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9 BAY AREA CLEAN WATER AGENCIES



10 BEFORE THE
11 CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

12 In the Matter of the Bay Area Clean Water)
13 Agencies' Petition for Review of Action and)
14 Failure to Act by the California Regional Water)
15 Quality Control Board, San Francisco Bay)
16 Region, in Adopting Order No. R2-2008-0005,)
17 NPDES Permit No. CA0037885 and Waste)
18 Discharge Requirements for Contra Costa)
19 County Sanitation District No. 5 and an)
20 accompanying Cease and Desist Order No. R2-)
21 2008-0006.)

PETITION FOR REVIEW;
PRELIMINARY POINTS AND
AUTHORITIES IN SUPPORT OF
PETITION (WATER CODE
SECTIONS 13320 AND 13321)

22 Petitioner Bay Area Clean Water Agencies ("BACWA"), in accordance with section 13320
23 of the Water Code, hereby petitions the State Water Resources Control Board ("SWRCB" or "State
24 Board") to review Order No. R2-2008-0005 of the California Regional Water Quality Control
25 Board, San Francisco Bay Region, ("RWQCB" or "Regional Board") reissuing National Pollution
26 Discharge Elimination System ("NPDES") Permit No. CA0037885 and Waste Discharge
27 Requirements for Contra Costa County Sanitation District No. 5 (the "District") as well as an
28 accompanying Cease and Desist Order ("CDO"), No. R2-2008-0006. Copies of Order Nos. R2-
2008-0005 and R2-2008-0006, adopted on January 30, 2008, are attached to this Petition as **Exhibit**
A and B. The issues and a summary of the bases for the Petition follow. At such time as the full
administrative record is available and any other material has been submitted, BACWA reserves the

1 right to file a more detailed memorandum in support of the Petition and/or in reply to the Regional
2 Board's response.¹

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

13 On December 21, 2007, BACWA submitted written comments on the tentative version of
14 NPDES Permit No. CA0037885. For the reasons contained herein, and incorporated by reference
15 as stated above, BACWA asserts that provisions contained in the recently issued permit for the
16 District are improper and inappropriate. BACWA hopes that the State Board will choose to take
17 up this petition and review the issues being raised that are vitally important to Bay Area POTWs.

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

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

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

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

7 BACWA seeks review of Order Nos. R2-2008-0005 and R2-2008-0006, reissuing NPDES
8 Permit No. CA0037885 for the District (the "Permit") and the accompanying CDO. The specific
9 requirements of the Permit that BACWA requests the State Board to review relate to the following:

- 10 A. Numeric-based effluent limits for mercury;
- 11 B. Final effluent limits for mercury;
- 12 C. Concentration limits for mercury;
- 13 D. Daily maximum effluent limitations; and
- 14 E. Compliance schedule action plans for mercury.

15 The State Board is also requested to review the Regional Board's actions in adopting the
16 Permit for compliance with due process and the California Administrative Procedures Act (Cal.
17 Gov't Code §§11340, *et seq.*); the California Environmental Quality Act ("CEQA," Cal. Pub. Res.
18 Code §21000, *et seq.*);² the Porter-Cologne Water Quality Control Act (Cal. Water Code §§13000,
19 *et seq.*); the Clean Water Act ("CWA") (33 U.S.C. §§1251, *et seq.*) and its implementing
20 regulations (40 C.F.R. Parts 122, 123, 130 and 131); the Water Quality Control Plan, San Francisco
21 Bay Region (the "Basin Plan"); and the Policy for Implementation of Toxics Standards for Inland
22 Surface Waters, Enclosed Bays, and Estuaries of California ("SIP").

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

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

2 The Regional Board adopted the Permit on January 30, 2008.

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

5 On February 11, 2008, the federal Environmental Protection Agency (“EPA”) approved the
6 San Francisco Bay Basin Plan amendment incorporating a TMDL for mercury.³ As a result of this
7 approval, the Waste Discharge Requirements for Municipal and Industrial Wastewater Discharges
8 of Mercury to San Francisco Bay, Order No. R2-2007-0077, NPDES Permit No. CA0038849,
9 becomes effective on March 1, 2008 (“Mercury Watershed Permit”).⁴ The Mercury Watershed
10 Permit, which names the District as a discharger, supersedes the mercury requirements imposed in
11 this Permit.⁵ However, on December 3, 2007, the San Francisco Baykeeper filed a Petition for
12 Review of the Mercury Watershed Permit. As a precaution, BACWA’s position regarding the
13 imposition of interim compliance requirements and effluent limitations for mercury in this Permit is
14 still being filed given San Francisco Baykeeper’s appeal of the Mercury Watershed Permit.

