California Regional Water Quality Control Board

Linda S. Adams
Secretary for
Environmental Protection

San Francisco Bay Region
1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
http://www.waterboards.ca.gov/sanfranciscobay

Arnold Schwarzenegger
Governor

TENTATIVE ORDER R2-2010-XXXX

AMENDMENT OF WASTE DISCHARGE REQUIREMENTS FOR MUNICIPAL AND INDUSTRIAL DISCHARGERS TO IMPLEMENT CYANIDE AND COPPER SITE SPECIFIC OBJECTIVES

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

1. The Regional Water Board issued waste discharge requirements that serve as National Pollutant Discharge Elimination System (NPDES) permits for the dischargers listed in Table 1 (hereinafter "Dischargers"). These permits authorize the Dischargers to discharge treated effluent from their respective facilities to waters of the United States under specific conditions.

2. This Order amends the orders listed in Table 1 to replace existing interim cyanide and copper limits with revised water quality-based effluent limits (WQBELs) based on newly established cyanide and copper site-specific objectives (SSOs) in the Regional Water Board's Water Quality Control Plan for the San Francisco Bay Basin (hereinafter "Basin Plan").

3. The Fact Sheet attached to this Order as Attachment F contains background information and rationale for this Order's requirements. It is hereby incorporated into this Order and therefore constitutes part of the findings for this Order.

4. This Order is exempt from the provisions of the California Environmental Quality Act pursuant to California Water Code §13389.

5. The Regional Water Board notified the Dischargers and interested agencies and persons of its intent to consider adoption of this Order, and provided an opportunity to submit written comments.

6. In a public meeting, the Regional Water Board heard and considered all comments pertaining to this Order.

IT IS HEREBY ORDERED, pursuant to the provisions of California Water Code Division 7 and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder, that the Dischargers listed in Table 1 shall comply with their respective orders listed in Table 1, as amended by this Order.

Table 1
DISCHARGERS SUBJECT TO THIS ORDER

Discharger	Permit Number	Order Number	Permit Adoption Date	This Order Revises WQBELs for	
				Cyanide	Copper
American Canyon, City of	CA0038768	R2-2006-0036	6/14/06	X [1]	X [2]
ConocoPhillips	CA0005053	R2-2005-0030	6/15/05	X [3]	X [2]
East Bay Regional Park District (EBRPD), Union Sanitary District (USD), and East Bay Dischargers Authority (EBDA) (Hayward Shoreline Marsh)	CA0038636	R2-2006-0031	5/10/06	X [1]	X [2]
GWF Power Systems, LP, Site I	CA0029106	R2-2005-0018	5/18/05	X [3]	X [2]
GWF Power Systems, LP, Site V	CA0029122	R2-2005-0019	5/18/05	X [3]	X [2]
Morton International, Inc.	CA0005185	R2-2005-0010	4/20/05	X [3]	--
Mt. View Sanitary District	CA0037770	R2-2006-0063	9/13/06	X [1]	--
Napa Sanitation District	CA0037575	R2-2005-0008	4/20/05	X [3]	X [2]
Petaluma, City of	CA0037810	R2-2005-0058	10/19/05	X [3]	X [2]
Tesoro Refining & Marketing Co.	CA0004961	R2-2005-0041	9/21/05	X [3]	--
USS-Posco Industries	CA0005002	R2-2006-0029	5/10/06	X [1]	--

[1] The listed permit contains alternate cyanide limits that cannot become effective because they are based on dilution factors other than those in the Basin Plan associated with the cyanide SSOs.
[2] The listed permit contains WQBELs for copper that are not based on the copper SSOs.
[3] The listed permit contains WQBELs for cyanide that are not based on the cyanide SSOs.

