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BEFORE THE  
CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

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. R2-2007-0054,  
NPDES Permit No. CA0038067 and Waste  
Discharge Requirements for the Sausalito-Marin  
City Sanitary District and an accompanying  
Cease and Desist Order No. R2-2007-0055.

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. R2-2007-0054 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. CA0038067 and Waste Discharge Requirements for the Sausalito-Marin City Sanitary District ("SMSD") as well as an accompanying Cease and Desist Order ("CDO"), No. R2-2007-0055. A copy of tentative versions of Order Nos. R2-2007-0054 and R2-2007-0055, 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

1 detailed memorandum in support of the Petition and/or in reply to the Regional Board's response.<sup>1</sup>  
2 In addition, many of these issues are carried over from the previous permit appeal filed by BACWA  
3 on SMSD's previous permit (SWRCB/OCC File No. A-1319(a)), which is hereby consolidated with  
4 this appeal and any applicable arguments are incorporated by reference herein since it is currently  
5 being held in abeyance.

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

16 On July 10, 2007, BACWA submitted written comments on the tentative version of  
17 NPDES Permit No. CA0038067. For the reasons contained herein, and incorporated by reference  
18 as stated above, BACWA asserts that provisions contained in the recently issued permit for SMSD  
19 are improper and inappropriate. BACWA hopes that the State Board will choose to take up this  
20 petition and review the issues being raised that are vitally important to Bay Area POTWs.

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

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27 <sup>1</sup> The State Board's regulations require submission of a statement of points and authorities in support of a petition (23  
28 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.

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

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9 **2. THE SPECIFIC ACTION OF THE REGIONAL BOARD WHICH THE STATE**  
10 **BOARD IS REQUESTED TO REVIEW:**

11 BACWA seeks review of Order Nos. R2-2007-0054 and R2-2007-0055, reissuing NPDES  
12 Permit No. CA0038067 for SMSD (the "Permit") and the accompanying CDO. The specific  
13 requirements of the Permit that BACWA requests the State Board to review relate to the following:

- 14 A. The blending prohibition and compliance schedule;
- 15 B. Numeric-based effluent limits for dioxin-TEQ;
- 16 C. Final effluent limits for cyanide, chlordane, mercury and selenium;
- 17 D. Mass limit for mercury;
- 18 E. Compliance schedule action plans for chlordane, dioxin, mercury, and selenium; and
- 19 F. Requirements of the regionally-developed portion of the Pollutant Minimization  
20 Program.

21 The State Board is also requested to review the Regional Board's actions in adopting the  
22 Permit for compliance with due process and the California Administrative Procedures Act (Cal.  
23 Gov't Code §§11340, *et seq.*); the California Environmental Quality Act ("CEQA," Cal. Pub. Res.  
24 Code §21000, *et seq.*);<sup>2</sup> the Porter-Cologne Water Quality Control Act (Cal. Water Code §§13000,  
25 *et seq.*); the Clean Water Act ("CWA") (33 U.S.C. §§1251, *et seq.*) and its implementing

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26 <sup>2</sup> Although the Permit at II.E. discusses an exemption from CEQA under Water Code §13389, that exemption is narrow,  
27 and only exempts Chapter 3. The remaining non-exempted parts of CEQA require all Regional Boards to consider the  
28 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.

1 regulations (40 C.F.R. Parts 122, 123, 130 and 131); the Water Quality Control Plan, San Francisco  
2 Bay Region (the "Basin Plan"); and the Policy for Implementation of Toxics Standards for Inland  
3 Surface Waters, Enclosed Bays, and Estuaries of California ("SIP").

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

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

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

8 **A. The Regional Board Improperly Imposed a Schedule with Enforceable**  
9 **Deadlines to Eliminate Blending.**

10 The Permit's prohibition on blending provision, at section VI.6, states that:

11 "The Discharger shall comply with the following tasks and deadlines to  
12 minimize blending events."

Task	Compliance Date
13 1. <i>Wet Weather Improvements.</i> Submit a 14 technical report that evaluates alternatives for 15 potential wet weather conveyance and treatment 16 plant improvements. Comparisons of various 17 alternatives should be based on costs, 18 effectiveness, and implementability. The report 19 should proposed preferred alternative(s) based on 20 the results of the analysis.	One year after the effective date of this Order
21 2. <i>Workplan.</i> Prepare a workplan to implement 22 the measures proposed in the Feasibility Study.	90 days after completion of Task 1 above
23 3. The Discharger shall begin implementing the 24 measures identified in its workplan.	In accordance with the Work Plan described in Task 2 above
25 4. <i>Completion Report.</i> The Discharger shall 26 provide annual updates on its progress in 27 completing measures specified in the workplan.	Annually with the Annual Self- Monitoring Report

28 Currently, SMSD utilizes the well established practice of blending during peak wet weather  
flows to ensure compliance with its effluent limitations and with the CWA. This practice has  
never resulted in a violation of the stringent effluent limitations contained in previous NPDES  
permits, and nothing suggests that future violations may occur.

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2 1) The Regional Board Should Not Impose Prohibitions on  
3 Blending Before EPA Issues Clear Guidance.

4 The EPA and the Office of Management and Budget are still reviewing the current version  
5 of a national blending policy. Notably, the EPA has not yet issued a final draft due to the  
6 controversy surrounding the prohibition on blending. Furthermore, BACWA does not believe that  
7 it is national or state policy or regulation that a No Feasible Alternatives Analysis (NFAA) be  
8 followed up by an enforcement schedule, which may carry penalties. First, the regulation cited, 40  
9 C.F.R. §122.41(m), used to justify the development of a NFAA, does not require that an  
10 enforceable schedule be placed in the Permit. Second, requirements in this region should not be  
11 developed on a permit by permit basis, in advance of allowing these significant issues to be settled  
12 nationally.

13 Furthermore, SMSD will incur substantial immediate and irreparable harm if it is required  
14 to immediately comply with the Permit's prohibition on blending. The Permit established an  
15 enforceable compliance schedule requiring SMSD to design and construct facilities to eliminate  
16 blending that will be costly and unnecessary. *See* Permit at pg. 21. Public expenditures for design  
17 and construction of facilities to eliminate blending, which have not been demonstrated to produce  
18 expressly identified water quality benefits represents a waste of scarce public funds. Furthermore,  
19 such regulation should be deferred until a ruling in the *City of Vacaville vs. SWRCB* case (Contra  
20 Costa County, CASE NO. CIV MSN03-0956) is reached on the legality of blending restrictions.  
21 For these reasons, the State Water Board should overturn the requirements contained in SMSD's  
22 Permit related to blending.

23 **B. The Regional Board Improperly Imposed Numeric Effluent Limitations.**

24 BACWA has been concerned about the imposition of numeric effluent limitations for dioxin  
25 since the California Toxics Rule ("CTR") was promulgated, notwithstanding that regulations'  
26 promise that the "rule would not impose undue or inappropriate burden on the State of California or  
27 its dischargers." 65 Fed. Reg. 31687 (May 18, 2000). BACWA was initially hopeful that the  
28 EPA's prediction that costs to meet the CTR criteria would be "unlikely to reach the high-end of the

1 [cost] range because State authorities are likely to choose implementation options that provide some  
2 degree of flexibility or relief to the point source dischargers” was accurate; unfortunately, in  
3 practice, this has not been the case. *Id.* at 31706. The purpose of this petition is to request that the  
4 State use its presumed flexibility when issuing discharge permits where compliance with water  
5 quality criteria (whether these criteria are CTR criteria or narrative objectives) has been  
6 demonstrated to be infeasible.

7 The Permit being appealed by BACWA contains concentration limits for dioxin-TEQ,  
8 cyanide, chlordane, mercury and selenium, and mass limitations for mercury. Similar limits were  
9 challenged by BACWA in previous administrative and court appeals. Unfortunately, some of the  
10 holdings of those previous appeals are not being upheld by the Regional Board. BACWA tried for  
11 several years to settle the outstanding petitions on Bay Area POTW permits filed since 2000 by  
12 BACWA and others, but disagreement as to legal requirements prevented consummation of a global  
13 settlement. Because these issues remain as important today as they did five years ago, or perhaps  
14 more important since the time for final compliance with CTR criteria becomes shorter every day,  
15 BACWA continues to press for a final ruling to re-incorporate the “flexibility or relief” promised  
16 over the years.

17 BACWA believes that the Regional Board included interim and final numeric water quality-  
18 based effluent limitations (“WQBELs”) for these constituents in the Permit that are contrary to the  
19 requirements of the CWA and state law.<sup>3</sup> In most cases, these numeric limitations have been  
20 demonstrated to be infeasible to meet,<sup>4</sup> and could result in the permitted entities having to construct  
21 expensive new treatment facilities, if technology even exists to provide such treatment. These  
22 treatment technologies far exceed the mandated treatment requirements of the CWA and will likely  
23 become unnecessary once new water quality objectives, site specific objectives, or TMDLs for these  
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26 <sup>3</sup> The Regional Board must ensure its actions to implement the CWA are consistent with any applicable provisions of  
27 the CWA and its implementing regulations. Cal. Water Code §13372.

28 <sup>4</sup> 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  
State Implementation Policy at Appendix 1-3.

1 substances are in place and finally approved.<sup>5</sup> Such a waste of resources is not reasonable nor  
2 required (*see* Water Code §13000), and ignores the fact that control of some substances may instead  
3 require a “carefully conceived, agency-approved, long-term pollution control procedure for a  
4 complex environmental setting.” *Communities for a Better Environment v. SWRCB*, 109  
5 Cal.App.4th 1089, 1107 (2003). For these reasons, BACWA challenges these limits herein as  
6 being contrary to federal and state law requirements.

7 1) Numeric Effluent Limitations are Not Required.

