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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. R2-2007-0060,
NPDES Permit No. CA0038318 and Waste
Discharge Requirements for the City and
County of San Francisco, San Francisco
International Airport, Mel Leong Treatment
Plant and an accompanying Cease and Desist
Order No. R2-2007-0059.

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. R2-2007-0060 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. CA0038318 and Waste Discharge Requirements for the City and County of San Francisco, San Francisco International Airport, Mel Leong Treatment Plant ("SFIA") as well as an accompanying Cease and Desist Order ("CDO"), No. R2-2007-0059. A copy of tentative versions of Order Nos. R2-2007-0060 and R2-2007-0059, adopted on August 8, 2007, are attached to this Petition as **Exhibit A**, as final versions were not available by the petition due date. The issues and a summary of the bases for the Petition follow.

1 At such time as the full administrative record is available and any other material has been
2 submitted, BACWA reserves the right to file a more detailed memorandum in support of the
3 Petition and/or in reply to the Regional Board's response.¹ In addition, many of these issues are
4 carried over from the previous permit appeal filed by BACWA on SFIA's previous permit
5 (SWRCB/OCC File No. A-1473), which is hereby consolidated with this appeal and incorporated
6 by reference herein since it is currently being held in abeyance until April 19, 2008.

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

17 On July 10, 2007, BACWA submitted written comments on the tentative version of
18 NPDES Permit No. CA0038318. For the reasons contained herein, and incorporated by reference
19 as stated above, BACWA asserts that provisions contained in the recently issued permit for SFIA
20 are improper and inappropriate. BACWA hopes that the State Board will choose to take up this
21 petition and review the issues being raised that are vitally important to Bay Area POTWs.

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

23 Michele Pla, Executive Director
24 Bay Area Clean Water Agencies
25 P.O. Box 24055 MS 702
26 Oakland, CA 94623

27 ¹ 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.

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

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

13 BACWA seeks review of Order Nos. R2-2007-0060 and R2-2007-0059, reissuing NPDES
14 Permit No. CA0038318 for SFIA (the "Permit") and the accompanying CDO. The specific
15 requirements of the Permit that BACWA requests the State Board to review relate to the following:

- 16 A. Numeric-based effluent limitations for dioxin-TEQ;
- 17 B. Final effluent limits for mercury, aldrin, 4,4'-DDT, 4,4'-DDE, dieldrin, endrin,
18 heptachlor, and heptachlor dioxide;
- 19 C. Mass limit for mercury; and
- 20 D. Compliance schedule action plans for dioxin, mercury, and pesticide.

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.*);² 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
26 regulations (40 C.F.R. Parts 122, 123, 130 and 131); the Water Quality Control Plan, San Francisco

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

1 Bay Region (the "Basin Plan"); and the Policy for Implementation of Toxics Standards for Inland
2 Surface Waters, Enclosed Bays, and Estuaries of California ("SIP").

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

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

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

7 **A. The Regional Board Improperly Imposed Numeric Effluent Limitations.**

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

19 The Permit being appealed by BACWA contains concentration limits for dioxin-TEQ,
20 mercury, pesticides and mass limitations for mercury. *See* Permit at IV.A.2. page 12 and 16.
21 Similar limits were challenged by BACWA in previous administrative and court appeals.
22 Unfortunately, some of the holdings of those previous appeals are not being upheld by the Regional
23 Board. BACWA tried for several years to settle the outstanding petitions on Bay Area POTW
24 permits filed since 2000 by BACWA and others, but disagreement as to legal requirements
25 prevented consummation of a global settlement. Because these issues remain as important today as
26 they did seven years ago, or perhaps more important since the time for final compliance with CTR
27 criteria becomes shorter every day, BACWA continues to press for a final ruling to re-incorporate
28 the "flexibility or relief" promised over the years.

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

14 1) Numeric Effluent Limitations are Not Required.

15 The Regional Board has imposed numeric water quality-based effluent limitations
16 ("WQBELs") for various constituents in the Permit based on 40 C.F.R. §122.44(d). *See* Permit at
17 _____

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

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

23 ⁵ Courts have recognized a step-wise process in pollutant control. In *San Francisco BayKeeper v. Whitman*, 287 F.3d
24 764,766-767 (April 15, 2002), the Ninth Circuit Court of Appeals determined that:

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

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

1 IV.A.2, pg. 12. However, as explained below, section 122.44(d) does not require the imposition of
2 *numeric* WQBELs.

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

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

25 By including numeric effluent limitations in lieu of non-numeric or narrative requirements
26 where numeric limits have been demonstrated to be infeasible, the Regional Board exceeded federal
27 law requirements. If the Regional Board chooses to exceed federal law requirements, then it must
28 comply with state law requirements. *City of Burbank, et al v. SWRCB, et al.*, 35 Cal. 4th 613, 627-

1 628 (2005). However, the Regional Board failed to comply with the requirements of Water Code
2 §13263(a), which requires consideration of several factors including those contained in Water Code
3 §13241 when adopting numeric effluent limitations more stringent than required by federal law into
4 this Permit.

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

11 2) Dioxin-TEQ Limits

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

13 <u>AMEL (µg/L)</u>	<u>MDEL (µg/L)</u>	<u>Effective Date</u>
14 1.4 x 10 ⁻⁸	2.8 x 10 ⁻⁸	9/30/2017

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

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

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

8 The number used in the RPA was exactly the same as the promulgated criterion for
9 2,3,7,8-TCDD. The Permit provides that:

10 “the preamble of the CTR states that California NPDES permits should use toxicity
11 equivalents where dioxin-like compounds have a reasonable potential with respect to
12 narrative criteria. In USEPA’s National Recommended WQO’s, December 2002, USEPA
13 published the 1998 World Health Organization in Toxicity Equivalence Factor (TEF)
14 scheme.⁸ In addition the CTR preamble states USEPA’s intent to adopt revised WQC
15 guidance subsequent to their health reassessment for dioxin-like compounds. Therefore,
16 the narrative bioaccumulation objective is translated into a numeric criterion expressed in
17 2,3,7,8-TCDD equivalents (or dioxin-TEQ) based on the CTR criterion for 2,3,7,8-TCDD
18 and the application of the Toxic Equivalence Factors (TEFs) for dioxins and furans
19 adopted by the World Health Organization in 1998.”

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

26 ⁷ It should be noted that this is contrary to the RPA for other constituents where the Permit states “No Criteria” in the
27 table instead of inserting a non-promulgated criteria. *See* Permit at pg. F-27-30.

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

1 mandate that water quality standards criteria “shall be specific numeric criteria for such toxic
2 pollutants.” 33 U.S.C. §1313(c)(2)(B)(emphasis added).

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

6 In adopting a numeric effluent limitation for dioxin-TEQ, the Regional Board attempted to
7 justify its actions by claiming that the applicable water quality objectives specified in the Basin Plan
8 require limits to protect against unsafe levels of dioxin in the fatty tissue of fish and other
9 organisms. *See* Permit at pg. F-32. The Basin Plan contains no numeric objectives specifically set
10 to define acceptable levels of these constituents in fish tissue or sediment, and the CTR only set
11 numeric criteria for 2,3,7,8-TCDD, not for all the congeners of dioxins. Thus, the Regional Board
12 improperly relied upon the Basin Plan’s narrative objective for Bioaccumulation to justify limits for
13 dioxin-TEQ.

14 In addition, the Regional Board improperly lumped together all of the congeners of dioxin,
15 and furans. Had the RPA been done on each individual congener, most if not all would not show
16 reasonable potential because of the varying TEF for each. *See* Permit at pg. F-32-33. However,
17 pooling all of the congeners together creates an unnecessary finding of reasonable potential for all
18 congeners. The Regional Board’s inclusion of an effluent limit for dioxin-TEQ based on all of the
19 congeners of dioxins and furans improperly ignores that the congeners do not create reasonable
20 potential. Imposition of limits on congeners without reasonable potential violates the specific
21 mandates of the Basin Plan and federal regulations.⁹

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

25 Many pollutants can accumulate on particles, in sediment, or
26 bioaccumulate in fish or other aquatic organisms. Controllable water
27 quality factors shall not cause a detrimental increase in concentrations
28 of toxic substances found in bottom sediments or aquatic life. Effects

⁹ The insertion of limits without reasonable potential is contrary to permit findings that state “WQBELs are not included in this Order for constituents that do not demonstrate Reasonable Potential.” *See* Order No. R2-2007-0060 at pg. F-55, para. (C)(2)(a).

