Y	0.002	Y	0.000453	No Criteria
130	Y	0.002	Y	0.000453	No Criteria
131	Y	0.002	Y	0.000453	No Criteria
132	Y	0.002	Y	0.000453	No Criteria
133	Y	0.002	Y	0.000453	No Criteria
134	Y	0.002	Y	0.000453	No Criteria
135	Y	0.002	Y	0.000453	No Criteria
136	Y	0.002	Y	0.000453	No Criteria
137	Y	0.002	Y	0.000453	No Criteria
138	Y	0.002	Y	0.000453	No Criteria
139	Y	0.002	Y	0.000453	No Criteria
140	Y	0.002	Y	0.000453	No Criteria
141	Y	0.002	Y	0.000453	No Criteria
142	Y	0.002	Y	0.000453	No Criteria
143	Y	0.002	Y	0.000453	No Criteria
144	Y	0.002	Y	0.000453	No Criteria
145	Y	0.002	Y	0.000453	No Criteria
146	Y	0.002	Y	0.000453	No Criteria
147	Y	0.002	Y	0.000453	No Criteria
148	Y	0.002	Y	0.000453	No Criteria
149	Y	0.002	Y	0.000453	No Criteria
150	Y	0.002	Y	0.000453	No Criteria
151	Y	0.002	Y	0.000453	No Criteria
152	Y	0.002	Y	0.000453	No Criteria
153	Y	0.002	Y	0.000453	No Criteria
154	Y	0.002	Y	0.000453	No Criteria
155	Y	0.002	Y	0.000453	No Criteria
156	Y	0.002	Y	0.000453	No Criteria
157	Y	0.002	Y	0.000453	No Criteria
158	Y	0.002	Y	0.000453	No Criteria
159	Y	0.002	Y	0.000453	No Criteria
160	Y	0.002	Y	0.000453	No Criteria
161	Y	0.002	Y	0.000453	No Criteria
162	Y	0.002	Y	0.000453	No Criteria
163	Y	0.002	Y	0.000453	No Criteria
164	Y	0.002	Y	0.000453	No Criteria
165	Y	0.002	Y	0.000453	No Criteria
166	Y	0.002	Y	0.000453	No Criteria
167	Y	0.002	Y	0.000453	No Criteria
168	Y	0.002	Y	0.000453	No Criteria
169	Y	0.002	Y	0.000453	No Criteria
170	Y	0.002	Y	0.000453	No Criteria
171	Y	0.002	Y	0.000453	No Criteria
172	Y	0.002	Y	0.000453	No Criteria
173	Y	0.002	Y	0.000453	No Criteria
174	Y	0.002	Y	0.000453	No Criteria
175	Y	0.002	Y	0.000453	No Criteria
176	Y	0.002	Y	0.000453	No Criteria
177	Y	0.002	Y	0.000453	No Criteria
178	Y	0.002	Y	0.000453	No Criteria
179	Y	0.002	Y	0.000453	No Criteria
180	Y	0.002	Y	0.000453	No Criteria
181	Y	0.002	Y	0.000453	No Criteria
182	Y	0.002	Y	0.000453	No Criteria
183	Y	0.002	Y	0.000453	No Criteria
184	Y	0.002	Y	0.000453	No Criteria
185	Y	0.002	Y	0.000453	No Criteria
186	Y	0.002	Y	0.000453	No Criteria
187	Y	0.002	Y	0.000453	No Criteria
188	Y	0.002	Y	0.000453	No Criteria
189	Y	0.002	Y	0.000453	No Criteria
190	Y	0.002	Y	0.000453	No Criteria
191	Y	0.002	Y	0.000453	No Criteria
192	Y	0.002	Y	0.000453	No Criteria
193	Y	0.002	Y	0.000453	No Criteria
194	Y	0.002	Y	0.000453	No Criteria
195	Y	0.002	Y	0.000453	No Criteria
196	Y	0.002	Y	0.000453	No Criteria
197	Y	0.002	Y	0.000453	No Criteria
198	Y	0.002	Y	0.000453	No Criteria
199	Y	0.002	Y	0.000453	No Criteria
200	Y	0.002	Y	0.000453	No Criteria

Note: 1) Background data used for rates is from monitoring location BC10 (Craba Bays Island).

