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BAY AREA CLEAN WATER AGENCIES



BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

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| In the Matter of the Bay Area Clean Water Agencies' Petition for Review of Action and Failure to Act by the California Regional Water Quality Control Board, San Francisco Bay Region, in Adopting Order No. R2-2007-0056, NPDES Permit No. CA0037711 and Waste Discharge Requirements for the Sewerage Agency of Southern Marin and an accompanying Cease and Desist Order No. R2-2007-0057. | PETITION FOR REVIEW; PRELIMINARY POINTS AND AUTHORITIES IN SUPPORT OF PETITION (WATER CODE SECTIONS 13320 AND 13321) |

Petitioner Bay Area Clean Water Agencies ("BACWA"), in accordance with section 13320 of the Water Code, hereby petitions the State Water Resources Control Board ("SWRCB" or "State Board") to review Order No. R2-2007-0056 of the California Regional Water Quality Control Board, San Francisco Bay Region, ("RWQCB" or "Regional Board") reissuing National Pollution Discharge Elimination System ("NPDES") Permit No. CA0037711 and Waste Discharge Requirements for the Sewerage Agency of Southern Marin ("SASM") as well as an accompanying Cease and Desist Order ("CDO"), No. R2-2007-0057. Copies of tentative versions of Order Nos. R2-2007-0056 and R2-2007-0057, adopted on August 8, 2007, are attached to this Petition as **Exhibit A**, as final versions were not available by the date this petition was due. The issues and a summary of the bases for the Petition follow. At such time as the full administrative record is

available and any other material has been submitted, BACWA reserves the right to file a more detailed memorandum in support of the Petition and/or in reply to the Regional Board's response.[1] In addition, many of these issues are carried over from the previous permit appeal filed by BACWA on SASM's previous permit (SWRCB/OCC File No. A-1398), which is hereby consolidated with this appeal and incorporated by reference herein since it is currently being held in abeyance until August 23, 2008.

BACWA is a joint powers authority ("JPA") whose members own and operate publicly-owned treatment works ("POTWs") that discharge treated effluent to San Francisco Bay and its tributaries. Collectively, BACWA's members serve nearly 7 million people in the nine-county Bay Area, treating all domestic, commercial and a significant amount of industrial wastewater. BACWA was formed to develop a region-wide understanding of the watershed protection and enhancement needs through reliance on sound technical, scientific, environmental and economic information and to ensure that this understanding leads to long-term stewardship of the San Francisco Bay Estuary. BACWA member agencies are public agencies, governed by elected officials and managed by professionals, who are dedicated to protecting our water environment and the public health.

On July 10, 2007, BACWA submitted written comments on the tentative version of NPDES Permit No. CA0037711. For the reasons contained herein, and incorporated by reference as stated above, BACWA asserts that provisions contained in the recently issued permit for SASM are improper and inappropriate. BACWA hopes that the State Board will choose to take up this petition and review the issues being raised that are vitally important to Bay Area POTWs.

**1. NAME, ADDRESS, TELEPHONE, AND EMAIL FOR PETITIONER:**

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[1] The State Board's regulations require submission of a statement of points and authorities in support of a petition (23 C.C.R. §2050(a)(7)), and this document is intended to serve as a preliminary memorandum. However, it is impossible to prepare a thorough statement or a memorandum that is entirely useful to the reviewer in the absence of the complete administrative record, which is not yet available.

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In addition, all materials in connection with this Petition for Review should also be provided to the BACWA's special counsel at the following address:

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## 2. THE SPECIFIC ACTION OF THE REGIONAL BOARD WHICH THE STATE BOARD IS REQUESTED TO REVIEW:

BACWA seeks review of Order Nos. R2-2007-0056 and R2-2007-0057, reissuing NPDES Permit No. CA0037711 for SASM (the "Permit") and the accompanying CDO. The specific requirements of the Permit that BACWA requests the State Board to review relate to the following:

A. Numeric-based effluent limits for dioxin-TEQ;

B. Final effluent limits for mercury and cyanide;

C. Mass limit for mercury;

D. Compliance schedule action plans for mercury and cyanide; and

E. Requirements for the regionally-developed portion of the Pollutant Minimization Program.

The State Board is also requested to review the Regional Board's actions in adopting the Permit for compliance with due process and the California Administrative Procedures Act (Cal. Gov't Code §§11340, *et seq.*); the California Environmental Quality Act ("CEQA," Cal. Pub. Res. Code §21000, *et seq.*); [2] the Porter-Cologne Water Quality Control Act (Cal. Water Code §§13000,

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[2] Although the Permit at II.E. discusses an exemption from CEQA under Water Code §13389, that exemption is narrow, and only exempts Chapter 3. The remaining non-exempted parts of CEQA require all Regional Boards to consider the environmental consequences of their permitting actions, and to explore feasible alternatives and mitigation measures prior to the adoption of waste discharge requirements. *See e.g.*, Cal. Pub. Res. Code §21002; 23 C.C.R. §3733 (which states that the exemption in §13389 "does not apply to the policy provisions of Chapter 1 of CEQA"). Because this issue is currently pending before the California Supreme Court by way of a petition for review, BACWA includes this issue to preserve its rights pending resolution by that Court.

*et seq.*); the Clean Water Act ("CWA") (33 U.S.C. §§1251, *et seq.*) and its implementing regulations (40 C.F.R. Parts 122, 123, 130 and 131); the Water Quality Control Plan, San Francisco Bay Region (the "Basin Plan"); and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California ("SIP").

**3. THE DATE ON WHICH THE REGIONAL BOARD ACTED:**

The Regional Board adopted the Permit on August 8, 2007.

**4. A STATEMENT OF THE REASONS THE ACTION WAS INAPPROPRIATE OR IMPROPER:**

**A. <u>The Regional Board Improperly Imposed Numeric Effluent Limitations for Dioxin-TEQ.</u>**

BACWA has been concerned about the imposition of numeric effluent limitations for dioxin since the California Toxics Rule ("CTR") was promulgated, notwithstanding that regulations' promise that the "rule would not impose undue or inappropriate burden on the State of California or its dischargers." 65 Fed. Reg. 31687 (May 18, 2000). BACWA was initially hopeful that the EPA's prediction that costs to meet the CTR criteria would be "unlikely to reach the high-end of the [cost] range because State authorities are likely to choose implementation options that provide some degree of flexibility or relief to the point source dischargers" was accurate; unfortunately, in practice, this has not been the case. *Id.* at 31706. The purpose of this petition is to request that the State use its presumed flexibility when issuing discharge permits where compliance with water quality criteria (whether these criteria are CTR criteria or narrative objectives) has been demonstrated to be infeasible.

The Permit being appealed by BACWA contains concentration limits for dioxin-TEQ, mercury, cyanide, and mass limitations for mercury. Similar limits were challenged by BACWA in previous administrative and court appeals. Unfortunately, some of the holdings of those previous appeals are not being upheld by the Regional Board. BACWA tried for several years to settle the outstanding petitions on Bay Area POTW permits filed since 2000 by BACWA and others, but disagreement as to legal requirements prevented consummation of a global settlement. Because these issues remain as important today as they did seven years ago, or perhaps more important since

the time for final compliance with CTR criteria becomes shorter every day, BACWA continues to press for a final ruling to re-incorporate the "flexibility or relief" promised over the years.

BACWA believes that the Regional Board included interim and final numeric water quality-based effluent limitations ("WQBELs") for these constituents in the Permit that are contrary to the requirements of the CWA and state law.[3] In most cases, these numeric limitations have been demonstrated to be infeasible to meet,[4] and could result in the permitted entities having to construct expensive new treatment facilities, if technology even exists to provide such treatment. These treatment technologies far exceed the mandated treatment requirements of the CWA and will likely become unnecessary once new water quality objectives, site specific objectives, or TMDLs for these substances are in place and finally approved.[5] Such a waste of resources is not reasonable nor required (*see* Water Code §13000), and ignores the fact that control of some substances may instead require a "carefully conceived, agency-approved, long-term pollution control procedure for a complex environmental setting." *Communities for a Better Environment v. SWRCB*, 109 Cal.App.4th 1089, 1107 (2003). For these reasons, BACWA challenges these limits herein as being contrary to federal and state law requirements.

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[3] The Regional Board must ensure its actions to implement the CWA are consistent with any applicable provisions of the CWA and its implementing regulations. Cal. Water Code §13372.

[4] As defined by SWRCB Policy, "infeasible" means "not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." *See* SIP at Appendix 1-3.

[5] Courts have recognized a step-wise process in pollutant control. In *San Francisco BayKeeper v. Whitman*, 287 F.3d 764,766-767 (April 15, 2002), the Ninth Circuit Court of Appeals determined that:

> "[w]hen the NPDES system fails to adequately clean up certain rivers, streams or smaller water segments, the Act requires the use of a water-quality based approach. States are required to identify such waters, which are to be designated as 'water quality limited segments' ('WQLSs'). The states must then rank these waters in order of priority, and based on that ranking, institute more stringent pollution limits called 'total maximum daily loads' or 'TMDLs.' 33 U.S.C. §§1313(d)(1)(A), (C). TMDLs are the maximum quantity of a pollutant the water body can receive on a daily basis without violating the water quality standard. The TMDL calculations are to ensure that the cumulative impacts of multiple point source discharges are accounted for, and are evaluated in conjunction with pollution from non-point sources. States must ***then*** institute whatever additional cleanup actions are necessary, which can **include further controls on both point and nonpoint pollution sources**." (emphasis added).

Thus, the Court reasoned that the TMDL program is the tool for correcting water quality impairments when they are deemed to exist, not continued ratcheting down under the NPDES permitting program. Any other determination would render the TMDL program superfluous.

1) Numeric Effluent Limitations are Not Required.

The Regional Board has imposed numeric water quality-based effluent limitations ("WQBELs") for various constituents in the Permit based on 40 C.F.R. §122.44(d). *See* Permit at Section IV.C, pg. 9. However, as explained below, section 122.44(d) does not require the imposition of *numeric* WQBELs.

EPA regulations require that "each NPDES permit shall include the following requirements when applicable." *See* 40 C.F.R. § 122.44 (emphasis added). Subsection (d) of this section imposes "any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of the CWA necessary to achieve water quality standards established under Section 303 of the CWA, including State narrative criteria for water quality . . ." 40 C.F.R. § 122.44(d) (emphasis added). The regulations require the imposition of "requirements," not numeric effluent limitations. Furthermore, when numeric effluent limitations are infeasible, EPA regulations specifically authorize the use of Best Management Practices (BMPs) and other non-numeric or narrative requirements in lieu of numeric limits. 40 C.F.R. §122.44(k)(3); *see also* SWRCB Order No. WQ 2003-12 at pg. 9. Alternatively, the Regional Board could have styled this Permit after recent permits in the Central Valley Region, which have imposed final numeric limits, but stated that these limits do not apply if certain actions are undertaken by the discharger. *See* Order Nos. R5-2007-0036 and R5-2007-0039. This approach, which was not vetoed by USEPA, takes a creative approach to dealing with infeasible final limits without the necessity of compliance schedules.

The California Court of Appeal in the *Tesoro* case specifically ruled on this issue and stated that numeric limits are not required, and that, where infeasibility is demonstrated, numeric limits can be replaced with non-numeric requirements. *See Communities for a Better Environment v. SWRCB*, 109 Cal.App.4th at 1103-1105; *see accord In the Matter of the Petition of Citizens for a Better Environment, Save San Francisco Bay Association, and Santa Clara Audubon Society*, SWRCB Order No. WQ 91-03 (May 16, 1991). This appellate decision is binding on the State Board as a party to that case and must be followed in the case of this Permit.

By including numeric effluent limitations in lieu of non-numeric or narrative requirements where numeric limits have been demonstrated to be infeasible, the Regional Board exceeded federal law requirements. If the Regional Board chooses to exceed federal law requirements, then it must comply with state law requirements. *City of Burbank, et al v. SWRCB, et al.,* 35 Cal. 4th 613, 627-628 (2005). However, the Regional Board failed to comply with the requirements of Water Code §13263(a), which requires consideration of several factors including those contained in Water Code §13241 when adopting numeric effluent limitations more stringent than required by federal law into this Permit.

Thus, the State Board should remand the Permit to the Regional Board and direct the Regional Board to comply with the provisions of 40 C.F.R. §122.44(k)(3), by removing the numeric concentration-based effluent limits for mercury, cyanide, and dioxin-TEQ, and the mass emission limit for mercury, where compliance with such limits has been demonstrated to be infeasible, and replace these numeric limits with narrative requirements (source control, best management practices, etc.) in lieu of the numeric limits.[6]

2) Dioxin-TEQ Limits

The Permit contains the following effluent limitations for dioxin-TEQ:

| AMEL (µg/L) | MDEL (µg/L) | Effective Date |
|---|---|---|
| $1.4 \times 10^{-8}$ | $2.8 \times 10^{-8}$ | 9/1/2017 |

The CTR did not promulgate numeric water quality criteria for dioxin-TEQ, only for 2,3,7,8-tetrachlorodibenzo-p-dioxin ("2,3,7,8-TCDD"). In addition, no aquatic life criteria were promulgated in the CTR of the Basin Plan for dioxin-TEQ. Only a human-health criteria for municipal ("Water & Organisms"), and non-municipal drinking water supply waters (*e.g.*, "Organisms Only") were set at 0.000000013 and 0.000000014 µg/L, respectively, based on a carcinogenicity risk of $1 \times 10^{-6}$. 40 C.F.R. §131.38(b)(1)(#16). These figures are based on an assumed exposure pathway of consumption of 6.5 grams per day of organisms from the Bay that are contaminated at a level equal to the criteria concentration, but multiplied by a

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[6] Such an action would negate the need for compliance schedules as well since the SASM would presumably be able to immediately comply with narrative requirements for the constituents at issue.