1. **The cyanide WQBELs in this Order shall replace all existing cyanide limits in the orders listed in Table 1, with the exception of the existing Napa Sanitation District dry weather cyanide limits.**

   The new cyanide WQBELs, set forth in Table 2, implement the Basin Plan's cyanide SSOs and associated dilution factors. The revised limits for the Napa Sanitation District shall apply to wet season (November 1 through April 30) discharges only; the dry weather limits shall remain unchanged.

2. **The copper WQBELs in this Order shall replace all existing copper limits in the orders that Table 1 lists as receiving revised copper limits, with the exception of the existing Napa Sanitation District dry weather copper limits.**

   The new copper WQBELs, set forth in Table 3, implement the Basin Plan's copper SSOs. The revised limits for the Napa Sanitation District shall apply to wet season (November 1 through April 30) discharges only; the dry weather limits shall remain unchanged.

Table 2
CYANIDE WQBELs

Discharger	Average Monthly (AMEL) µg/L	Maximum Daily (MDEL) µg/L
American Canyon, City of	7.0	14
ConocoPhillips	21	42
East Bay Regional Park District (EBRPD), Union Sanitary District (USD), and East Bay Dischargers Authority (EBDA) (Hayward Shoreline Marsh)	6.7	15
GWF Power Systems, LP, Site I	21	38
GWF Power Systems, LP, Site V	20	40
Morton International, Inc.	2.4	4.8
Mt. View Sanitary District	6.5	15
Napa Sanitation District	18	47
Petaluma, City of	7	14
Tesoro Refining & Marketing Co.	21	42
USS-Posco Industries	6.8	14

Table 3
COPPER WQBELs

Discharger	Average Monthly (AMEL) µg/L	Maximum Daily (MDEL) µg/L
American Canyon, City of	6.2	11
ConocoPhillips	60	120
East Bay Regional Park District (EBRPD), Union Sanitary District (USD), and East Bay Dischargers Authority (EBDA) (Hayward Shoreline Marsh)	6.6	11
GWF Power Systems, LP, Site I	72	94
GWF Power Systems, LP, Site V	39	53
Napa Sanitation District	8.6	17
Petaluma, City of	6.4	10

3. The cyanide and copper compliance schedules and related requirements in the orders listed in Table 1 are hereby rescinded.

The Dischargers shall no longer be required to complete any remaining tasks or meet any remaining deadlines associated with their cyanide and copper compliance schedules.

4. Each Discharger listed in Table 1 shall implement a Cyanide Action Plan.

The Dischargers shall implement pretreatment, source control, and pollution prevention for cyanide in accordance with the tasks and time schedule in Table 4.

5. Each Discharger designated in Table 1 as receiving revised copper limits shall implement a Copper Action Plan.

The Dischargers receiving revised copper limits shall implement pretreatment, source control, and pollution prevention for copper in accordance with the tasks and time schedule in Table 5.

Table 4
CYANIDE ACTION PLAN

Task	Deadline
1. Review Potential Cyanide Contributors Each Discharger shall submit an inventory of potential sources of cyanide to the treatment plant (e.g., metal plate operators, hazardous waste recycling, etc.). If no contributors of cyanide are identified, Tasks 2 and 3 are not required, unless the Discharger receives a request to discharge detectable levels of cyanide to its treatment plant. If so, the Discharger shall notify the Executive Officer and implement Tasks 2 and 3.	June 9, 2010
2. Implement Cyanide Control Program Each Discharger shall submit a plan and begin implementation of a program to minimize cyanide discharges to its treatment plant consisting, at a minimum, of the following elements: a. Inspect each potential contributor to assess the need to include that contributing source in the control program. b. Inspect contributing sources included in the control program annually. Inspection elements may be based on U.S. EPA guidance, such as Industrial User Inspection and Sampling Manual for POTWs (EPA 831-B-94-01). c. Develop and distribute educational materials to contributing sources and potential contributing sources regarding the need to prevent cyanide discharges. d. Prepare an emergency monitoring and response plan to be implemented if a significant cyanide discharge occurs.	With the annual pollution prevention report due in 2011
3. Implement Additional Cyanide Control Measures If the Discharger is notified by the Regional Water Board that ambient monitoring shows cyanide concentrations of 1.0 µg/L or higher in the main body of San Francisco Bay, then within 90 days of the notification, the Discharger shall commence with actions to identify and abate cyanide sources responsible for the elevated ambient concentrations and shall report annually on the progress and effectiveness of actions taken together with a schedule for actions to be taken in the next 12 months.	With the annual pollution prevention report starting with the report due after the notification
4. Report Status of Cyanide Control Program Each Discharger shall submit an annual report documenting implementation of its cyanide control program.	With the annual pollution prevention report due each year starting with the 2011 report