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

12 EPA regulations require that “each NPDES permit shall include the following requirements  
13 when applicable.” *See* 40 C.F.R. § 122.44 (emphasis added). Subsection (d) of this section  
14 imposes “any requirements in addition to or more stringent than promulgated effluent limitations  
15 guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of the CWA necessary to  
16 achieve water quality standards established under Section 303 of the CWA, including State  
17 narrative criteria for water quality . . .” 40 C.F.R. § 122.44(d) (emphasis added). The regulations  
18 require the imposition of “requirements,” not numeric effluent limitations. Furthermore, when  
19 numeric effluent limitations are infeasible, EPA regulations specifically authorize the use of Best  
20 Management Practices (BMPs) and other non-numeric or narrative requirements in lieu of numeric

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22 <sup>5</sup> Courts have recognized a step-wise process in pollutant control. In *San Francisco BayKeeper v. Whitman*, 287 F.3d  
23 764,766-767 (April 15, 2002), the Ninth Circuit Court of Appeals determined that:

24 “[w]hen the NPDES system fails to adequately clean up certain rivers, streams or smaller water segments, the Act  
25 requires the use of a water-quality based approach. States are required to identify such waters, which are to be  
26 designated as ‘water quality limited segments’ (‘WQLSs’). The states must then rank these waters in order of  
27 priority, and based on that ranking, institute more stringent pollution limits called ‘total maximum daily loads’ or  
28 ‘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).

1 limits. 40 C.F.R. §122.44(k)(3); *see also* SWRCB Order No. WQ 2003-12 at pg. 9. Alternatively,  
2 the Regional Board could have styled this Permit after recent permits in the Central Valley Region,  
3 which have imposed final numeric limits, but stated that these limits do not apply if certain actions  
4 are undertaken by the discharger. *See* Order Nos. R5-2007-0036 and R5-2007-0039. This  
5 approach, which was not vetoed by USEPA, takes a creative approach to dealing with infeasible  
6 final limits without the necessity of compliance schedules.

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

14 By including numeric effluent limitations in lieu of non-numeric or narrative requirements  
15 where numeric limits have been demonstrated to be infeasible, the Regional Board exceeded federal  
16 law requirements. If the Regional Board chooses to exceed federal law requirements, then it must  
17 comply with state law requirements. *City of Burbank, et al v. SWRCB, et al.*, 35 Cal. 4th 613, 627-  
18 628 (2005). However, the Regional Board failed to comply with the requirements of Water Code  
19 §13263(a), which requires consideration of several factors including those contained in Water Code  
20 §13241 when adopting numeric effluent limitations more stringent than required by federal law into  
21 this Permit.

22 Thus, the State Board should remand the Permit to the Regional Board and direct the  
23 Regional Board to comply with the provisions of 40 C.F.R. §122.44(k)(3), by removing the numeric  
24 concentration-based effluent limits for dioxin-TEQ, cyanide, chlordane, mercury and selenium, and  
25 the mass emission limit for mercury, where compliance with such limits has been demonstrated to  
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27  
28 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 be infeasible, and replace these numeric limits with narrative requirements (source control, best  
2 management practices, etc.) in lieu of the numeric limits.<sup>6</sup>

3 2) Dioxin-TEQ Limits

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

5 <u>AMEL (µg/L)</u>	6 <u>MDEL (µg/L)</u>	7 <u>Effective Date</u>
8 1.4 x 10 <sup>-8</sup>	9 2.8 x 10 <sup>-8</sup>	10 10/01/2017

11 The CTR did not promulgate numeric water quality criteria for dioxin-TEQ, only for  
12 2,3,7,8-tetrachlorodibenzo-p-dioxin (“2,3,7,8-TCDD”). In addition, no aquatic life criteria were  
13 promulgated in the CTR or the Basin Plan for dioxin-TEQ. Only a human-health criteria for  
14 municipal (“Water & Organisms”), and non-municipal drinking water supply waters (e.g.,  
15 “Organisms Only”) were set at 0.000000013 and 0.000000014 µg/L, respectively, based on a  
16 carcinogenicity risk of 1x10<sup>-6</sup>. 40 C.F.R. §131.38(b)(1)(#16). These figures are based on an  
17 assumed exposure pathway of consumption of 6.5 grams per day of organisms from the Bay that  
18 are contaminated at a level equal to the criteria concentration, but multiplied by a  
19 “bioconcentration factor.” 65 Fed. Reg. 31693 (May 18, 2000). This amount can be consumed  
20 over a lifetime (70 years) without expecting an adverse effect. *Id.* However, current detection  
21 technologies cannot measure to these levels.

22 The Permit did not show a demonstrated reasonable potential for 2,3,7,8-TCDD. *See*  
23 Permit at pg. F-26. However, the same table containing the reasonable potential analysis (“RPA”)  
24 shows reasonable potential (“RP”) for dioxin-TEQ, even though no adopted water quality criteria  
25 or objective exists for dioxin-TEQ upon which a reasonable potential analysis could be  
26 performed.<sup>7</sup> The Regional Board’s action in finding reasonable potential in the absence of an  
27 applicable numeric water quality criteria was unreasonable, in violation of Water Code §13000,  
28 and 40 C.F.R. §122.44(d).

<sup>6</sup> Such an action would negate the need for compliance schedules as well since the SMSD would presumably be able to immediately comply with narrative requirements for the constituents at issue.

<sup>7</sup> 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-25-28.

1 The number used in the RPA was exactly the same as the promulgated criterion for  
2 2,3,7,8-TCDD. The Permit states that “[t]he narrative objective is translated into a numeric  
3 objective expressed in 2,3,7,8-TCDD equivalents (or dioxin-TEQ) based on the CTR criterion for  
4 2,3,7,8-TCDD and the application of the Toxic Equivalence Factors (“TEFs”) for dioxin and  
5 furans adopted by the World Health Organization (WHO) in 1998.”<sup>8</sup> See Permit at pg. F-40-41.  
6 Given that 9 years have passed since the TEFs were first adopted by the WHO, it is unreasonable  
7 for the Regional Board to continue to use a broad narrative objective and not adopt numeric  
8 objectives and an implementation plan through a formal rulemaking process as required by Water  
9 Code §13241 and §13242, and the triennial review process required by CWA section 303, 33  
10 U.S.C. §1313(c) and (e). Moreover, the use of a narrative objective indefinitely to skirt state law  
11 requirements also ignores the congressional mandate that water quality standards criteria “shall be  
12 specific numeric criteria for such toxic pollutants.” 33 U.S.C. §1313(c)(2)(B)(emphasis added).

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

16 In adopting a numeric effluent limitation for dioxin-TEQ, the Regional Board attempted to  
17 justify its actions by claiming that the applicable water quality objectives specified in the Basin Plan  
18 require limits to protect against unsafe levels of dioxin in the fatty tissue of fish and other  
19 organisms. See Permit at pg. F-41. The Basin Plan contains no numeric objectives specifically set  
20 to define acceptable levels of these constituents in fish tissue or sediment, and the CTR only set  
21 numeric criteria for 2,3,7,8-TCDD, not for all the congeners of dioxins. Thus, the Regional Board  
22 improperly relied upon the Basin Plan’s narrative objective for Bioaccumulation to justify limits for  
23 dioxin-TEQ.

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25  
26 <sup>8</sup> The “translated” dioxin-TEQ objective of 0.014 pg/L mirrors the dioxin-TEQ objective in the State Board’s 1991  
27 Enclosed Bays and Estuaries Plan (“EBEP”), which was invalidated in 1994 by the Sacramento County Superior Court  
28 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.

1 In addition, the Regional Board improperly lumped together all of the congeners of dioxin  
2 and furans. Had the RPA been done on each individual congener, most if not all would not show  
3 reasonable potential because of the varying TEF for each. *See* Permit at pg. F-41-42. However,  
4 pooling all of the congeners together creates an unnecessary finding of reasonable potential for all  
5 congeners. The Regional Board's inclusion of an effluent limit for dioxin-TEQ based on all of the  
6 congeners of dioxins and furans improperly ignores that the congeners do not create reasonable  
7 potential. Imposition of limits on congeners without reasonable potential violates the specific  
8 mandates of the Basin Plan and federal regulations.<sup>9</sup>

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

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

16 The Regional Board has acknowledged in permit findings and other associated documents  
17 that the presence of dioxin may be beyond the Discharger's control. *See, e.g.,* Order No. R2-2007-  
18 0054 at pg. F-50, para. (7) ("...the ubiquitous nature of the sources of dioxin-TEQ..."); *see also*  
19 *Communities for a Better Environment*, 109 Cal.App.4th at 1096 ("Dioxins are not produced  
20 intentionally. They are formed as undesired byproducts of combustion and the manufacture and use  
21 of certain chlorinated chemical compounds. They exist in the environment worldwide, particularly  
22 in air, water, soils, and sediments. They enter the atmosphere through aerial emissions and widely  
23 disperse through a number of processes, including erosion, runoff, and volatilization from land or  
24 water. For example, automobile exhaust is a common source of dioxins.") Therefore, the minimal  
25 contribution of dioxin-TEQ by SMSD's POTW is not a "controllable water quality factor" that is  
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27  
28 <sup>9</sup> 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. R2-2007-0054 at pg. F-28, para. (2).

1 causing a “detrimental increase in concentrations of toxic substances found in bottom sediments or  
2 aquatic life,” and imposing a limit for dioxin-TEQ is not necessary nor based upon the findings and  
3 evidence.