"bioconcentration factor." 65 Fed. Reg. 31693 (May 18, 2000). This amount can be consumed over a lifetime (70 years) without expecting an adverse effect. *Id.* However, current detection technologies cannot measure to these levels.

The Permit did not show a demonstrated reasonable potential for 2,3,7,8-TCDD. *See* Permit at pg. F-22. However, the same table containing the reasonable potential analysis ("RPA") shows reasonable potential ("RP") for dioxin-TEQ, even though no adopted water quality criteria or objective exists for dioxin-TEQ upon which a RPA could be performed.[7] The Regional Board's action in finding reasonable potential in the absence of applicable numeric water quality criteria was unreasonable, in violation of Water Code §13000, and 40 C.F.R. §122.44(d).

The number used in the RPA was exactly the same as the promulgated criterion for 2,3,7,8-TCDD. The Permit provides:

> "The CTR states that California NPDES permits should use toxicity equivalents (TEQs) where dioxin-like compounds have a reasonable potential with respect to narrative criteria. In USPEA's National Recommended WQOs, December 2002, USEPA published the 1998 World Health Organization (WHO) Toxicity Equivalence Factor (TEF) scheme.[8] In addition, the CTR preamble states USEPA's intent to adopt revised WQC guidance subsequent to their health reassessment for dioxin-like compounds. The SIP applies to all toxic pollutants, including dioxins and furans. Staff used TEQs to translate the narrative Basin Plan WQO to a numeric WQC for the 16 dioxin congeners."

*See* Permit at pg. F-34. Given that 9 years have passed since the TEFs were first adopted by the WHO, it is unreasonable for the Regional Board to continue to use a broad narrative objective and not adopt numeric objectives and an implementation plan through a formal rulemaking process as required by Water Code §13241 and §13242, and the triennial review process required by CWA section 303, 33 U.S.C. §1313(c) and (e). Moreover, the use of a narrative objective indefinitely to

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[7] It should be noted that this is contrary to the RPA for other constituents where the Permit states "No Criteria" in the table instead of inserting a non-promulgated criteria. *See* Permit at pg. F-21-24.

[8] The "translated" dioxin-TEQ objective of 0.014 pg/L mirrors the dioxin-TEQ objective in the State Board's 1991 Enclosed Bays and Estuaries Plan ("EBEP"), which was invalidated in 1994 by the Sacramento County Superior Court due to the State Board's failure to consider economics and other factors under Cal. Water Code Section 13241, failure to comply with CEQA, and failure to comply with the Administrative Procedures Act ("APA"). *See Water Quality Control Cases*, Judicial Council Coordination Proceeding No. JC2610, Statement of Decision (Sacramento County Superior Court, Mar. 23, 1994). Following the Court decision, the State Board rescinded the plan, including the dioxin-TEQ objective of 0.014 pg/L. Thus, this invalidated and later rescinded dioxin-TEQ objective should not be used.

skirt state law requirements also ignores the congressional mandate that water quality standards criteria "shall be specific numeric criteria for such toxic pollutants." 33 U.S.C. §1313(c)(2)(B)(emphasis added).

a) The Regional Board Improperly Utilized the Basin Plan's Narrative Objective for Bioaccumulation to Justify the Imposition of a Dioxin-TEQ Limit.

In adopting a numeric effluent limitation for dioxin-TEQ, the Regional Board attempted to justify its actions by claiming that the applicable water quality objectives specified in the Basin Plan require limits to protect against unsafe levels of dioxin in the fatty tissue of fish and other organisms. *See* Permit at pg. F-33. The Basin Plan contains no numeric objectives specifically set to define acceptable levels of these constituents in fish tissue or sediment, and the CTR only set numeric criteria for 2,3,7,8-TCDD, not for all the congeners of dioxins. Thus, the Regional Board improperly relied upon the Basin Plan's narrative objective for Bioaccumulation to justify limits for dioxin-TEQ.

In addition, the Regional Board improperly lumped together all of the congeners of dioxin and furans. Had the RPA been done on each individual congener, most if not all would not show reasonable potential because of the varying TEF for each. *See* Permit at pg. F-34. However, pooling all of the congeners together creates an unnecessary finding of reasonable potential for all congeners. The Regional Board's inclusion of an effluent limit for dioxin-TEQ based on all of the congeners of dioxins and furans improperly ignores that the congeners do not create reasonable potential. Imposition of limits on congeners without reasonable potential violates the specific mandates of the Basin Plan and federal regulations. [9]

A review of the Bioaccumulation objective demonstrates that this objective does not provide authorization for the numeric limits imposed in this instance. The Bioaccumulation objective found on page 3-2 of the Basin Plan provides:

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[9] The insertion of limits without reasonable potential is contrary to permit findings that state "WQBELs are not included in this Order for constituents that do not demonstrate Reasonable Potential." *See* Order No. R2-2007-0056 at pg. F-24, para. (f).

> Many pollutants can accumulate on particles, in sediment, or bioaccumulate in fish or other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife, and human health will be considered. (emphasis added)

Courts have acknowledged that the presence of dioxin may be beyond the Discharger's control. *See, e.g., Communities for a Better Environment*, 109 Cal.App.4th at 1096 ("Dioxins are not produced intentionally. They are formed as undesired byproducts of combustion and the manufacture and use of certain chlorinated chemical compounds. They exist in the environment worldwide, particularly in air, water, soils, and sediments. They enter the atmosphere through aerial emissions and widely disperse through a number of processes, including erosion, runoff, and volatilization from land or water. For example, automobile exhaust is a common source of dioxins.") Therefore, the minimal contribution of dioxin-TEQ by SASM's POTW is not a "controllable water quality factor" that is causing a "detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life," and imposing a limit for dioxin-TEQ is not necessary nor based upon the findings and evidence.

Additionally, a numeric effluent limitation can only be imposed through a narrative water quality objective if the narrative objective contains an appropriate mechanism to "translate" the narrative requirement (*i.e.*, to translate a narrative objective into a concentration or mass effluent limitation).[10] In order for a numeric limit derived from a narrative objective to be appropriate, the derivation of the numeric limit must be transparent. A clear explanation of the translation from the

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[10] Federal regulations mandate that "[w]here a State adopts narrative criteria for toxic pollutants to protect designated uses, the State must provide information identifying the method by which the State intends to regulate point source dischargers of toxic pollutants on water quality limited segments based on such narrative criteria. Such information may be included as part of the standards . . . ." 40 C.F.R. §131.11(a)(2). Since the Basin Plan's narrative objective for Bioaccumulation does not contain an appropriate translation mechanism, the only conclusion can be that subjective, arbitrary, or wholly inapplicable WQBELs for dioxin-TEQ have been imposed in the Permits. The rationale in the *EBMUD* Order, SWRCB Order No. WQ 2002-0012 at pgs. 6-7 does not apply in this case, since the dioxin-TEQ limits are final WQBELs and were not adopted in conformance with federal regulations as there are no 304(a) guidance criteria for dioxin-TEQ. *See* http://www.epa.gov/waterscience/criteria/wqcriteria.html.

narrative water quality objective must be set forth in the NPDES permit.[11] *See* 40 C.F.R. §124.8(b)(4); *Topanga Ass'n for a Scenic Community v. County of Los Angeles*, 11 Cal. 3d 506, 515 (1974); *California Edison v. SWRCB*, 116 Cal. App. 3d 751, 761 (1981); *see also In re Petition of the Pinole-Hercules Water Pollution Control Plant and County of San Francisco*, State Board Order No. WQ-95-4 at 10 (Sept. 21, 1995). The failure by the Regional Board to clearly enunciate the translation from a narrative objective to a numeric limit in the Findings or Fact Sheet of the Permit was an abuse of discretion.[12]

b) Meeting the Dioxin Concentration Limit is Not Feasible

As stated above, dioxins enter the environment from a variety of sources, primarily combustions sources. *See Communities for a Better Environment*, 109 Cal. App. 4th at 1096 ("automobile exhaust is a common source of dioxins.") Further. the Regional Board has conceded that compliance with the dioxin-TEQ limits is not feasible. *See* Permit at pg. F-34, para. (iv), F-38, para. (2). For these reasons, numeric effluent limitations were not required.[13]

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[11] In EPA's official guidance documents, EPA explains at length the process the State must go through to implement an adequate translator mechanism. *See* EPA Water Quality Standards Handbook at 3-13 to 3-26 (1994). Among other things, EPA provides that a State's translator procedure for narrative criteria should specifically describe:

- specific, scientifically defensible methods by which the state will implement its narrative toxicity standard for all priority pollutants;
- how these methods will be integrated into the State's priority pollutant control program;
- methods the State will use to identify those pollutants to be regulated in a specific discharge;
- an incremental cancer risk for carcinogens;
- methods for identifying compliance thresholds in permits where calculated limits are below detection;
- methods for selecting appropriate hardness, pH, and temperature variables for criteria expressed as functions;
- methods or policies controlling the size and in-zone quality of mixing zones;
- design flows to be used in translating chemical-specific numeric criteria for aquatic life and human health into permit limits; and
- other methods and information needed to apply standards on a case-by-case basis.

*Id.* at 3-25; *see also* EPA, TSD for Water Quality-Based Toxics Control at 30-31(1991).

[12] Similar arguments can be made for the imposition of the mercury mass limit, which was also imposed in the last permit (and carried over into this Permit) based on the Bioaccumulation narrative objective. If, despite the above arguments and evidence, the State Board believes that mass should be addressed on a year round performance basis, prior to the completion of an applicable TMDL, BACWA requests that the Regional Board be directed to reclassify the proposed kg/month values for mercury as effluent "goals" that, if exceeded, would trigger mandatory, enforceable additional new source identification and control activities beyond those currently being implemented, as is done with chronic toxicity requirements. The distinction between a goal and a limit is that the goal would not be subject to mandatory minimum penalties and unnecessary civil and criminal liability.

[13] The Regional Board should have done what it did in the Vallejo permit, Order No. R2-2006-0056, which was to state: "Due to the limited monitoring data, no dioxin limits (final or interim) are established. The final limits for dioxin TEQ will be based on the WLA assigned to the Discharger in the TMDL. This Order requires additional dioxin

The Regional Board's assertion that other strategies, including potential mass offsets, could address the impairment ignores two basic points. First, the Regional Board has historically never agreed that there is an "impairment" for dioxin in the Bay.[14] In addition, mass offsets will not address the ability to meet a *concentration* limit. Even the new Regional Board member, Dr. Terry Young, has previously questioned how an offset can be done for concentration. Offset programs for concentration-based limits have not been demonstrated to be feasible. Further, no state policy for offsets exists, so the feasibility of such an approach has not been determined. For these reasons, the numeric limits for dioxin-TEQ imposed in the Permits represent an abuse of discretion.

### B. The Regional Board Improperly Included Final Effluent Limits for Mercury and Cyanide.

SASM's Permit includes final effluent limits for mercury and cyanide. Each of these pollutants is currently being addressed through alternative means in order to protect beneficial uses for the San Francisco Bar. Requiring final effluent limits that are unachievable by SASM for compounds that are awaiting site specific objective adoption at the state level (cyanide) or total maximum daily load allocations (mercury, selenium, pesticides) is inappropriate. Further, many of these limits are expressed as daily maximum limits when the impracticability of longer terms limits has not been established, contrary to 40 C.F.R. §122.45(d)(2). These final limits should be only provided for reference and should not be enforceable. BACWA requests removal of these final concentration limits.

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monitoring to complement the Clean Estuary Partnership's special dioxin project, consisting of impairment, assessment, and a conceptual model for dioxin loading into the Bay. The permit will be reopened, as appropriate, to include interim dioxin limitations when additional data become available." Order No. R2-2006-0056 at pg. F-24.

[14] *See* Letter and attachments from Loretta Barsamian, RWQCB to Alexis Strauss, EPA Region IX (Jul 14, 1998)("we believe the data do not support any other additions to the list at this time. This is particularly true in the case of dioxin.")(incorporated herein by reference). The existing 303(d) listings for dioxins and furans in San Francisco Bay were made by USEPA Region IX in a letter dated May 12, 1999. These listings were made as changes (additions) to the 1998 303(d) list, which was originally adopted by the SWRCB, based on a 1994 study (San Francisco Regional Board/ SWRCB/ California Department of Fish and Game, *Contaminant Levels in Fish Tissue from San Francisco Bay*, December 1994). EPA based its determination on an OEHHA fish advisory, and by finding impairment of the Commercial and Sportfishing (COMM) use due to human consumption of fish. However, EPA's finding ignored other important information such as later studies and a 1998 national dioxin health risk study that showed that dioxin levels and dioxin consumption rates of other protein sources (e.g., beef, dairy products) is higher than through fish consumption. *See* Statements by Dr. William Farland, USEPA National Center for Environmental Assessment, 1998. More recent studies have also shown the benefits of eating fish notwithstanding health advisories for mercury or dioxins. Therefore, an advisory to avoid fish consumption may actually increase the health risk to Bay area residents.

BACWA is specifically concerned about mercury which is being addressed through TMDLs. EPA Region 9 has provided an opinion that TMDLs cannot be used to delay the implementation of a final limit in a permit. This is an opinion of EPA Region 9 expressed through their recent SIP disapproval action. However, this is not a regulation adopted by either the state of California nor the USEPA. Furthermore, EPA's recent action is contrary to appellate case law that affirms the deference of final numeric effluent limits until a TMDL can be implemented. For these reasons BACWA strongly objects to having final limits and a CDO for mercury when BACWA members have worked tirelessly with the Clean Estuary Partnership (CEP), the Regional Water Board and the State Water Board to have a final mercury TMDL adopted.