15 **A. The Regional Board Improperly Imposed Numeric Effluent Limitations for**
16 **Mercury.**

17 The Regional Board included interim compliance requirements and final numeric water
18 quality-based effluent limitations (“WQBELs”) for mercury in the Permit and accompanying CDO
19 that are contrary to the requirements of the CWA and state law.⁶ These numeric limitations have
20 been demonstrated to be infeasible to meet,⁷ and could result in the District having to construct
21 expensive new treatment facilities, if technology even exists to provide such treatment. These
22 treatment technologies far exceed the mandated treatment requirements of the CWA and will likely
23 become unnecessary once new water quality objectives, site specific objectives, or TMDLs for these

24 ³ See <http://www.swrcb.ca.gov/rwqcb2/TMDL/sfbaymercurytmdl.htm> (February 22, 2008).

25 ⁴ See Regional Board Order No. R2-2007-0077 at Table 3, fn. 1, pg. i.

26 ⁵ See *id.* at II.A, pg. 8.

27 ⁶ The Regional Board must ensure its actions to implement the CWA are consistent with any applicable provisions of
28 the CWA and its implementing regulations. Cal. Water Code §13372.

1 substances are in place and finally approved.⁸ Such a waste of resources is not reasonable nor
2 required (*see* Water Code §13000), and ignores the fact that control of some substances may instead
3 require a “carefully conceived, agency-approved, long-term pollution control procedure for a
4 complex environmental setting.” *Communities for a Better Environment v. SWRCB*, 109
5 Cal.App.4th 1089, 1107 (2003). For these reasons, BACWA challenges the mercury limits herein
6 as being contrary to federal and state law requirements.

7 1) Numeric Effluent Limitations for Mercury are Not Required.

8 The Regional Board has imposed numeric water quality-based effluent limitations
9 (“WQBELs”) for various constituents in the Permit based on 40 C.F.R. §122.44(d). *See* Permit at
10 pg. 13. However, as explained below, section 122.44(d) does not require the imposition of *numeric*
11 WQBELs.

12 EPA regulations require that “each NPDES permit shall include the following requirements
13 when applicable.” *See* 40 C.F.R. § 122.44 (emphasis added). Subsection (d) of this section
14 imposes “any requirements in addition to or more stringent than promulgated effluent limitations
15 guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of the CWA necessary to
16 achieve water quality standards established under Section 303 of the CWA, including State
17 narrative criteria for water quality . . .” 40 C.F.R. § 122.44(d) (emphasis added). The regulations
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20 ⁷ *See* Permit at pg. F-27; As defined by SWRCB Policy, “infeasible” means “not capable of being accomplished in a
21 successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and
22 technological factors.” *See* SIP at Appendix 1-3.

23 ⁸ 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 require the imposition of "requirements," not numeric effluent limitations. Furthermore, when
2 numeric effluent limitations are infeasible, EPA regulations specifically authorize the use of Best
3 Management Practices ("BMPs") and other non-numeric or narrative requirements in lieu of
4 numeric limits. 40 C.F.R. §122.44(k)(3); *see also* SWRCB Order No. WQ 2003-12 at pg. 9.
5 Alternatively, the Regional Board could have styled this Permit after recent permits in the Central
6 Valley Region, which have imposed final numeric limits, but stated that these limits do not apply if
7 certain actions are undertaken by the discharger. *See* Order Nos. R5-2007-0036 and R5-2007-0039.
8 This approach, which was not vetoed by USEPA, takes a creative approach to dealing with
9 infeasible final limits without the necessity of compliance schedules.

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

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

25 Thus, the State Board should remand the Permit to the Regional Board and direct the
26 Regional Board to comply with the provisions of 40 C.F.R. §122.44(k)(3), by removing the numeric
27 concentration-based effluent limits for mercury where compliance with such limits has been
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1 demonstrated to be infeasible, and replace these numeric limits with narrative requirements (source
2 control, best management practices, etc.) in lieu of the numeric limits.⁹

3 **B. The Regional Board Improperly Included Final Effluent Limits for Mercury.**

4 The District's Permit includes final effluent limits for mercury. Mercury is currently being
5 addressed through alternative means in order to protect beneficial uses for the San Francisco Bay.
6 Requiring final effluent limits that are unachievable by the District for compounds that are awaiting
7 total maximum daily load allocations (mercury, selenium, pesticides) is inappropriate. Further,
8 many of these limits are expressed as daily maximum limits when the impracticability of longer
9 term (weekly and monthly) limits has not been established, contrary to 40 C.F.R. §122.45(d)(2).
10 These final limits should be only provided for reference and should not be enforceable. Therefore,
11 BACWA requests removal of these final concentration limits.