4         Additionally, a numeric effluent limitation can only be imposed through a narrative water  
5 quality objective if the narrative objective contains an appropriate mechanism to “translate” the  
6 narrative requirement (*i.e.*, to translate a narrative objective into a concentration or mass effluent  
7 limitation).<sup>10</sup> In order for a numeric limit derived from a narrative objective to be appropriate, the  
8 derivation of the numeric limit must be transparent. A clear explanation of the translation from the  
9 narrative water quality objective must be set forth in the NPDES permit.<sup>11</sup> *See* 40 C.F.R.  
10 §124.8(b)(4); *Topanga Ass’n for a Scenic Community v. County of Los Angeles*, 11 Cal. 3d 506, 515  
11 (1974); *California Edison v. SWRCB*, 116 Cal. App. 3d 751, 761 (1981); *see also In re Petition of*  
12 *the Pinole-Hercules Water Pollution Control Plant and County of San Francisco*, State Board  
13 Order No. WQ-95-4 at 10 (Sept. 21, 1995). The failure by the Regional Board to clearly enunciate  
14

15 \_\_\_\_\_  
16 <sup>10</sup> Federal regulations mandate that “[w]here a State adopts narrative criteria for toxic pollutants to protect designated  
17 uses, the State must provide information identifying the method by which the State intends to regulate point source  
18 dischargers of toxic pollutants on water quality limited segments based on such narrative criteria. Such information  
19 may be included as part of the standards . . . .” 40 C.F.R. §131.11(a)(2). Since the Basin Plan’s narrative objective for  
20 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  
21 *EBMUD* Order, SWRCB Order No. WQ 2002-0012 at pgs. 6-7 does not apply in this case, since the dioxin-TEQ limits  
22 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>.

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

- 26         ▪ specific, scientifically defensible methods by which the state will implement its narrative toxicity standard for  
all priority pollutants;
- 27         ▪ how these methods will be integrated into the State’s priority pollutant control program;
- 28         ▪ 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, Technical Support Document for Water Quality-Based Toxics Control at 30-31(1991).

1 the translation from a narrative objective to a numeric limit in the Findings or Fact Sheet of the  
2 Permit was an abuse of discretion.<sup>12</sup>

3 b) Meeting the Dioxin Concentration Limit is Not Feasible

4 As stated above, dioxins enter the environment from a variety of sources, primarily  
5 combustions sources. *See Communities for a Better Environment*, 109 Ca.App.4<sup>th</sup> at 1096  
6 (“automobile exhaust is a common source of dioxins.”) The Regional Board has recognized that  
7 “dioxin and furan concentrations cannot be further reduced without significant upgrades to the  
8 facility to advanced treatment which could be overly burdensome and would not be cost effective  
9 for the benefits received.” *See e.g.*, Order No. R2-2007-0054 at pg. F-49-50, para. (7). Thus, the  
10 Regional Board has conceded that compliance with the dioxin-TEQ limits is not technically or  
11 economically feasible. *See Permit* at pg. F-49-50, para. (7). For these reasons, numeric effluent  
12 limitations should not be required.<sup>13</sup>

13 The Regional Board’s assertion that other strategies, including potential mass offsets, could  
14 address the impairment ignores two basic points. First, the Regional Board has historically never  
15 agreed that there is an “impairment” for dioxin in the Bay.<sup>14</sup> In addition, mass offsets will not  
16

17 <sup>12</sup> Similar arguments can be made for the imposition of the mercury mass limit, which was also imposed in the last  
18 permit (and carried over into this Permit) based on the Bioaccumulation narrative objective. If, despite the above  
19 arguments and evidence, the State Board believes that mass should be addressed on a year round performance basis,  
20 prior to the completion of an applicable TMDL, BACWA requests that the Regional Board be directed to reclassify the  
21 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.

22 <sup>13</sup> The Regional Board should have done what it did in the Vallejo permit, Order No. R2-2006-0056, which was to  
23 state: “Due to the limited monitoring data, no dioxin limits (final or interim) are established. The final limits for dioxin  
24 TEQ will be based on the WLA assigned to the Discharger in the TMDL. This Order requires additional dioxin  
25 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.

26 <sup>14</sup> *See* Letter and attachments from Loretta Barsamian, RWQCB to Alexis Strauss, EPA Region IX (Jul 14, 1998) (“we  
27 believe the data do not support any other additions to the list at this time. This is particularly true in the case of  
28 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

1 address the ability to meet a *concentration* limit. Even the new Regional Board member, Dr. Terry  
2 Young, has previously questioned how an offset can be done for concentration. Offset programs for  
3 concentration-based limits have not been demonstrated to be feasible. Further, no state policy for  
4 offsets exists, so the feasibility of such an approach has not been determined. For these reasons, the  
5 numeric limits for dioxin-TEQ imposed in the Permits represent an abuse of discretion.

6 **C. The Regional Board Improperly included Final Effluent Limits for Cyanide,**  
7 **Chlordane, Mercury and Selenium.**

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

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

26  
27 important information such as later studies and a 1998 national dioxin health risk study that showed that dioxin levels  
28 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.

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

7  
8 **D. The Regional Board Improperly Imposed Mercury Limits.**

9 1) Mercury Concentration Limits

10 The Permit contains final concentration limits for mercury at page 9, paragraph IV.1.3,  
11 Table 7. These limits were derived from the Basin Plan objectives of 2.1 and 0.025 µg/L,<sup>15</sup> for  
12 acute and chronic criteria, respectively. See Permit at pg. F-38, para. (2)(a). There was no  
13 reasonable potential to trigger the imposition of these limits since the objective used to determine  
14 reasonable potential was recently deleted from the Basin Plan and no reasonable potential exists  
15 under the CTR criterion. See Permit at pg. F-25, F-38, para. (2)(a). Nevertheless, reasonable  
16 potential was determined based on "Trigger 3," because "the receiving water is 303(d) listed for  
17 mercury." See Permit at pg. F-38, para. (2)(b). The mercury listing was not based upon the water  
18 column criteria, but instead the bioaccumulation narrative objective.

19 The 1998 303(d) list stated that "current data indicate fish consumption and wildlife  
20 consumption impacted uses: health consumption advisory in effect for multiple fish species  
21 including striped bass and shark. Major source is historic: gold mining sediments and local mercury  
22

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23 <sup>15</sup> The 0.025 criterion has been recently removed from the Basin Plan and is no longer a valid water quality objective.  
24 BACWA supported removal of that old criterion for the reasons stated in its comments to the State Board in 2005 on  
25 the Mercury TMDL. In those comments, BACWA stated the 4-day mercury water quality standard was poorly  
26 designed with a bad technical basis in addition to being obsolete. This water quality objective did not take into account  
27 the conditions in the Bay where there is shallow water and high winds, causing the sediments to be re-suspended in the  
28 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 on the level of detection and not necessarily  
a level to protect aquatic life. See 1995 Basin Plan at pg. 3-10, footnote i.

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

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

19 2) Mercury Mass Limits

20 Effluent Limitation IV.6 on pg. 12 of the Permit contains a mass limit for mercury that  
21 limits the discharge of this constituent to 0.042 kg/month until such time that a Total Maximum  
22 Daily Load (“TMDL”)<sup>16</sup> is required under CWA §303(d) and has been completed. See Permit at pg.  
23 12.

24 In adopting this permit limitation, the Regional Board acted in a manner that is inconsistent  
25 with CWA requirements, as the adoption of water quality-based effluent limitations for POTWs to  
26

27  
28 <sup>16</sup> 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.

1 address an alleged impairment before the adoption and implementation of TMDLs was neither  
2 intended by Congress, nor mandated by the CWA.

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

10 The mere listing of a pollutant on the §303(d) list does not constitute conclusive evidence  
11 that there is a lack of assimilative capacity in the receiving water for that pollutant. SWRCB WQ  
12 Order No. 2001-06 at 23 (March 7, 2001). Under EPA regulations and the 1998 Clean Water Act  
13 Section 303(d) Listing Guidelines for California (August 11, 1997), a water body and pollutant may  
14 have been placed on the 303(d) list in the absence of any evidence of an exceedance of the water  
15 quality standard or objective for that pollutant or that the water body is otherwise impaired as a  
16 result of that pollutant. In fact, a waterbody was allowed to be listed just because the water quality  
17 is "of such concern that the Regional Water Board determines the waterbody needs to be afforded a  
18 level of protection offered by a 303(d) listing." See 1998 Clean Water Act Section 303(d) Listing  
19 Guidelines for California (August 11, 1997) at p. 3, para. B.6. Thus, the State's listing may have  
20 been *completely independent* of any finding of an actual impairment of water quality and should not  
21 be used as a basis for imposing mass limits.<sup>19</sup>

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22  
23 <sup>17</sup> The Basin Plan reiterates that "by considering pollutant influx from all sources, wasteload allocation [WLA] supports  
24 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.

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

28 <sup>19</sup> 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.

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

12           Allowing normal economic growth and development to occur in the SMSD service area in  
13 the interim until the TMDL is finalized would not result in any appreciable degradation in water  
14 quality. Furthermore, completely eliminating SMSD's discharge to the Bay would not result in any  
15 measurable or significant improvement in water quality.<sup>21</sup> Therefore, regulation of this *de minimis*  
16 source is not reasonable and is likely not required. See *Ober v. USEPA*, 243 F.3d 1190 (9th Cir.  
17 2001)(“de minimis exception is allowed for regulation yielding trivial gain”; thus, regulators have  
18 “the authority to exempt from regulation those source categories in the area which contribute only  
19 negligibly to ambient concentrations which exceed [standards].”)

20           The requirements to limit the *de minimis* mass inputs of mercury to current levels in the  
21 Permit<sup>22</sup> and subsequent permits will more likely impede, rather than facilitate, improvements in  
22

23  
24 <sup>20</sup> Recent scientific literature indicates that “...loadings to water in the San Francisco Bay Estuary are dominated by  
25 runoff from the Central Valley catchment and remobilization of contaminated sediments deposited during past mining  
26 activities.” Macleod ES&T, vol.39, No.17, 2005. Many BACWA members have mercury source control programs that  
27 include dental amalgam programs and/or fluorescent bulb and thermometer exchange programs.

28 <sup>21</sup> 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).