1 on aquatic organisms, wildlife, and human health will be considered.
2 (emphasis added)

3 The Regional Board has acknowledged in permit findings and other associated documents
4 that the presence of dioxin may be beyond the Discharger's control. *See, e.g.*, Order No. R2-2007-
5 0060 at pg. F-56, para. (4) ("...ubiquitous nature of the sources of dioxin-TEQ..."); *see also*
6 *Communities for a Better Environment*, 109 Cal.App.4th at 1096 ("Dioxins are not produced
7 intentionally. They are formed as undesired byproducts of combustion and the manufacture and use
8 of certain chlorinated chemical compounds. They exist in the environment worldwide, particularly
9 in air, water, soils, and sediments. They enter the atmosphere through aerial emissions and widely
10 disperse through a number of processes, including erosion, runoff, and volatilization from land or
11 water. For example, automobile exhaust is a common source of dioxins.") Therefore, the minimal
12 contribution of dioxin-TEQ by SFIA's POTW is not a "controllable water quality factor" that is
13 causing a "detrimental increase in concentrations of toxic substances found in bottom sediments or
14 aquatic life," and imposing a limit for dioxin-TEQ is not necessary nor based upon the findings and
15 evidence.

16 Additionally, a numeric effluent limitation can only be imposed through a narrative water
17 quality objective if the narrative objective contains an appropriate mechanism to "translate" the
18 narrative requirement (*i.e.*, to translate a narrative objective into a concentration or mass effluent
19 limitation).¹⁰ In order for a numeric limit derived from a narrative objective to be appropriate, the
20 derivation of the numeric limit must be transparent. A clear explanation of the translation from the
21 narrative water quality objective must be set forth in the NPDES permit.¹¹ *See* 40 C.F.R.

22
23 ¹⁰ Federal regulations mandate that "[w]here a State adopts narrative criteria for toxic pollutants to protect designated
24 uses, the State must provide information identifying the method by which the State intends to regulate point source
25 dischargers of toxic pollutants on water quality limited segments based on such narrative criteria. Such information
26 may be included as part of the standards . . ." 40 C.F.R. §131.11(a)(2). Since the Basin Plan's narrative objective for
27 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
28 *EBMUD* Order, SWRCB Order No. WQ 2002-0012 at pgs. 6-7 does not apply in this case, since the dioxin-TEQ limits
are final WQBELs and were not adopted in conformance with federal regulations as there are no 304(a) guidance
criteria for dioxin-TEQ. *See* <http://www.epa.gov/waterscience/criteria/wqcriteria.html>.

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

1 §124.8(b)(4); *Topanga Ass'n for a Scenic Community v. County of Los Angeles*, 11 Cal. 3d 506, 515
2 (1974); *California Edison v. SWRCB*, 116 Cal. App. 3d 751, 761 (1981); see also *In re Petition of*
3 *the Pinole-Hercules Water Pollution Control Plant and County of San Francisco*, State Board
4 Order No. WQ-95-4 at 10 (Sept. 21, 1995). The failure by the Regional Board to clearly enunciate
5 the translation from a narrative objective to a numeric limit in the Findings or Fact Sheet of the
6 Permit was an abuse of discretion.¹²

7 b) Meeting the Dioxin Concentration Limit is Not Feasible

8 As stated above, dioxins enter the environment from a variety of sources, primarily
9 combustion sources. See *Communities for a Better Environment*, 109 Ca.App.4th at 1096
10 (“automobile exhaust is a common source of dioxins.”) The Regional Board has recognized that
11 “dioxin and furan concentrations cannot be further reduced without significant upgrades to the
12 facility to advanced treatment which could be overly burdensome and would not be cost effective
13 for the benefits received.” See e.g., Order No. R2-2007-0060 at pg. F-50, para. (4). Thus, the
14 Regional Board has conceded that compliance with the dioxin-TEQ limits is not technically or
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- 19 ▪ specific, scientifically defensible methods by which the state will implement its narrative toxicity standard for all priority pollutants;
 - 20 ▪ how these methods will be integrated into the State’s priority pollutant control program;
 - 21 ▪ methods the State will use to identify those pollutants to be regulated in a specific discharge;
 - 22 ▪ an incremental cancer risk for carcinogens;
 - 23 ▪ methods for identifying compliance thresholds in permits where calculated limits are below detection;
 - 24 ▪ methods for selecting appropriate hardness, pH, and temperature variables for criteria expressed as functions;
 - 25 ▪ methods or policies controlling the size and in-zone quality of mixing zones;
 - 26 ▪ design flows to be used in translating chemical-specific numeric criteria for aquatic life and human health into permit limits; and
 - 27 ▪ other methods and information needed to apply standards on a case-by-case basis.

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

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

1 economically feasible. See Permit at pg. F-56, para. (4). For these reasons, numeric effluent
2 limitations were not required.¹³

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

11 **B. The Regional Board Improperly Included Final Effluent Limits for Mercury,**
12 **Aldrin, 4,4'-DDT, 4,4'-DDE, Dieldrin, Endrin, Heptachlor, and Heptachlor**
13 **Dioxide Should Be Removed.**

14 SFIA's Permit includes final effluent limits for mercury, aldrin, 4,4'-DDT, 4,4'-DDE,
15 dieldrin, endrin, heptachlor, and heptachlor dioxide. These final limits should be only provided for
16 reference in the findings and should not be enforceable. Further, many of these limits are expressed
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19 ¹³ The Regional Board should have done what it did in the Vallejo permit, Order No. R2-2006-0056, which was to
20 state: "Due to the limited monitoring data, no dioxin limits (final or interim) are established. The final limits for dioxin
21 TEQ will be based on the WLA assigned to the Discharger in the TMDL. This Order requires additional dioxin
22 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.

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

1 as daily maximum limits when the impracticability of longer terms limits has not been established,
2 contrary to 40 C.F.R. §122.45(d)(2). BACWA requests removal of these final concentration limits.

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

12 Now BACWA members are essentially being punished just because a final TMDL has not
13 been finally adopted and approved. BACWA urges the State Water Board to question EPA Region
14 9's recent action and to repromulgate compliance schedule authority to deal with TMDL-based
15 schedules as well as allowing compliance schedules for any new or more stringent effluent limit
16 imposed. In the interim, the State Water Board should overturn the use of final limits prior to the
17 implementation of a TMDL.

18 1) The Regional Board Abused its Discretion by Imposing Final Effluent
19 Limits for Banned Pesticides.

20 For all of the reasons provided above, final numeric effluent limits for banned pesticides are
21 inappropriate for a POTW because it is infeasible to treat for these constituents that only randomly
22 appear. The Regional Board should have determined that the limited data set was insufficient or
23 inappropriate for use in determining reasonable potential and for imposing final numeric effluent
24 limitations. The Regional Board failed to make this determination, thereby abusing its discretion.

25 In lieu of numeric final effluent limits, the Regional Board should have prescribed Best
26 Management Practices and set effluent goals with associated monitoring and related provisions
27 pursuant to § 2.2.2 of the SIP rather than effluent limitations. 40 C.F.R. §122.44(k)(3). By failing to
28 take this action, the Regional Board abused its discretion. As such, the State Board should remand

1 the Permit to the Regional Board with direction to remove the improper limits for banned pesticides
2 and, instead, include BMPs and appropriate monitoring requirements pursuant to SIP § 2.2.2.

3 **C. The Regional Board Improperly Imposed Mercury Limits.**

4
5 1) Mercury Concentration Limits

6 The Permit contains final concentration limits for mercury at page 12, Table 7. These limits
7 were derived from the Basin Plan objectives of 2.1 and 0.025 µg/L,¹⁵ for acute and chronic criteria,
8 respectively. See Permit at pg. F-39. There was no reasonable potential to trigger the imposition of
9 these limits since the objective used to determine reasonable potential was recently deleted from the
10 Basin Plan and no reasonable potential exists under the CTR criteria. See Permit at pgs. F-24, F-27,
11 F-31.