Table 5
COPPER ACTION PLAN

Task	Deadline
1. Review Potential Copper Sources Each Discharger shall submit an inventory of potential copper sources to its treatment plant.	June 9, 2010
2. Implement Copper Control Program Each Discharger shall submit a plan for and begin implementation of a program to reduce copper discharges identified through Task 1. For publicly owned treatment works, the plan shall consist, at a minimum, of the following elements (those with dry weather design flows less than 1 million gallon per day need not include elements b and c): a. Provide education and outreach to the public (e.g., focus on proper pool and spa maintenance and plumbers' roles in reducing corrosion). b. If corrosion is determined to be a significant copper source, work cooperatively with local water purveyors to reduce and control water corrosivity, as appropriate, and ensure that local plumbing contractors implement best management practices to reduce corrosion in pipes. c. Educate plumbers, designers, and maintenance contractors for pools and spas to encourage best management practices that minimize copper discharges.	With the annual pollution prevention report due in 2011
3. Implement Additional Measures If the Regional Water Board notifies the Discharger that the three-year rolling mean dissolved copper concentration of the receiving water exceeds the values below: GRW Power Systems Site I and Site V: 2.8 µg/L American Canyon, ConocoPhillips, Napa Sanitation District, Petaluma: 3.0 µg/L Hayward Marsh: 3.6 µg/L then the Discharger shall evaluate the effluent copper concentration, the Discharger shall develop and begin implementation of additional measure to control copper discharges, and shall report annually on the progress and effectiveness of measures taken together with a schedule for measures to be taken in the next 12 months.	With annual pollution prevention report starting with the report due after the notification
4. Studies to Reduce Copper Pollutant Impact Uncertainties The Dischargers shall submit a study plan and schedule to conduct or cause to be conducted technical studies to investigate possible copper sediment toxicity and technical studies to investigate sublethal effects on salmonids. Specifically, the Dischargers shall include the manner in which the above will be accomplished and describe the studies to be performed with an implementation schedule. To satisfy this requirement, dischargers may collaborate and conduct these studies as a group.	With annual pollution prevention report due in 2011
5. Report on Status of Copper Control Program Each Discharger shall submit a report documenting copper control program implementation. Additionally, each Discharger shall report the findings and results of the studies completed, planned, or in progress under Task 4. Regarding the Task 4 studies, dischargers may collaborate and provide this information in a single report for the entire group.	With annual pollution prevention report due each year starting with the 2011 report

6. **The Monitoring and Reporting Program (or Self-Monitoring Program) attached to each order listed in Table 1 shall require influent cyanide monitoring at the same frequency as the Monitoring and Reporting Program requires for effluent cyanide monitoring.**

   The Basin Plan requires that all municipal and industrial dischargers with WQBELs based on the cyanide SSOs implement influent cyanide monitoring. If a Discharger already monitors its influent for cyanide to comply with pretreatment requirements, such monitoring shall satisfy this requirement.

7. **The Monitoring and Reporting Program (or Self-Monitoring Program) attached to each order listed in Table 1 shall allow effluent compliance monitoring for cyanide to take place at a location after effluent dechlorination.**

   Each Discharger choosing to relocate effluent monitoring for cyanide shall notify the Regional Water Board in writing with a description of its new cyanide effluent monitoring location before any compliance monitoring is conducted at the new location.