<sup>22</sup> See Permit at 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 loadings  
to the receiving water do not increase...”). Incidentally, the Regional Board’s assertion in previous Orders (e.g., Order

1 water quality. By causing significant public resources to be expended on projects to meet stringent  
2 limits that do little to improve water quality, fewer resources will be available for projects that  
3 would actually provide demonstrable improvements in water quality. Such projects will  
4 presumably be identified as a part of the TMDL development process.

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

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

11 Effluent limitations can be expressed numerically in terms of concentration (*i.e.*, milligrams  
12 per liter) or mass (*i.e.*, pounds per day). Federal regulations provide guidance on when to impose  
13 which type of effluent limit by stating, in part, that “[a]ll pollutants in permits shall have limitations,  
14 standards or prohibitions expressed in terms of mass EXCEPT . . . when applicable standards and  
15 limitations are expressed in terms of other units of measurement. . . .” 40 C.F.R.  
16 §122.45(f)(1) (emphasis added). Thus, if water quality standards are based upon concentration,  
17 mass limits are not required. *Id.*

18 Despite this clear exception to the requirement for mass limits, the Permit contains both  
19 mass and concentration effluent limits for mercury. Requiring dual effluent limits (mass and  
20 concentration) for the same constituent amounts to a “double ding” in any potential enforcement  
21 action, in that an exceedance of a concentration effluent limit may also result in exceedance of the  
22 mass limit. Thus, the imposition of mass limits, in addition to concentration limits, unnecessarily  
23 exposes these permit holders to additional enforcement actions and mandatory minimum penalties.

24 Mass limits, in addition to concentration limits, are redundant as mass limits are always  
25 implied in POTW permits because of inherent constraints related to a treatment plant's design

26  
27 No. 01-105) that the State's anti-degradation policy (Resolution 68-16) necessitates the imposition of effluent  
28 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.

1 capacity or maximum flows. In this case, the Permit specifically prohibits exceeding the average  
2 dry weather flow rate for which the facility was designed. See Permit at page 8, para. (III)(D) The  
3 combination of a flow restriction and a concentration restriction is equivalent to a mass restriction.  
4 Thus, there is no need to explicitly require mass limits in the Permit since the two components of  
5 mass (flow and concentration) are already explicitly limited.

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

15 By imposing duplicative mass limits, the Regional Board has regulated beyond the  
16 requirements of federal law and must, therefore, consider the requirements set forth in Water Code  
17 section 13263(a), including a consideration of economics and the need for developing housing  
18 within particular regions pursuant to Water Code §13241, prior to imposing such growth restricting  
19 limits upon POTWs. See *City of Burbank v. State Water Resources Control Board*, 35 Cal.4th 613,  
20 618 (2005). For each of these reasons, the Regional Board violated state law and committed a  
21 prejudicial abuse of discretion by including or sanctioning both mass and concentration limits. For  
22 these reasons, the State Board should remand the Permit to remove the mass limits on mercury.

23  
24 **E. The Regional Board Improperly Imposed Compliance Schedule Action**  
25 **Plans in the Permit and in the CDO which are Overly Stringent.**

26 BACWA is concerned that having stringent schedules contained in the CDO will  
27 eventually require the construction of capital facilities when BACWA has repeatedly been told that  
28 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

1 TMDLs, site specific objectives, and pollution prevention (as described in the implementation plan  
2 for the mercury TMDL). The CDO veers way off of this intended direction.

3 Furthermore, this Permit includes compliance schedules for pollutants that have been  
4 banned for use or for which wastewater treatment plant effluents have been identified as non-  
5 significant sources. See Permit at pgs. 21-23. Additionally, each pollutant is already being  
6 addressed through an alternative regulatory strategy that will appropriately resolve beneficial use  
7 concerns for the San Francisco Bay. The compliance schedules in the Permit and/or the CDO are  
8 overly burdensome for every constituent, as specified below:

9 1) Chlordane. Chlordane was banned for use as a pesticide in the United States 19 years  
10 ago in 1988. Since then, chlordane has been banned in many other countries around the world as  
11 well. To include nine separate tasks to reduce chlordane in municipal wastewater effluent, when  
12 the effluent limit is based on only one non-quantified, non-reproducible data point, is  
13 unsupportable and a waste of public resources.

14 2) Dioxin. The dioxin congeners found in fish tissue samples, which form the basis for the  
15 dioxin 303(d) listing are different than the congeners detected in publicly-owner treatment works.  
16 Given that the sources of dioxin are uncontrollable by municipal wastewater treatment plants and  
17 are primarily introduced through air deposition, the compliance requirements for dioxin reduction in  
18 the effluent will have little, if any, environmental benefit to reduce the concentrations of dioxin  
19 congeners found in fish tissue. Thus, a *de minimus* exception should be granted in this case. See  
20 *Ober v. USEPA*, 243 F.3d 1190, 1195 (9th Cir. 2001) (“de minimis exception is allowed for  
21 regulation yielding trivial gain.”)

22 3) Mercury. The Regional Water Board has been in the process of developing a mercury  
23 TMDL for at least ten years. The mercury TMDL recently approved by the Regional and State  
24 Water Boards contains requirements that have been developed in a meaningful and deliberate way  
25 to address the mercury issue holistically. Bay Area POTWs are ready to implement the mercury  
26 TMDL through activities that will address impairment in San Francisco Bay. This is in contrast to  
27 the requirements in the CDO that mandate extensive actions, including significant expenditures of  
28 public funds, within the next three to six months solely because the State Water Board has not yet

1 approved the mercury TMDL. This timeline is completely unreasonable given the history of the  
2 TMDL process and the insignificant contribution of mercury by municipal wastewater treatment  
3 plants to San Francisco Bay.

4 4) Selenium. BACWA is concerned that the activities being required for selenium are  
5 inappropriate because a TMDL for selenium will be developed in the future. Therefore, significant  
6 studies and capital improvements are premature for this municipal discharger. In addition, quality  
7 control for sampling and analysis should be investigated first and further actions taken only if  
8 warranted.

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

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

16 SMSD does not have a Pollution Prevention Program because its flow rate is less than 5  
17 mgd and it is not required to have a pretreatment program. The Regional Water Board's Policy had  
18 already been established on Pollution Prevention (P2) in the copper and cyanide SSO was that P2  
19 was not expected of facilities of less than five mgd. This CDO, again, is not consistent with the  
20 approach that has been well accepted. Therefore, BACWA objects to the inclusion of detailed  
21 requirements for the regionally-developed portion of the Pollutant Minimization Program in the  
22 permit as too burdensome for this small discharger. *See* Permit at pg. 17. Significant pollution  
23 prevention activities are already required as part of the compliance schedule and CDO, and these  
24 activities should be sufficient.

25 In addition, California Water Code section 13263.3(k) prohibits the State Board or Regional  
26 Board from including a Pollution Prevention Plan ("PPP") in any waste discharge requirements or  
27 other permits. Notwithstanding this prohibition, SMSD's Permit includes a detailed discussion of  
28 SMSD's PPP. *See, e.g.*, Permit at pg. 17 (requiring SMSD to "develop and conduct" a Pollutant

1 Minimization Program when triggered by various evidence). By including the PPP in the Cities'  
2 Permit, the Regional Board violated Water Code section 13263.3(k).

3 Furthermore, in the *Tosco Order*, the State Board stated: "The Regional Water Board cannot  
4 require in a permit that a discharger implement a Pollution Prevention Plan." *Tosco Order* at 61.  
5 Thus, the Permit cannot require the implementation of a Pollution Prevention Plan. For the above-  
6 stated reasons, the State Board should direct the Regional Board to remove the PPP from the Cities'  
7 Permit, or at least remove the requirement to "conduct" the PPP.

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

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

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

27 Other statutory provisions, while not setting mandatory minimum penalties, create even  
28 greater exposure for BACWA's members. The CWA authorizes civil penalties of up to \$32,500 per

1 day per violation, 33 U.S.C. § 1319(d), and also authorizes criminal penalties, including the  
2 incarceration of public officials, for knowing or negligent permit violations. 33 U.S.C §1319(c); *see*  
3 *U.S. v. Weitzenhoff*, 35 F.3d 1275 (9<sup>th</sup> Cir. 1994) (managers of treatment plant convicted of permit  
4 violations). In addition to enforcement by administrative agencies, private parties can seek civil  
5 penalties pursuant to the “citizen suit” provisions of the CWA. *See* 33 U.S.C. § 1365.

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

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

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

22 Petitioner seeks an Order by the State Board that will remand Order Nos. R2-2007-0054 and  
23 R2-2007-0055 to the Regional Board for revisions and will direct the Regional Board to:

- 24 A. Remove the blending prohibition and compliance schedule;
- 25 B. Remove the numeric-based effluent limits for dioxin-TEQ;
- 26 C. Remove the final effluent limits for cyanide, chlordane, mercury and selenium;
- 27 D. Remove the mass limit for mercury;
- 28 E. Revise the compliance schedule action plans to (1) remove all activities related to  
installation of capital improvements and (2) ensure that any pollution prevention

1 activities are identical to resolutions or orders already adopted by the Regional Water  
2 Board for specific constituents; and

3 F. Remove requirements for the regionally-developed portion of the Pollutant  
4 Minimization Program.

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

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

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

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

22 A true and correct copy of this Petition was mailed by First Class mail on September 7,  
23 2007, to the Discharger, and to the Regional Board at the following address:

24 Bruce Wolfe, Executive Officer  
25 California Regional Water Quality Control Board,  
26 San Francisco Region  
27 1515 Clay Street, Suite 1400  
28 Oakland, California 94612

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

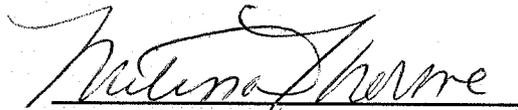
4 The substantive issues and objections were raised before the Regional Board either in this  
5 permitting action, or in previous permitting actions that were appealed to the State Board and  
6 remain in abeyance. The issues raised in the previous Petition that remain at issue were reiterated  
7 and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

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

9 BACWA requests that the State Board place its Petition for Review in abeyance pursuant to  
10 23 C.C.R. §2050.5(d) to allow time for BACWA to attempt to resolve its concerns with the  
11 Regional Board informally.