12 The 1998 303(d) list stated that “current data indicate fish consumption and wildlife
13 consumption impacted uses: health consumption advisory in effect for multiple fish species
14 including striped bass and shark. Major source is historic: gold mining sediments and local mercury
15 mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate
16 to low level inputs from point sources.” See 1998 303(d) List at pg. 8 (approved by USEPA on
17 May 12, 1999). Further, EPA’s own response to comments stated that “The existence of the fish
18 consumption advisory provides a strong rationale for determining that the fishing beneficial use of
19 the Bay is impaired and that the Bay should be listed on the 303(d) list.” See Responsiveness
20 Summary for Comments Directed to the State Water Resources Control Board, prepared by Joe
21 Karkoski and Dave Smith, USEPA at pg. 9 (October 19, 1998). Thus, there is no evidence in the
22

23 ¹⁵ 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 listing record that the aquatic life use was impaired, or that the 0.025 µg/L was the water quality
2 standard representing the basis of the 303(d) listing. *See accord* SWRCB Order No. WQ 2001-06
3 at pgs. 31-33 (remanding mercury concentration limit). In fact, data from the Regional Monitoring
4 Program submitted by the predecessor of BACWA demonstrated that mercury concentrations were
5 not above the 0.025 µg/L levels in the areas of San Francisco Bay to which this objective applied.
6 *See Letter from Bay Area Dischargers Association to Loretta Barsamian, SFRWQCB at Attachment*
7 *B (Feb. 2, 1998).*

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

12 2) Mercury Mass Limits

13 Effluent Limitation IV.C, on page 16 of the Permit contains a mass limit for mercury that
14 limits the discharge of this constituent to 0.0041 kg/month until such time that a Total Maximum
15 Daily Load ("TMDL")¹⁶ is required under CWA §303(d) and has been completed. *See Permit at pg.*
16 *16.*

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

21 Congress, in the CWA, required that, where water quality standards were not being
22 implemented even after the imposition of technology-based effluent limits, those waters were to be
23 placed on the "303(d) List" and TMDLs were to be established at a level necessary to implement or
24 achieve the standards. 33 U.S.C. §1313(d)(1)(C). This statutory provision makes clear that Congress
25 intended water quality-based effluent limits to be based on the results of a TMDL process. This
26

27
28 ¹⁶ A TMDL is a quantitative assessment of the mass loading of a pollutant that can be discharged to a waterbody each day and still implement the applicable water quality standards.

1 interpretation is consistent with the implementation language of the Basin Plan¹⁷ and EPA
2 guidance.¹⁸

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

15 Although effluent restrictions are presumably intended to benefit water quality and the
16 environment, the evidence shows that such benefits will not be realized. POTWs contribute only a
17 small percentage of the total pollutant loading to the Bay of toxic pollutants listed on the 303(d) list
18 (including mercury). *See* Bay Area Regional Water Board’s 2006 Mercury TMDL Report. Public
19 clean water agencies’ contribution to the input of mercury to the Bay, and any corresponding
20 reduction sought in the TMDL is extremely small. Municipal wastewater results in 11-17 kg/yr out
21 of the more than 1200 kg/yr total annual loading from all sources. This is less than one-tenth of one
22

23 ¹⁷ 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 ¹⁸ *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 ¹⁹ Although the State Board has adopted new listing criteria, it is not clear that all listed waters have been thoroughly
reanalyzed under the new criteria for listing and delisting and may remain on the list as remnants of the broader
previous listing process.

1 percent (.01%) of the total loading. Imposing mass limits for mercury does not solve the problem,
2 but merely unfairly targets point sources covered by permits and increases the regulatory burden on
3 public agencies that have already stepped up to the plate to help with mercury reduction efforts
4 voluntarily.²⁰

5 Allowing normal economic growth and development to occur in the SFIA service area in the
6 interim until the TMDL is finalized would not result in any appreciable degradation in water
7 quality. Furthermore, completely eliminating SFIA's discharge to the Bay would not result in any
8 measurable or significant improvement in water quality.²¹ Therefore, regulation of this *de minimis*
9 source is not reasonable and is likely not required. *See Ober v. USEPA*, 243 F.3d 1190 (9th Cir.
10 2001)("de minimis exception is allowed for regulation yielding trivial gain"; thus, regulators have
11 "the authority to exempt from regulation those source categories in the area which contribute only
12 negligibly to ambient concentrations which exceed [standards].")

13 The requirements to limit the *de minimis* mass inputs of mercury to current levels in the
14 Permit²² and subsequent permits will more likely impede, rather than facilitate, improvements in
15 water quality. By causing significant public resources to be expended on projects to meet stringent
16 limits that do little to improve water quality, fewer resources will be available for projects that
17 would actually provide demonstrable improvements in water quality. Such projects will
18 presumably be identified as a part of the TMDL development process.

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

24 ²¹ The total removal of this discharge would make no measurable change in the mercury levels in fish. "[W]hat matters
25 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).

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

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

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

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

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

20 Mass limits, in addition to concentration limits, are redundant as mass limits are always
21 implied in POTW permits because of inherent constraints related to a treatment plant's design
22 capacity or maximum flows. In this case, the Permit specifically prohibits exceeding the average
23 dry weather flow rate for which the facility was designed. *See* Permit at III.D, pg. 10. The
24 combination of a flow restriction and a concentration restriction is equivalent to a mass restriction.
25 Thus, there is no need to explicitly require mass limits in the Permit since the two components of
26 mass (flow and concentration) are already explicitly limited.

27 Furthermore, performance-based mass limits are particularly troublesome for POTWs as
28 such limits may unjustifiably restrict future growth and economic development in the POTW
service area. Such restrictions contradict the Basin Plan's mandate that “control measures

1 employed must be sufficiently flexible to accommodate future changes in technology, population
2 growth, land development, and legal requirements.” Basin Plan at 4-7 (emphasis added). By
3 imposing mass limits without considering the need for population growth and land development
4 within the SFIA service area, the Regional Board violated the Basin Plan, and failed to comply with
5 Water Code §13263(a) when imposing mass limits which are not required when a concentration
6 limit is imposed. 40 C.F.R. §122.44(f).

7 By imposing duplicative mass limits, the Regional Board has regulated beyond the
8 requirements of federal law and must, therefore, consider the requirements set forth in Water Code
9 section 13263(a), including a consideration of economics and the need for developing housing
10 within particular regions pursuant to Water Code §13241, prior to imposing such growth restricting
11 limits upon POTWs. *See City of Burbank v. State Water Resources Control Board*, 35 Cal.4th 613,
12 618 (2005). For each of these reasons, the Regional Board violated state law and committed a
13 prejudicial abuse of discretion by including or sanctioning both mass and concentration limits. For
14 these reasons, the State Board should remand the Permit to remove the mass limits on mercury.

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

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

23 Furthermore, this Permit includes compliance schedules for pollutants that have been
24 banned for use or for which wastewater treatment plant effluents have been identified as non-
25 significant sources. *See* Permit at pg. 23-24 and CDO at pg. 4-5. Additionally, each pollutant is
26 already being addressed through an alternative regulatory strategy that will appropriately resolve
27 beneficial use concerns for the San Francisco Bay. The compliance schedules in the Permit and/or
28 the CDO are overly burdensome for every constituent, as specified below:

1 1) Dioxin. The dioxin congeners found in fish tissue samples, which form the basis for
2 the dioxin 303(d) listing, are different than the congeners detected in POTWs. Given that the
3 sources of dioxin are uncontrollable by municipal wastewater treatment plants and are primarily
4 introduced through air deposition, the compliance requirements for dioxin reduction in the effluent
5 will have little if any environmental benefit to reduce the concentrations of dioxin congeners found
6 in fish tissue. Thus, a *de minimis* exception should be granted in this case. *See Ober v. USEPA*,
7 243 F.3d 1190, 1195 (9th Cir. 2001) (“de minimis exception is allowed for regulation yielding
8 trivial gain.”)

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

20 3) Pesticides. Most, if not all, of the pesticides listed in the CDO were banned for use
21 as a pesticide in the United States 19 years ago in 1988. Since then many have been banned in
22 many other countries around the world as well. To include nine separate tasks to reduce these
23 pesticides in municipal wastewater effluent is an irresponsible use of public resources.