8. **If conflicts exist between this Order's provisions and those of the orders listed in Table 1, this Order's provisions shall prevail.**

9. **This Order shall become effective on April 1, 2010.**

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on March 10, 2010.

_____

Bruce H. Wolfe
Executive Officer

ATTACHMENT F

FACT SHEET

This Fact Sheet describes the legal requirements and technical rationale that serve as the basis for this Order's requirements. This Fact Sheet constitutes a portion of the findings for the Order.

Purpose

The purpose of the Order is to replace the cyanide and copper limits in the orders listed in Table 1 with WQBELs based on current water quality objectives. Table F-1 provides some basic information about the facilities this Order covers. The WQBELs in these orders are currently based on water quality objectives that no longer apply. The Regional Water Board has since amended the Basin Plan to incorporate cyanide SSOs for all San Francisco Bay segments and copper SSOs for San Francisco Bay segments north of the Dumbarton Bridge. USEPA subsequently approved these SSOs. The new WQBELs will replace the existing cyanide and copper limits.

Cyanide Background

USEPA approved cyanide SSOs for all San Francisco Bay segments on July 22, 2008. This approval put into effect a Basin Plan amendment containing site-specific marine aquatic life water quality objectives of 2.9 µg/L cyanide for chronic conditions (four-day average) and 9.4 µg/L cyanide for acute conditions (one-hour average). The orders listed in Table 1 contain cyanide WQBELs based on water quality objectives that became obsolete when the SSOs became effective. The City of American Canyon, Hayward Shoreline Marsh, Mt. View Sanitary District, and USS Posco Industries orders contain alternate WQBELs that cannot go into effect because they are based on flawed assumptions regarding dilution credits that may be adopted with the SSOs. This Order contains WQBELs based on the approved SSOs and dilution factors in the Basin Plan. Additionally, the Basin Plan now requires that all municipal and industrial facilities receive an effluent limit for cyanide and monitor influent for cyanide. The Basin Plan also requires that each Discharger implement an action plan to ensure that receiving water cyanide concentrations do not increase. This Order imposes these requirements.

Copper Background

USEPA approved copper SSOs for all San Francisco Bay segments north of the Dumbarton Bridge on January 6, 2009. This approval put into effect a Basin Plan amendment containing the site-specific marine aquatic life water quality objectives for copper listed in Table F-2. The orders listed in Table 1 contain copper WQBELs based on water quality objectives that became obsolete when these SSOs became effective. In some cases, these orders contain alternate WQBELs that cannot go into effect because they are based on flawed assumptions regarding the SSOs ultimately adopted. This Order contains WQBELs based on the approved SSOs.