12 DATED: September 7, 2007

Respectfully submitted,

13  
14 

15 Melissa Thorne  
16 DOWNEY BRAND LLP  
17 BACWA Special Counsel

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**EXHIBIT A**



# California Regional Water Quality Control Board

## San Francisco Bay Region



Linda S. Adams  
Secretary for  
Environmental Protection

1515 Clay Street, Suite 1400, Oakland, California 94612  
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Arnold Schwarzenegger  
Governor

### REVISED TENTATIVE ORDER NPDES NO. CA0038067

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

**Table 1. Discharger Information**

<b>Discharger</b>	Sausalito-Marín City Sanitary District
<b>Name of Facility</b>	Sausalito-Marín City Sanitary District Wastewater Treatment Plant and Its Collection System
<b>Facility Address</b>	#1 Fort Baker Road
	Sausalito, CA 94965
	Marin County

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

**Table 2. Discharge Location**

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Secondary treated POTW effluent	37° 50' 37" N	122° 28' 03" W	Central San Francisco Bay

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Board on:	<Adoption Date>
This Order shall become effective on:	<b>October 1, 2007</b>
This Order shall expire on:	<b>September 30, 2012</b>
The U.S. Environmental Protection Agency (U.S. EPA) 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. 00-060 and R2-2003-0109 are 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 thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, 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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## I. FACILITY INFORMATION

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

**Table 4. Facility Information**

<b>Discharger</b>	Sausalito-Marín City Sanitary District
<b>Name of Facility</b>	Sausalito-Marín City Sanitary District Wastewater Treatment Plant and Its Collection System
<b>Facility Address</b>	#1 Fort Baker Road
	Sausalito, CA 94965
	Marin County
<b>Facility Contact, Title, and Phone</b>	Robert Simmons, General Manager, (415) 332-0244
<b>Mailing Address</b>	P.O. Box 39 Sausalito, CA 94966
<b>Type of Facility</b>	Publicly Owned Treatment Plant (POTW)
<b>Facility Design Flow</b>	1.8 million gallons per day (MGD) average dry weather flow 6.0 MGD secondary treatment capacity

## II. FINDINGS

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

- A. Background.** Sausalito-Marín City Sanitary District (hereinafter the Discharger) is currently discharging under Order No. 00-060 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038067. Board Order No. R2-2003-0109 amends Order No. 00-060 to allow for Enterococci bacteria monitoring instead of total bacteria monitoring. The Discharger submitted a Report of Waste Discharge, dated January 2005, and applied for an NPDES permit reissuance to discharge treated wastewater to the Central San Francisco Bay, a water of the United States, via a submerged diffuser. The application was deemed complete on August 9, 2005.
- B. Facility Description.** The Discharger owns and operates a wastewater treatment plant, located at #1 Fort Baker Road, Sausalito, Marin County, California. The location of the facility is shown in Attachment B. The plant provides secondary level treatment for domestic wastewater from the City of Sausalito, Marin City, Tamalpais Community Services District, and Golden Gate National Recreation Area. The Discharger's service area has an approximate population of 18,500. The treatment plant has an average dry weather flow of about 1.3 million gallons per day (MGD) and a maximum wet weather design flow of 6.0 MGD. Wet weather conditions sometime exceed 6.0 MGD due to infiltration into the collection system. Under these conditions, the excess flow above 6.0 MGD is diverted from the biological treatment units directly to the secondary clarifiers.

The Discharger's collection system includes about 10 miles of sanitary sewer lines and seven pump stations. The Discharger owns and operates all of the seven pump stations and about 5.5 miles of sanitary sewer lines in the unincorporated areas including Marin City and about 4.5 miles of gravity sewer and force mains that make up the Discharger's conveyance system. About 70 miles of sanitary sewer lines are owned and operated by the City of Sausalito, Tamalpais Community Service District, and Golden Gate National Recreational Area.

The treatment facility flow schematic is shown in Attachment C. The treatment processes consist of primary sedimentation, followed by biological treatment using fixed-film reactors, followed by secondary clarification, rotating disk screening, sand filtration, chlorination and dechlorination. The treated effluent is discharged 300 feet offshore at a 30-foot depth into Central San Francisco Bay through a submerged diffuser.

- 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 the Discharger to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC 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 G, which contain background information and rationale for Order requirements, 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, Chapter 3.
- F. Technology-Based Effluent Limitations.** NPDES regulations at 40 CFR §122.44(a) require 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, Best Professional Judgment (BPJ) in accordance with 40 CFR §125.3, and Table 4-2 of the Basin Plan. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. Water Quality-based Effluent Limitations.** 40 CFR Section 122.44(d) requires that where reasonable potential (RP) to cause or contribute to an exceedance of applicable water quality standards exists, permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives (WQOs) have not been established, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a) or proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, including site specific applicability, or an indicator parameter. A detailed discussion of the water quality-based effluent limitations is included in the Fact Sheet (Attachment F).
- H. Water Quality Control Plans.** The Regional Water Board adopted the *Water Quality Control Plan for the San Francisco Bay Basin* (the Basin Plan, revised in 2005) that designates beneficial uses, establishes WQOs, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Beneficial uses applicable to Central San Francisco Bay are as follows.

**Table 5. Basin Plan Beneficial Uses of Central San Francisco Bay**

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Central San Francisco Bay	Ocean Commercial and Sport Fishing (COMM) Estuarine Habitat (EST) Industrial Service Supply (IND) Fish Migration (MIGR), Navigation (NAV) Industrial Process Water Supply (PROC) Preservation of Rare and Endangered Species (RARE) Water Contact Recreation (REC1) Non-contact Water Recreation (REC2) Shellfish Harvesting (SHELL) Fish Spawning (SPWN) Wildlife Habitat (WILD).

Requirements of this Order specifically implement the Basin Plan.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended 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, which incorporated the NTR criteria that were applicable in California. The CTR was amended on February 13, 2001. These rules include water quality criteria (WQC) for priority pollutants and are applicable to this discharge.
- J. **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 Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- K. **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 compliance schedules and interim effluent limitations. A detailed discussion of the basis for the compliance schedules and interim effluent limitations is included in the Fact Sheet (Attachment F).

- L. 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 CFR. §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.
- M. 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 BOD or CBOD, TSS, Oil and Grease, pH, and chlorine residual. Restrictions on these pollutants are specified in federal regulations and have been in the Basin Plan since before May 30, 2000, as discussed in the attached Fact Sheet, Attachment F. The permit's technology-based pollutant restrictions are no more stringent than required by the CWA. WQBELs 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 WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual WQBELs 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 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.
- N. Antidegradation Policy.** 40 CFR 131.12 requires that 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, which incorporates the requirements of federal antidegradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F), the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution No. 68-16.
- O. 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. Some effluent limitations in the previous Order have been removed. As discussed in detail in the Fact Sheet (Attachment F), this removal of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

- P. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards 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.
- Q. Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. 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 (Attachment F).
- R. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to adopt an NPDES permit and prescribe Waste Discharge Requirements (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).
- S. 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. 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 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.13 of the *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (Attachment G).

Blended wastewater is biologically treated wastewater blended with wastewater that has been diverted around biological treatment units or advanced treatment units. Such discharges are approved under the bypass conditions stated in 40 CFR 122.41(m)(4) (1) when the Discharger's peak wet weather influent flow volumes exceed the capacity of the secondary treatment unit(s) of 6.0 MGD, (2) when the discharge complies with the effluent and receiving water limitations contained in this Order, and (3) provided the Discharger satisfy Provision VI.C.5.c.

Furthermore, the Discharger shall operate its facility as designed and in accordance with the Operation & Maintenance Manual developed for the facility. This means that it shall optimize storage and use of equalization units, and shall fully utilize the biological treatment units and advanced treatment units, if applicable. The Discharger shall report incidents of the anticipated blended effluent discharges in routine monitoring reports, and shall conduct monitoring of this discharge as specified in the attached MRP (Attachment E).

- D. The average dry weather flow, as measured at station M-001 described in the attached MRP (Attachment E), shall not exceed 1.8 MGD. Actual average dry weather flow shall be determined for compliance with this prohibition over three consecutive dry weather months each year.
- 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**

**1. Effluent Limitations for Conventional Pollutants.**

The discharge of secondary treated wastewater to Central San Francisco Bay shall maintain compliance with the following effluent limitations, with compliance measured at the effluent Monitoring Location M-001 as described in the attached Monitoring and Reporting Program (Attachment E). The discharge from Discharge Point No. 001 shall not exceed the following limitations.

**Table 6. Conventional Effluent Limitations for Discharge Point No. M-001**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Carbonaceous BOD, 5-day @ 20°C (CBOD <sub>5</sub> )	mg/L	25	40	---	---	---
Percent Removal of CBOD <sub>5</sub>	%	85	---	---	---	---
Total Suspended Solids (TSS)	mg/L	30	45	---	---	---
TSS percent removal	%	85	---	---	---	---
pH <sup>(1)</sup>	Standard units	---	---	---	6.0	9.0
Total Chlorine Residual <sup>(2)</sup>	mg/L	---	---	---	---	0.0
Oil and Grease	mg/L	10	---	20	---	---

Footnotes for Table 6:

(1) 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.

(2) 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.