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

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

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

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

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

26 Likewise, California's Porter-Cologne Water Quality Act contains stiff penalties for
27 violation of effluent limitations in a wastewater discharge permit. *See* Cal. Water Code §§ 13385
28 and 13387. This act authorizes a penalty of up to \$25,000 per day per violation, with additional

1 liability not to exceed \$25 per gallon if the discharge is to navigable waters of the United States and
2 either is "not susceptible to cleanup or is not cleaned up." Cal. Water Code § 13385(b)(1)-(2), (d).
3 The act also establishes criminal liability for intentional or negligent violation of effluent limitations
4 contained within a permit. Cal. Water Code § 13387(a)-(d).

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

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

14 Petitioner seeks an Order by the State Board that will remand Order Nos. R2-2007-0060 and
15 R2-2007-0059 to the Regional Board for revisions and will direct the Regional Board to:

- 16 A. Remove numeric effluent limitations for dioxin-TEQ;
- 17 B. Remove the final effluent limits for mercury, aldrin, 4,4'-DDT, 4,4'-DDE, dieldrin,
18 endrin, heptachlor, and heptachlor dioxide;
- 19 C. Remove the mass limit for mercury; and
- 20 D. Revise the compliance schedule action plans to (1) remove all activities related to
21 installation of capital improvements and (2) ensure that any pollution prevention
22 activities are identical to resolutions or orders already adopted by the Regional Water
23 Board for specific constituents.

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

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

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

11
12 **8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE REGIONAL**
13 **BOARD AND TO THE DISCHARGER:**

14 A true and correct copy of this Petition was mailed by First Class mail on September 7,
15 2007, to the Discharger, and to Regional Board at the following address:

16 Bruce Wolfe, Executive Officer
17 California Regional Water Quality Control Board,
18 San Francisco Region
19 1515 Clay Street, Suite 1400
Oakland, California 94612

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

23 The substantive issues and objections were raised before the Regional Board either in this
24 permitting action, or in previous permitting actions that were appealed to the State Board and
25 remain in abeyance. The issues raised in the previous Petition that remain at issue were reiterated
26 and incorporated into this Petition.
27
28

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

2 BACWA requests that the State Board place its Petition for Review in abeyance pursuant to
3 23 C.C.R. §2050.5(d) to allow time for BACWA to attempt to resolve its concerns with the
4 Regional Board informally.

5
6 DATED: September 7, 2007

Respectfully submitted,

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8 

9
10 Melissa Thorne
11 DOWNEY BRAND LLP
12 BACWA Special Counsel

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EXHIBIT A



Linda S. Adams
Secretary for
Environmental Protection

California Regional Water Quality Control Board

San Francisco Bay Region

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Arnold Schwarzenegger
Governor

ORDER NO. R2-2007-00XX
NPDES NO. CA0038318

The following Discharger is subject to waste discharge requirements as set forth in this Order.

Table 1. Discharger Information

Dischargers	City & County of San Francisco and North Bayside System Unit (NBSU)
Name of Facility	San Francisco International Airport, Mel Leong Treatment Plant, Sanitary Plant
Facility Address	676 McDonnell Road, San Francisco, San Mateo County, CA 94128

The discharge by the City and County of San Francisco, San Francisco International Airport (SFIA), Mel Leong Treatment Plant, Sanitary Plant, from the discharge point identified below is subject to waste discharge requirements as set forth in this Order.

Table 2. Discharge Location

Sampling Points	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
EFF-001-San, EFF-001A, EFF-002	Treated Sanitary Wastewater	37°, 39', 55" N	122°, 21', 41" W	Lower San Francisco Bay

Table 3. Administrative Information

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

IT IS HEREBY ORDERED, that this Order supersedes Order No. 01-145 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) 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 that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on _____, 2007.

Bruce H. Wolfe, Executive Officer

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Attachment G – The following documents are part of this Permit, but are not physically attached due to volume. They are available on the internet at www.waterboards.ca.gov/sanfranciscobay/	
- Self-Monitoring Program, Part A, adopted August 1993	
- Standard Provisions and Reporting Requirements, August 1993	
- August 6, 2001 Staff Letter: <i>Requirement for Priority Pollutant Monitoring in Receiving Water and Wastewater Discharges</i>	

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I. FACILITY INFORMATION

The following Discharger is subject to the waste discharge requirements as set forth in this Order. Since the NBSU is responsible for chlorination and dechlorination of the effluent prior to discharge to Lower San Francisco Bay, the NBSU is also subject to these requirements:

Table 4. Facility Information

Dischargers	City & County of San Francisco and North Bayside System Unit (NBSU)
Name of Facility	San Francisco International Airport, Mel Leong Treatment Plant, Sanitary Plant
Facility Address	676 McDonnell Road, San Francisco, San Mateo County, CA 94128
Facility Contact, Title, and Phone	SFIA: Mark Costanzo, Utility Manager, (650) 821-7809, Mark.costanzo@flysfo.com
Mailing Address	SFIA P.O. Box 8097, San Francisco, CA 94128
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	2.2 million gallons per day

II. FINDINGS

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

A. Background. The City and County of San Francisco, San Francisco International Airport (SFIA), Mel Leong Treatment Plant, Sanitary Plant is currently discharging under Order No. 01-145 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038318. The Discharger submitted a Report of Waste Discharge, dated August 28, 2006 and applied for an NPDES permit renewal to discharge up to 2.2 million gallons per day (MGD) of treated wastewater from the Mel Leong Treatment Plant, Sanitary Plant. The application was deemed complete on November 29, 2006.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policies are held to be equivalent to references to the Discharger herein.

B. Facility Description. The Discharger owns and operates the Mel Leong Treatment Plant. The Mel Leong Treatment Plant consists of a Sanitary Plant and an Industrial Plant. This Order pertains only to the Sanitary Plant. The Sanitary Plant includes a secondary wastewater treatment plant and its collection and conveyance system. The Sanitary Plant treats sanitary wastewater from airplanes and facilities such as terminal restrooms, hangars, restaurants, and shops located at the airport. The Industrial Plant treats first flush storm water collected from the SFIA as well as other wastewaters generated throughout the SFIA (e.g., maintenance shops, car washing). As necessary, either plant may occasionally be used to store or treat flows, spills or overflows from the other as necessary to assure that both treatment plants are operated efficiently and that such flows are captured and treated before they reach receiving waters.

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Sanitary wastewaters from facilities throughout the SFIA are collected and conveyed to the Sanitary Plant through a system that consists of over 20 miles of sewer piping, eight lift stations, and 16 pump stations. Wastewater treatment processes at the Sanitary Plant consist of screening using punched plate bar screens, grit removal, flow equalization, biological treatment using sequential batch reactors (SBRs), and effluent flow equalization and chlorination. Sludge is treated by gravity belt thickening and anaerobic digestion then dewatered by belt filter presses or air dried using sludge drying beds. Final sludge cake and air-dried sludge are disposed at a landfill (currently Ox Mountain Sanitary Landfill).

After chlorination, treated wastewater is directed to a pumping station where it is combined with treated effluent from the Industrial Plant, and then discharged to the dechlorination facility owned and operated by the North Bayside System Unit (NBSU). The NBSU is operated by a joint powers authority of the same name and is responsible for operation of certain shared transport, treatment, and disposal facilities. NBSU member organizations include Millbrae, Burlingame, South San Francisco, San Bruno, and SFIA. The dechlorination facility is located at the South San Francisco/San Bruno Water Quality Control Plant, located at 195 Belle Air Road, South San Francisco, CA 94080. The plant manager is currently David Castagnola who may be contacted at 650 829 3844.

Dechlorination takes place in the NBSU outfall before the combined effluent is discharged. Effluent from the NBSU force main discharges into Lower San Francisco Bay, a water of the State and United States, northeast of Point San Bruno, through a submerged diffuser approximately 5,300 feet offshore at a depth of 20 feet below mean lower low water (latitude 37°, 39', 55" North and longitude 122°, 21', 41" West).

According to the permit application, in 2005 the Sanitary Plant discharged an average daily flow of 0.8 MGD; the highest recorded daily flow was 1.3 MGD. The dry weather design flow for the facility is 2.2 MGD.

In addition, approximately 100,000 gallons per day of treated wastewater is stored in pressurized tanks and used for in-plant purposes. The reclaimed water is used year-round on an as-needed basis.