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

21 BACWA urges the State Water Board to question EPA Region 9's recent action and to
22 repromulgate compliance schedule authority to deal with TMDL-based schedules as well as
23 allowing compliance schedules for any new or more stringent effluent limit imposed. In the
24 interim, the State Water Board should overturn the use of final limits prior to the implementation of
25 a TMDL.

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28 ⁹ Such an action would negate the need for compliance schedules as well since the District would presumably be able to immediately comply with narrative requirements for the constituents at issue.

1 **C. The Regional Board Improperly Imposed Mercury Concentration Limits.**

2 The Permit contains final concentration limits for mercury at page 13, Table 7. These limits
3 were derived from the Basin Plan objectives of 2.1 and 0.025 µg/L,¹⁰ for acute and chronic criteria,
4 respectively. See Permit at pg. F-26. There was no reasonable potential to trigger these limits since
5 the objective use to determine reasonable potential was recently deleted from the Basin Plan and no
6 reasonable potential exists under the CTR criteria. See Permit at pgs. F-19, F-26.

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

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24 ¹⁰ The 0.025 criterion has been recently removed from the Basin Plan and is no longer a valid water quality objective.
25 BACWA supported removal of that old criterion for the reasons stated in its comments to the State Board in 2005 on
26 the Mercury TMDL. In those comments, BACWA stated the 4-day mercury water quality standard was poorly
27 designed with a bad technical basis in addition to being obsolete. This water quality objective did not take into account
28 the conditions in the Bay where there is shallow water and high winds, causing the sediments to be re-suspended in the
water column. In BACWA’s review of the RMP data, BACWA concluded that even if mercury levels attained pre-
industrial, pre-mining, pristine concentrations of 0.1 ppm, the water column objective of 0.025 µg/L would not be
attained everywhere in the Bay without implementing massive dredging projects to modify the Bay’s bathymetry.
Moreover, the Basin Plan indicates that the 0.025 µg/L standard was based 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 See Letter from Bay Area Dischargers Association to Loretta Barsamian, SFRWQCB at Attachment
2 B (Feb. 2, 1998).

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

7 **D. The Regional Board Improperly Included Daily Maximum Effluent**
8 **Limitations.**

9 Where effluent limitations are authorized, federal regulations provide that for
10 discharges from POTWs, all permit effluent limits shall, unless impracticable, be stated as average
11 weekly and average monthly discharge limitations.¹¹ 40 C.F.R. § 122.45(d)(2). The Permit
12 contains several unsupported daily maximum limits, including, among others, the limit for mercury.
13 See Permit at pgs. 13.

14 In order to justify the inclusion of these daily limits, the Regional Board first cited to the
15 language of 40 C.F.R. §122.45(d)(1), which states that: “For continuous discharges all permit
16 effluent limitations, standards, and prohibitions, including those necessary to achieve water quality
17 standards shall unless impracticable be stated as maximum daily and average monthly discharge
18 limitations for all discharges other than publicly owned treatment works.” See Permit at pg. F-14,
19 para. C.1.b.(1). This citation ignores that these discharges *are* from a publicly owned treatment
20 work, and the rule for such a facility is that “average weekly and average monthly discharge
21 limitations [apply] for POTWs.” 40 C.F.R. §122.45(d)(2). Therefore, this first justification for
22 daily limits fails.

23 The State Implementation Policy (SIP) did not change the federal requirements. In enacting
24 the SIP, the State Board may have attempted to modify the federal regulatory prohibition on the use
25 of daily maximum limits for POTWs by stating: “For this method only [referring to limits for
26 aquatic life protection] maximum daily effluent limitations shall be used for publicly-owned
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28 ¹¹ Federal regulations also provide that discharges from all dischargers other than POTWs, effluent limitations shall be
stated as maximum daily and average monthly discharge limitations. 40 C.F.R. §122.45(d)(1).

1 treatment works (POTWs) in place of average weekly limitations.” SIP at 8, §1.4. However, prior
2 to authorizing the use of daily maximum limitations in POTW permits for compliance with aquatic
3 life criteria in the SIP, the State Board did not make the required demonstration that the imposition
4 of average weekly and average monthly effluent limitations for the protection of aquatic life was
5 “impracticable” per the requirements of 40 C.F.R. §122.45(d). Therefore, the State Board’s
6 authorization of daily maximum limitations for compliance with aquatic life criteria does not meet
7 federal requirements or California Water Code Chapter 5.5 requirements for consistency with
8 federal requirements. As such, the Regional Board should remove all daily maximum interim and
9 final effluent limitations based on aquatic life criteria.