Table F-1
DISCHARGER FACILITY INFORMATION

Discharger	Facility Name	Facility Address	Facility Design Flow (mgd)	Receiving Water
American Canyon, City of	Wastewater Treatment and Reclamation Facility	151 Mezzeta Court American Canyon, CA 94503 Napa County	2.5	North Slough
ConocoPhillips	San Francisco Refinery	1380 San Pablo Ave Rodeo, CA 94572-1354 Contra Costa County	varies	San Pablo Bay
East Bay Regional Park District (EBRPD), Union Sanitary District (USD), and East Bay Dischargers Authority (EBDA) (Hayward Shoreline Marsh)	Hayward Shoreline Marsh	3010 West Winton Road Hayward, CA 94544 Alameda County	20	Lower San Francisco Bay
GWF Power Systems, LP, Site I	GWF – Site I Power Plant	895 East 3rd Street Pittsburg, CA 94565 Contra Costa County	0.045 (average)	New York Slough
GWF Power Systems, LP, Site V	GWF – Site V Power Plant	555 Nichols Road Bay Point, CA 94565 Contra Costa County	0.047 (average)	Suisun Bay
Morton International, Inc, Morton Salt Division, Newark Facility	Morton Salt Division, Newark Facility	7380 Morton Ave Newark, CA 94560 Alameda County	0.0432 (average flow)	Alameda County Flood Control Ditch, tributary to Plummer Creek
Mt. View Sanitary District	Mt. View Sanitary District Wastewater Treatment Plant	3800 Arthur Road Martinez, CA 94553 Contra Costa County	3.2	Peyton Slough, a tributary to Carquinez Strait
Napa Sanitation District	Soscol Water Recycling Facility	151 Soscol Ferry Road Napa, CA 94558 Napa County	15.4	Napa River
Petaluma, City of	Municipal Wastewater Treatment Plant	950 Hopper Street Petaluma, CA 94952 Sonoma County	5.2	Petaluma River
Tesoro Refining & Marketing Co.	Golden Eagle Refinery	150 Solano Way Martinez, CA 94553 Contra Costa County	varies	Suisun Bay
USS-Posco Industries	Pittsburg Plant	900 Loveridge Road Pittsburg, CA 94565 Contra Costa County	28	Suisun Bay

Table F-2
SAN FRANCISCO BAY COPPER SSOs [1]

Location	4-day Average (CCC) [2]	1-hour Average (CMC) [3]
Lower San Francisco Bay south of the Hayward Shoals and South San Francisco Bay.	6.9	10.8
Delta (within San Francisco Bay Region), Suisun Bay, Carquinez Strait, San Pablo Bay, Central San Francisco Bay, and Lower San Francisco Bay north of the Hayward Shoals.	6.0	9.4

[1] These SSOs incorporate a water effects ratio of 2.4.
[2] Criteria Continuous Concentration
[3] Criteria Maximum Concentration

Additionally, the Basin Plan requires that each Discharger implement an action plan to ensure that receiving water copper concentrations do not increase. This Order imposed these requirements.

Cyanide WQBEL Calculations

The revised cyanide WQBELs are calculated in accordance with the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (hereinafter "State Implementation Policy"). Table F-3 provides the details of these calculations. The recalculated WQBELs are based on the original WQBEL calculations for each Discharger, modified to reflect the cyanide SSOs and appropriate dilution credit. These calculations use the same data and assumptions used when the Regional Water Board adopted the existing orders.

This Order does not change the dry weather cyanide WQBELs in the Napa Sanitation District's existing permit because those limits became effective on December 31, 2007.

Copper WQBEL Calculations

The revised cyanide WQBELs are calculated in accordance with the State Implementation Policy. Table F-4 provides the details of these calculations. The recalculated WQBELs are based on the original WQBEL calculations for each Discharger, modified to reflect the copper SSOs. These calculations use the same data and assumptions used when the Regional Water Board adopted the existing orders.

The copper SSOs only apply to marine water. All the Dischargers listed in Table 1 of the Order, except the City of Petaluma and Napa Sanitation District, discharge to marine waters. The City of Petaluma and Napa Sanitation District discharge to estuarine waters. The Basin Plan and CTR state that the salinity characteristics (i.e., freshwater versus saltwater) of the receiving water is to be considered in determining the applicable water quality objectives. Freshwater criteria apply to discharges to waters with salinities equal to or less than 1 ppt at least 95 percent of the time. Saltwater criteria apply to discharges to waters with salinities equal to or greater than 10 ppt at least 95 percent of the time in a normal water year. For discharges to waters with salinities in

Table F-3
CYANIDE WQBEL CALCULATIONS (µg/L)