Now BACWA members are essentially being punished just because a final TMDL has not been finally adopted and approved. BACWA urges the State Water Board to question EPA Region 9's recent action recent action and to repromulgate compliance schedule authority to deal with TMDL-based schedules as well as allowing compliance schedules for any new or more stringent effluent limit imposed. In the interim, the State Water Board should overturn the use of final limits prior to the implementation of a TMDL.

**C. <u>The Regional Board Improperly Imposed Mercury Limits.</u>**

1) <u>Mercury Concentration Limits</u>

The Permit contains final concentration limits for mercury at page 9, IV.C, Table 4. These limits were derived from the Basin Plan objectives of 2.1 and 0.025 µg/L,[15] for acute and chronic criteria, respectively. *See* Permit at pg. F-25. There was no reasonable potential to trigger these

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[15] The 0.025 criterion has been recently removed from the Basin Plan and is no longer a valid water quality objective. BACWA supported removal of that old criterion for the reasons stated in its comments to the State Board in 2005 on the Mercury TMDL. In those comments, BACWA stated the 4-day mercury water quality standard was poorly designed with a bad technical basis in addition to being obsolete. This water quality objective did not take into account the conditions in the Bay where there is shallow water and high winds, causing the sediments to be re-suspended in the water column. In BACWA's review of the RMP data, BACWA concluded that even if mercury levels attained pre-industrial, pre-mining, pristine concentrations of 0.1 ppm, the water column objective of 0.025 µg/L would not be attained everywhere in the Bay without implementing massive dredging projects to modify the Bay's bathymetry. Moreover, the Basin Plan indicates that the 0.025 µg/L standard was based <u>on the level of detection</u> and not necessarily a level to protect aquatic life. *See* 1995 Basin Plan at pg. 3-10, footnote i.

limits since the objective use to determine reasonable potential was recently deleted from the Basin Plan and no reasonable potential exists under the CTR criteria. *See* Permit at pgs. F-22, F-25.

The 1998 303(d) list stated that "current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources." *See* 1998 303(d) List at pg. 8 (approved by USEPA on May 12, 1999). Further, EPA's own response to comments stated that "The existence of the fish consumption advisory provides a strong rationale for determining that the fishing beneficial use of the Bay is impaired and that the Bay should be listed on the 303(d) list." *See* Responsiveness Summary for Comments Directed to the State Water Resources Control Board, prepared by Joe Karkoski and Dave Smith, USEPA at pg. 9 (October 19, 1998). Thus, there is no evidence in the listing record that the aquatic life use was impaired, or that the 0.025 µg/L was the water quality standard representing the basis of the 303(d) listing. *See accord* SWRCB Order No. WQ 2001-06 at pgs. 31-33 (remanding mercury concentration limit). In fact, data from the Regional Monitoring Program submitted by the predecessor of BACWA demonstrated that mercury concentrations were not above the 0.025 µg/L levels in the areas of San Francisco Bay to which this objective applied. *See* Letter from Bay Area Dischargers Association to Loretta Barsamian, SFRWQCB at Attachment B (Feb. 2, 1998).

Therefore, the 303(d) listing is not dispositive of a water column impairment and imposing a concentration-based limits for this reason is not justified, particularly when a mass limit is also imposed. For these reasons, the mercury concentration limits should be removed as unnecessary and improperly justified.

2) Mercury Mass Limits

Effluent Limitation IV.F on page 12 of the Permit contains a mass limit for mercury that limits the discharge of this constituent to 0.011 kg/month until such time that a Total Maximum

Daily Load ("TMDL")[16] is required under CWA §303(d) and has been completed. *See* Permit at IV.F.

In adopting this permit limitation, the Regional Board acted in a manner that is inconsistent with CWA requirements, as the adoption of water quality-based effluent limitations for POTWs to address an alleged impairment before the adoption and implementation of TMDLs was neither intended by Congress, nor mandated by the CWA.

Congress, in the CWA, required that, where water quality standards were not being implemented even after the imposition of technology-based effluent limits, those waters were to be placed on the "303(d) List" and TMDLs were to be established at a level necessary to implement or achieve the standards. 33 U.S.C. §1313(d)(1)(C). This statutory provision makes clear that Congress intended water quality-based effluent limits to be based on the results of a TMDL process. This interpretation is consistent with the implementation language of the Basin Plan[17] and EPA guidance.[18]

The mere listing of a pollutant on the §303(d) list does not constitute conclusive evidence that there is a lack of assimilative capacity in the receiving water for that pollutant. SWRCB WQ Order No. 2001-06 at 23 (March 7, 2001). Under EPA regulations and the 1998 Clean Water Act Section 303(d) Listing Guidelines for California (August 11, 1997), a water body and pollutant may have been placed on the 303(d) list in the absence of any evidence of an exceedance of the water quality standard or objective for that pollutant or that the water body is otherwise impaired as a result of that pollutant. In fact, a waterbody was allowed to be listed just because the water quality is "of such concern that the Regional Water Board determines the waterbody needs to be afforded a level of protection offered by a 303(d) listing." *See* 1998 Clean Water Act Section 303(d) Listing

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[16] A TMDL is a quantitative assessment of the mass loading of a pollutant that can be discharged to a waterbody each day and still implement the applicable water quality standards.

[17] The Basin Plan reiterates that "by considering pollutant influx from all sources, wasteload allocation [WLA] supports the identification and implementation of the most effective and economically efficient means of achieving water quality objectives in the larger Estuary system." Basin Plan at 4-2.

[18] *See* Water Quality-based Approach to Pollution Control described in Chapter 7 of EPA's Water Quality Standards Handbook (1994); *see also* 54 Fed. Reg. 23879 (1989) ("Pursuant to section 303(c) of the CWA, states adopt water quality standards, and then, under section 303(d), develop total maximum daily loads (TMDLs), for water quality-

Guidelines for California (August 11, 1997) at p. 3, para. B.6. Thus, the State's listing may have been *completely independent* of any finding of an actual impairment of water quality and should not be used as a basis for imposing mass limits.[19]

Although effluent restrictions are presumably intended to benefit water quality and the environment, the evidence shows that such benefits will not be realized. POTWs contribute only a small percentage of the total pollutant loading to the Bay of toxic pollutants listed on the 303(d) list (including mercury). *See* Bay Area Regional Water Board's 2006 Mercury TMDL Report. Public clean water agencies' contribution to the input of mercury to the Bay, and any corresponding reduction sought in the TMDL is extremely small. Municipal wastewater results in 11-17 kg/yr out of the more than 1200 kg/yr total annual loading from all sources. This is less than one-tenth of one percent (.01%) of the total loading. Imposing mass limits for mercury does not solve the problem, but merely unfairly targets point sources covered by permits and increases the regulatory burden on public agencies that have already stepped up to the plate to help with mercury reduction efforts voluntarily.[20]

Allowing normal economic growth and development to occur in the SASM service area in the interim until the TMDL is finalized would not result in any appreciable degradation in water quality. Furthermore, completely eliminating SASM's discharge to the Bay would not result in any measurable or significant improvement in water quality.[21] Therefore, regulation of this *de minimis* source is not reasonable and is likely not required. *See Ober v. USEPA*, 243 F.3d 1190 (9th Cir. 2001)("de minimis exception is allowed for regulation yielding trivial gain"; thus, regulators have

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limited segments, to attain and maintain the water quality standards....This process results in effluent limits that protect aquatic life and human health because the limits are derived from water quality standards.")

[19] Although the State Board has adopted new listing criteria, it is not clear that all listed waters have been thoroughly reanalyzed under the new criteria for listing and delisting and may remain on the list as remnants of the broader previous listing process.

[20] Recent scientific literature indicates that "...loadings to water in the San Francisco Bay Estuary are dominated by runoff from the Central Valley catchment and remobilization of contaminated sediments deposited during past mining activities." Macleod ES&T, vol.39, No.17, 2005. Many BACWA members have mercury source control programs that include dental amalgam programs and/or fluorescent bulb and thermometer exchange programs.

[21] The total removal of this discharge would make no measurable change in the mercury levels in fish. "[W]hat matters is not the [water]'s current status, but whether the proposed discharge will have a detectable effect on that status." *Arkansas v. Oklahoma*, 503 U.S. 93 (1992).

"the authority to exempt from regulation those source categories in the area which contribute only negligibly to ambient concentrations which exceed [standards].")

The requirements to limit the *de minimis* mass inputs of mercury to current levels in the Permit[22] and subsequent permits will more likely impede, rather than facilitate, improvements in water quality. By causing significant public resources to be expended on projects to meet stringent limits that do little to improve water quality, fewer resources will be available for projects that would actually provide demonstrable improvements in water quality. Such projects will presumably be identified as a part of the TMDL development process.

The imposition of permit restrictions on SASM's *de minimis* discharge of 303(d)-listed pollutants (i.e., mercury) prior to the adoption of a TMDL, and in the absence of a clearly articulated legal, scientific or technical basis, constituted a prejudicial abuse of discretion by violating the Basin Plan, the California Water Code, and the CWA.

3) The Regional Board Abused its Discretion by Imposing Both Interim Concentration and Mass Limits on Mercury.

Effluent limitations can be expressed numerically in terms of concentration (*i.e.,* milligrams per liter) or mass (*i.e.,* pounds per day). Federal regulations provide guidance on when to impose which type of effluent limit by stating, in part, that "[a]ll pollutants in permits shall have limitations, standards or prohibitions expressed in terms of mass EXCEPT . . . when applicable standards and limitations are expressed in terms of other units of measurement. . .." 40 C.F.R. §122.45(f)(1) (emphasis added). Thus, if water quality standards are based upon concentration, mass limits are not required. *Id.*

Despite this clear exception to the requirement for mass limits, the Permit contains both mass and concentration effluent limits for mercury. Requiring dual effluent limits (mass and

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[22] *See* Permit IV.6, pg. 12 ("Until TMDL and wasteload allocation (WLA) efforts for mercury provide enough information to establish a different WQBEL, the Discharger shall demonstrate that the current mercury mass loading does not increase..."). Incidentally, the Regional Board's assertion in previous Orders (*e.g.,* Order No. 01-105) that the State's anti-degradation policy (Resolution 68-16) necessitates the imposition of effluent limitations for constituents found on the State's 303(d) list in order to prevent further degradation of a particular water body is faulty. Resolution 68-16 applies to "high quality waters" (*i.e.,* whenever the existing quality of water is better than the quality established in policies as of the date on which such policies became effective) and therefore, does not apply to discharges of constituents for which the receiving water has been determined to be impaired.

concentration) for the same constituent amounts to a "double ding" in any potential enforcement action, in that an exceedance of a concentration effluent limit may also result in exceedance of the mass limit. Thus, the imposition of mass limits, in addition to concentration limits, unnecessarily exposes these permit holders to additional enforcement actions and mandatory minimum penalties.

Mass limits, in addition to concentration limits, are redundant as mass limits are always implied in POTW permits because of inherent constraints related to a treatment plant's design capacity or maximum flows. In this case, the Permit specifically prohibits exceeding the average dry weather flow rate for which the facility was designed. *See* Permit at page 7, para. (III)(C). The combination of a flow restriction and a concentration restriction is equivalent to a mass restriction. Thus, there is no need to explicitly require mass limits in the Permit since the two components of mass (flow and concentration) are already explicitly limited.

Furthermore, performance-based mass limits are particularly troublesome for POTWs as such limits may unjustifiably restrict future growth and economic development in the POTW service area. Such restrictions contradict the Basin Plan's mandate that "control measures employed must be sufficiently flexible to accommodate future changes in technology, population growth, land development, and legal requirements." Basin Plan at 4-7 (emphasis added). By imposing mass limits without considering the need for population growth and land development within the SASM service area, the Regional Board violated the Basin Plan, and failed to comply with Water Code §13263(a) when imposing mass limits which are not required when a concentration limit is imposed. 40 C.F.R. §122.44(f).

By imposing duplicative mass limits, the Regional Board has regulated beyond the requirements of federal law and must, therefore, consider the requirements set forth in Water Code section 13263(a), including a consideration of economics and the need for developing housing within particular regions pursuant to Water Code §13241, prior to imposing such growth restricting limits upon POTWs. *See City of Burbank v. State Water Resources Control Board,* 35 Cal.4th 613, 618 (2005). For each of these reasons, the Regional Board violated state law and committed a prejudicial abuse of discretion by including or sanctioning both mass and concentration limits. For these reasons, the State Board should remand the Permit to remove the mass limits on mercury.

**D. The Regional Board Improperly Imposed a Compliance Schedule Action Plans in the Permit and in the CDO which are Overly Stringent.**

BACWA is concerned that having stringent schedules contained in the CDO will eventually require the construction of capital facilities when BACWA has repeatedly been told that building additional treatment is not the expected direction of the Bay Area water quality program. BACWA was under the impression that the direction was to pursue regulatory alternatives, such as TMDLs, site specific objectives, and pollution prevention (as described in the implementation plan for the mercury TMDL). The CDO veers way off of this intended direction.