10 Further, the State Board did not include in the SIP the same language purportedly allowing
11 for the inclusion of daily maximum limitations in POTW permits for effluent limitations based upon
12 technological requirements (for conventional pollutants) or upon human health criteria. Therefore,
13 even if the SIP provisions pertaining to maximum daily limits for aquatic life criteria were valid, 40
14 C.F.R. §122.45(d) requires the Regional Board to remove all daily maximum interim and final
15 effluent limitations based on human health criteria or technological requirements.

16 The Permit never specifies why monthly and weekly average limits are impracticable. The
17 Permit merely states that “MDELs are used in this Order to protect against acute water quality
18 effects. The MDELs are necessary for preventing fish kills or mortality to aquatic organisms.”
19 Permit at pg. F-14, para. C.1.c. These statements do not constitute an impracticability analysis, and
20 are inadequate to justify daily limits as there is no evidence to support such generic findings.

21 Furthermore, at most, these justifications would address only limits based on acute aquatic
22 life criteria. However, the Regional Board did not include limits based on acute aquatic life
23 protection, rather, the limits for mercury are based on long-term chronic exposure. *See In the Matter*
24 *of the Own Motion Review of the City of Woodland*, SWRCB Order No. WQ 2004-0010 (holding
25 that “implementing the limits as instantaneous maximums appears to be incorrect because the
26 criteria guidance value . . . is intended to protect against chronic effects.”)

27 Therefore, the Regional Board’s inclusion of daily maximum effluent limitations in the
28 Permit, without a specific, pollutant-by-pollutant impracticability analysis, violated 40 C.F.R.

1 §122.45(d)(2) and Water Code Chapter 5.5. By violating federal and state law, the Regional Board
2 proceeded without, or in excess of, its jurisdiction and has committed a prejudicial abuse of
3 discretion by not proceeding in a manner required by law. For these reasons, the State Board should
4 direct the Regional Board to remove the daily maximum effluent limitations not properly analyzed
5 for impracticability. *See accord* SWRCB Order No. 2002-0012 at pg. 20-21 (July 18, 2002)(“the
6 Regional Board must include a finding in the permit on remand explaining the impracticability of
7 weekly average limits.”); SWRCB Order No. 2002-0015 at pg. 56; *City of Woodland v. Regional*
8 *Water Quality Control Board for the Central Valley Region, and SWRCB, Case No. RG04-188200,*
9 *Statement of Decision at pg. 20.*

10 **E. The Regional Board Improperly Imposed Compliance Schedule Action**
11 **Plans in the CDO which are Overly Stringent.**

12 To the extent such a schedule still applies given the adoption of the Mercury Watershed
13 Permit, BACWA is concerned that having stringent schedules contained in the CDO for mercury
14 will eventually require the construction of capital facilities when BACWA has repeatedly been told
15 that building additional treatment is not the expected direction of the Bay Area water quality
16 program. BACWA was under the impression that the direction was to pursue regulatory
17 alternatives, such as TMDLs, site specific objectives, and pollution prevention (as described in the
18 implementation plan for the mercury TMDL). The CDO veers way off of this intended direction.

19 Also, the CDO contains a compliance schedule for mercury that has been banned for use,
20 cannot be source controlled, or for which wastewater treatment plant effluents have been identified
21 as non-significant sources. *See* CDO at pgs. 4-5. Additionally, mercury is already being addressed
22 through an alternative regulatory strategy that will appropriately resolve beneficial use concerns
23 for the San Francisco Bay. The compliance schedules in the CDO is overly burdensome for
24 mercury, as specified below:

25 The Regional Board has been in the process of developing a mercury TMDL for at least ten
26 years. The mercury TMDL recently approved by the EPA, Regional Board, and State Water
27 Board contains requirements that have been developed in a meaningful and deliberate way to
28 address the mercury issue holistically throughout the process of its development and deliberation.

1 Bay Area POTWs are ready to implement the mercury TMDL through activities that will address
2 impairment in San Francisco Bay. This is in contrast to the requirements in the CDO that mandate
3 extensive actions, including significant expenditures of public funds, within the next year. This
4 timeline is completely unreasonable given the history of the TMDL process and the insignificant
5 contribution of mercury by municipal wastewater treatment plants to San Francisco Bay.
6 Furthermore, this schedule should be in the Permit, not a separate CDO, as the Basin Plan provides
7 adequate compliance schedule authority.

8 For these reasons, the compliance schedule in the CDO should be revised to remove all
9 activities related to installation of capital improvements. In addition, any pollution prevention
10 activities should be identical to resolutions or orders already adopted by the Regional Board for
11 specific constituents. No new or different activities should be required for these constituents.