	American Canyon	Mt. View SD	Hayward Marsh	USS Posco	Conoco Phillips	Petaluma	Napa	GWF Site I	GWF Site V	Morton	Tesoro
CTR Criteria -Acute	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
CTR Criteria -Chronic	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Dilution Factor (D) (if applicable)	**2.25**	**2.25**	**2.25**	**2.25**	9	2.25	9	9	9	0	9
No. of samples per month	4	4	4	4	4	4	4	4	4	4	4
Aquatic life criteria analysis required? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HH criteria analysis required? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Applicable Acute WQO	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
Applicable Chronic WQO	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
HH criteria	220,000	220,000	220,000	700	220,000	220,000	220,000	700	220,000	220,000	220,000
Background (Max Conc for Aquatic Life calc)	0.363	0.4	0.4	0.5	0.4	0.363	0.363	0.5	0.5	0.4	0.4
Background (Avg Conc for Human Health calc)	0.21	0.2	0.76	0.425			0.21	0.5	0.5	0.4	
Is the pollutant Bioaccumulative(Y/N)?	N	N	N	N	N	N	N	N	N	N	N
ECA acute	29.7	29.7	29.7	29.4	90.4	29.7	90.7	89.5	89.5	9.4	90.4
ECA chronic	8.6	8.5	8.5	8.3	25.4	8.6	25.7	24.5	24.5	2.9	25.4
ECA HH	715000	715000	714998	2274	220000	220000	2199998	6996	2199996	220000	220000
No. of data points <10 or at least 80% of data reported non detect? (Y/N)	N	N	N	Y	N	N	N	N	Y	Y	Y
Avg of effluent data points	2.077	1.16	2.6		3.57	3.14	3.44	3.43			
Std Dev of effluent data points	1.25	0.98	1.9		2.25		3.8	1.72			
CV calculated	0.60	0.85	0.73	N/A	0.63	0.64	1.10	0.50	N/A	N/A	N/A
CV (Selected) - Final	0.60	0.85	0.73	0.60	0.63	0.64	1.10	0.50	0.60	0.60	0.60
ECA acute mult99	0.32	0.24	0.27	0.32	0.31	0.30	0.19	0.37	0.32	0.32	0.32
ECA chronic mult99	0.53	0.42	0.47	0.53	0.51	0.51	0.34	0.58	0.53	0.53	0.53
LTA acute	9.52	7.00	8.02	9.45	27.83	9.03	16.94	33.27	28.74	3.02	29.03
LTA chronic	4.53	3.59	3.98	4.38	13.02	4.37	8.85	14.22	12.92	1.53	13.40
minimum of LTAs	4.53	3.59	3.98	4.38	13.02	4.37	8.85	14.22	12.92	1.53	13.40
AMEL mult95	1.55	1.80	1.68	1.55	1.58	1.59	2.05	1.46	1.55	1.55	1.55
MDEL mult99	3.12	4.23	3.70	3.11	3.25	3.29	5.36	2.69	3.11	3.11	3.11
AMEL (aq life)	7.04	6.46	6.70	6.80	20.60	6.96	18.11	20.71	20.06	2.37	20.80
MDEL(aq life)	14.15	15.20	14.73	13.63	42.28	14.39	47.43	38.26	40.25	4.76	41.72
MDEL/AMEL Multiplier	2.01	2.35	2.20	2.01	2.05	2.07	2.62	1.85	2.01	2.01	2.01
AMEL (human hlth)	715000	715000	714998	2274	220000	220000	2199998	6996	2199996	220000	220000
MDEL (human hlth)	1436459	1682984	1572124	4562	451598	454843	5762096	12923	4413607	441362	441362
Min of AMEL for Aq. life vs HH	7	6.5	6.7	6.8	20.6	7.0	18.1	20.7	20.1	2.4	21
min of MDEL for Aq. Life vs HH	14	15	15	14	42	14	47	38	40	5	42
Final limit - AMEL	7.04	6.46	6.70	6.80	20.60	6.96	18.11	20.71	20.06	2.37	20.80
Final limit - MDEL	14.15	15.20	14.73	13.63	42.28	14.39	47.43	38.26	40.25	4.76	41.72

Table F-4
COPPER WQBEL CALCULATIONS (µg/L)

