

MARINE WATER QUALITY OBJECTIVE FOR CYANIDE



The Bay Area Clean Water Agencies BACWA

On December 13, 2006, the San Francisco Bay Regional Water Quality Control Board (Water Board) unanimously approved the marine water quality objective for Cyanide in the San Francisco Bay. This action has been many years in the making. BACWA and BACWA member agencies have worked closely with the Water Board to develop site specific information regarding the presence of cyanide in effluent, how it reacts in the Bay at specific discharge locations and the impact on the San Francisco Bay crabs and other local aquatic organisms.

Marine Water Quality Objectives for Cyanide in San Francisco Bay (values in ug/l)

Cyanide	Chronic Objective (4-day Average)	2.9
Cyanide	Acute Objective (1-hour Average)	9.4

Ground-breaking Dilution Credits for Shallow Water Discharges

The dilution credits for calculation of cyanide water quality based effluent limits for shallow water dischargers is ground breaking. The Basin Plan amendment has recognized that, due to the dilution at the site specific discharge points and attenuation of the pollutant in the aquatic environment, an exception to the shallow water dilution prohibition is warranted.

Nine BACWA member agencies will receive a 3.25:1 dilution, one a 4.0:1 dilution and one a 3.0:1 dilution.

Dilution Credits for Calculation of Cyanide Water Quality-Based Effluent Limits for Shallow Water Discharges

Discharger	Discharge Location	Dilution Credit*
American Canyon	North Slough	3.25:1
Fairfield-Suisun	Boynton Slough	4.0:1
Hayward Marsh	Hayward Shoreline Regional Park Marsh Basin	3.25:1
Las Gallinas	Miller Creek	3.25:1
Mt. View SD	Peyton Slough	3.25:1
Napa SD	Napa River	3.25:1
Novato SD	San Pablo Bay	3.25:1
City of Palo Alto	Man-made-channel	3.25:1
City of Petaluma	Petaluma River	3.25:1
City of San Jose	Artesian Slough	3.0:1
Sonoma County Water Agency	Schell Slough	3.25:1
City of Sunnyvale	Moffett Channel	4.0:1
USS Posco	New York Slough	3.25:1

*The dilution credit is expressed as the ratio of total parts mixed (effluent and receiving water) to one part effluent.

NPDES Requirements Under Site Specific Objective

As part of the implementation plan for the site specific objective (SSO), all municipal wastewater discharges to any segment of the San Francisco Bay shall have the following requirements in NPDES permits:

- **Effluent limits regardless of reasonable potential for cyanide**
- **Monitoring and surveillance programs including influent, effluent and ambient monitoring**
- **Cyanide source review every five years**

Where potential for contributions to the influent exist, implementation of a pollution prevention will be required, including programs to:

- **Prevent of illicit discharges to the collection system**
- **Inspect potential contributor sites**
- **Develop and distribute educational materials**
- **Prepare emergency monitoring and response plans if a significant cyanide discharge occurs**



If ambient monitoring shows cyanide concentrations of 1.0 ug/L or higher, clean water agencies will be required to initiate investigations to determine sources and actions to abate the sources.

EPA approves of the SSO and the implementation plan, but remains concerned about the potential impacts of the shallow water discharges on endangered and threatened species. EPA will take up this issue when the SSO is presented to them after the State Board adoption.

More Approvals are Needed Before New Objective Is Finalized



Before EPA sees the SSO, it has to be approved by the State Water Resources Control Board and the Office of Administrative Law which should occur by the end of June 2007. With approval of the SSO, EPA must engage a Fish and Wildlife consultation and de-promulgate the cyanide standard in the California Toxics Rule.

BACWA will continue to encourage and support prompt action on all fronts to finalize the SSO.

Through its member agencies, BACWA collectively serves approximately 6 million people. BACWA members collectively spend approximately **\$500 million per year** to protect the resources of San Francisco Bay from harmful pollutants.

BACWA Member Agencies

Central Contra Costa Sanitary District
San Francisco Public Utilities Commission
City of San Jose
East Bay Dischargers Authority
East Bay Municipal Utility District
Central Marin Sanitation Agency
City of Livermore
City of Palo Alto
City of San Mateo
City of Sunnyvale
Delta Diablo Sanitation District
Dublin-San Ramon Services District
Fairfield-Suisun Sewer District
Napa Sanitation District
Sacramento Regional County Sanitation District
South Bayside System Authority
South San Francisco/San Bruno WQCP
Vallejo Sanitation & Flood Control District

West County Agency
City of American Canyon
City of Belmont
City of Benicia
City of Brisbane Public Works
City of Burlingame WWTP
City of Fairfield
City of Millbrae
City of Petaluma
City of Piedmont
City of Pleasanton
City of Redwood City
City of Richmond WPCP
City of St. Helena
City of San Carlos
Las Gallinas Valley Sanitation District
Mt. View Sanitary District
North San Mateo Sanitation District

Novato Sanitary District
Pinole/Hercules WPCP
San Francisco International Airport
San Mateo County, Department of Public Works
Sanitary District of Marin County No. 1 (Ross Valley)
Sanitary District of Marin County No. 2 (Corte Madera)
Sanitary District of Marin County No. 5 (Tiburon)
Santa Clara County Sanitation District No. 2-3
Sausalito/Marin City Sanitary District
Sewage Agency of Southern Marin
Sewer Authority Mid-Coastside
Sonoma County Water Agency
Stege Sanitary District
Tamalpais Community Services District
Town of Yountville
West Bay Sanitary District
West Valley Sanitation District