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

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

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

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

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

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

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

26 Petitioner seeks an Order by the State Board that will remand Order Nos. R2-2008-0005 and
27 R2-2008-0006 to the Regional Board for revisions and will direct the Regional Board to:

- 28 A. Remove the numeric effluent limits for mercury;

- 1 B. Remove the final effluent limits for mercury;
2 C. Remove the concentration limits for mercury;
3 D. Remove daily maximum effluent limitations where the Regional Board failed to
4 conduct an impracticability analysis; and
5 E. Revise the compliance schedule action plan for mercury to (1) remove all activities
6 related to installation of capital improvements and (2) ensure that any pollution
7 prevention activities are identical to resolutions or orders already adopted by the
8 Regional Water Board.

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

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

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

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

26 A true and correct copy of this Petition was mailed by First Class mail on November 30,
27 2007, to the Discharger, and to the Regional Board at the following address:

28 Bruce Wolfe, Executive Officer
California Regional Water Quality Control Board,

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San Francisco Region
1515 Clay Street, Suite 1400
Oakland, California 94612

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

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

10. PETITIONER'S REQUEST FOR ABEYANCE:

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

DATED: February 29, 2008

Respectfully submitted,


Adam Friedman
DOWNEY BRAND LLP
BACWA Special Counsel

EXHIBIT A



California Regional Water Quality Control Board

San Francisco Bay Region



Linda S. Adams
Secretary for
Environmental Protection

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
<http://www.waterboards.ca.gov/sanfranciscobay>

Arnold Schwarzenegger
Governor

ORDER NO. R2-2008-0005
NPDES NO. CA0037885

WASTE DISCHARGE REQUIREMENTS FOR CONTRA COSTA COUNTY SANITATION DISTRICT NO. 5 PORT COSTA, CONTRA COSTA COUNTY

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

Table 1. Discharger Information

| | |
|-------------------------|---|
| Discharger | Contra Costa County Sanitation District No. 5 |
| Name of Facility | Port Costa Wastewater Treatment Plant |
| Facility Address | End of Canyon Lake Drive |
| | Port Costa, CA 94569 |
| | Contra Costa County |

The discharge by Contra Costa County Sanitation District No. 5 from the discharge point identified below is subject to waste discharge requirements as set forth in this Order:

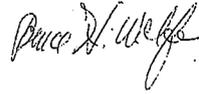
Table 2. Discharge Location

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|-----------------|---------------------------------|--------------------------|---------------------------|------------------|
| 001 | Secondary treated POTW Effluent | 38°, 02', 55" N | 122°, 10', 56" W | Carquinez Strait |

Table 3. Administrative Information

| | |
|---|-------------------------|
| This Order was adopted by the Regional Water Quality Control Board on: | January 30, 2008 |
| This Order shall become effective on: | April 1, 2008 |
| This Order shall expire on: | March 31, 2013 |
| The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a minor discharge. | |
| The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the Order expiration date as application for issuance of new waste discharge requirements. | |

I, Bruce H. Wolfe, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on January 30, 2008.



Digitally signed
by Bruce Wolfe
Date: 2008.01.31
16:18:58 -08'00'

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 site 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: Requirement for Priority Pollutant Monitoring in Receiving Water and Wastewater Discharges
- Regional Water Board Resolution 74-10

I. FACILITY INFORMATION

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

Table 4. Facility Information

| | |
|---|---|
| Discharger | Contra Costa County Sanitation District No. 5 |
| Name of Facility | Port Costa Wastewater Treatment Plant |
| Facility Address | End of Canyon Lake Drive |
| | Port Costa, California 94569 |
| | Contra Costa County |
| Facility Contact, Title, and Phone | Warren Lai, Associate Civil Engineer, (925) 313-2180 |
| Mailing Address | 255 Glacier Drive Martinez, CA 94553 |
| Type of Facility | Publicly Owned Treatment Works |
| Facility Design Flow | 0.033 million gallons per day (mgd, average dry weather capacity) |

II. FINDINGS

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

A. Background. The Contra Costa County Sanitation District No. 5 (hereinafter the Discharger) is currently discharging pursuant to Order No. R2-2003-0009 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037885. The Discharger submitted a Report of Waste Discharge, dated June 29, 2007, and applied for an NPDES permit reissuance to discharge up to 0.033 mgd of treated wastewater from the Port Costa Wastewater Treatment Plant (WWTP). The application was deemed complete on October 10, 2007. In addition, the Discharger is under Time Schedule Order R2-2005-0057, which requires treatment plant upgrades.