	American Canyon	Conoco Phillips	Hayward Marsh	GWF Site I	GWF Site V	Napa	Petaluma
SSO Criteria -Acute	3.9	3.9	4.5	3.9	3.9	3.9	3.9
SSO Criteria -Chronic	2.5	2.5	2.88	2.5	2.5	2.5	2.5
Water Effects ratio (WER)	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Lowest WQO							
Site Specific Translator - MDEL	0.83	0.66	0.94	0.66	0.66	0.42	0.83
Site Specific Translator - AMEL	0.83	0.38	0.60	0.38	0.38	0.57	0.83
Dilution Factor (D) (if applicable)	0	9	0	9	9	9	0
No. of samples per month	4	4	4	4	4	4	4
Aquatic life criteria analysis required? (Y/N)	Y	Y	Y	Y	Y	Y	Y
HH criteria analysis required? (Y/N)	N	N	N	N	N	N	N
Applicable Acute WQO	11	14	11.5	14	14	22.29	11.28
Applicable Chronic WQO	7.2	15.8	11.5	15.8	15.8	10.53	7.23
HH criteria							
Background (Max Conc for Aquatic Life calc)	32	2.45	2.5	5.31	9.86	18.5	14.7
Background (Avg Conc for HH calc)							
Is the pollutant Bioaccumulative(Y/N)?	N	N	N	N	N	N	N
ECA acute	11.3	119.8	11.5	94.0	53.1	56.4	11.3
ECA chronic	7.2	135.8	11.5	110.1	69.2	10.5	7.2
ECA HH	--	--	--	--	--	--	--
No. of data points <10 or at least 80% of data reported non detect? (Y/N)	N	N	N	N	N	N	N
Avg of effluent data points	3.174	7.7	4.1	22.0	20.5	3.93	3.26
Std Dev of effluent data points	1.374	4.6	1.8	4.2	4.4	2.3	1.1
CV calculated	0.43	0.60	0.44	0.19	0.21	0.59	0.34
CV (Selected) - Final	0.43	0.60	0.44	0.19	0.21	0.59	0.34
ECA acute mult99	0.42	0.32	0.41	0.66	0.62	0.33	0.49
ECA chronic mult99	0.62	0.53	0.62	0.81	0.78	0.53	0.69
LTA acute	4.69	38.63	4.73	61.80	33.12	18.48	5.55
LTA chronic	4.50	71.86	7.13	88.75	54.21	5.62	4.97
minimum of LTAs	4.50	38.63	4.73	61.80	33.12	5.62	4.97
AMEL mult95	1.39	1.55	1.40	1.16	1.19	1.54	1.30
MDEL mult99	2.41	3.10	2.43	1.52	1.60	3.05	2.03
AMEL (aq life)	6.25	59.84	6.60	71.89	39.27	8.64	6.45
MDEL(aq life)	10.82	119.77	11.49	94.03	53.08	17.13	10.10
MDEL/AMEL Multiplier	1.73	2.00	1.74	1.31	1.35	1.98	1.57
AMEL (human hlth)	--	--	--	--	--	--	--
MDEL (human hlth)	--	--	--	--	--	--	--
minimum of AMEL for Aq. life vs HH	6	60	7	72	39	9	6
minimum of MDEL for Aq. Life vs HH	11	120	11	94	53	17	10
Final limit - AMEL	6.2	60	6.6	71.9	39.3	8.6	6.4
Final limit - MDEL	10.8	120	11	94.0	53.1	17.1	10.1

between these two categories, or tidally influenced fresh waters that support estuarine beneficial uses, the applicable objectives are the lower of the saltwater or freshwater objectives. The freshwater objectives applicable to the City of Petaluma and Napa Sanitation District discharges are less stringent than the saltwater SSOs. Therefore, the copper SSOs apply to these dischargers as well.