For purposes of this Order, two Discharge Points are defined for effluent from the Sanitary Plant. Discharge Points 001 and 002. Discharge Point 001 represents treated effluent from the Mel Leong Sanitary Treatment Plant. As described further in the Monitoring and Reporting Program (Attachment E), two different monitoring locations have been established for Discharge Point 001. Monitoring Location EFF-001-San is used to collect samples from the Sanitary Plant. This treated waste water is then combined with the treated waste water from the Industrial Plant and samples of the combined flow collected at monitoring location EFF-001A. Samples from this location represent the total wastewater discharge from the Mel Leong Treatment Plant prior to discharge into the NBSU. Samples are also collected from Discharge Point 002 which is a point in the NBSU after dechlorination.

Attachment B provides a map of the area around the facility. **Attachment C** provides a flow schematic of the Facility.

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- C. Legal Authorities.** This Order is issued pursuant to CWA section 402 and implementing regulations adopted by the USEPA and Chapters 5.5, Division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with section 13260).
- 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 other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA.
- 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 and Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. The Regional Water Board has considered the factors associated with these requirements when developing all effluent limitations. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet.
- G. Water Quality-based Effluent Limitations.** 40 CFR 122.44 (d) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided at 40 CFR 122.44(d)(1)(vi).
- H. Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan for the San Francisco Bay Basin* (revised in 2005) (hereinafter the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply (MUN). Because of the marine influence on receiving waters of the San Francisco Bay, total dissolved solids levels in the Bay commonly (and often significantly) exceed 3,000 mg/l and thereby meet an exception to State Water Board

Resolution No. 88-63. Therefore, the designation MUN is not applicable to Lower San Francisco Bay. Beneficial uses applicable to Lower San Francisco Bay are as follows.

Table 5. Basin Plan Beneficial Uses of Lower San Francisco Bay

Discharge Point	Receiving Water Name	Beneficial Uses
002	Lower San Francisco Bay	Industrial Service Supply (IND) Navigation (NAV) Water Contact Recreation (REC1) Non-Contact Water Recreation (REC2) Ocean Commercial and Sport Fishing (COMM) Wildlife Habitat (WILD) Preservation of Rare and Endangered Species (RARE) Fish Migration (MIGR) Shellfish Harvesting (SHELL) Estuarine Habitat (EST)

Requirements of this Order implement the Basin Plan.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- 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). Where a compliance schedule for a final effluent limitation exceeds one year, a permit must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin

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Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does include compliance schedules and interim effluent limitations. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) is included in the Fact Sheet.

- L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards 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 5-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), pH, turbidity, oil and grease, and chlorine residual. Restrictions on these pollutants are specified in federal regulations as discussed in Section III.C.6 of the Fact Sheet. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All 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). 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 the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

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- O. Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) of 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 Order, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.
- P. Monitoring and Reporting.** 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- Q. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- R. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.E and V.B of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- S. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements 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 of this Order.
- T. 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 of this Order.

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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 at any point at which the treated wastewater 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.12 of the *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits*, August 1993 (**Attachment G**).
- D. The average dry weather flow, as measured at Monitoring Location EFF-001 described in the attached MRP (**Attachment E**), shall not exceed 2.2 million gallons per day. 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

A. Effluent Limitations – Discharge Point 001

1. Effluent Limitations for Conventional Pollutants

- a. The Discharger shall maintain compliance with the following effluent limitations at Monitoring Location EFF-001-San as described in the attached MRP (Attachment E). Conventional pollutants in the waste water from the Sanitary Plant are monitored before the waste water is combined with the waste water from the Industrial Plant. There is a separate monitoring location, EFF-001A for the combined flow.

Table 6. Effluent Limitations – Conventional Pollutants monitored at EFF-001-San

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Carbonaceous Biochemical Oxygen Demand (5-day @ 20 Deg. C) (CBOD ₅)	mg/l	25	40	--	--	--
Total Suspended Solids (TSS)	mg/l	30	45	--	--	--
Oil and Grease	mg/l	10	--	20	--	--
pH ⁽¹⁾	standard units	--	--	--	6.0	9.0

⁽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.

- b. **CBOD₅ and TSS 85 Percent Removal:** The average monthly percent removal of CBOD₅ and TSS, by concentration, based on samples from the inflow (INF-001-San) and outflow (EFF-001-San) shall not be less than 85 percent.
- c. **Fecal Coliform Bacteria:** The treated wastewater, from samples collected from sampling point EFF-001A, shall meet the following limitations of bacteriological quality:
 - (1) The 5-day geometric mean fecal coliform density shall not exceed a Most Probable Number (MPN) of fecal coliform bacteria of 200 MPN/100 ml.
 - (2) The 90th percentile value of the last ten fecal coliform density values shall not exceed 400 MPN/100 ml.
- d. **Enterococci Bacteria:** The monthly geometric mean enterococci bacteria density in samples of treated wastewater collected at EFF-001A shall not exceed 35 colonies/100 ml.

2. Effluent Limitations for Toxics Substances

- a. The Discharger shall maintain compliance with the following effluent limitations at at Monitoring Location EFF-001A (except for cyanide, measured at Location EFF-002), as described in the attached MRP (Attachment E):

Table 7. Effluent Limitations - Toxic Substances

Parameter	Units	Effluent Limitations ⁽¹⁾⁽²⁾			
		Average Monthly	Average Weekly	Maximum Daily	
Copper ⁽³⁾	µg/l	54	--	110	--
Lead	µg/l	64	--	130	--
Mercury ⁽⁴⁾	µg/l	0.020	--	0.041	--
Nickel	µg/l	76	--	150	--
Dioxin-TEQ ⁽⁴⁾	µg/l	1.4 x 10 ⁻⁸	--	2.8x 10 ⁻⁸	--
Aldrin ⁽⁴⁾	µg/l	0.00014	--	0.00028	--
Alpha-BHC	µg/l	0.13	--	0.26	--
Beta-BHC	µg/l	0.46	--	0.92	--
4,4-DDT ⁽⁴⁾	µg/l	0.00059	--	0.0012	--
4,4-DDE	µg/l	0.00059	--	0.0012	--
Dieldrin	µg/l	0.00014	--	0.00028	--
Endrin	µg/l	0.019	--	0.037	--
Heptachlor ⁽⁴⁾	µg/l	0.0020	--	0.0041	--
Heptachlor Epoxide ⁽⁴⁾	µg/l	0.00089	--	0.0018	--
Ammonia ⁽⁵⁾	mg/l	120	--	310	--
Tributyltin	µg/l	0.061	--	0.12	--

- ⁽¹⁾ (a) Limitations apply to the average concentration of all samples collected during the averaging period (daily = 24-hour period; monthly = calendar month).
 (b) All metals limitations are expressed as total recoverable metal.
- ⁽²⁾ A daily maximum or average monthly value for a given constituent shall be considered noncompliant with the effluent limitations only if it exceeds the effluent limitation and the Reporting Level for that constituent. As outlined in Section 2.4.5 of the SIP, the table below indicates the Minimum Level (ML) upon which the Reporting Level is based for compliance determination purposes. In addition, in order to perform reasonable potential analysis for future permit reissuance, the Discharger shall use methods with MLs lower than the applicable water quality objectives or water quality criteria (e.g., copper). A ML is the concentration at which the entire analytical system must give a recognizable signal and the 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.