Furthermore, this Permit includes compliance schedules for pollutants that have been banned for use or for which wastewater treatment plant effluents have been identified as non-significant sources. *See* Permit at pg. 24, CDO at pg. 3. Additionally, each pollutant is already being addressed through an alternative regulatory strategy that will appropriately resolve beneficial use concerns for the San Francisco Bay. The compliance schedules in the Permit and/or the CDO are overly burdensome for every constituent, as specified below:

1) Mercury. The Regional Water Board has been in the process of developing a mercury TMDL for at least ten years. The mercury TMDL recently approved by the Regional and State Water Boards contain requirements that have been developed in a meaningful and deliberate way to address the mercury issue holistically throughout the process of its development and deliberation. Bay Area POTWs are ready to implement the mercury TMDL through activities that will address impairment in San Francisco Bay. This is in contrast to the requirements in the CDO that mandate extensive actions, including significant expenditures of public funds, within the next three to six months solely because the State Water Board has not yet approved the mercury TMDL. This timeline is completely unreasonable given the history of the TMDL process and the insignificant contribution of mercury by municipal wastewater treatment plants to San Francisco Bay.

2) Cyanide. The Regional Water Board has adopted a site-specific objective for cyanide that will result in appropriate water quality objectives that are protective, technically feasible, and reasonable. Approval of the cyanide site-specific objective by the State Water Board, which must happen before approval by the Office of Administrative Law and USEPA, is currently stalled

because the State Water Board staff has been pulled to work on other initiatives. Cyanide is *not* a significant water quality issue for San Francisco Bay. Yet the CDO requires significant outlay of public funds on all kinds of activities to reduce cyanide from municipal wastewater effluent. These requirements are a waste of public resources.

For these reasons, the action plans in the Permit and/or CDO should be revised to remove all activities related to installation of capital improvements. In addition, any pollution prevention activities should be identical to resolutions or orders already adopted by the Regional Water Board for specific constituents, such as mercury and cyanide. No new or different activities should be required for these constituents.

**E. The Regional Board Improperly Imposed Requirements for the Regionally-Developed Portion of the Pollutant Minimization Program.**

SASM does not have a Pollution Prevention Program because its flow rate is less than 5 mgd and it is not required to have a pretreatment program. The Regional Water Board's Policy had already been established on Pollution Prevention (P2) in the copper and cyanide SSO was that P2 was not expected of facilities of less than five mgd. This CDO, again, is not consistent with the approach that has been well accepted. Therefore, BACWA objects to the inclusion of detailed requirements for the regionally-developed portion of the Pollutant Minimization Program in the permit as too burdensome for this small discharger. *See* Permit at pg. 18. Significant pollution prevention activities are already required as part of the compliance schedule and CDO, and these activities should be sufficient.

In addition, California Water Code section 13263.3(k) prohibits the State Board or Regional Board from including a Pollution Prevention Plan ("PPP") in any waste discharge requirements or other permits. Notwithstanding this prohibition, SASM's Permit includes a detailed discussion of SASM's PPP. *See, e.g.,* Permit at page 17 (requiring SASM to "develop and conduct" a pollution minimization program when triggered by certain evidence). By including the PPP in the Cities' Permit, the Regional Board violated Water Code section 13263.3(k).

Furthermore, in the *Tosco Order*, the State Board stated: "The Regional Water Board cannot require in a permit that a discharger implement a Pollution Prevention Plan." *Tosco Order* at

61. Thus, the Permit cannot require the implementation of a Pollution Prevention Plan. For the above-stated reasons, the State Board should direct the Regional Board to remove the PPP from SASM's Permit.

**5. THE MANNER IN WHICH THE PETITIONER IS AGGRIEVED:**

The Permit and CDO include requirements, challenged herein, which are unreasonable, contrary to legal requirements, and not supported by the findings and evidence in the administrative record. The limits for mercury, cyanide and dioxin-TEQ are unreasonable because these entities have extremely limited control over influent sources. Further, these requirements could ultimately impose considerable costs on the agency's ratepayers for potential mandatory and discretionary penalties imposed for non-compliance with the challenged requirements, or for construction of additional treatment units to meet limits imposed without a demonstration that such requirements would result in material improvements in the water quality of the Bay. In fact, such expenditures could have a negative impact on water quality, by diverting limited public funds away from other projects that might have a higher potential for improvements in water quality.

BACWA is aggrieved by unreasonable permit prohibitions that may put SASM in non-compliance with the Permit and CDO. BACWA's membership will be aggrieved by any permit provisions that cannot now or in the future be met as federal and state law provide harsh sanctions for non-compliance with effluent limitations in a wastewater discharge permit. For example, California Water Code § 13385 prescribes mandatory minimum penalties of $3,000 per day per violation, with narrow exceptions. With this statute, the State has no latitude to excuse noncompliance with the Permit.

Other statutory provisions, while not setting mandatory minimum penalties, create even greater exposure for BACWA's members. The CWA authorizes civil penalties of up to $32,500 per day per violation, 33 U.S.C. § 1319(d), and also authorizes criminal penalties, including the incarceration of public officials, for knowing or negligent permit violations. 33 U.S.C §1319(c); *see U.S. v. Weitzenhoff*, 35 F.3d 1275 (9th Cir. 1994) (managers of treatment plant convicted of permit violations). In addition to enforcement by administrative agencies, private parties can seek civil penalties pursuant to the "citizen suit" provisions of the CWA. *See* 33 U.S.C. § 1365.

Likewise, California's Porter-Cologne Water Quality Act contains stiff penalties for violation of effluent limitations in a wastewater discharge permit. *See* Cal. Water Code §§ 13385 and 13387. This act authorizes a penalty of up to $25,000 per day per violation, with additional liability not to exceed $25 per gallon if the discharge is to navigable waters of the United States and either is "not susceptible to cleanup or is not cleaned up." Cal. Water Code § 13385(b)(1)-(2), (d). The act also establishes criminal liability for intentional or negligent violation of effluent limitations contained within a permit. Cal. Water Code § 13387(a)-(d).

Furthermore, the application of illegal or unreasonable effluent limitations in violation of federal and state law causes substantial harm to BACWA and its members that have a vested interest in complying with the law. This appeal furthers one of BACWA's express purposes, which is "to represent the interests of the Agency or one or more Member Agencies, including, without limiting the generality of the foregoing, by participating in the appeal of or court challenge of the issuance or denial of issuance of NPDES permits or the adoption or amendment of water quality orders, regulations or decisions."

**6. THE SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH PETITIONER REQUESTS:**

Petitioner seeks an Order by the State Board that will remand Order Nos. R2-2007-0056 and R2-2007-0057 to the Regional Board for revisions and will direct the Regional Board to:

A. Remove the numeric effluent limitations for dioxin-TEQ;

B. Remove the final effluent limits for mercury and cyanide;

C. Remove the mass limit for mercury;

D. Revise the compliance schedule action plans to (1) remove all activities related installation of capital improvements and (2) ensure that any pollution prevention activities are identical to resolutions or orders already adopted by the Regional Water Board for specific constituents; and

E. Remove the requirements for the regionally-developed portion of the Pollutant Minimization Program.

**7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL ISSUES RAISED IN THE PETITION:**

BACWA's preliminary statement of points and authorities is set forth in Section 4 above. Nevertheless, BACWA reserves the right to supplement this statement upon receipt and review of the administrative record.

In Section 4, BACWA asserts that provisions of the Permit and CDO are inconsistent with the law and otherwise inappropriate for various reasons, including: failure to comply with the Porter-Cologne Water Quality Control Act (Cal. Water Code, §§ 13000 *et seq.*); failure to comply with the CEQA (Cal. Public Resources Code, §§ 21000 *et seq.,* and 23 C.C.R. § 3733); failure to comply with the APA (Cal. Gov't Code, §§ 11340 *et seq.*); inconsistency with the Water Quality Control Plan, San Francisco Bay Region (Basin Plan); inconsistency with the Clean Water Act (33 U.S.C. §§ 1251 *et seq.*) and its implementing regulations (40 C.F.R. Parts 122, 123, 130, and 131); inconsistency with EPA guidance (EPA's Water Quality Standards Handbook (1994, 3$^{d}$ edition)); absence of findings supporting the provisions of the Order; Regional Board findings that are not supported by the evidence; and other grounds that may be or have been asserted by Petitioner.

**8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE REGIONAL BOARD AND TO THE DISCHARGER:**

A true and correct copy of this Petition was mailed by First Class mail on September 7, 2007, to the Discharger, and to the Regional Board at the following address:

Bruce Wolfe, Executive Officer
California Regional Water Quality Control Board,
San Francisco Region
1515 Clay Street, Suite 1400
Oakland, California 94612

**9. A STATEMENT THAT THE SUBSTANTIVE ISSUES AND OBJECTIONS RAISED IN THE PETITION WERE RAISED BEFORE THE REGIONAL BOARD, OR AN EXPLANATION WHY NOT:**

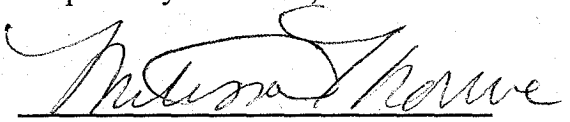
The substantive issues and objections were raised before the Regional Board either in this permitting action, or in previous permitting actions that were appealed to the State Board and remain in abeyance. The issues raised in the previous Petition that remain at issue were reiterated and incorporated into this Petition.

**10. PETITIONER'S REQUEST FOR ABEYANCE:**

BACWA requests that the State Board place its Petition for Review in abeyance pursuant to 23 C.C.R. §2050.5(d) to allow time for BACWA to attempt to resolve its concerns with the Regional Board informally.

DATED: September 7, 2007

Respectfully submitted,



Melissa Thorme
DOWNEY BRAND LLP
BACWA Special Counsel

**EXHIBIT A**

California Regional Water Quality Control Board

San Francisco Bay Region

1515 Clay Street, Suite 1400
(510) 622-2300• Fax (510)622-2460
http://www.waterboards.ca.gov/sanfrancsicobay

Linda S. Adams
*Secretary of Environmental Protection*

Arnold Schwarzenegger
*Governor*

**REVISED TENTATIVE ORDER NO. R2-2007-XXXX**
**NPDES PERMIT NO. CA0037711**

**WASTE DISCHARGE REQUIREMENTS FOR SEWERAGE AGENCY OF SOUTHERN MARIN, DISCHARGING TO CENTRAL SAN FRANCISCO BAY THROUGH DISCHARGE POINT 001**

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order.

**Table A. Discharger Information**

| | |
|---|---|
| **Discharger** | Sewerage Agency of Southern Marin |
| **Name of Facility** | Sewerage Agency of Southern Marin Wastewater Treatment Plant, its collection system and its satellite collection systems |
| **Facility Address** | 450 Sycamore Avenue |
| | Mill Valley, CA 94941 |
| | Marin County |

The Discharger is authorized to discharge from the following discharge points as set forth below.

**Table B. Discharge Location**

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| 001 | Approximately 3.4 million gallons per day (MGD) of secondary-level treated wastewater | 37° 52' 12" | 112° 27' 05" | Raccoon Strait of Central San Francisco Bay |

**Table C. Administrative Information**

| | |
|---|---|
| This Order was adopted by the Regional Water Board on: | **XXXX** |
| This Order shall become effective on: | **October 1, 2007** |
| This Order shall expire on: | **September 30, 2012** |
| The U.S. Environmental Protection Agency (USEPA) and the Regional Water Board have classified this discharge as a major discharge. | |
| The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the Order expiration date as application for issuance of new waste discharge requirements. | |

IT IS HEREBY ORDERED, that Order No. 01-070 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted therein, and the

provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted therein, the Discharger shall comply with the requirements in this Order.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on **<Adoption Date>**.

Bruce H. Wolfe, Executive Officer

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## List of Tables



## List of Attachments

# I. FACILITY INFORMATION

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order.

**Table 1. Facility Information**

| | |
|---|---|
| **Discharger** | Sewerage Agency of Southern Marin |
| **Name of Facility** | Sewerage Agency of Southern Marin Wastewater Treatment Plant and its collection system |
| **Facility Address** | 450 Sycamore Street |
| | Mill Valley, CA 94941 |
| | Marin County |
| **Facility Contact, Title, and Phone** | Stephen J. Danehy, General Manager, 415-388-2402 ex. 16 |
| **Mailing Address** | 26 Corte Madera Avenue, Mill Valley, CA 94941 |
| **Type of Facility** | POTW |
| **Facility Design Flow** | 3.6 MGD (average dry weather flow) |

# II. FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Regional Water Board), finds:

**A. Background.** Sewerage Agency of Southern Marin (SASM) (hereinafter the Discharger), submitted a Report of Waste Discharge (ROWD), dated November 15, 2005, and applied for an NPDES permit renewal to discharge treated wastewater from the SASM Wastewater Treatment Plant (plant or facility) located at 450 Sycamore Street, Mill Valley, Marin County. The ROWD was deemed complete on March 17, 2006. The Discharger is the owner and operator of the facility.

**B. Facility Description**

1. The plant provides secondary level treatment for domestic wastewater from the six SASM member agencies: City of Mill Valley, Almonte Sanitary District, Alto Sanitary District, Homestead Valley Sanitary District, Richardson Bay Sanitary District, and the Kay Park Area of the Tamalpais Community Sanitary District. The Discharger's service area has a present population of approximately 28,000. The treatment plant has an average dry weather capacity of 3.6 million gallons per day (MGD) and can treat up to 24.7 MGD during the wet weather flow period with flows in excess of this being diverted to equalization basins. The two earthen equalization basins have a total volume of 2.21 million gallons (MG). The plant presently discharges an average dry weather flow of 2.4 MGD and an annual average effluent flow of about 3.4 MGD. A location map of the Discharger's facilities is included as **Attachment B** of this Order.

2. Treated wastewater is currently discharged 840 feet offshore at an 84-foot depth below mean sea level, into Raccoon Strait (Central San Francisco Bay), through a

submerged diffuser located at Latitude 37 degrees, 52 minutes, 12 seconds, Longitude 112 degrees, 27 minutes, 5 seconds.