Marin County Sanitary District
WQBEL Calculations

PRIORITY POLLUTANTS	Copper	Selenium	Cyanide	Dioxin TEQ	Bis(2-Ethylhexyl)Phthalate	Total Ammonia (acute)	Total Ammonia (chronic)
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Basis and Criteria Type	Alternate limits using SSOs	NTR Criterion for the Bay	Alternate Limits Using Prop SSOs	CTR HH	CTR HH	Basin Plan Aq. Life	Basin Plan Aq. Life
CTR Criteria - Acute	5.5	1.0	9.4				
CTR Criteria - Chronic	4.2	1.0	2.9				
SSO Criteria - Acute (December 2004) (Diss.)	3.9						
SSO Criteria - Chronic (December 2004) (Diss.)	2.5						
Water Effects ratio (WER)	2.4	1	1	1	1	1	1
Lowest WQO	4.2	5.0	1.0	1.4E-08	5.9	4650	1190
Site Specific Translator - MDEL	0.88						
Site Specific Translator - AMEL	0.74						
Dilution Factor (D) (if applicable)	9	0	74	0	9	82	87
No. of samples per month	4	4	4	4	4	4	30
Aquatic life criteria analysis required? (Y/N)	Y	Y	Y	N	Y	Y	Y
HH criteria analysis required? (Y/N)	N	N	Y	Y	N	N	N
Applicable Acute WQO	13.1	10.64	1	9.4		4650	
Applicable Chronic WQO	10.1	8.11	1	2.9			1190
HH Criteria	2.55	0.39	220000	1.4E-08	5.9	0	
Background (Maximum Conc for Aquatic Life Calc)			0.4	7.1E-08	0.091	170	90
Background (Average Conc for Human Health Calc)			0.4	5.00E-08	0.091		
Is the pollutant Bioaccumulative (Y/N)? (e.g., Hg)	N	Y	N	Y	N	N	N
ECA acute	108	20.00	45.4	90.4		372010	No Acute WQO
ECA chronic	78	5.00	15.4	25.4		9	Chronic WQO
ECA HH			16469970	2198996	59.2		96880
No. of data points <10 or at least 80% of data reported non detect? (Y/N)	N	N	N	N	Y	N	N
Avg of effluent data points	4.7	1.6	3.5	3.5		18041	18041
Std Dev of effluent data points	1.0	1.4	2.7	2.7		7120	7120
CV calculated	0.22	0.91	0.8	0.8	N/A	0.39	0.39
CV (Selected) - Final	0.22	0.91	0.8	0.8	0.60	0.39	0.39
ECA acute mult99	0.62	0.22	0.25	0.25		0.444	0.953
ECA chronic mult99	0.78	0.40	0.44	0.44		165057	165057
LTA acute	66.8	51.6	11.4	22.7		165057	165057
LTA chronic	61	45	20.1	11		165057	165057
minimum of LTAs	61	45	11.41	11		165057	165057
AMEL mult95	1.2	1.2	1.7	1.7	1.6	1.35	1.12
MDEL mult99	1.6	1.6	4.0	4.0	3.1	2.25	2.25
AMEL (on life)	72	54	19.9	19.6		223546	103704
MDEL (on life)	98	73	45.4	44.7		372010	208173
MDEL/AMEL Multiplier	1.36	1.36	2.28	2.28	2.01	1.7	2.01
AMEL (human hbh)			16499870	2199996	1.4E-08	58.181	0
MDEL (human hbh)			37868541	5022473	2.8E-08	116.72208	0
minimum of AMEL for Aq. life vs HH	72.0	54.0	19.9	19.6	1.4E-08	58.181	103704
minimum of MDEL for Aq. Life vs HH	97.9	73.3	45.4	44.7	2.8E-08	116.72208	208173
Current limit in permit (30-day average)							
Current limit in permit (daily)	37 (interim)	37 (interim)	25 (interim)	25 (interim)			
Final limit - AMEL	72	54	20	20	1.4E-08	58	103704
Final limit - MDEL	98	73	45	45	2.8E-08	117	208173
Max Eff Conc (MEC)	6.6	6.6	13	13	3.2E-09	7	41000