Minimum Levels for Pollutants with Effluent Limitations

Parameter	Minimum Level	Units
Copper	2	µg/l
Lead	2	µg/l
Mercury	0.0005	µg/l
Nickel	5	µg/l
Cyanide	5	µg/l
Dioxin-TEQ	½ the USEPA specified MLs for Method 1613	µg/l

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Parameter	Minimum Level	Units
Aldrin	0.005	µg/l
alpha-BHC	0.01	µg/l
beta-BHC	0.005	µg/l
4,4-DDT	0.01	µg/l
4,4-DDE	0.05	µg/l
Dieldrin	0.01	µg/l
Endrin	0.01	µg/l
Heptachlor	0.01	µg/l
Heptachlor Epoxide	0.01	µg/l
Ammonia ⁽⁵⁾	0.1	mg/l
Tributyltin	0.001	µg/l

Isomer Group	Minimum Level, pg/l
2,3,7,8-TetraCDD	5
1,2,3,7,8-PentaCDD	25
1,2,3,4,7,8-HexaCDD	25
1,2,3,6,7,8-HexaCDD	25
1,2,3,7,8,9-HexaCDD	25
1,2,3,4,6,7,8-HeptaCDD	25
OctaCDD	50
2,3,7,8-TetraCDF	5
1,2,3,7,8-PentaCDF	25
2,3,4,7,8-PentaCDF	25
1,2,3,4,7,8-HexaCDF	25
1,2,3,6,7,8-HexaCDF	25
1,2,3,7,8,9-HexaCDF	25
2,3,4,6,7,8-HexaCDF	25
1,2,3,4,6,7,8-HeptaCDF	25
1,2,3,4,7,8,9-HeptaCDF	25

⁽³⁾ Alternate Effluent Limitations for Copper:

a. If a copper SSO for the receiving water becomes legally effective, resulting in adjusted saltwater Criterion Continuous Concentration (CCC) of 2.5 µg/l and Criterion Maximum Concentration (CMC) of 3.9 µg/l as documented in the *North of Dumbarton Bridge Copper and Nickel Site-Specific Objective (SSO) Derivation (Clean Estuary Partnership December 2004)*, upon its effective date, the following limitations shall supersede those copper limitations listed in Table 7.

AMEL of 42 µg/l, and MDEL of 84 µg/l.

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

⁽⁴⁾ Limits for these pollutants become effective according to the compliance schedules described in VI.C.4.

⁽⁵⁾ Measured as N in total ammonia

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3. Acute Toxicity:

- a. Representative samples of the effluent at Discharge Point 001, collected before chlorination, 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 combined 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: A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if five or more of the past ten or fewer bioassay tests 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 fewer 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 discharge is in compliance with the effluent limits, then such toxicity does not constitute a violation of this effluent limitation.

4. 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 treated final effluent at Discharge Point 001 (Monitoring Location EFF-001A) 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 the "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.3 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**).

B. Effluent Limitations – Discharge Point 002

1. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 002 with compliance measured at Monitoring Location EFF-002 as described in the attached MRP (Attachment E).

Table 8. Effluent Limitations – Discharge Point 002

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Chlorine, Total Residual ⁽¹⁾	mg/l	--	--	--	--	0.0
Cyanide ⁽²⁾	µg/l	20	--	44		

⁽¹⁾ This requirement is defined as below the limit of detection in standard test methods, as defined in the latest edition of Standard Methods for the Examination of Water and Wastewater. For total residual chlorine (TRC) detection levels, the Discharger shall use a method of analysis of TRC that is identified as approved by USEPA for analysis of wastewaters at 40 CFR Part 136. The method of analysis shall achieve a method detection limit (MDL) at least as low as that achieved by the Amperometric Titration Method (4500-Cl D from *Standard Methods for Examination of Water and Wastewater*, Edition 20). The State Water Board is considering a statewide policy on chlorine residual. This Order may be reopened in the future to reflect any changes relating to chlorine residual.

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C. Mercury Mass Emission Limitation

Until TMDL and Waste Load Allocation (WLA) efforts for mercury provide enough information to establish a different WQBEL, the Discharger shall demonstrate that the total mercury mass loading from Discharge Point 001 (Monitoring Location EFF-001A) to Lower San Francisco Bay via the NBSU has not increased by complying with the following:

1. Mass Emission Limit: The mass emission limit for mercury is 0.0041 kilograms per month (kg/month). The total mercury mass load shall not exceed this limit.
2. Compliance with this limit shall be evaluated using a running annual average mass load. Running annual averages shall be calculated by taking the arithmetic average of the current monthly mass loading value (see sample calculation below) and the previous 11 months of values. Sample calculation:

Flow (MGD) = Average of monthly plant effluent flows in MGD.

Constituent Concentration ($\mu\text{g/l}$) = Average of monthly effluent concentration measurements in $\mu\text{g/l}$. If more than one measurement is obtained in a calendar month, the average of these measurements is used as the monthly value for that month. If test results are less than the method detection limit used, the measurement value is assumed to be equal to the method detection limit.

Mass Loading (kg/month) = (Flow) x (Constituent Concentration) x 0.1151.

This mass emission limit will be superseded upon implantation, through amendment of this Order or issuance of a separate permit, of a TMDL and WLA for mercury. According to the anti-backsliding rule in the Clean Water Act, Section 402(o), the permit may be modified to include a less stringent requirement following completion of a TMDL and WLA.

D. Reclamation Specifications

Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

1. Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharges shall not cause the following in Lower San Francisco Bay:
 - 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;

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- 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 limitations 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, 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 as growths cause nuisance or adversely affect beneficial uses.

B. Groundwater Limitations

Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with Federal Standard Provisions included in **Attachment D** of this Order.
2. 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)*, including any amendments thereto. Where provisions or reporting requirements specified in this Order and/or Attachment G are different from equivalent or related provisions or reporting requirements given in the Standard Provisions in Attachment D, the specifications of this Order and/or Attachment G

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shall apply in areas where these provisions are more stringent. Duplicative requirements in the federal Standard Provisions in VI.A.1, 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 (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in **Attachment E** of this Order. The Discharger shall also comply with the requirements contained in *Self Monitoring Programs, Part A*, August 1993 (**Attachment G**).

C. Special Provisions

1. Re-opener 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 have, or will cease to have, a reasonable potential to cause or contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.
- b. If new or revised WQOs or TMDLs come into effect for the San Francisco Bay estuary and contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order will be modified as necessary to reflect updated WQOs and waste load allocations in TMDLs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally adopted WQOs, TMDLs, or as otherwise permitted under Federal regulations governing NPDES permit modifications.
- c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified.
- d. If administrative or judicial decision on a separate NPDES permit or WDR that addresses requirements similar to this discharge.
- e. Or as otherwise authorized by law.

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

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2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Effluent Characterization for Selected Constituents

The Discharger shall monitor and evaluate the discharge collected from sample monitoring location EFF-001A 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 Dischargers.

The Discharger shall, on an annual basis, evaluate 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.

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 RPA and to calculate effluent limitations. The data on the conventional water quality parameters (pH, salinity, and hardness) shall also be sufficient to characterize these parameters in the receiving water at a point after the discharge has mixed with the receiving waters. This provision may be met through monitoring through the Collaborative Bay Area Clean Water Agencies (BACWA) Study, or a similar ambient monitoring program for San Francisco Bay. This Order may be reopened, as appropriate, to incorporate effluent limitations or other requirements based on Regional Water Board review of these data.

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

c. Optional Mass Offset

If the Discharger can demonstrate that further net reductions of the total mass loadings of 303(d)-listed pollutants to the receiving water cannot be achieved through economically feasible measures such as aggressive source control,

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wastewater reuse, and treatment plant optimization, but only through a mass offset program, the Discharger may submit to the Regional Water Board for approval a mass offset plan to reduce 303(d)-listed pollutants to the same watershed or drainage basin. The Regional Water Board may modify this Order to allow an approved mass offset program.

3. Best Management Practices and Pollution Minimization

a. Pollution Minimization Program

The Discharger shall continue to improve, in a manner acceptable to the Executive Officer, its existing Pollutant Minimization Program to reduce pollutant loadings of to the treatment plant and therefore to the receiving waters. The Discharger shall implement any applicable additional pollutant minimization measures described in Basin Plan implementation requirements associated with the copper SSO and cyanide SSO if and when each of those SSOs become effective and alternate limitations take effect.

b. Annual Pollution Minimization Report

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

- (1) *A brief description of its treatment plant, treatment plant processes and service area.*
- (2) *A discussion of the current pollutants of concern.* Periodically, the Discharger shall determine which pollutants are currently a problem and/or which pollutants may be potential future problems. This discussion shall include the reasons why the pollutants were chosen.
- (3) *Identification of sources for the pollutants of concern.* This discussion shall include how the Discharger intends to estimate and identify pollutant sources. 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.
- (4) *Identification of tasks to reduce the sources of the pollutants of concern.* This discussion shall identify and prioritize tasks to address the Discharger's pollutants of concern. The Discharger may implement the tasks themselves or participate in group, regional, or national tasks that will address its pollutants of concern whenever it is efficient and appropriate to do so. A time line shall be included for the implementation of each task.
- (5) *Outreach to employees.* The Discharger shall inform its employees about the pollutants of concern, potential sources, and how they might be able to help

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reduce the discharge of these pollutants. The Discharger may provide a forum for employees to provide input to the program.