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

B. Facility Description. The Discharger owns the Port Costa WWTP and collection system, which is operated by a contract operating service (at this time, HS Operating Services, 3 Rolph Park Ct., Crockett, CA 94525). Attachment B provides a map of the area and the facility. The facility provides secondary treatment of wastewater from domestic and, to a lesser extent, commercial sources within the community of Port Costa. The Discharger owns the sewer collection system, which consists of a few miles of terra-cotta pipe, although the collection system is maintained by the operator.

The facility has a current dry weather design treatment capacity of 0.033 mgd. The Discharger reported a daily average flow of 0.02 mgd from April 2003 through April 2007 and a maximum daily flow rate of 0.14 mgd during that period.

Wastewater from the community of Port Costa is conveyed by gravity to an 86,000 gallon capacity, baffled septic tank where primary sedimentation occurs. From the septic tank, the primary-treated wastewater flows by gravity to a wet well where it mixes with treated wastewater from the sand/gravel filter beds at a ratio of approximately four or five parts of treated wastewater to one part primary-treated septic tank effluent. After mixing, the treated wastewater is pumped to a dosing structure, which distributes the treated wastewater to sand/gravel filter beds. From the sand/gravel beds, a portion of the treated wastewater is routed back to the wet well to mix with primary-treated septic tank effluent. The remaining treated wastewater flows over a V-notch weir into a contact chamber, where it is chlorinated and then dechlorinated with sulfur dioxide. The treatment facility flow schematic is shown in Attachment C.

Treated, dechlorinated wastewater is discharged from Discharge Point 001 through a submerged outfall and diffuser to the Carquinez Strait, a water of the United States. The diffuser is located approximately 60 feet offshore, at a depth of about 17.5 feet below mean lower low water at 38° 02' 55" N. Latitude, 122° 10' 56" W. Longitude.

The Discharger removes solids from its septic tank for disposal at a septage tank receiving station (e.g., Central Contra Costa Sanitary District WWTP in Martinez, CA).

All storm water captured within the wastewater treatment plant storm drain system is directed to the headworks of the treatment plant and treated to the standards contained in this Order. The facility is therefore exempt from coverage under the Statewide Industrial Storm Water Permit (NPDES General Permit No. CAS000001).

- C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the CWC (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. Attachments A through G, which contains background information and rationale for Order requirements, are hereby incorporated into this Order and thus constitutes part of the Findings for 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, Public Resources Code sections 21100-21177.
- F. Technology-Based Effluent Limitations.** CWA section 301(b) and NPDES regulations at 40 CFR §122.44(a) require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR §133 and Table 4.2 of the Basin Plan. A detailed discussion of the development of technology-based effluent limitations is included in the Fact Sheet (Attachment F).
- G. Water Quality-Based Effluent Limitations.** CWA section 301(b) and NPDES regulations at 40 CFR §122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. NPDES regulations at 40 CFR §122.44(d)(1)(i) mandates 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) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR §122.44(d)(1)(vi).
- H. Water Quality Control Plans.** *The Water Quality Control Plan for the San Francisco Bay Basin* (the Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface

waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board (State Water Board), USEPA, and the Office of Administrative Law, as required.

Beneficial uses applicable to Carquinez Strait are as follows.

Table 5. Basin Plan Beneficial Uses

| Discharge Point | Receiving Water Name | Beneficial Use(s) |
|-----------------|----------------------|---|
| 001 | Carquinez Strait | Ocean, Commercial, and Sport Fishing (COMM) Estuarine Habitat (EST) Industrial Service Supply (IND) Fish Migration (MIGR) Navigation (NAV) Preservation of Rare and Endangered Species (RARE) Water Contact Recreation (REC1) Non-Contact Water Recreation (REC2) Fish Spawning (SPWN) Wildlife Habitat (WILD) |

Requirements of this Order specifically implement the Basin Plan.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, 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 (WQC) 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 the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric

limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement new or revised WQOs. This Order does not include any compliance schedules or interim effluent limitations.

L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. [65 Fed. Reg. 24641 (April 27, 2000) (codified at 40 CFR §131.21)]. 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 both technology-based and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on total suspended solids (TSS), biochemical oxygen demand (BOD₅), pH, and oil and grease. Establishment of these technology-based limitations is discussed in the Fact Sheet (Attachment F). This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the federal, technology based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR §131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants 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 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 the 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 requirements of the CWA.

N. Antidegradation Policy. NPDES regulations at 40 CFR §131.12 require 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 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 provisions of 40 CFR §131.12 and State Water Board Resolution No. 68-16.

O. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050

to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

- P. Anti-Backsliding Requirements.** CWA sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR §122.44(i) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed in the Fact Sheet this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- Q. Monitoring and Reporting.** NPDES regulations at 40 CFR §122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize 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.
- R. 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 (Attachment F).
- S. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.C, IV.D, 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; and consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- T. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements (WDRs) for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

IT IS HEREBY ORDERED, Order No. R2-2003-0009 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted 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.