Marin County Sanitary District
Feasibility Analysis

CTR No.	Analyte	Number of Samples	Number of NDs	Percent ND	Lowest Criteria (ug/L)	MEC (ug/L)	Background Maximum Concentration (ug/L)	Reason	Best Fit Distribution	Sample Mean	Sample Standard Deviation	95 th vs AMEL	99 th vs MDEL	Mean vs LTA	Feasible to Comply?	Previous Limit (ug/L) (Interim Daily Average)	Performance Based Interim Limit (PBEL) if Necessary (ug/L) (2)	Selected (most stringent) Interim Limit (5)
6	Copper	36	0	0%	4.2	6.6	2.55	MEC >= C [6.6 ug/l vs 4.2 ug/l]	Lognormal	1.5	0.22	6.6 < 72	7.7 < 98	4.7 < 61	Yes	37 (Interim Daily Average)	---	---
10	Selenium	36	6	17%	5.0	6.0	0.39	MEC >= C [6.0 ug/l vs 5.0 ug/l]	Lognormal	0.12	0.90	4.9 > 3.7	9.1 > 9.0	1.6 < 2.0	No	50 (Interim Daily Average)	17 (4)	17 (4)
14	Cyanide	36	6	17%	1.0	13	ND (0.4)	MEC >= C [13 ug/l vs 1.0 ug/l]	Lognormal	0.98	0.79	9.8 < 19.9	17 < 45.4	3.5 < 11.4	Yes	25 (Interim Daily Average)	29 (6)	25 (6)
16-TEQ	Dioxin TEQ	2	0	0%	1.4E-08	3.2E-09	7.1E-08	B > C and detected in Effluent	(2)	(2)	(2)	(1)	(1)	(1)	Yes (7)	---	---	---
68	Bis(2-Ethylhexyl)Phthalate	4	0	0%	5.9	7.0	0.091	MEC >= C [7.0 ug/l vs 5.9 ug/l]	(2)	(2)	(2)	(1)	(1)	(1)	Yes (8)	---	---	---
	Total Ammonia	186	0	0%	1190	41000	90	MEC >= C [41000 ug/l vs 1190 ug/l]	Normal	18041	7120	29754 < 103704	34603 < 208173	18041 < 92365	Yes	---	---	39402

Notes:
Effluent data for this RPA is from April 2004 to March 2007 for most inorganic pollutants, and from March 2002 to September 2003 for most organic pollutants. For this RPA, background data for toxics was from the Yerba Buena Island RMP station (BC10) from March 1993 to August 2003.

Qualified Data Handling - "J" or "DNQ" qualified data are used at the estimated value for determining MEC and for calculating mean and standard deviation. The mean and standard deviation are then used to calculate the coefficient of variation and 95th,

All values in ug/L.

When results for an analyte are found to be log-normally distributed, the sample mean and standard deviation are expressed using transformed (natural log conversion) data. The 95th, 99th, and PBEL values have been converted back into real concentrations.

ND= Not detected in background data. Number in parentheses is detection limit.

(1) No comparison possible. Not enough data.

(2) Not enough data to determine the distribution or to calculate mean and standard deviation.

(3) If there is sufficient data, the PBEL is calculated as the 99.87th percentile performance level (i.e., the 99.87th percentile of observed effluent concentrations), otherwise the Interim Limit is set equal to the MEC.

(4) Interim limit and compliance schedules are not allowed for selenium. Pursuant to State Water Board Order WQ2007-004, compliance schedules are not authorized for numeric objectives or criteria that were in effect prior to the SIP. This includes the NTR objectives for selenium. Because it is infeasible for the Discharger to immediately comply with the final WQBELs for selenium, the Discharger will discharge in violation of this Order. Therefore a cease and desist order will be adopted concurrently with this Order. The Cease and Desist Order will establish time schedules for the Discharger to complete necessary investigative, preventative, and remedial actions to comply with final effluent limitations.

(5) As required by the SIP, interim effluent limitations are based on current treatment facility performance or on existing permit limitations, whichever is more stringent.

(6) Interim limit and compliance schedules are not allowed for cyanide. Pursuant to State Water Board Order WQ2007-004, compliance schedules are not authorized for numeric objectives or criteria that were in effect prior to the SIP. This includes the NTR objectives for cyanide. Because it is infeasible for the Discharger to immediately comply with the final WQBELs for cyanide, the Discharger will discharge in violation of this Order. Therefore a cease and desist order will be adopted concurrently with this Order. The Cease and Desist Order will establish time schedules for the Discharger to complete necessary investigative, preventative, and remedial actions to comply with final effluent limitations.

(7) Since there is insufficient data to calculate a 95th or 99th percentile concentration, feasibility to comply is determined by comparing the MEC (3.2E-09 ug/L) to the AMEL (1.4E-08 ug/L) and MDEL (2.8E-08 ug/L). Comparison shows that it is feasible for the Discharger to immediately comply with final effluent limitations.

(8) Since there is insufficient data to calculate a 95th or 99th percentile concentration, feasibility to comply is determined by comparing the MEC (7.0 ug/L) to the AMEL (58 ug/L) and MDEL (117 ug/L). Comparison shows that it is feasible for the Discharger to immediately comply with final effluent limitations.