- (6) *Continuation of Public Outreach Program.* The Discharger shall prepare a public outreach program to communicate pollution minimization measures 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 various media. Information shall be specific to target audiences. The Discharger shall coordinate with other agencies as appropriate.
- (7) *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 discussion shall include of the specific criteria used to measure the effectiveness of each of the tasks in item b(3), b(4), b(5), and b(6).
- (8) *Documentation of efforts and progress.* This discussion shall detail all of the Discharger's activities in the Pollution Minimization Program during the reporting year.
- (9) *Evaluation of Program's and tasks' effectiveness.* The Discharger shall use the criteria established in b. to evaluate the Program's and tasks' effectiveness.
- (10) *Identification of specific tasks and time schedules for future efforts.* Based on the evaluation, the Discharger shall detail how it intends to continue or change its tasks to more effectively reduce the amount of pollutants to the treatment plant and subsequently its effluent.

c. Pollutant Minimization Program for Reportable Priority Pollutants

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

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

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d. Requirements of a Pollutant Minimization Program

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

- (1) An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling, or alternative measures approved by the Executive Officer when it is demonstrated that source monitoring is unlikely to produce useful analytical data;
- (2) Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system, or alternative measures approved by the Executive Officer, when it is demonstrated that influent monitoring is unlikely to produce useful analytical data;
- (3) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
- (4) Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
- (5) The annual report required by 3.b. above, shall specifically address the following items:
 - i. All PMP monitoring results for the previous year;
 - ii. A list of potential sources of the reportable priority pollutant(s);
 - iii. A summary of all actions undertaken pursuant to the control strategy; and
 - iv. A description of actions to be taken in the following year.

4. Requirement to Assure Compliance with Final Limits

In an effort to assure compliance with final effluent limitations for dioxin-TEQ, aldrin, 4,4-DDT, heptachlor, and heptachlor epoxide, the Discharger shall comply with the following tasks and dates:

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Table 9. Requirements to Assure Compliance with Final Limitations

Task	Dioxin compliance	Pesticide compliance
1. Submit a plan for identifying all dioxins and Pesticides sources to the discharge. Examples of potential pesticide sources include stored pesticides and pesticide-treated soils near sewer lines. The plan shall, at a minimum, include sampling influent waste streams to identify and quantify pollutant sources.	April 1, 2008	April 1, 2008
2. Implement the plan developed in action "2" within 30 days of the deadline for action "2," and submit by the deadline for this action a report that contains an inventory of the pollutant sources.	August 1, 2008	August 1, 2008
3. 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: (i) Maintain a list of sources of pollutants of concern. (ii) Investigate each source to assess the need to include it in the program. (iii) Identify and implement targeted actions to reduce or eliminate discharges from each source in the program. (iv) Develop and distribute, as appropriate, educational materials regarding the need to prevent sources to the sewer system.	October 1, 2008	October 1, 2008
4. Continue to implement the program described in action "3" 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. If not, identify and implement additional measures to further reduce discharge.	Annually each February 28 in Best Management Practices and Pollutant Minimization Report required by Permit Provision VI.C.3	Annually each February 28 in Best Management Practices and Pollutant Minimization Report required by Permit Provision VI.C.3
5. Full compliance with IV Effluent Limitations and District Specifications IV.A.2.a for aldrin, 4,4-DDT, heptachlor, and heptachlor epoxide.	Not applicable	May 18, 2010
6. Full compliance with IV Effluent Limitations and District Specifications IV.A.2.a for dioxin-TEQ. Alternatively, the Discharger may	September 30, 2017	

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comply with this limit through implementation of a mass offset strategy for dioxin-TEQ in accordance with policies in effect at that time.		
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5. Construction, Operation and Maintenance Specifications

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

- (1) The Discharger shall operate and maintain its wastewater collection, treatment, and disposal facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, in order to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities.
- (2) The Discharger shall regularly review and evaluate its wastewater facilities and operation practices in accordance with section a.1. above. Reviews and evaluations shall be conducted as an ongoing component of the Discharger's administration of its wastewater facilities.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its wastewater facilities and operation practices, including any recommended or planned actions and an estimated time schedule for these actions. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures, and applicable wastewater facility programs or capital improvement projects.

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

- (1) The Discharger shall maintain an O&M Manual as described in the findings of this Order for the Discharger's wastewater facilities. The O&M Manual shall be maintained in usable condition and be available for reference and use by all applicable personnel.
- (2) The Discharger shall regularly review, revise, or update, as necessary, the O&M Manual(s) to ensure that the document(s) may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary. For any significant changes in treatment facility equipment or operation practices, applicable revisions shall be completed within 90 days of completion of such changes.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its O&M manual, including any recommended or planned actions and an estimated time schedule for these actions. The

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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 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.

6. Special Provisions for POTWs

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 Part 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 Part 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.

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- (4) The discharge of sludge shall not cause waste material to be in a position where it is or can be carried from the sludge treatment and storage site and deposited in waters of the State.
- (5) The sludge treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the temporary storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.
- (6) For sludge that is applied to the land, placed on a surface disposal site, or fired in a sludge incinerator as defined in 40 CFR §503, the Discharger shall submit an annual report to USEPA and the Regional Water Board containing monitoring results and pathogen and vector attraction reduction requirements as specified by 40 CFR §503, postmarked February 15 of each year, for the period covering the previous calendar year.
- (7) Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR Part 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 Order. 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 Order prior to expiration if changes occur in applicable state and federal sludge regulations.

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b. Sanitary Sewer Overflows and Sewer System Management Plan

The Discharger's collection system is part of the facility that is subject to this Order. As such, the 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.

7. Other Special Provisions

a. Cyanide Action Plan

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.

b. Copper Action Plan

If and when the copper alternate limits in IV become effective, the Discharger shall initiate implementation of an action plan for copper, consistent with the copper SSO Basin Plan Amendment.

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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, Attachment A and Section VI of the Fact Sheet 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 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.

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ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ), 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: Σx 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 Order), 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.

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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

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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

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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 (σ) is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

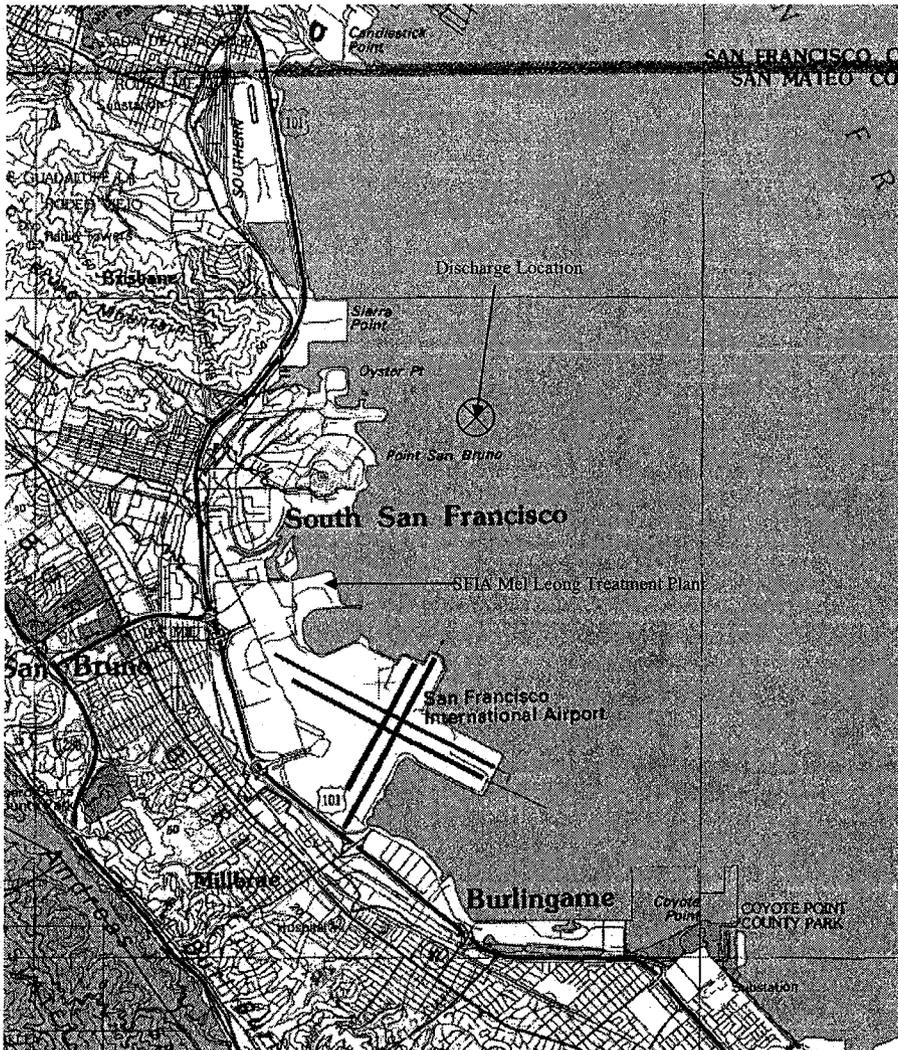
where:

- x is the observed value;
- μ 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.)

