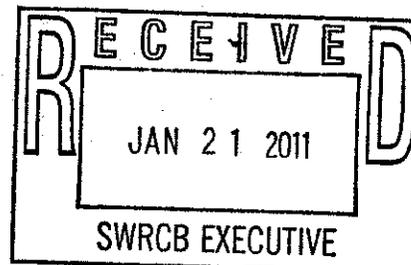


SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Wastewater Enterprise
OFFICE OF THE ASSISTANT GENERAL MANAGER



January 21, 2011

BY EMAIL, FAX AND U.S. MAIL
Charles R. Hoppin, Chair and Members
c/o Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814



Re: San Francisco's Comment Letter on the Proposed Policy for Toxicity Assessment & Control

Dear Chair Hoppin and Members:

The City and County of San Francisco Public Utilities Commission (San Francisco) respectfully submits the following comments on the proposed Policy for Toxicity Assessment and Control. We support having a well-designed toxicity testing policy and believe that testing municipal effluent for toxicity is generally a more effective method to indicate impacts of effluent on aquatic organisms than continuous analysis of individual pollutants. San Francisco, like many of the Region 2 NPDES permit holders, has been doing Whole Effluent Toxicity (WET) testing since the late 1980s. We estimate that we have conducted more than two hundred chronic and over one thousand acute tests since 1990.

In many cases toxicity may be caused or exacerbated by pollutants introduced into the wastewater system over which publically owned treatment works (POTWs) have no effective control. Source control is the preferred method of addressing these toxicity-causing pollutants, not additional POTW requirements. We note that the recent Surface Water Ambient Monitoring Program (SWAMP) report, *Summary of Toxicity in California Waters: 2001-2009* (November 2010), showed that virtually all receiving water toxicity in the State is due to pesticides. Unfortunately POTWs cannot ban pesticides or similar commercial products that may cause or contribute to toxicity. Requiring POTWs to address the main source of toxicity in California through wastewater treatment is neither appropriate nor cost effective.

There are proactive measures which can address these primary sources of toxicity, however, and the State Water Board's participation in these measures could make a significant difference. Since the State Water Board strongly supports source control, we urge you to become more active in addressing toxicity source control through legislation, aggressive participation in the Green Chemistry Initiative, and coordination with DPR and other State agencies.

San Francisco supports the comments submitted by the Clean Water Associations on January 21, 2011, especially the sections discussing the inappropriateness of numeric

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*Charles R. Hopplin, Chair and Members of Jeanine Townsend, Clerk to the Board
Re: San Francisco's Comment Letter on the Proposed Policy for Toxicity Assessment & Control*

*January 21, 2011
Page 2 of 5*

limits for chronic toxicity, the problem of unacceptably high percentages of non-toxic samples being (mis)identified as toxic under the policy, the resulting waste of the public's resources in pursuing excessive false positives, and the recommended approach for combining narrative standards and numeric triggers to improve the proposed toxicity policy.

Based on San Francisco's considerable experience with toxicity testing we provide these additional comments on the proposed policy.

1. Toxicity Policy should utilize Narrative Standards with Numeric Triggers

In the San Francisco Bay Area, toxicity testing is a mature, robust program. Our experience with toxicity testing is that test results can be highly variable. In addition, TIEs can be expensive, time consuming and, most importantly, inconclusive. While we believe that numeric limits can play a useful role in triggering the need for testing and aggressive investigation of a verified toxicity finding, numeric limits should not be used as the basis of a permit violation - especially when the POTW is often unable to control (or sometimes even identify) the source of the toxicity. Instead, POTWs should be required, with well-articulated narrative standards, to vigorously pursue investigation of numerically-triggered toxicity results to ascertain test result validity, identify toxicity source(s) and contributors and (where possible) reduce and/or eliminate them.

The advantages of a narrative and numeric blend approach are further described in the Clean Water Associations' comment letter of January 21, 2011.

2. Part II Section B should be Amended to Include Combined Sewer Systems operating in Wet Weather Mode.

Over ninety percent of the drainage area in San Francisco is served by combined sewers that collect both sanitary sewage and urban stormwater runoff. This means that in the vast combined sewer area, San Francisco captures and treats ALL of its stormwater in full compliance with Clean Water Act laws, regulations, and policies for combined sewer systems. Last year, San Francisco captured and treated approximately 34.8 billion gallons of combined flow.

During wet weather, San Francisco's system operates in a similar fashion to a MS4 system (although the treatment provided by San Francisco is much more extensive than MS4 permittees, with greater than 90% of the combined flow receiving secondary treatment and 100% receiving the equivalent of primary treatment). As recognized in San Francisco's NPDES permits, during wet weather San Francisco's treatment system produces discharges which are intermittent, short duration and highly diluted.

For these reasons, the application of toxicity testing for San Francisco during the wet weather periods defined in our NPDES permits should be governed by Section B.