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. Following completion of all requirements of Time Schedule Order No. R2-2005-0057 and approval by the Executive Officer, the average dry weather flow shall not exceed 0.033 mgd. Until completion of these requirements, the dry weather flow shall not exceed 0.025 mgd. The average dry weather flow shall be determined for compliance with this prohibition over three consecutive dry weather months each year.
- C. Discharge of treated wastewater into Carquinez Strait, at any point where it does not receive an initial dilution of at least 10:1, is prohibited.
- D. The bypass of untreated or partially treated wastewater to waters of the United States is prohibited, except as provided for in the conditions stated in 40 CFR §122.41(m)(4) and in section A.13 of the *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (Attachment G).
- E. Any sanitary sewer overflow that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Effluent Limitations for Conventional Pollutants

- a. The discharge of secondary treated wastewater to Carquinez Strait shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location E-001, as described in the attached Monitoring and Reporting Program (Attachment E). The discharge from Discharge Point 001 shall not exceed the following limitations.

Table 6. Conventional Effluent Limitations for Discharge Point 001

| Parameter | Units | Effluent Limitations | | | | |
|---|----------------|----------------------|----------------|---------------|-----------------------|-----------------------|
| | | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
| Oil and Grease | mg/L | 10 | --- | 20 | --- | --- |
| pH ⁽¹⁾ | Standard units | --- | --- | --- | 6.0 | 9.0 |
| Total Suspended Solids (TSS) | mg/L | 30 | 45 | --- | --- | --- |
| Biochemical Oxygen Demand, 5-day @ 20°C (BOD ₅) | mg/L | 30 | 45 | --- | --- | --- |
| Total Chlorine Residual ⁽²⁾ | mg/L | --- | --- | --- | --- | 0.0 |

Footnotes for Table 6:

- (1) If the Discharger monitors pH continuously, pursuant to 40 CFR §401.17, the Discharger shall be in compliance with the pH limitation specified herein, provided that both of the following conditions are satisfied: (i) the total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the range of pH values shall exceed 60 minutes;
- (2) 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*. The Discharger may elect to use a continuous on-line monitoring system(s) for measuring flows, sodium hypochlorite, and sodium bisulfite dosage (including a safety factor) and concentration to prove that chlorine residual exceedances are false positives. If convincing evidence is provided, Regional Water Board staff may conclude that these false positive chlorine residual exceedances are not violations of the effluent limitation established by the Order.

- b. **BOD and TSS 85% Percent Removal:** The average monthly percent removal of BOD and TSS values, by concentration, shall not be less than 85 percent.
- c. **Total Coliform Bacteria:** The five-sample median total coliform density shall not exceed 240 MPN/100 ml and the daily maximum value shall not exceed 10,000 MPN/100 ml at E-001.

2. Effluent Limitations for Toxic Substances

- a. The Discharger shall maintain compliance with the effluent limitations listed in Table 7 for toxic pollutants, at Discharge Point 001, with compliance measured at Monitoring Location E-001 as described in the attached MRP (Attachment E).

Table 7. Effluent Limitations for Toxic Substances ⁽¹⁾⁽³⁾

| Parameter | Units | Effluent Limits | |
|-----------------------|--------|-----------------|---------------|
| | | Average Monthly | Maximum Daily |
| Cadmium | µg/L | 6.7 | 18 |
| Copper ⁽²⁾ | µg/L | 73 | 150 |
| Mercury | µg/L | 0.020 | 0.041 |
| Total Ammonia | mg/L N | 13 | 33 |

Footnotes for Table 7:

- (1) (a) All analysis shall be performed using current U.S. EPA approved methods, or equivalent methods approved in writing by the Executive Officer.
 (b) Limitations apply to the average concentration of all samples collected during the averaging period (daily = 24-hour period; monthly = calendar month).
 (c) All metals limitations are expressed as total recoverable metal.
- (2) Alternate Effluent Limits for Copper:
 (a) If a copper Site Specific Objective (SSO) for the receiving water becomes legally effective, resulting in an adjusted saltwater Criterion Continuous Concentration (CCC) of 2.5 µg/l and a Criterion Maximum Concentration (CMC) of 3.9 µg/l as documented in *North of Dumbarton Bridge Copper and Nickel Site-Specific Objective (SSO) Derivation* (Clean Estuary Partnership, December 2004), upon its effective date, the following limitations shall supersede those copper limitations listed in Table 7 (the rationale for these effluent limitations can be found in the Fact Sheet (Attachment F)).
 MDEL = 120 µg/L, and AMEL = 58 µg/L.
 If a different copper SSO for the receiving water is adopted, alternate WQBELs based on the SSO will be determined after the SSO effective date.
- (3) Minimum Levels. The Discharger shall achieve the following minimum levels for compliance determination purposes as defined in Section VII of this Order.