3. **Treatment Process.** The treatment process consists of screening facilities, Pista-Grit grit removal, primary sedimentation clarifiers, biological treatment using trickling filters (bio-towers with synthetic media), secondary clarification, disinfection (chlorination) and dechlorination (sulfonation). Chlorine contact is accomplished in the six-mile effluent force main and dechlorination is accomplished by Sanitary District No. 5 prior to entrance into the outfall. In wet weather conditions, when high influent flows exceeds 24.7 MGD (the capacity of the biological treatment processes), a portion of the flow is diverted to the equalization ponds. The diverted flow is pumped back to the headworks after the high influent flow subsides. A treatment process schematic diagram is included as **Attachment C** of this Order.

4. **Solids Handling and Disposal.** Solids removed from the wastewater stream are treated by gravity thickening, primary and secondary digestion, and dewatering by belt filter press. Dewatered biosolids are delivered to Redwood Sanitary Landfill in Novato approximately eight months out of the year (from October through May) where it is composted with yard wastes and used for daily cover at the landfill. From June through September, dewatered solids may be delivered to the Residuals Processing Inc. agricultural reuse site located on Lakeville Highway in Sonoma County. Residuals Processing Inc. operates this site under a Sonoma County permit. The Discharger currently generates and reclaims about 310 dry tons of biosolids per year.

5. **Collection System and Pump Stations.** The Discharger's wastewater collection system includes about 9 miles of sanitary sewer lines and six pump stations. The collection system consists of force mains, gravity lines and pump stations (a more detailed description can be found in the attached Fact Sheet).

6. **Satellite Collection Systems.** In addition to the Discharger owned collection system, wastewater is conveyed to the Discharger's system from six satellite collection systems, which include the City of Mill Valley, Almonte Sanitary District, Alto Sanitary District, Homestead Valley Sanitary District, Richardson Bay Sanitary District, and the Kay Park area of the Tamalpais Community Sanitary District. Each of the satellite systems is operated independently from the Discharger and collects wastewater from their respective service areas. The satellite systems each convey wastewater to a discreet location into the Discharger's collection system.

7. **Roles and Responsibilities of Satellite Collection Systems.** Each satellite collection system is responsible for an ongoing program of maintenance and capital improvements for sewer lines and pump stations within its respective jurisdiction in order to ensure adequate capacity and reliability of the collection system. Each satellite collection system shall ensure that its wastewater does not adversely impact the Discharger's treatment plant and/or collection system. The responsibilities include managing overflows, controlling Infiltration and Inflow (I&I) and implementing collection system maintenance.

8. **Treatment Plant Storm Water Discharges.** The Discharger is permitted to discharge storm water in accordance with "State Water Resources Control Board Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, Wastewater Discharge Requirements for discharges of storm water associated with industrial activities."

9. **Reclamation.** The Discharger reclaims wastewater under General Water Reuse Order 96-011, issued May 9, 1997. Seasonal reclaimed water reuse to parklands is about 5 MG (or 0.1 MGD during the reclamation season).

**Attachment B** to this Order is a Location Map showing the location of the facility within the region; and **Attachment C** is a flow schematic of the facility.

C. **Legal Authorities.** This Order is issued pursuant to CWA Section 402 and implementing regulations adopted by the USEPA and CWC Chapter 5.5, Division 7. It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to CWC Article 4, Chapter 4 for discharges that are not subject to regulation under CWA Section 402.

D. **Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and through special studies. **Attachments A** through **H**, which contain background information and rationale for requirements of the Order, are hereby incorporated into this Order and, thus, constitute part of the Findings for this Order.

E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act in accordance with CWC Section 13389.

F. **Technology-Based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Secondary Treatment Standards at 40 CFR Part 133. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (**Attachment F**).

G. **Water Quality-Based Effluent Limitations.** Section 122.44(d) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

**H. Water Quality Control Plans.** The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Water Board and approved by the State Water Resources Control Board, Office of Administrative Law and the U.S. EPA, where required. Beneficial uses applicable to Central San Francisco Bay within the San Francisco Bay Basin are as follows.

**Table 2. Plan Beneficial Uses of Central San Francisco Bay**

| Discharge Point | Receiving Water Name | Beneficial Use(s) - Existing |
|---|---|---|
| 001 | Raccoon Strait of Central San Francisco Bay | • Ocean, Commercial, and Sport Fishing (COMM)<br>• Estuarine Habitat (EST)<br>• Industrial Service Supply (IND)<br>• Fish Migration (MIGR)<br>• Navigation (NAV)<br>• Industrial Process Supply (PROC)<br>• Preservation of Rare and Endangered Species (RARE)<br>• Water Contact Recreation (REC-1)<br>• Noncontact Water Recreation (REC-2)<br>• Shellfish Harvesting (SHELL)<br>• Fish Spawning (SPWN)<br>• Wildlife Habitat (WILD) |

Requirements of this Order implement the Basin Plan.

**I. Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters.

**J. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

**K. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved

by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The State Water Board subsequently amended the SIP on February 24, 2005, and the amendments became effective on July 31, 2005. The SIP includes procedures for determining the need for and calculating WQBELs and requires dischargers to submit data sufficient to do so. Requirements of this Order implement the SIP.

**L. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under Section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement new or revised WQOs. This Order includes a compliance schedule for dioxin-TEQ, but does not include interim effluent limitations for dioxin-TEQ.

**M. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21; 65 Fed. Reg. 24641; (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

**N. Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), total suspended solids (TSS), and pH. Restrictions on these pollutants are specified in federal regulations and are no more stringent than required by the CWA. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR 131.21(c)(1). The remaining water quality objectives and

beneficial uses implemented by this Order [arsenic, cadmium, chromium (VI), copper (fresh water), lead, nickel, silver (1-hour), and zinc] were approved by USEPA on January 5, 2005, and are applicable water quality standards pursuant to 40 CFR 131.21(c)(2). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

O. **Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet (**Attachment F**) the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

P. **Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and NPDES regulations at 40 CFR 122.44 (l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in detail in the Fact Sheet (**Attachment F**), the prohibitions, limitations, and conditions of this Order are consistent with applicable federal and State anti-backsliding requirements.

Q. **Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in **Attachment E**. The MRP may be amended by the Executive Officer pursuant to USEPA regulation 40 CFR 122.62, 122.63, and 124.5.

R. **Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in **Attachment D**. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger (**Attachment G**). A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

S. **Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.C, V.B, and VI.C of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

**T. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (**Attachment F**) of this Order.

**U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (**Attachment F**) of this Order.

## III. DISCHARGE PROHIBITIONS

**A.** The discharge of treated wastewater at a location or in a manner different from that described in this Order is prohibited.

**B.** Discharge of treated wastewater at any point where it does not receive an initial dilution of at least 10:1 is prohibited.

**C.** The discharge of average dry weather flows greater than 3.6 mgd is prohibited. The average dry weather flow shall be determined over three consecutive dry weather months each year.

**D.** The bypass of untreated or partially treated wastewater to waters of the United States is prohibited, except as provided for in the conditions stated in 40 CFR 122.41(m)(4) and in A.12 of the Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993 (**Attachment G**).

**E.** Any sanitary sewer overflow that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

## IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

Compliance with the effluent limitations shall be demonstrated at Discharge Point 001, with compliance measured at Monitoring Location M-001 as described in the attached Monitoring and Reporting Program (MPR, **Attachment E**).

### A. Effluent Limitations for Conventional and Non-Conventional Pollutants

The Discharge shall not exceed the following effluent limitations as specified in Table 3:

## Table 3. Effluent Limitations for Conventional and Non-Conventional Pollutants

| Parameter | Unit | Effluent Limitations | | | | |
|---|---|---|---|---|---|---|
| | | Average monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
| a. Biochemical Oxygen Demand 5-day @ 20°C ($BOD_5$) | mg/L | 30 | 45 | --- | --- | --- |
| b. Total Suspended Solids (TSS) | mg/L | 30 | 45 | --- | --- | --- |
| c. $BOD_5$ and TSS Percent removal (1) | % | 85 | --- | --- | --- | --- |
| d. pH (2) | standard unit | --- | --- | --- | 6.0 | 9.0 |
| e. Oil and Grease | mg/L | 10 | --- | 20 | --- | --- |
| f. Total Chlorine Residual (3) | mg/L | --- | --- | --- | --- | 0.0 |

Footnotes for Table 3:

(1) The arithmetic mean of the $BOD_5$ and TSS values, by concentration, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values for influent samples collected at approximately the same times during the same period.

(2) If the Discharger monitors pH continuously, pursuant to 40 CFR § 401.17, the Discharger shall be in compliance with the pH limitation specified herein, provided that both of the following conditions are satisfied: (i) the total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the range of pH values shall exceed 60 minutes.

(3) Requirement defined as below the limit of detection in standard test methods defined in the latest edition of *Standard Methods for the Examination of Water and Wastewater.* The Discharger may elect to use a continuous on-line monitoring system(s) for measuring flows, chlorine residual and sodium bisulfite (or other dechlorinating chemical) dosage (including a safety factor) and concentration to prove that chlorine residual exceedances are false positives. If convincing evidence is provided, Regional Water Board staff may conclude that these false positive chlorine residual exceedances are not violations of this permit limitation.

### B. Total Coliform Bacteria

The treated wastewater at Discharge Point 001, as monitored at M-001, shall meet the following limits of bacteriological quality:

1. The moving median value for the Most Probable Number (MPN) of total coliform bacteria in five (5) consecutive samples shall not exceed 240 MPN/100 ml; and,

2. Any single sample shall not exceed 10,000 MPN/100 ml.

## C. Final Effluent Limitations for Toxics Substances

The discharge of effluent at Discharge Point 001 shall not exceed the following limitations.

### Table 4. Final Effluent Limitations for Toxic Pollutants

| Constituent | Units | Final Effluent Limitations [1][2] | |
|---|---|---|---|
| | | Average Monthly (AMEL) | Maximum Daily (MDEL) |
| Copper [3] | µg/L | 72 | 98 |
| Mercury [4] | µg/L | 0.021 | 0.040 |
| Silver | µg/L | 9.8 | 22 |
| Zinc | µg/L | 450 | 860 |
| Cyanide [5][6] | µg/L | 3.1 | 6.4 |
| Dioxin-TEQ [7] | µg/L | $1.4\times10^{-8}$ | $2.8\times10^{-8}$ |
| Bis (2-ethylhexly) phthalate | µg/L | 54 | 110 |
| Total Ammonia | mg/L | 12.3 | 32 |

Footnotes for Table 4:

[1] a. All analyses shall be performed using current USEPA methods, or equivalent methods approved in writing by the Executive Officer.

b. Limitations apply to the average concentration of all samples collected during the averaging period (daily = 24-hour period; monthly = calendar month).

c. All metal limitations are total recoverable.

[2] A daily maximum or average monthly value for a given constituent shall be considered noncompliant with the effluent limitations only if it exceeds the effluent limitation and the Reporting Level for that constituent. As outlined in Section 2.4.5 of the SIP, the table below indicates the Minimum Level (ML) upon which the Reporting Level is based for compliance determination purposes. A Minimum Level is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

| Constituent | ML | Units |
|---|---|---|
| Copper | 2 | µg/L |
| Mercury | 0.0005 | µg/L |
| Silver | 0.25 | µg/L |
| Zinc | 1 | µg/L |
| Cyanide | 5 | µg/L |
| Bis(2-ethylhexyl) phthalate | 5 | µg/L |
| Total Ammonia | 0.2 | mg/L |
| Dioxin-TEQ | As specified below | |
| 2,3,7,8-TetraCDD | 5 | pg/L |
| 1,2,3,7,8-PentaCDD | 25 | pg/L |
| 1,2,3,4,7,8-HexaCDD | 25 | pg/L |
| 1,2,3,6,7,8-HexaCDD | 25 | pg/L |

| Constituent | ML | Units |
|---|---|---|
| 1,2,3,7,8,9-HexaCDD | 25 | pg/L |
| 1,2,3,4,6,7,8-HeptaCDD | 25 | pg/L |
| OctaCDD | 50 | pg/L |
| 2,3,7,8-TetraCDF | 5 | pg/L |
| 1,2,3,7,8-PentaCDF | 25 | pg/L |
| 2,3,4,7,8-PentaCDF | 25 | pg/L |
| 1,2,3,4,7,8-HexaCDF | 25 | pg/L |
| 1,2,3,6,7,8-HexaCDF | 25 | pg/L |
| 1,2,3,7,8,9-HexaCDF | 25 | pg/L |
| 2,3,4,6,7,8-HexaCDF | 25 | pg/L |
| 1,2,3,4,6,7,8-HeptaCDF | 25 | pg/L |
| 1,2,3,4,7,8,9-HeptaCDF | 25 | pg/L |
| OctaCDF | 50 | pg/L |

[3] **Alternate Effluent Limits for Copper:**

a. If a copper SSO for the receiving water becomes legally effective, resulting in adjusted saltwater chronic objective of 2.5 µg/L and acute objective of 3.9 µg/L as documented in the *North of Dumbarton Bridge Copper and Nickel Site-Specific Objective (SSO) Derivation (Clean Estuary Partnership December 2004)*, upon its effective date, the following limitations shall supersede those copper limitations listed in Table 4 (the rationale for these effluent limitations can be found in the Fact Sheet **[Attachment F]**).

MDEL of 73 µg/L, and AMEL of 54 µg/L.

b. If a different copper SSO for the receiving water is adopted, the alternate WQBELs based on the SSO will be determined after the SSO effective date.