Charles R. Hoppin, Chair and Members c/o Jeanine Townsend, Clerk to the Board
Re: San Francisco's Comment Letter on the Proposed Policy for Toxicity Assessment & Control

January 21, 2011
Page 3 of 5

San Francisco respectfully requests the following specific amendment to the proposed policy:

"Section B applies to *wet weather discharges from combined sewer systems as defined under the National CSO Control Policy (EPA 830-B-94-001)*, storm water discharges from municipal separate storm sewer systems (MS4)

3. Toxicity Policy should not Assume Reasonable Potential

Numeric effluent limits should only be applied for pollutants, including toxicity, when reasonable potential is established or when site specific studies, analyses or considerations indicate that numerical standards should be applied. See 40 CFR 122.44 (1) (i) and (ii).

In apparent disregard for these regulations, however, the proposed toxicity policy simply asserts that any major POTW effluent automatically has reasonable potential for both acute and chronic toxicity. This assumption does not take into account site-specific water quality considerations, source control programs, or treatment technologies. Not only does this approach conflict with federal regulations, there are POTWs for which this assumption is simply not accurate. San Francisco's Oceanside Water Pollution Control Treatment Plant effluent has been monitored for toxicity for many years and has never met the test for reasonable potential for chronic toxicity.

Reasonable potential must be established before public resources are dedicated to compliance with new testing standards and compliance requirements. San Francisco recommends that the proposal be amended under Part II, Section A-1 by **removing** the second paragraph.

4. Toxicity Policy should contain Standardized Dilution Guidance (not be left to each Region's discretion)

Toxicity testing is specifically applied to determine if there is a synergistic or cumulative effect of the effluent discharge on sensitive aquatic life. Consideration of actual dilution is necessary to fully understand this "in stream" impact. If toxicity testing does not include consideration of actual dilution, the results are likely to be misleading and inaccurate. The application of the full dilution in the ambient waters for a particular discharge is fully allowed under 40 CFR 122.44 (d) (iii).

Regions have applied dilution policies with significant variation. In Region 2 we have experienced swings in the dilution policy. Until recently the Region 2 permits have capped dilution at 10:1 for deep water discharges even when the actual dilution is much higher. Now Region 2 allows actual dilution for the cyanide objectives consistent with the site specific objective that was approved by EPA in 2008 and also for ammonia.

Charles R. Hoppin, Chair and Members c/o Jeanine Townsend, Clerk to the Board
Re: San Francisco's Comment Letter on the Proposed Policy for Toxicity Assessment & Control

January 21, 2011
Page 4 of 5

To achieve its goals of accuracy and consistency, the State Water Board should develop a statewide approach for dilution as part of this toxicity policy.

If developing a consistent, statewide approach to toxicity dilution is not feasible at this time, San Francisco urges, at a minimum, that section Part 2 Section A-2 (the last sentence of the first paragraph), be amended to state:

"Mixing zones and actual ambient-dilution credits based on dilution studies, tests, and/or models, will be applied to these numeric effluent limitations."

5. A Policy Change of this Magnitude Warrants a Phase-in Period

The new methods and changes in protocols, including new test species, being proposed by this policy are quite significant. Based on San Francisco's experience with toxicity testing, we strongly recommend that the policy provide a two to four-year phase-in period to assess the results of the new methodology before the toxicity standards become enforceable for municipal and industry effluent toxicity testing under Sect A.

In similar situations, the appropriate approach for a successful implementation has been a structured phase-in period. For instance the Regional Water Boards have routinely and successfully utilized a more prudent approach when implementing new monitoring strategies in conjunction with establishing TMDLs by utilizing a 13267 letter. Consistent with that practice and in order to base decisions on sound technical merits, dischargers could be instructed to collect and report monitoring data using provisions set forth in the new WET policy over a two year period. In this way, the State Water Board could use real-life information and not be forced to employ hypothetical scenarios and assumptions when introducing such a significant and untested new toxicity program.

A phased-in implementation would be especially critical should the State Water Board go forward, against our and the Clean Water Associations' recommendations, with imposition of numeric limits.

Conclusion:

San Francisco supports WET testing as an important aspect of determining whether effluent has the potential to harm aquatic life, and encourages the development of a well-designed toxicity policy. In many states around the country, toxicity testing is required in permits; however, the basis for that testing is the narrative standard, not numerical toxicity effluent limitations.

The current proposed policy goes beyond requiring rigorous toxicity testing, however, and by imposing numeric permit standards, develops an overly punitive approach to toxicity that is not warranted, especially in cases where science cannot determine the cause of the toxicity or the POTW is unable to exercise control over the source. In

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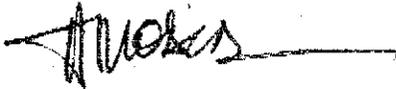
January 21, 2011
Page 5 of 5

addition, the proposed policy may have far reaching consequences for the use of public resources, as this policy has the potential to greatly increase not only monitoring costs, but the follow-on costs for TRES and TIES.

San Francisco supports the comments submitted by the Clean Water Associations. We hope that these additional comments will also be used to improve the proposed policy so that we achieve our mutual goals of responsible stewardship of the water environment.

If you have any questions or concerns, please do not hesitate to contact my staff member, Laura Pagano, Regulatory Compliance Specialist, at 415-554-3109, lpagano@sfwater.org.

Sincerely,



Tommy T. Moala
SFPUC Assistant General Manager
Wastewater Enterprise

LP/TIM/hc
cc: Maria Jurosek