Table 8. Minimum Levels for Pollutants with Effluent Limitations

| Parameter | Units | Minimum Level |
|-----------|-------|---------------|
| Cadmium | µg/L | 0.25 or 0.5 |
| Copper | µg/L | 0.5 or 2 |
| Mercury | µg/L | 0.0005 |

b. Acute Toxicity:

- (1) Representative samples of the effluent at Discharge Point 001 shall meet the following limits for acute toxicity. Bioassays shall be conducted in compliance with Section V.A of the Monitoring and Reporting Program (MRP, Attachment E).

The survival of organisms in undiluted effluent shall be a three (3) sample median value of not less than 90 percent survival, and a single (1) sample value of not less than 70 percent survival.

- (2) These acute toxicity limitations are further defined as follows:

3 sample median: Any bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if one of the past two or less bioassay tests also shows less than 90 percent survival.

1 sample limit: A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit.

- (3) Bioassays shall be performed using the most up-to-date USEPA protocol and the most sensitive species as specified in writing by the Executive Officer based on the most recent screening test results. Bioassays shall be conducted in compliance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms," currently 5th Edition (EPA-821-R-02-012), with exceptions granted to the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP) upon the Discharger's request with justification.
- (4) If the Discharger can demonstrate to the satisfaction of the Executive Officer that toxicity exceeding the levels cited above is caused by ammonia and that the ammonia in the discharge is not exceeding effluent limitations, then such toxicity does not constitute a violation of this effluent limitation.

B. Interim Effluent Limitations

Not Applicable

C. Land Discharge Specifications

Not Applicable

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 discharge shall not cause the following in the Carquinez Strait:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foams;
 - b. Suspended sediment, dissolved solids, settleable material that results in bottom deposition or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

- d. Concentrations of taste- or odor-producing substances that impart undesirable tastes or odors to fish flesh or other edible products of aquatic organisms, or otherwise adversely affect beneficial use;
 - e. Visible, floating, suspended, or deposited oil and other products of petroleum origin; and
 - f. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State within one foot of the water surface:
- a. Dissolved Oxygen 7.0 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 Not to exceed natural background levels
 - c. pH Within 6.5 and 8.5
 - d. Nutrients: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

B. Groundwater Limitations

Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. **Regional Water Board Standard Provisions.** The Discharger shall comply with all applicable items of the *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (Attachment G), including any amendments thereto. Where provisions or reporting requirements specified in this Order are different from equivalent or related provisions or reporting requirements given in the Standard Provisions in

Attachment D, the specifications of this Order and/or Attachment G shall apply in areas where those provisions are more stringent. Duplicative requirements in the federal Standard Provisions in VI.A.1, 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. This Discharger shall also comply with the requirements contained in *Self Monitoring Programs, Part A*, August 1993 (Attachment G).

C. Special Provisions

1. Reopener Provisions

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

- a. If present or future investigations demonstrate that the discharge(s) governed by this Order will 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 Discharger shall include in any such request an antidegradation and antibacksliding analysis.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Effluent Characterization for Selected Constituents

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

accordance with the specifications stated in the Regional Water Board's August 6, 2001 Letter under Effluent Monitoring for Minor Dischargers.

The Discharger shall summarize the analytical results of the data collected to date and describe future monitoring to take place, based upon these results, in the annual report required by Part A of the Self-Monitoring Program (Attachment G). The first annual report under this Order is due with the annual Self-Monitoring Report, due February 1st of each year.

A final report that presents all the data shall be submitted to the Regional Water Board no later than 180 days prior to the expiration date of this Order. This final report shall be submitted with the application for permit reissuance. Reporting requirements under this section may be satisfied by: (a) monthly reporting using the electronic reporting system (ERS) or an equivalent electronic system required by the Regional Water Board or State Water Board, and (b) submittal of a complete application for permit reissuance no later than 180 days prior to the permit expiration date.

b. Optional Mass Offset

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

3. Best Management Practices and Pollution Minimization Program

a. Pollutant Minimization Program

The Discharger shall develop and implement, in a manner acceptable to the Executive Officer, a Pollutant Minimization Program (PMP) to reduce pollutant loadings to the treatment plant and therefore to the receiving waters. In addition, the Discharger shall implement any applicable pollutant minimization measures described by Basin Plan implementation requirements associated with site specific objectives (SSOs) for copper, if and when each of those SSOs become effective and alternate limitations take effect.

b. Annual Pollution Prevention 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