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ATTACHMENT B - MAP



USGS HUNTERS POINT (CA)
1:24,000
Current: 1993
7.5 minute

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**ATTACHMENT C – SFIA MEL LEONG TREATMENT PLANT, SANITARY PLANT: FLOW
SCHEMATIC AND AERIAL VIEW OF THE MEL LEONG TREATMENT PLANT SHOWING
SAMPLING LOCATIONS**

- ① INFLUENT SANITARY PROCESS: INF-001 SAN
- ② INFLUENT INDUSTRIAL WASTE: INF-001 IND
- ③ EFFLUENT SANITARY PROCESS: EFF-001 SAN
- ④ EFFLUENT INDUSTRIAL WASTE: EFF-001 IND
- ⑤ COMBINED EFFLUENT PUMP STATION: EFF-001 A



SBR TANKS

SANITARY WASTE TREATMENT PLANT

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EXHIBIT B

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

REVISED CEASE AND DESIST ORDER NO. R2-2007-00XX

**REQUIRING THE CITY AND COUNTY OF SAN FRANCISCO
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 City and County of San Francisco (hereinafter "Discharger") owns and operates the Mel Leong Treatment Plant, Sanitary Plant (hereinafter "Sanitary Plant"), located at 676 McDonnell Road, San Francisco International Airport, San Mateo County. The Sanitary Plant treats sanitary wastewater from airplanes and airport facilities, such as terminal restrooms, hangars, restaurants, and shops. It has a dry weather design capacity of 2.2 million gallons per day.
2. The Sanitary Plant discharge has been regulated by waste discharge requirements in Order No. 01-145 (NPDES Permit No. CA0038318).
3. Concurrent with the adoption of this Cease and Desist Order, the Regional Water Board adopted Order No. R2-2007-00XX (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	0.020	0.041	EFF-001A
Aldrin	0.00014	0.00028	EFF-001A
4,4-DDT	0.00059	0.0012	EFF-001A
4,4-DDE	0.00059	0.0012	EFF-001A
Dieldrin	0.00014	0.00028	EFF-001A
Heptachlor	0.0020	0.0041	EFF-001A
Heptachor epoxide	0.00089	0.0018	EFF-001A

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 estimated for the combined flow from the Sanitary Plant and the nearby Industrial Plant (which contributes to effluent concentrations at the combined monitoring station). The Permit grants compliance schedules for some but not all of these pollutants; therefore, the Discharger will discharge waste in violation of the Permit.
5. Although the Permit contains final effluent limits for aldrin, 4,4-DDT, heptachlor, and heptachlor epoxide, the Permit also provides compliance schedules to meet these effluent limits. The compliance schedules last until May 18, 2010, which is the last day the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy) authorizes compliance schedules for California Toxics Rule pollutants. As stated in the Permit findings, the actions these compliance schedules require 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 schedules for these pollutants end, the Discharger threatens to violate the effluent limitations for these pollutants.
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 compliance schedules. This Order continues those efforts once the compliance schedules end 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 interim limits are intended to ensure that the Discharger maintains at least its existing performance while completing all tasks required during the time schedules. The interim limits are based on past performance or limits in previous orders, whichever are more stringent. If based on past performance, the interim limits represent the 99.87th percentile of actual measured discharge concentrations (three standard deviations from the mean). If insufficient monitoring data exist to derive a reliable performance-based limit, and if no previous order contained a limit, then this Order does not establish an interim limit.
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* that supersedes the mercury limits in the Permit.
 - b. *Aldrin, 4,4-DDT, Heptachlor, and Heptachlor Epoxide*. The prescribed actions in Table 2, actions "a," "b," "c," and "d," shall not apply to aldrin, 4,4-DDT, heptachlor, and heptachlor epoxide because the Permit already requires these actions. Actions "e," "f," "g," and "h" shall apply to aldrin, 4,4-DDT, heptachlor, and heptachlor epoxide 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.
5. Effective Date. This Order shall be effective on the effective date of the Permit.

* 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.

Table 2: Time Schedules and Prescribed Actions

Action	Deadline	
	Mercury	Pesticides
a. Comply with the following interim effluent limits: Mercury (at Monitoring Station EFF-001A): Average monthly effluent limit = 0.087 µg/L Maximum daily effluent limit = 1.0 µg/L	Upon the effective date of this Order	<i>Not Applicable</i>
b. Investigate sample collection, sample handling, and analytical laboratory quality assurance and quality control practices to ensure that analytical results for aldrin, 4,4-DDT, 4,4-DDE, dieldrin, heptachlor, and heptachlor epoxide (hereinafter "Pesticides") 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.	<i>Not Applicable</i>	January 1, 2008
c. Submit a plan for identifying all mercury, and Pesticides sources to the discharge. Examples of potential mercury sources include chemicals used on site, medical devices, laundry services, fluorescent light tubes, and electrical switches. Examples of potential Pesticide sources include stored pesticides and pesticide-treated soils near sewer lines. The plan shall, at a minimum, include sampling influent waste streams to identify and quantify pollutant sources.	June 1, 2008	June 1, 2008
d. Implement the plan developed in action "c" within 30 days of the deadline for action "c," and submit by the deadline for this action a report that contains an inventory of the pollutant sources.	October 1, 2008	October 1, 2008
e. Submit a report documenting development and initial implementation of a program to reduce and prevent the pollutants of concern in the discharge. The program shall consist, at a minimum, of the following elements: i. Maintain a list of sources of pollutants of concern. ii. Investigate each source to assess the need to include it in the program. iii. Identify and implement targeted actions to reduce or eliminate discharges from each source in the program.	December 1, 2008	December 1, 2008

Action	Deadline	
	Mercury	Pesticides
iv. Develop and distribute, as appropriate, educational materials regarding the need to prevent sources to the sewer system.		
f. Continue to implement the program described in action "e" and submit annual status reports that evaluate its effectiveness and summarize planned changes. Report whether the program has successfully brought the discharge into compliance with the effluent limits in the Permit. If not, identify and implement additional measures to further reduce discharges.	Annually each February 28 in Best Management Practices and Pollutant Minimization Report required by Permit Provision VI.C.3	
g. If by February 28, 2011 , discharge data continue to show the discharge is out of compliance (as defined in 2.4.5 of the State Implementation Policy) with the Permit effluent limits, submit a report, by the deadline for this action, identifying more aggressive actions to ensure compliance. These actions shall include, but not be limited to, reviewing options for pretreatment and upgrades to the treatment plant. The report shall identify an implementation schedule for investigating these options, selecting a preferred option, and implementing the chosen option. At a minimum, the report shall plan for the following activities: i. Bench scale testing or pilot scale testing or both ii. Development of preliminary design specifications iii. Development of final design specifications iv. Procurement of funding v. Acquisition of necessary permits and approvals vi. Construction	June 1, 2011	June 1, 2011
h. Implement the plan required in action "g" within 45 days of the deadline for action "g," and submit annual status reports.	Annually each February 1 in Annual Self-Monitoring Report required by Permit Attachment E, Monitoring & Reporting Program	
i. Submit documentation confirming complete plan implementation and comply with effluent limits in the Permit.	June 1, 2015	June 1, 2015

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on _____, 2007.

BRUCE H. WOLFE
Executive Officer