[4] Effluent mercury monitoring shall be performed using ultra-clean sampling and analysis techniques.

[5] Compliance may be demonstrated by measurement of weak acid dissociable cyanide.

[6] **Alternate Effluent Limits for Cyanide:**

a. If a cyanide SSO for the receiving water becomes legally effective, resulting in adjusted saltwater chronic objective of 2.9 µg/L and acute objective of 9.4 µg/L (based on the assumptions in *Draft Staff Report on Proposed Site-Specific Water Quality Objectives and Effluent Limit Policy for Cyanide for San Francisco Bay*, dated November 10, 2005), upon its effective date, the following limitations shall supersede those cyanide limitations, above (the rationale for these effluent limitations can be found in the Fact Sheet **[Attachment F]**).

MDEL of 42 µg/L, and AMEL of 21 µg/L.

b. If a different cyanide SSO for the receiving water is adopted, the alternate WQBELs based on the SSO will be determined after the SSO effective date.

[7] Final effluent limits for dioxin-TEQ shall become effective on September 1, 2017.

## D. Whole Effluent Acute Toxicity

Representative samples of the discharge at Discharge Point 001 shall meet the following limits for acute toxicity. Compliance with these limits shall be achieved in accordance with Section V.A of the attached MRP (**Attachment E**).

1. The survival of bioassay test organisms in 96-hour flow-through bioassays of undiluted effluent shall be:

   a. An eleven (11)-sample median value of not less than 90 percent survival; and

   b. An eleven (11)-sample 90th percentile value of not less than 70 percent survival.

2. These acute toxicity limits are further defined as follows:

   a. 11-sample median limit:

      Any bioassay test showing survival of 90 percent or greater is not a violation of this limit. A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if five or more of the past ten or fewer bioassay tests also show less than 90 percent survival.

   b. 90th percentile limit:

      Any bioassay test showing survival of 70 percent or greater is not a violation of this limit. A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit, if one or more of the past ten or fewer bioassay tests also show less than 70 percent survival.

3. Bioassays shall be performed using the most up-to-date USEPA protocol and the most sensitive species as specified in writing by the Executive Officer based on the most recent screening test results. Bioassays shall be conducted in compliance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms," currently 5th Edition (EPA-821-R-02-012), with exceptions granted to the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP) upon the Discharger's request with justification.

4. If the Discharger can demonstrate to the satisfaction of the Executive Officer that toxicity exceeding the levels cited above is caused by ammonia and that the ammonia in the discharge is not adversely impacting receiving water quality or beneficial uses, then such toxicity does not constitute a violation of this effluent limitation.

## E. Whole Effluent Chronic Toxicity

1. Compliance with the Basin Plan narrative toxicity objective shall be demonstrated according to the following tiered requirements based on results from representative samples of the treated effluent at Discharge Point 001 meeting test acceptability criteria and Section V.B of the MRP (**Attachment E**):

a. Conduct routine monitoring;

b. Accelerate monitoring after exceeding a single sample maximum value of 10 TUc[1];

c. Return to routine monitoring if accelerated monitoring does not exceed the "trigger" in (2);

d. If accelerated monitoring confirms consistent toxicity above the "trigger" in (2), above, initiate toxicity identification evaluation/toxicity reduction evaluation (TIE/TRE) in accordance with a workplan submitted in accordance with Section V.B of the MRP (**Attachment E**), and that incorporates any and all comments from the Executive Officer;

e. Return to routine monitoring after appropriate elements of TRE workplan are implemented and either the toxicity drops below "trigger" level in (2), above, or, based on the results of the TRE, the Executive Officer authorizes a return to routine monitoring.

2. **Test Species and Methods.** The Discharger shall conduct routine monitoring with the most sensitive species determined during the most recent chronic toxicity screening performed by the Discharger or utilizing recent results from species screening testing conducted by a similar neighboring sanitary district and approved by the Executive Officer. Chronic Toxicity Monitoring Screening Phase Requirements, Critical Life Stage Toxicity Tests and definitions of terms used in the chronic toxicity monitoring are identified in **Appendices E-1 and E-2** of the MRP (**Attachment E**). In addition, bioassays shall be conducted in compliance with the most recently promulgated test methods, "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," currently fourth Edition (EPA-821-R-02-013), with exceptions granted by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).

## F. Mercury Mass Emission Effluent Limitations

Until TMDL and WLA efforts for mercury provide enough information to establish a different WQBEL, the Discharger shall demonstrate that the current mercury mass loading to the receiving water does not increase by complying with the following:

1. **Mass Emission limit.** The 12-month moving average annual load for mercury shall not exceed 0.011 kilograms per month (kg/mo). Compliance shall be calculated using 12-month moving average loadings from Discharge 001 to the receiving water for the entire year.

[1] A TUc equals 100 divided by the no observable effect level (NOEL). The NOEL is determined from IC, EC, or NOEC values. These terms, their usage, and other chronic toxicity monitoring program requirements are defined in more detail in the MRP (**Attachment E**). Monitoring and TRE requirements may be modified by the Executive Officer in response to the degree of toxicity detected in the effluent or in ambient waters related to the discharge.

2. **Compliance determination method.** Compliance for each month will be determined based on the 12-month moving averages over the previous 12 months of monitoring calculated using the method described below:

   Monthly mass emission loading, in kg/mo = Flow, in MGD x Concentration, in µg/L x 0.1151

   12-month moving average Hg mass loading = Running average of last 12 monthly mercury mass loadings in kg/mo

   Where 0.1151 is a unit conversion factor.

   If more than one mercury measurement is obtained in a calendar month, the average of the calculated mass loadings for the sampling days is used as the monthly value for that month. If the results are less than the method detection limit used, the concentrations are assumed to be equal to the method detection limit.

3. **Mercury Final Limits.** The Regional Water Board intends to amend this Order in accordance with the mercury TMDL and WLAs. The Clean Water Act's anti-backsliding rule, Section 402(o), indicates that this Order may be modified to include a less stringent requirement following adoption of the TMDL and WLA, if the requirements for an exception to the rule are met.

### G. Land Discharge Specifications

N/A

### H. Reclamation Specifications

N/A

## V. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitations

1. The discharge shall not cause the following conditions to exist in waters of the State at any place:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam in concentrations that cause nuisance or adversely affect beneficial uses;

   b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;

   c. Alterations of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; and

e. Toxic or other deleterious substances to be present in concentrations or quantities, which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

2. The discharges shall not cause nuisance, or adversely affect the beneficial uses of the receiving water.

3. The discharges shall not cause the following limits to be exceeded in waters of the State at any one place within one foot of the water surface:

a. Dissolved Oxygen: 5.0 mg/L, minimum

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, then the discharges shall not cause further reduction in ambient dissolved oxygen concentrations.

b. Dissolved Sulfide: 0.1 mg/L, maximum

c. pH: The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH by more than 0.5 Standard Units.

e. Nutrients: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

4. The discharges shall not cause a violation of any particular water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA Section 303, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

**B. Groundwater Limitations**

N/A

## VI. PROVISIONS

### A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in **Attachment D** of this Order.

2. **Regional Water Board Standard Provisions.** The Discharger shall comply with all applicable items of the attached *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (the Standard Provisions, **Attachment G**), and any amendment thereto. Where provisions or reporting requirements specified in this Order are different from equivalent or related provisions or reporting requirements given in the Standard Provisions (**Attachment G**), the specifications of this Order shall apply. Duplicative requirements in the federal Standard Provisions in VI.A.1.2, above (**Attachment D**) and the regional Standard Provisions (**Attachment G**) are not separate requirements. A violation of a duplicative requirement does not constitute two separate violations.

### B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in **Attachment E**. The Discharger shall also comply with the requirements contained in *Self-Monitoring Program, Part A, August 1993* (**Attachment G**).

### C. Special Provisions

#### 1. Reopener Provisions

The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances as allowed by law:

a. If present or future investigations demonstrate that the discharge(s) governed by this Order will or have a reasonable potential to cause or contribute to, or will cease to, have adverse impacts on water quality and/or beneficial uses of the receiving waters.

b. If new or revised WQOs, or TMDLs come into effect for the San Francisco Bay estuary and contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order will be modified as necessary to reflect updated WQOs and waste load allocations in TMDLs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally adopted WQOs, TMDLs, or as otherwise permitted under Federal regulations governing NPDES permit modifications.

c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified.

d. If administrative or judicial decision on a separate NPDES permit or WDR that addresses requirements similar to this discharge.

e. Or as otherwise authorized by law.

The Dischargers may request permit modification based on the above. The Dischargers shall include in any such request an antidegradation and antibacksliding analysis.

**2. Special Studies, Technical Reports and Additional Monitoring Requirements**

**a. Effluent Monitoring**

The Discharger shall continue to monitor and evaluate the discharge from Outfall 001 (measured at M-001) for the constituents listed in Enclosure A of the Regional Water Board's August 6, 2001 Letter, according to the sampling frequency specified in the attached MRP **(Attachment E)**. Compliance with this requirement shall be achieved in accordance with the specifications stated in the Regional Water Board's August 6, 2001 Letter under Effluent Monitoring for Minor Discharger.

The Discharger shall evaluate on an annual basis if concentrations of any constituent increase over past performance. The Discharger shall investigate the cause of the increase. The investigation may include, but need not be limited to, an increase in the effluent monitoring frequency, monitoring of internal process streams, and monitoring of influent sources. This may be satisfied through identification of these constituents as "Pollutants of Concern" in the Discharger's Pollutant Minimization Program described in Provision VI.C.3, below. A summary of the annual evaluation of data and source investigation activities shall also be reported in the annual self-monitoring report.

**Final report:** A final report that presents all the data shall be submitted to the Regional Water Board no later than 180 days prior to the Order expiration date. This final report shall be submitted with the application for permit reissuance.

**b. Ambient Background Receiving Water Monitoring**

The Discharger shall collect or participate in collecting background ambient receiving water monitoring for priority pollutants that is required to perform a Reasonable Potential Analysis (RPA) and to calculate effluent limitations. The data on the conventional water quality parameters (pH, salinity, and hardness) shall also be sufficient to characterize these parameters in the receiving water at a point after the discharge has mixed with the receiving waters. This provision may be met through monitoring through the Collaborative Bay Area Clean Water Agencies (BACWA) Study, or a similar ambient monitoring program for San Francisco Bay. This permit may be reopened, as appropriate, to incorporate

effluent limits or other requirements based on Regional Water Board review of these data.

**Final report:** The Discharger shall submit a final report that presents all the data to the Regional Water Board 180 days prior to Order expiration. This final report shall be submitted with the application for permit reissuance.

c. **Optional Mass Offset**

If the Discharger can demonstrate that further net reductions of the total mass loadings of 303(d)-listed pollutants to the receiving water cannot be achieved through economically feasible measures such as aggressive source control, wastewater reuse, and treatment plant optimization, but only through a mass offset program, the Discharger may submit to the Regional Water Board for approval a mass offset plan to reduce 303(d)-listed pollutants to the same watershed or drainage basin. The Regional Water Board may modify this Order to allow an approved mass offset program.

**3. Best Management Practices and Pollution Minimization Program**

a. The Discharger shall continue to improve, in a manner acceptable to the Executive Officer, its existing Pollutant Minimization Program to reduce pollutant loadings to the treatment plant, and therefore, to the receiving waters.

b. The Discharger shall submit an annual report, acceptable to the Executive Officer, no later than February 28th of each calendar year. The annual report shall cover January through December of the preceding year. Each annual report shall include at least the following information:

(1) A brief description of its treatment facilities and treatment processes.

(2) A discussion of the current pollutants of concern. Periodically, the Discharger shall analyze its own situation to determine which pollutants are currently a problem and/or which pollutants may be potential future problems. This discussion shall include the reasons why the pollutants were chosen.

(3) Identification of sources for the pollutants of concern. This discussion shall include how the Discharger intends to estimate and identify sources of the pollutants. The Discharger shall also identify sources or potential sources not directly within the ability or authority of the Discharger to control, such as pollutants in the potable water supply and air deposition.

(4) Identification of tasks to reduce the sources of the pollutants of concern. This discussion shall identify and prioritize tasks to address the Discharger's pollutants of concern. The Discharger may implement tasks itself or participate in group, regional, or national tasks that will address its pollutants of concern. The Discharger is strongly encouraged to participate in group, regional, or national tasks that will address its pollutants of concern whenever

it is efficient and appropriate to do so. A time-line shall be included for the implementation of each task.

(5) Outreach to employees. The Discharger shall inform employees about the pollutants of concern, potential sources, and how they might be able to help reduce the discharge of these pollutants of concern into the treatment facilities. The Discharger may provide a forum for employees to provide input to the Program.

(6) Discussion of criteria used to measure the program's and tasks' effectiveness. The Discharger shall establish criteria to evaluate the effectiveness of its Pollution Minimization Program. This shall also include a discussion of the specific criteria used to measure the effectiveness of each of the tasks in item (b) (3, 4, and 5), above.

(7) Documentation of efforts and progress. This discussion shall detail all the Discharger's activities in the Pollution Minimization Program during the reporting year.

(8) Evaluation of program's and tasks' effectiveness. The Discharger shall use the criteria established in (b) (6) to evaluate the Program's and tasks' effectiveness.