Table F-5 identifies the bases for the copper translators (i.e., ratios of total to dissolved copper) used to calculate the copper WQBELs. For the deepwater discharges (ConocoPhillips, GWF Power Systems Sites I and V, and Napa Sanitation District), the Basin Plan's translators were used to convert the SSOs for dissolved copper into total copper criteria. For Suisun Bay and San Pablo Bay, these translators are 0.38 (chronic) and 0.66 (acute). For Central San Francisco Bay and Lower San Francisco Bay, they are 0.73 (chronic) and 0.87 (acute). For shallow water discharges, site-specific translators were used when available. For the Hayward Shoreline Marsh and Napa Sanitation District, the same translators were used as those used when the Regional Water Board adopted the existing orders. For the other shallow water discharges (City of American Canyon, Hayward Marsh, and City of Petaluma), site-specific translators are unavailable; therefore, the California Toxics Rule default translator of 0.83 was used to calculate the WQBELs.

This Order does not change the dry weather copper WQBELs in the Napa Sanitation District's existing permit because those limits became effective on December 31, 2007.

Table F-5
BASIS FOR COPPER TRANSLATORS

Discharger	Basis
American Canyon, City of	Basin Plan translators for San Pablo Bay
ConocoPhillips	Basin Plan translators for San Pablo Bay
East Bay Regional Park District (EBRPD), Union Sanitary District (USD), and East Bay Dischargers Authority (EBDA) (Hayward Shoreline Marsh)	Site-specific translators
GWF Power Systems, LP, Site I	Basin Plan translators for Suisun Bay
GWF Power Systems, LP, Site V	Basin Plan translators for Suisun Bay
Mirant Potrero, LLC	Default CTR translator
Napa Sanitation District	Site-specific translators
Petaluma, City of	Default CTR translator

Anti-Backsliding

Clean Water Act sections 402(o)(2) and 303(d)(4), and 40 CFR 122.44(l), prohibit backsliding in NPDES permits. These anti-backsliding provisions require revised effluent limitations to be at least as stringent as those previously in place, with some exceptions. The WQBELs in this Order replace existing interim limits, which are not WQBELs. Anti-backsliding requirements do not apply when comparing different types of limits developed for different purposes (e.g., performance-based interim limits versus final WQBELs).

The WQBELs in this Order also replace WQBELs; however, in no case do they replace WQBELs that have become effective. For example, some existing cyanide and copper WQBELs are not yet effective because the Regional Water Board granted cyanide and copper compliance schedules that have not yet expired. Other WQBELs were alternate limits that could only become effective if specific SSOs and dilution credits were adopted. In these cases, the orders were written such that these alternate limits can never become effective since the assumptions underlying them were flawed. Anti-backsliding requirements do not apply when comparing revised WQBELs with WQBELs that are not yet effective.

Antidegradation

Antidegradation policies require that the existing quality of waters be maintained unless degradation is justified based on specific findings. State Water Board Resolution Number 68-16 sets forth California's antidegradation policy. Consistent with 40 CFR 131.12, Resolution Number 68-16 incorporates the federal antidegradation policy. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Permitted discharges must be consistent with these antidegradation policies.

This Order revises cyanide and copper WQBELs based on the Basin Plan's cyanide and copper SSOs. Documentation completed when the Regional Water Board adopted these water quality objectives addressed antidegradation. The Regional Water Board found that implementing the cyanide and copper SSOs would not degrade water quality. This finding was based, in part, on the fact that the Regional Water Board also required, through the same Basin Plan amendment, dischargers to implement cyanide and copper action plans for source identification and pollution minimization. This Order requires such action plans and thus ensures that existing water quality will be maintained or improved.

Notification of Interested Parties

The Regional Water Board encouraged public participation in this amendment process. It notified the Dischargers and other interested parties, and provided an opportunity to submit written comments between December 17, 2009 and January 21, 2010. On <DATE>, *The Oakland Tribune* published a notice that the Regional Water Board would consider this item during its March 10, 2010, meeting.