- 2. **Total Coliform Bacteria:** The five-sample median total coliform density shall not exceed 240 MPN/100 mL and the daily maximum value shall not exceed 10,000 MPN/100mL at M-001.
- 3. **Effluent Limitations for Toxics Substances:** The discharge of treated wastewater shall maintain compliance with the effluent limitations listed in Table 7 for toxic pollutants, at M-001, as described in the attached MRP (Attachment E):

**Table 7. Effluent Limitations for Toxic Substances** <sup>(1,3)</sup>

Constituent	Water Quality-Based Effluent Limits (WQBELs)		Interim Limits	
	Maximum Daily (MDEL) ( $\mu\text{g/L}$ ) <sup>7</sup>	Average Monthly (AMEL) ( $\mu\text{g/L}$ ) <sup>7</sup>	Maximum Daily ( $\mu\text{g/L}$ )	Average Monthly ( $\mu\text{g/L}$ )
Copper <sup>(2)</sup>	100	73	---	---
Mercury	0.034	0.023	---	---
Selenium	9.0	3.7	---	---
Zinc	670	500	---	---
Cyanide	46	19	---	---
Bis(2-ethylhexyl)phthalate	110	55	---	---
Dioxin-TEQ <sup>(4)</sup>	2.8E-08	1.4E-08	---	---
Chlordane <sup>(5)</sup>	0.0012	0.00059	0.1	---
Total Ammonia (as N)	380	180	---	---

Footnotes for Table 7:

- (1) (a) All analyses shall be performed using current U.S. EPA approved 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) Alternate Effluent Limits for Copper:
  - a. If a copper SSO for the receiving water becomes legally effective, resulting in adjusted saltwater CCC of 2.5  $\mu\text{g/L}$  and CMC of 3.9  $\mu\text{g/L}$  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 7 (the rationale for these effluent limitations can be found in the Fact Sheet [Attachment F]).

MDEL of 75  $\mu\text{g/L}$ , and AMEL of 55  $\mu\text{g/L}$ .
  
- (3) Minimum Levels. The Discharger shall achieve the following minimum levels for compliance determination purposes as defined in Section VII of this Order.

**Table 8. Minimum Levels**

<u>Constituent</u>	<u>Minimum Level</u>	<u>Units</u>
Copper	0.5 or 2	$\mu\text{g/L}$
Mercury	0.0005	$\mu\text{g/L}$
Selenium	2 or 5	$\mu\text{g/L}$
Zinc	1, 10 or 20	$\mu\text{g/L}$
Cyanide	5	$\mu\text{g/L}$
Bis(2-ethylhexyl)phthalate	5	$\mu\text{g/L}$
Chlordane	0.1	$\mu\text{g/L}$
Dioxin-TEQ	½ the USEPA specified	pg/L

<u>Constituent</u>	<u>Minimum Level</u>	<u>Units</u>
	MLs for Method 1613	
2,3,7,8-TCDD	5	pg/L
1,2,3,7,8-PeCDD	25	pg/L
1,2,3,4,7,8-HxCDD	25	pg/L
1,2,3,6,7,8-HxCDD	25	pg/L
1,2,3,7,8,9-HxCDD	25	pg/L
1,2,3,4,6,7,8-HpCDD	25	pg/L
OCDD	50	pg/L
2,3,7,8-TCDF	5	pg/L
1,2,3,7,8-PeCDF	25	pg/L
2,3,4,7,8-PeCDF	25	pg/L
1,2,3,4,7,8-HxCDF	25	pg/L
1,2,3,6,7,8-HxCDF	25	pg/L
1,2,3,7,8,9-HxCDF	25	pg/L
2,3,4,6,7,8-HxCDF	25	pg/L
1,2,3,4,6,7,8-HpCDF	25	pg/L
1,2,3,4,7,8,9-HpCDF	25	pg/L
OCDF	50	pg/L

- (4) The WQBEL for dioxin-TEQ shall become effective on October 1, 2017
- (5) The WQBEL for chlordane shall become effective on May 18, 2010
- (6) The WQBEL for Total Ammonia are expressed in mg/L.

4. Acute Toxicity

- a. Representative samples of the discharge at M-001 shall meet the following limitations for acute toxicity. Bioassays shall be conducted in compliance with Section V.A of the Monitoring and Reporting Program (MRP, Attachment E).

The survival of organisms in undiluted effluent shall be an eleven (11) sample median value of not less than 90 percent survival, and an eleven (11) sample 90 percentile value of not less than 70 percent survival.

- b. These acute toxicity limitations are further defined as follows:

**11 sample median:** 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 less bioassay tests show less than 90 percent survival.

**90th percentile:** 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 less bioassay tests show less than 70 percent survival.

- c. 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.

- d. 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 in compliance with effluent limits, then such toxicity does not constitute a violation of this effluent limitation.

## 5. Chronic Toxicity

- a. Compliance with the Basin Plan narrative chronic toxicity objective shall be demonstrated according to the following tiered requirements based on results from representative samples of the discharge, as measured at M-001, meeting test acceptability criteria and Section V.B of the MRP (Attachment E). Failure to conduct the required toxicity tests or a TRE within a designated period shall result in the establishment of effluent limitations for chronic toxicity.
  - 1) Conduct routine monitoring.
  - 2) Accelerate monitoring after exceeding a three sample median value of 10 chronic toxicity units (TUc) or a single sample maximum of 20 TUc or greater. Accelerated monitoring shall consist of monthly monitoring.
  - 3) Return to routine monitoring if accelerated monitoring does not exceed either "trigger" in (2), above.
  - 4) If accelerated monitoring confirms consistent toxicity above either "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;
  - 5) Return to routine monitoring after appropriate elements of TRE workplan are implemented and either the toxicity drops below "trigger" levels in (2), above, or, based on the results of the TRE, the Executive Officer authorizes a return to routine monitoring.
- b. Test Species and Methods

The Discharger shall conduct routine monitoring with the test species and protocols specified in Section V.B of the MRP (Attachment E). The Discharger shall also perform Chronic Toxicity Screening Phase monitoring as described in the Appendix E-1 of the MRP (Attachment E). 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).

## 6. Mass Emission Limits for Mercury and Selenium

Until TMDL and wasteload allocation (WLA) efforts for mercury and selenium provide enough information to establish a different WQBEL, the Discharger shall demonstrate that the current mercury and selenium mass loadings to the receiving water do not increase by complying with the following:

- a. Mass limit. The 12-month moving average annual load shall not exceed 0.042 kilograms per month (kg/mo) for mercury and 5.76 kg/mo for selenium.
- b. Compliance with this limit shall be evaluated using 12-month moving average mass loading over the previous 12 months of monitoring, computed as described below:

Monthly Mass Loading (kg/mo) = monthly plant discharge flow (in MGD) from the Outfall (001)  $\times$  monthly effluent concentration measurements (in  $\mu\text{g/L}$ ) corresponding to the above flow, for samples taken at 001  $\times$  0.1151 (conversion factor to convert million gallons/day  $\times$   $\mu\text{g/L}$  to kg/mo).

12-month Moving Average Mass Loading = Running average of last 12 monthly mass loadings in kg/mo.

- c. The mercury and selenium TMDLs and their WQBELs and WLAs will supersede the mercury and selenium WQBELs listed in Table 7 and these mass emission limitations upon its implementation through a permit amendment. 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.

## V. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in Central San Francisco Bay.

1. The discharge shall not cause the following conditions to exist in waters of the State:
  - a. Floating, suspended, or deposited macroscopic particulate matter or foams;
  - b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil and 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 discharge of waste shall not cause the following limits to be exceeded in waters of the State 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 discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

- b. Dissolved Sulfide                      Natural background levels

- c. pH    Within 6.5 and 8.5

- d. 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.

**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 *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (Attachment G), and any amendments thereto. Where provisions or reporting requirements specified in this Order and Attachment G are different for equivalent or related provisions or reporting requirements given in the Standard Provisions in Attachment D, the specifications of this Order and/or Attachment G shall apply in areas where those provisions are more stringent. 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 (MRP), and future revisions thereto, in Attachment E of this Order. 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.
- 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; and
- e. As authorized by law.

The Discharger may request permit modification based on b, c, d, and e above. The Discharger shall include in any such request an antidegradation and antibacksliding analysis.

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

### **a. Effluent Characterization for Selected Constituents**

The Discharger shall continue to monitor and evaluate the discharge from 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 Major 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 C.3.b, below. A summary of the annual evaluation of data and source investigation activities shall also be reported in the annual self-monitoring 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. This requirement can be met through the submittal of receiving water data as it becomes available by BACWA or SFEI.

**b. Ambient Background Receiving Water Study**

The Discharger shall collect or participate in collecting background ambient receiving water monitoring for priority pollutants that is required to perform an RPA and to calculate effluent limitations. The data on the conventional and certain non-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 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 (or cause to be submitted on its behalf) 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 Pollutant Minimization Program**

- a. The Discharger shall continue to improve, in a manner acceptable to the Executive Officer, its existing Pollutant Minimization Program to promote minimization of 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 28 of each calendar year. Each annual report shall include at least the following information:
  - i. *A brief description of its treatment plant, treatment plant processes and service area.*
  - ii. *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.
- iii. *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 should 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.
  - iv. *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 themselves 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.
  - v. *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.
  - vi. *Continuation of Public Outreach Program.* The Discharger shall prepare a public outreach program to communicate pollution prevention to its service area. Outreach may include participation in existing community events such as county fairs, initiating new community events such as displays and contests during Pollution Prevention Week, conducting school outreach programs, conducting plant tours, and providing public information in newspaper articles or advertisements, radio or television stories or spots, newsletters, utility bill inserts, and web site. Information shall be specific to the target audiences. The Discharger shall coordinate with other agencies as appropriate.
  - vii. *Discussion of criteria used to measure 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.iii., b.iv., b.v., and b.vi.
  - viii. *Documentation of efforts and progress.* This discussion shall detail all of the Discharger's activities in the Pollution Minimization Program during the reporting year.
  - ix. *Evaluation of Program's and tasks' effectiveness.* This Discharger shall utilize the criteria established in v.ii. to evaluate the Program's and tasks' effectiveness.