(9) Identification of Specific Tasks and Time Schedules for Future Efforts. Based on the evaluation, the Discharger shall detail how it intends to continue or change its tasks to more effectively reduce the amount of pollutants to the treatment plant, and subsequently in its effluent.

c. Pollutant Minimization Program for Pollutants with Effluent Limitations. The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

(1) A sample result is reported as DNQ and the effluent limitation is less than the RL; or

(2) A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in the SIP.

d. If triggered by the reasons in c. above, the Discharger's PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

(1) An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling, or alternative measures approved by the Executive Officer when it is demonstrated that source monitoring is unlikely to produce useful analytical data;

(2) Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system, or alternative measures approved by the Executive Officer, when it is demonstrated that influent monitoring is unlikely to produce useful analytical data;

(3) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;

(4) Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and

(5) The annual report required by 3.b. above, shall specifically address the following items:

i. All PMP monitoring results for the previous year;

ii. A list of potential sources of the reportable priority pollutant(s);

iii. A summary of all actions undertaken pursuant to the control strategy; and

iv. A description of actions to be taken in the following year.

**4. Action Plan for Cyanide**

If and when the cyanide alternate limits in IV become effective, the Discharger shall implement an action plan for cyanide in accordance with the measures identified in Appendix I of *Staff Report on Proposed Site-Specific Water Quality Objectives for Cyanide for San Francisco Bay*, December 4, 2006.

**5. Action Plan for Copper**

If and when the copper alternate limits in IV become effective, the Discharger shall initiate implementation of an action plan for copper in accordance with the Basin Plan Copper Site-Specific Objective Amendment.

## 6. Construction, Operation and Maintenance Specifications

### a. Wastewater Facilities, Review and Evaluation, and Status Reports

(1) The Discharger shall operate and maintain its wastewater collection, treatment, and disposal facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, in order to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities.

(2) The Discharger shall regularly review and evaluate its wastewater facilities and operation practices in accordance with section a.1 above. Reviews and evaluations shall be conducted as an ongoing component of the Discharger's administration of its wastewater facilities.

(3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its wastewater facilities and operation practices, including any recommended or planned actions and an estimated time schedule for these actions. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures, and applicable wastewater facility programs or capital improvement projects.

### b. Operations and Maintenance Manual (O&M), Review and Status Reports

(1) The Discharger shall maintain an O&M Manual as described in the findings of this Order for the Discharger's wastewater facilities. The O&M Manual shall be maintained in usable condition and be available for reference and use by all applicable personnel.

(2) The Discharger shall regularly review, revise, or update, as necessary, the O&M Manual(s) so that the document(s) may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary. For any significant changes in treatment facility equipment or operation practices, applicable revisions shall be completed within 90 days of completion of such changes.

(3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its O&M manual, including any recommended or planned actions and an estimated time schedule for these actions. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures and applicable changes to its operations and maintenance manual.

c. **Contingency Plan, Review and Status Reports**

(1) The Discharger shall maintain a Contingency Plan as required by Regional Water Board Resolution 74-10 (**Attachment G**) and as prudent in accordance with current municipal facility emergency planning. The discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or adequately implement a Contingency Plan will be the basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

(2) The Discharger shall regularly review and update, as necessary, the Contingency Plan so that the plan may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and updates shall be completed as necessary.

(3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its Contingency Plan review and update. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures and applicable changes to its Contingency Plan.

**7. Special Provisions**

a. **Sludge Management Practices Requirements**

(1) All sludge generated by the Discharger must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR §503. If the Discharger desires to dispose of sludge by a different method, a request for permit modification must be submitted to USEPA 180 days before start-up of the alternative disposal practice. All the requirements in 40 CFR §503 are enforceable by USEPA whether or not they are stated in an NPDES permit or other permit issued to the Discharger. The Regional Water Board should be copied on relevant correspondence and reports forwarded to USEPA regarding sludge management practices.

(2) Sludge treatment, storage and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.

(3) The Discharger shall take all reasonable steps to prevent or minimize any sludge use or disposal, which has a likelihood of adversely affecting human health or the environment.

(4) The discharge of sludge shall not cause waste material to be in a position where it is or can be carried from the sludge treatment and storage site and deposited in waters of the State.

(5) The sludge treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the temporary storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.

(6) For sludge that is applied to the land, placed on a surface disposal site, or fired in a sludge incinerator as defined in 40 CFR §503, the Discharger shall submit an annual report to USEPA and the Regional Water Board containing monitoring results and pathogen and vector attraction reduction requirements as specified by 40 CFR §503, postmarked February 15 of each year, for the period covering the previous calendar year.

(7) Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR §258. In the annual self-monitoring report, the Discharger shall include the amount of sludge disposed of and the landfill(s) to which it was sent.

(8) Permanent on-site sludge storage or disposal activities are not authorized by this permit. A report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activity by the Discharger.

(9) Sludge Monitoring and Reporting Provisions of this Regional Water Board's Standard Provisions (**Attachment G**), apply to sludge handling, disposal and reporting practices.

(10) The Regional Water Board may amend this permit prior to expiration if changes occur in applicable state and federal sludge regulations.

b. **Sanitary Sewer Overflows and Sewer System Management Plan**

The Discharger's collection system is part of the facility that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (**Attachment D**, Standard Provisions - Permit Compliance, subsection I.D). The Discharger must report any noncompliance (**Attachment D**, Standard Provision - Reporting, subsections V.E.1 and V.E.2), and mitigate any discharge from the Discharger's collection system in violation of this Order (**Attachment D**, Standard Provisions - Permit Compliance, subsection I.C). The General Waste Discharge Requirements for Collection System Agencies (Order No. 2006-0003 DWQ) has requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. While the Discharger must comply with both the General Waste Discharge Requirements for Collection System Agencies (General Collection System WDR) and this Order, the General Collection System WDR more clearly and specifically stipulates requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows. Implementation of the General Collection System WDR requirements

for proper operation and maintenance and mitigation of spills will satisfy the corresponding federal NPDES requirements specified in this Order. Following reporting requirements in the General Collection System WDR will satisfy NPDES reporting requirements for sewage spills. Furthermore, the Discharger shall comply with the schedule for development of sewer system management plans (SSMPs) as indicated in the letter issued by the Regional Water Board on July 7, 2005, pursuant to Water Code Section 13267. Until the statewide on-line reporting system becomes operational, the Discharger shall report sanitary sewer overflows electronically according to the Regional Water Board's SSO reporting program.

c. **Identification and Notification of Blending**

The Discharger shall install instrumentation no later than January 4, 2008, to indicate when blending occurs. As outlined in prohibition III.D, if blending occurs, the Discharger shall comply with 40 CFR 122.41(m) (see Federal Standard Provisions, **Attachment D**) and the conditions in A.12 of the Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993 (**Attachment G**). If blending occurs and the Discharger seeks to continue to blend, the Discharger shall prepare a utility analysis (No Feasible Alternatives Analysis) that satisfies 40 CFR 122.41(m)(4)(i)(A)-(C) and any additional applicable policy or guidance, such as that set forth in Part 1 of USEPA's Peak Wet Weather Policy (available at *http://cfpub.epa.gov/npdes/wetweather.cfm*) once it is finalized. This report shall be submitted no later than 180 days prior to the expiration date of this Order.

## VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

### A. General

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP and **Attachment A** of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

### B. Multiple Sample Data

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

## ATTACHMENT A – DEFINITIONS

**Acute Toxicity:**

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{\text{96-hr LC}_{50\%}}$$

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log (100 - S)}{1.7}$$

where:

S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

**Average Monthly Effluent Limitation (AMEL):** the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Chronic Toxicity:** This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$TUc = \frac{100}{NOEL}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix II.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

**Detected, but Not Quantified (DNQ)** are those sample results less than the reported Minimum Level, but greater than or equal to the laboratory's MDL.

**Enclosed Bays** are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

**Initial Dilution** is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the

discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

**Maximum Daily Effluent Limitation (MDEL):** the highest allowable daily discharge of a pollutant.

**MDL (Method Detection Limit)** is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, PART 136, Appendix B.

**Minimum Level (ML)** is the concentrations at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes and processing steps have been followed.

**Natural Light:** Reduction of natural light may be determined by the Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Water Board.

**Not Detected (ND)** are those sample results less than the laboratory's MDL.

**Ocean Waters** are the territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

**PAHs (polynuclear aromatic hydrocarbons)** shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

**PCBs (polychlorinated biphenyls)** shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

**Pollutant Minimization Program (PMP)** means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream

recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table B pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

**Reported Minimum Level** is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

**Satellite Collection System** is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

**Shellfish** are organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

**Significant Difference** is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

**State Water Quality Protection Areas (SWQPAs)** are non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

**TCDD Equivalents** shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

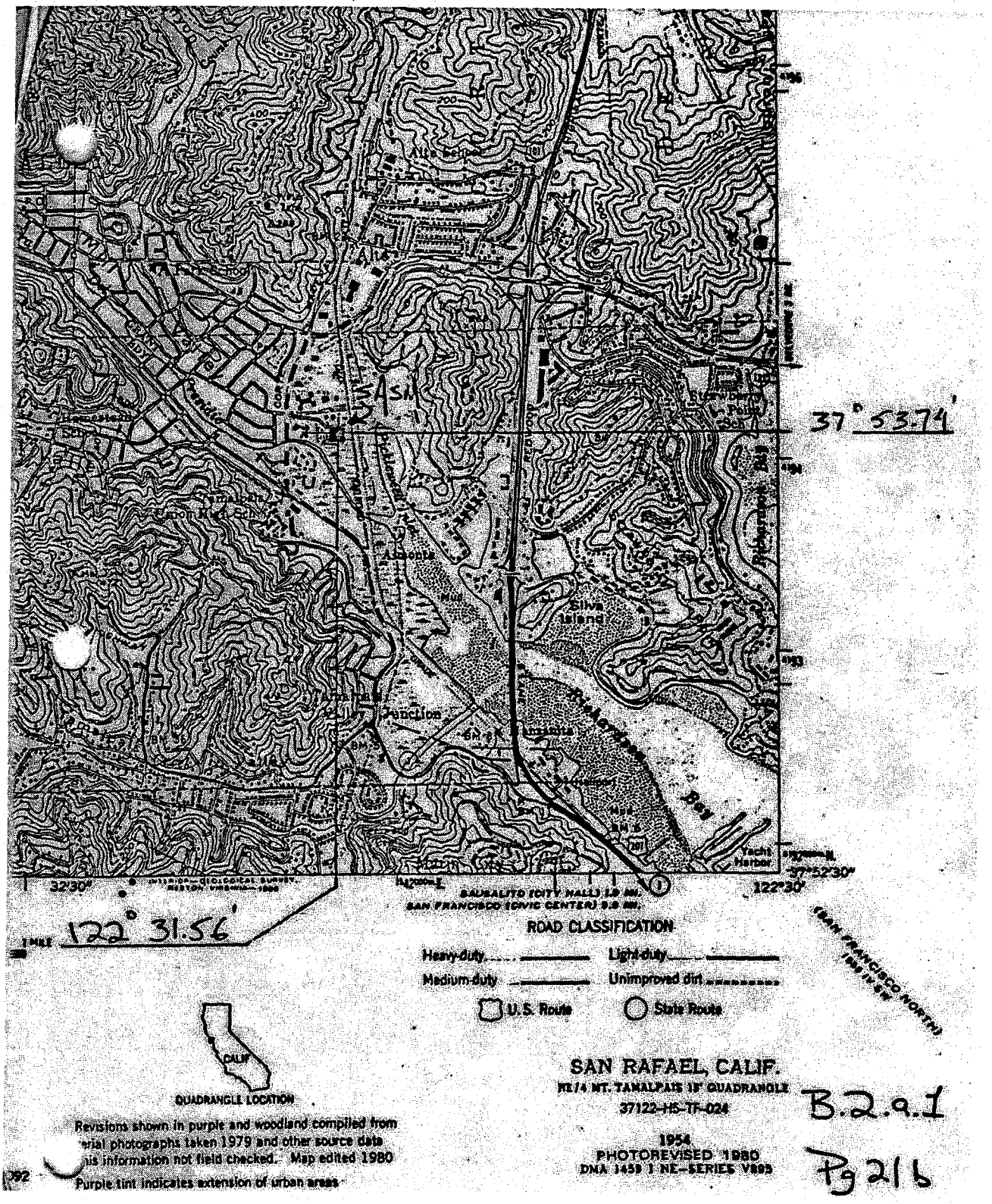
| Isomer Group | Toxicity Equivalence Factor |
|---|---|
| | 1.0 |
| 2,3,7,8-tetra CDD | |
| 2,3,7,8-penta CDD | 0.5 |
| 2,3,7,8-hexa CDDs | 0.1 |
| 2,3,7,8-hepta CDD | 0.01 |
| octa CDD | 0.001 |
| | |
| 2,3,7,8 tetra CDF | 0.1 |
| 1,2,3,7,8 penta CDF | 0.05 |
| 2,3,4,7,8 penta CDF | 0.5 |
| 2,3,7,8 hexa CDFs | 0.1 |
| 2,3,7,8 hepta CDFs | 0.01 |
| octa CDF | 0.001 |

**Toxicity Reduction Evaluation (TRE)** is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A TOXICITY IDENTIFICATION EVALUATION (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

**Waste:** As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

**Water Reclamation:** The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

## ATTACHMENT B – SITE LOCATION MAP



## ATTACHMENT C – FLOW SCHEMATIC

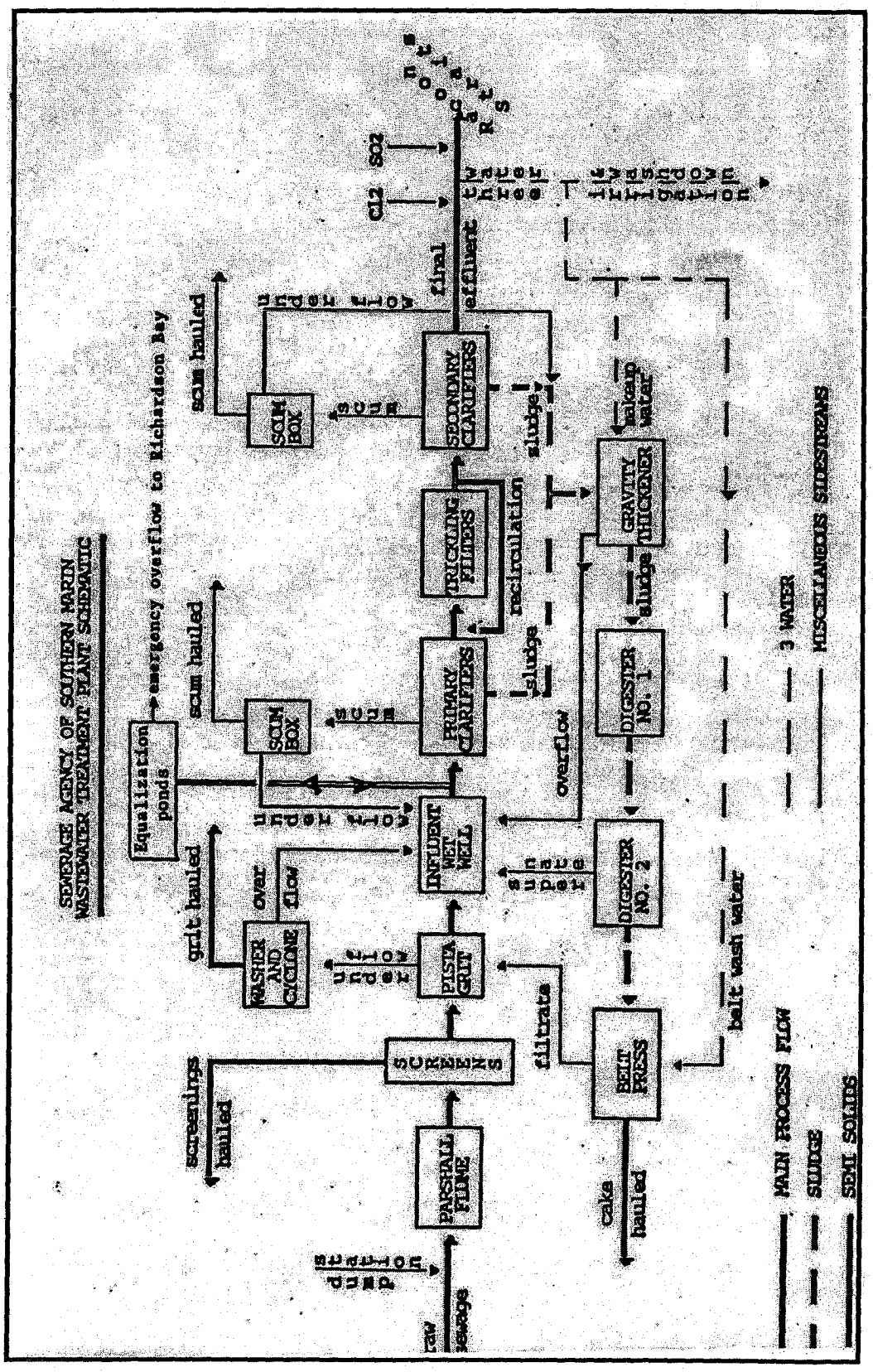


EXHIBIT B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

CEASE AND DESIST ORDER NO. R2-2007-XXXX

REQUIRING THE SEWERAGE AGENCY OF SOUTHERN MARIN
TO CEASE AND DESIST DISCHARGING PARTIALLY-TREATED WASTEWATER
TO WATERS OF THE STATE

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

1. The Discharger owns and operates a wastewater treatment plant, which provides secondary-level treatment for domestic wastewater from the six Sewerage Agency of Southern Marin member agencies: City of Mill Valley, Almonte Sanitary District, Alto Sanitary District, Homestead Valley Sanitary District, Richardson Bay Sanitary District, and Kay Park Area of the Tamalpais Community Sanitary District. Each agency operates a satellite collection system independently from the Discharger and collects wastewater from its respective service area. The treated wastewater is discharged into Raccoon Strait (Central San Francisco Bay) through a deep water difusser.

2. The wastewater discharge has been regulated by waste discharge requirements in Order No. 01-070 (NPDES Permit No. CA0037711).

3. Concurrent with the adoption of this Cease and Desist Order, the Regional Water Board adopted Order No. R2-2007-XXXX (hereinafter "Permit"), reissuing waste discharge requirements for the Discharger. The Permit contains prohibitions, limitations, and provisions regulating the discharge. The limitations include those listed in Table 1 below, among others.

**Table 1: Permit Effluent Limits**

| Parameter | Final Effluent Limits in Permit | | Monitoring Station |
|---|---|---|---|
| | Average Monthly Effluent Limit (µg/L) | Maximum Daily Effluent Limit (µg/L) | |
| Mercury | 0.021 | 0.040 | M-001 |
| Cyanide | 3.1 | 6.4 | M-001 |

4. The Discharger submitted an infeasibility study demonstrating that it cannot comply with the effluent limits listed in Table 1. As stated in the Permit findings, the Regional Water Board concurs with the Discharger because for both mercury and cyanide the 95$^{th}$ percentile of the data exceeds the average monthly effluent limit, and additionally for mercury the long-term average is greater than the mean.

5. Water Code § 13301 authorizes the Regional Water Board to issue a Cease and Desist Order when it finds that a waste discharge is taking place, or threatening to take place, in violation of Regional Water Board requirements.

6. Because the Discharger will violate or threatens to violate required effluent limits, this Order is necessary to ensure that the Discharger achieves compliance. This Order establishes time schedules for the Discharger to complete necessary investigative, preventive, and remedial actions to address its imminent and threatened violations.

7. The time schedules in this Order are parameter-specific and intended to be as short as possible. They account for the considerable uncertainty in determining effective measures (e.g., pollution prevention and treatment plant upgrades) necessary to achieve compliance. This Order allows some time to first explore source control measures before requiring further actions, such as treatment plant upgrades, which are likely to be much more costly. The time schedules are based on reasonably expected times needed to implement source identification and upstream source control, evaluate success, identify on-site treatment alternatives if necessary, test and select from among alternatives, and construct plant upgrades. The Regional Water Board may wish to revisit these assumptions as more information becomes available.

8. As part of the time schedules to achieve compliance, this Order requires the Discharger to comply with interim effluent limits, where feasible. These interim limits are intended to ensure that the Discharger maintains at least its existing performance while completing all tasks required during the time schedules. The interim limits are based on past performance or limits in previous orders, whichever are more stringent. If based on past performance, the interim limits represent the 99.87th percentile of actual measured discharge concentrations (three standard deviations from the mean). If insufficient monitoring data exist to derive a reliable performance-based limit, and if no previous order contained a limit, then this Order does not establish an interim limit.

9. This Order is an enforcement action and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code § 21000 et seq.) in accordance with 14 CCR § 15321.

10. The Regional Water Board notified the Discharger and interested persons of its intent to consider adoption of this Cease and Desist Order, and provided an opportunity to submit written comments and appear at a public hearing. The Regional Water Board, in a public hearing, heard and considered all comments.

**IT IS HEREBY ORDERED**, in accordance with Water Code § 13301, that the Discharger shall cease and desist from discharging and threatening to discharge wastes in violation of its Permit by complying with the following provisions:

1. Prescribed Actions. The Discharger shall comply with the required actions in Table 2 in accordance with the time schedules provided therein to comply with all effluent limits contained in the Permit. All deliverables listed in Table 2 shall be acceptable to the Executive Officer, who will review them for adequacy and compliance with the Table 2 requirements. The Discharger shall further implement all actions set forth in each deliverable, unless the Executive Officer finds the deliverable to be unacceptable.

2. Exceptions. The following exceptions apply to the parameter-specific time schedules and prescribed actions in Table 2.

    a. *Mercury*. The mercury-related time schedules and prescribed actions shall cease to be in effect upon the effective date of a permit* that supersedes the mercury limits in the Permit.

* In March 2007, Regional Water Board staff publicly noticed a draft permit that could supersede existing mercury requirements

b. *Cyanide*. The cyanide-related time schedules and prescribed actions shall cease to be in effect upon the effective date of site-specific objectives† for cyanide in San Francisco Bay resulting in an adjusted saltwater chronic objective of 2.9 µg/L and acute objective of 9.4 µg/L, and thus putting into effect the alternate effluent limits the Permit specifies. If different site-specific objectives are adopted, the Regional Water Board will establish revised effluent limits based on them after the effective date of those different site-specific objectives, and the cyanide-related time schedules and prescribed actions in this Order shall remain in effect until the revised cyanide limits are adopted. At that time, the Regional Water Board will determine if the cyanide-related time schedules and prescribed actions in Table 2 are still necessary or if they should be rescinded. Until such time, the Discharger shall comply with them.

3. Reporting Delays. If the Discharger is delayed, interrupted, or prevented from meeting one or more of the time schedules in Table 3 due to circumstances beyond its reasonable control, the Discharger shall promptly notify the Executive Officer, provide the reasons and justification for the delay, and propose time schedules for resolving the delay.

4. Consequences of Non-Compliance. If the Discharger fails to comply with the provisions of this Order, the Executive Officer is authorized to take further enforcement action or to request the Attorney General to take appropriate actions against the Discharger in accordance with Water Code §§ 13331, 13350, 13385, and 13386. Such actions may include injunctive and civil remedies, if appropriate, or the issuance of an Administrative Civil Liability Complaint for Regional Water Board consideration.

5. Effective Date. This Order shall be effective on the effective date of the Permit.

**Table 2: Time Schedules and Prescribed Actions**

| Action | Deadline | |
|---|---|---|
| | Mercury | Cyanide |
| a. Comply with the following interim effluent limits at Monitoring Station M-001:<br>*Mercury*: Average monthly effluent limit = 0.087 µg/L<br>Maximum daily effluent limit = 1.0 µg/L<br>*Cyanide*: Maximum daily effluent limit = 25 µg/L | Upon the effective date of this Order | |
| b. Investigate sample collection, sample handling, and analytical laboratory quality assurance and quality control practices to ensure that analytical results for cyanide are accurately determined and reported. Submit a report by the deadline describing the results of the investigation and any changes in quality assurance and quality control practices implemented. | *Not Applicable* | January 1, 2008 |
| c. Submit a plan for identifying all mercury and cyanide sources to the discharge. Examples of potential mercury sources include | June 1, 2008 | June 1, 2008 |

and implement the wasteload allocations for municipal and industrial wastewater discharges identified in the San Francisco Bay Mercury TMDL that the Regional Water Board adopted in August 2006.

† In December 2006, the Regional Water Board adopted site specific objectives for cyanide in San Francisco Bay.

| Action | Deadline | |
|---|---|---|
| | Mercury | Cyanide |
| dental offices, laboratories, medical facilities, fluorescent light tubes, thermometers, and electrical switches. Examples of potential cyanide sources include metal plating and finishing, electroplating, photographic finishing, and laboratories. The plan shall, at a minimum, include sampling influent waste streams to identify and quantify pollutant sources. | | |
| d. Implement the plan developed in action "c" within 30 days of the deadline for action "c," and submit by the deadline for this action a report that contains an inventory of the pollutant sources. | October 1, 2008 | October 1, 2008 |
| e. Submit a report documenting development and initial implementation of a program to reduce and prevent the pollutants of concern in the discharge. The program shall consist, at a minimum, of the following elements:<br>i. Maintain a list of sources of pollutants of concern.<br>ii. Investigate each source to assess the need to include it in the program.<br>iii. Identify and implement targeted actions to reduce or eliminate discharges from each source in the program.<br>iv. Develop and distribute, as appropriate, educational materials regarding the need to prevent sources to the sewer system. | December 1, 2008 | December 1, 2008 |
| f. Continue to implement the program described in action "e" and submit annual status reports that evaluate its effectiveness and summarize planned changes. Report whether the program has successfully brought the discharge into compliance with the effluent limits in the Permit. If not, identify and implement additional measures to further reduce discharges. | Annually each February 28 in Best Management Practices and Pollutant Minimization Report required by Permit Provision VI.C.3 | |
| g. If by **February 28, 2011**, discharge data continue to show the discharge is out of compliance (as defined in 2.4.5 of the State Implementation Policy) with the Permit effluent limits, submit a report, by the deadline for this action, identifying more aggressive actions to ensure compliance. These actions shall include, but not be limited to, reviewing options for pretreatment and upgrades to the treatment plant. The report shall identify an implementation schedule for investigating these options, selecting a preferred option, and implementing the chosen option. At a minimum, the report shall plan for the following activities:<br>i. Bench scale testing or pilot scale testing or both<br>ii. Development of preliminary design specifications<br>iii. Development of final design specifications<br>iv. Procurement of funding | June 1, 2011 | June 1, 2011 |

| Action | Deadline | |
|---|---|---|
| | Mercury | Cyanide |
| v. Acquisition of necessary permits and approvals<br>vi. Construction | | |
| h. Implement the plan required in action "g" within 45 days of the deadline for action "g," and submit annual status reports. | Annually each February 1 in Annual Self-Monitoring Report required by Permit Attachment E, Monitoring and Reporting Program | |
| i. Submit documentation confirming complete plan implementation and comply with effluent limits in the Permit. | June 1, 2015 | June 1, 2015 |

I, Bruce H. Wolfe, Executive Officer, do hereby certify 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 _____, 2007.

_____

BRUCE H. WOLFE
Executive Officer