- x. *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 in order 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:

- i. A sample result is reported as DNQ and the effluent limitation is less than the RL; or
  - ii. 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:
- i. 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;
  - ii. 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;
  - iii. 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;
  - iv. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
  - v. The annual report required by 3.b. above, shall specifically address the following items:
    - 1. All PMP monitoring results for the previous year;
    - 2. A list of potential sources of the reportable priority pollutant(s);
    - 3. A summary of all actions undertaken pursuant to the control strategy; and

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

**4. 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 his or her 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 (O&M) Manual, 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 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 his or her 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 No. 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 his or her 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.

## **5. Special Provisions for POTW**

### **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) Sludge at the Discharger's facility shall not cause waste material to be in a position where it is or can be carried from the facility 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 are 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. Utility Analysis and Implementation Schedule for Wet Weather Bypass of Secondary Treatment**

180 days prior to the Order expiration date, the Discharger shall complete a utility analysis if it seeks to continue to bypass peak wet weather flows around its secondary treatment units. The utility analysis must satisfy 40 CFR 122.4 (m)(4)(i)(A)-(C), and any applicable policy or guidance such as the process set forth in Part 1 of USEPA's Peak Wet Weather Policy's No Feasible Alternatives Analysis Process (available at <http://cfpub.epa.gov/npdes/wetweather.cfm>) once it is finalized. Specifically, the Discharger shall more fully evaluate the extent to which it maximizes its ability to reduce inflow/infiltration (I/I) throughout the entire collection system (i.e. not only the portions operated by the Discharger, but also portions operated by its member agencies), to the extent feasible, including the use of existing legal authorities, potential improvements in the timing or quality of such efforts, and options for obtaining or expanding legal authorities to reduce I/I from satellite collection systems.

**c. 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 Discharge 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.

**6. Corrective Measures to Minimize Blending**

The Discharger shall comply with the following tasks and deadlines to minimize blending events.

Task	Compliance Date
1. <i>Wet Weather Improvements</i> . Submit a technical report that evaluates alternatives for potential wet weather conveyance and treatment plant improvements. Comparisons of various alternatives should be based on costs, effectiveness, and implementability. The report should propose preferred alternative(s) based on the results of the analysis.	One year after the effective date of this Order
2. <i>Workplan</i> . Prepare a workplan to implement the measures proposed in the Feasibility Study.	90 days after completion of Task 1 above
3. The Discharger shall begin implementing the measures identified in its work plan.	In accordance with the Work Plan described in Task 2, above
4. <i>Completion Report</i> . The Discharger shall provide annual updates on its progress in completing measures specified in the workplan.	Annually with the Annual Self-Monitoring Report

**7. Chlordane and Dioxin-TEQ Compliance Schedules**

The Discharger shall comply with the following tasks and deadlines:

Task	Deadline
<p>a. Investigate sample collection, sample handling, and analytical laboratory quality assurance and quality control practices to ensure that analytical results for dioxin-TEQ and chlordane 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.</p>	<p>January 1, 2008</p>
<p>b. Submit a plan for identifying all dioxin-TEQ and chlordane sources to the discharge.</p>	<p>April 1, 2008</p>
<p>c. Implement the plan developed in action "b" within 30 days of the deadline for action "b," and submit by the deadline for this action a report that contains an inventory of the pollutant sources.</p>	<p>August 1, 2008</p>
<p>d. 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:</p> <ul style="list-style-type: none"> <li>i. Maintain a list of sources of pollutants of concern.</li> <li>ii. Investigate each source to assess the need to include it in the program.</li> <li>iii. Identify and implement targeted actions to reduce or eliminate</li> <li>iv. Develop and distribute, as appropriate, educational materials regarding the need to prevent sources to the sewer system.</li> </ul>	<p>October 1, 2008</p>
<p>e. Continue to implement the program described in action "d" 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.</p>	<p>Annually each February 28 in Best Management Practices and Pollutant Minimization Report required by Permit Provision VI.C.3</p>
<p>f. Comply with final limits for chlordane: 0.0012 µg/L MDEL 0.00059 µg/L AMEL</p>	<p>May 18, 2010</p>
<p>g. If by February 28, 2011, the above actions for dioxin-TEQ have not successfully brought the discharge into compliance with all Permit effluent limits, submit a report, by the deadline for this action, identifying more aggressive actions to ensure compliance with dioxin-TEQ. 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:</p> <ul style="list-style-type: none"> <li>i. Bench scale testing or pilot scale testing or both</li> <li>ii. Development of preliminary design specifications</li> <li>iii. Development of final design specifications</li> </ul>	<p>October 1, 2011</p>

iv. Procurement of funding v. Acquisition of necessary permits and approvals vi. Construction	
h. Implement the plan required in action "f" within 45 days of the deadline for action "f," 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 for dioxin-TEQ in the Permit.	October 1, 2017

**8. Action Plan for Cyanide**

The Discharger shall initiate implementation of an action plan for cyanide as described in Appendix I of *Staff Report on Proposed Site-Specific Water Quality Objectives for Cyanide for San Francisco Bay, December 4, 2006*.

Additionally, the Discharger shall 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. By no later than March 1, 2008, the Discharger shall submit a report that describes the results of this investigation and any changes in quality assurance and quality control practices implemented.

**9. 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 SSO Amendment

**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 priority 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 priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

**B. Multiple Sample Data.**

When determining compliance with an AMEL, AWEL, or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, 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

Arithmetic Mean (m), also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean =  $\mu = \Sigma x / n$                       where:  $\Sigma x$  is the sum of the measured ambient water concentrations, and n is the number of samples.

**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.

**Bioaccumulative** pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

**Carcinogenic** pollutants are substances that are known to cause cancer in living organisms.

**Coefficient of Variation (CV)** is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

**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 RL, but greater than or equal to the laboratory's MDL.

**Dilution Credit** is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

**Effluent Concentration Allowance (ECA)** is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in U.S. EPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Enclosed Bays** means 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 the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

**Estimated Chemical Concentration** is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Estuaries** means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

**Inland Surface Waters** are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

**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)** means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

**Median** is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

**Method Detection Limit (MDL)** is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

**Minimum Level (ML)** 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.

**Mixing Zone** is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

**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. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

**Persistent pollutants** are substances for which degradation or decomposition in the environment is nonexistent or very slow.

**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 a priority pollutant(s) 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.

**Pollution Prevention** means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

**Reporting Level (RL)** 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 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. 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 RL.

**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.

**Source of Drinking Water** is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

**Standard Deviation** ( $\sigma$ ) is a measure of variability that is calculated as follows:

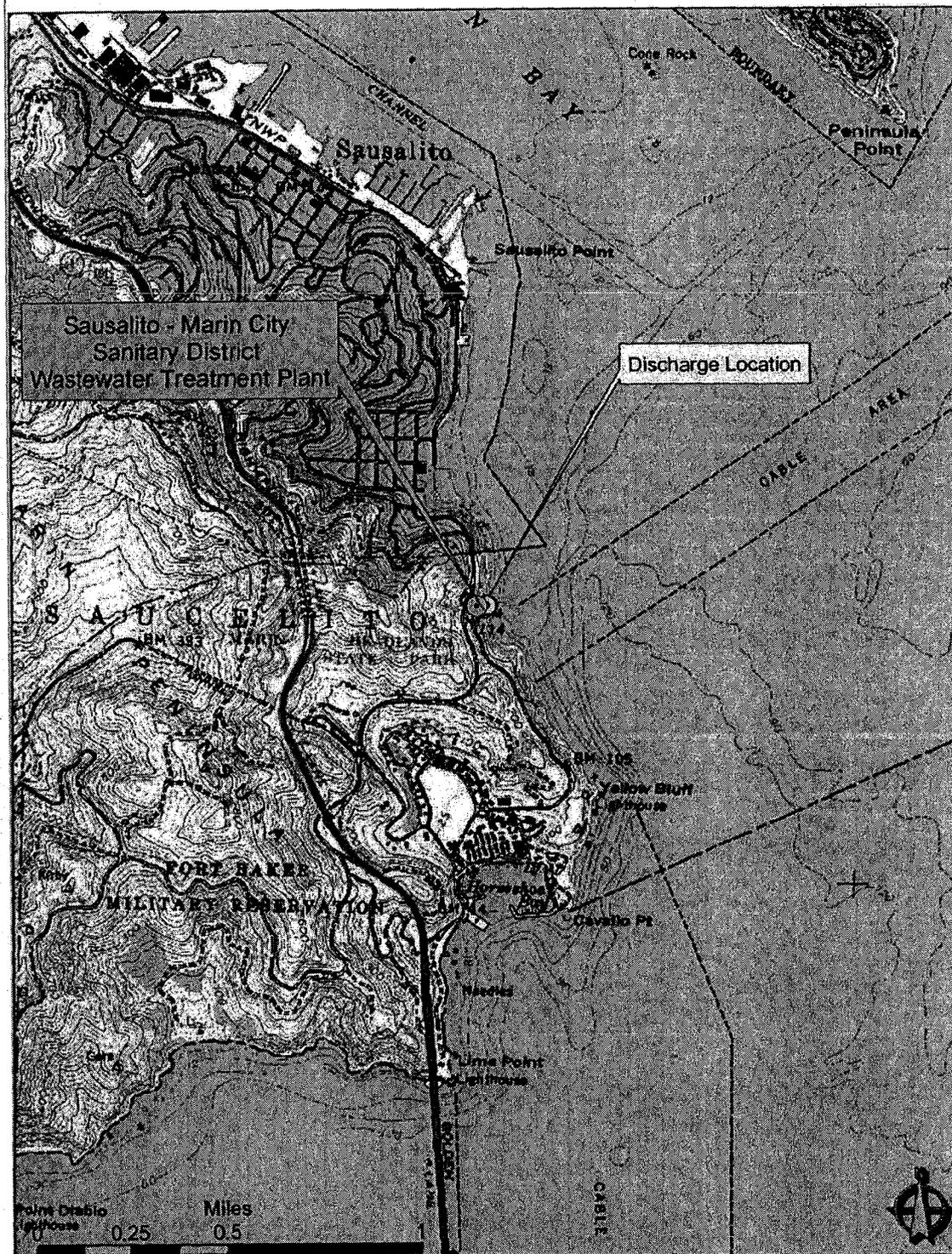
$$\sigma = \sqrt{\frac{\sum(\bar{x} - \mu)^2}{n-1}}$$

where:

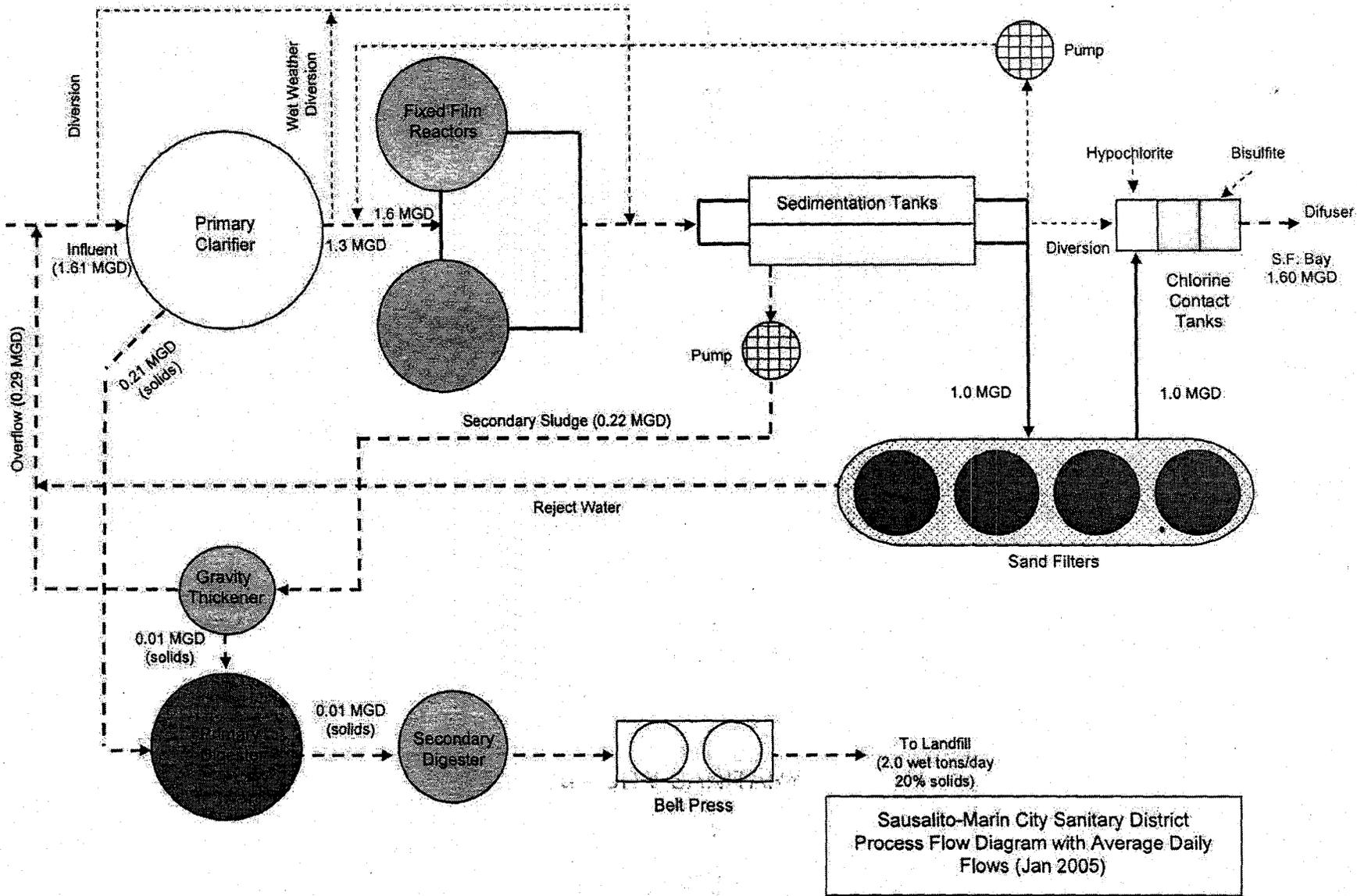
- x is the observed value;
- $\mu$  is the arithmetic mean of the observed values; and
- n is the number of samples.

**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.)

ATTACHMENT B - LOCATION MAP



ATTACHMENT C – SAUSALITO-MARIN CITY SANITARY DISTRICT WWTP FLOW SCHEMATIC



Sausalito-Marin City Sanitary District  
 Process Flow Diagram with Average Daily  
 Flows (Jan 2005)

Sausalito-Marín City Sanitary District  
Tentative Order  
NPDES NO. CA0038067

EXHIBIT B

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**REVISED TENTATIVE CEASE AND DESIST ORDER NO. R2-2007-XXXX**

**REQUIRING THE SAUSALITO-MARIN CITY SANITARY DISTRICT  
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 Sausalito-Marín City Sanitary District (hereinafter "Discharger") owns and operates a wastewater treatment plant, located at #1 Fort Baker Road, Sausalito, Marin County. The plant treats domestic wastewater for the City of Sausalito, Marin City, Tamalpais Community Service District, and Golden Gate Recreation Area. It has a dry weather design capacity of 1.8 million gallons per day.
2. The wastewater discharge has been regulated by waste discharge requirements in Order No. 00-060 (NPDES Permit No. CA0038067).
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	0.023	0.034	M-001
Selenium	3.7	9.0	M-001
Chlordane	0.00059	0.0012	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 the effluent limits are more stringent than the maximum effluent concentrations measured in the effluent. The Permit grants compliance schedules for chlordane but not the other pollutants; therefore, the Discharger will discharge waste in violation of the Permit.
5. Although the Permit contains final effluent limits for chlordane, the Permit also provides a compliance schedule to meet these final effluent limits. The compliance

schedule lasts until May 18, 2010, which is the last day of *Policy for Implementation of Toxics Standards of Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy) authorizes compliance schedules for California Toxic Rule pollutants. As stated in the Permit findings, the actions this compliance schedule requires are, by themselves, unlikely to result in compliance by May 18, 2010, because this length of time is insufficient to complete all necessary actions. Therefore, when the compliance schedule for chlordane ends, the Discharger threatens to violate the effluent limitations for this pollutant.

6. 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.
7. 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. The Permit requires certain actions as conditions of its chlordane compliance schedule. This Order continues those efforts once the compliance schedule ends so the Discharger will eventually comply with its final effluent limitations.
8. 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.
9. As part of the time schedules to achieve compliance, this Order requires the Discharger to comply with interim effluent limits, where feasible. These 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 of limits in previous orders, whichever are more stringent. If based on past performance, the interim limits represent the 99.87<sup>th</sup> 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.
10. 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.

11. 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<sup>1</sup> that supersedes the mercury limits in the Permit.
  - b. *Chlordane*. The prescribed actions in Table 2, actions "b," "c," "d," and "e" shall not apply to chlordane because the Permit already requires these actions. Actions "a," "f," "g," and "h" shall apply to chlordane beginning May 18, 2010.
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.

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<sup>1</sup> In March 2007, Regional Water Board staff publicly noticed a draft permit that could supersede existing mercury requirements 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.

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

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

Action	Deadline			
	Mercury		Selenium	Chlordane
a. Comply with the following interim effluent limits at Monitoring Station M-001: <i>Mercury</i> : Average monthly effluent limit = 0.087 µg/L <i>Selenium</i> : Maximum daily effluent limit = 50 µg/L <i>Chlordane</i> : Maximum daily effluent limit = 0.1 µg/L	Upon the effective date of this Order			Beginning May 18, 2010
b. Investigate sample collection, sample handling, and analytical laboratory quality assurance and quality control practices to ensure that analytical results for selenium 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		March 1, 2008	Not Applicable
c. Submit a plan for identifying all mercury, and selenium sources to the discharge. Examples of potential mercury sources include dental offices, laboratories, medical facilities, fluorescent light tubes, thermometers, and electrical switches.	June 1, 2008		June 1, 2008	Not Applicable
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	

Action	Deadline			
	Mercury		Selenium	Chlordane
<p>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:</p> <ul style="list-style-type: none"> <li>i. Maintain a list of sources of pollutants of concern.</li> <li>ii. Investigate each source to assess the need to include it in the program.</li> <li>iii. Identify and implement targeted actions to reduce or eliminate</li> <li>iv. Develop and distribute, as appropriate, educational materials regarding the need to prevent sources to the sewer system.</li> </ul>	December 1, 2008		December 1, 2008	Not Applicable
<p>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.</p>	<p>Annually each February 28 in Best Management Practices and Pollutant Minimization Report required by Permit Provision VI.C.3</p>			

Action	Deadline			
	Mercury		Selenium	Chlordane
<p>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:</p> <ul style="list-style-type: none"> <li>i. Bench scale testing or pilot scale testing or both</li> <li>ii. Development of preliminary design specifications</li> <li>iii. Development of final design specifications</li> <li>iv. Procurement of funding</li> <li>v. Acquisition of necessary permits and approvals</li> <li>vi. Construction</li> </ul>	June 1, 2011		June 1, 2011	June 1, 2011
<p>h. Implement the plan required in action "g" within 45 days of the deadline for action "g," and submit annual status reports.</p>	Annually each February 1 in Annual Self-Monitoring Report required by Permit Attachment E, Monitoring and Reporting Program			
<p>i. Submit documentation confirming complete plan implementation and comply with effluent limits in the Permit.</p>	June 1, 2015		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.

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BRUCE H. WOLFE  
Executive Officer