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9 BAY AREA CLEAN WATER AGENCIES



10 BEFORE THE
11 CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

12
13 In the Matter of the Bay Area Clean Water
14 Agencies' Petition for Review of Action and
15 Failure to Act by the California Regional Water
16 Quality Control Board, San Francisco Bay
17 Region, in Adopting Order No. R2-2009-0032,
18 NPDES Permit No. CA0037834 and Waste
Discharge Requirements for the Palo Alto
Regional Water Quality Control Plant and the
City of Palo Alto's sewage collection system.

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

19 Petitioner Bay Area Clean Water Agencies ("BACWA"), in accordance with section 13320
20 of the Water Code, hereby petitions the State Water Resources Control Board ("SWRCB" or "State
21 Board") to review Order No. R2-2009-0032 of the California Regional Water Quality Control
22 Board, San Francisco Bay Region, ("RWQCB" or "Regional Board") reissuing National Pollution
23 Discharge Elimination System ("NPDES") Permit No. CA0037834 ("Permit") and Waste Discharge
24 Requirements for the Palo Alto Regional Water Quality Control Plant and the City of Palo Alto's
25 sewage collection system ("Palo Alto"). A copy of Order No. R2-2009-0032, adopted on April 8,
26 2009, is attached to this Petition as **Exhibit A**. The issues and a summary of the bases for the
27 Petition follow. At such time as the full administrative record is available and any other material
28

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

3 BACWA is a joint powers authority whose members own and operate publicly-owned
4 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 February 13, 2009, BACWA submitted written comments on the tentative versions of
14 the Permit. For the reasons contained herein, BACWA asserts that provisions contained in the
15 recently issued Permit for Palo Alto are improper and inappropriate. BACWA believes the issues
16 being raised are vitally important to Bay Area POTWs.

17
18 **1. NAME, ADDRESS, TELEPHONE, AND EMAIL FOR PETITIONER:**

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

27 _____
28 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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8 **2. THE SPECIFIC ACTION OF THE REGIONAL BOARD WHICH THE STATE BOARD IS REQUESTED TO REVIEW:**

9 BACWA seeks review of Order No. R2-2009-0032, reissuing NPDES Permit No. CA0037834 for Palo Alto. The specific requirements of the Permit that BACWA requests the State Board to review relate to the following:

- 10 A. Numeric-based effluent limits for dioxin-TEQ;
11 B. Daily maximum effluent limitations; and
12 C. Compliance schedule action plans for dioxin-TEQ.

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

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

22 The Regional Board adopted the Permit on April 8, 2009.
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27 ² Although the Permit at II.E. discusses an exemption from CEQA under Water Code §13389, that exemption is narrow, and only exempts Chapter 3. The remaining non-exempted parts of CEQA require all Regional Boards to consider the environmental consequences of their permitting actions, and to explore feasible alternatives and mitigation measures prior to the adoption of waste discharge requirements. *See, e.g.*, Cal. Pub. Res. Code §21002; 23 C.C.R. §3733 (stating that the exemption in §13389 "does not apply to the policy provisions of Chapter 1 of CEQA").
28

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

3 **A. The Regional Board Improperly Imposed Numeric Effluent Limitations for**
4 **Dioxin-TEQ.**

5 BACWA has been concerned about the imposition of numeric effluent limitations for dioxin
6 since the California Toxics Rule ("CTR") was promulgated, notwithstanding that regulations'
7 promise that the "rule would not impose undue or inappropriate burden on the State of California or
8 its dischargers." 65 Fed. Reg. 31,687 (May 18, 2000). BACWA was initially hopeful that the
9 United States Environmental Protection Agency's ("USEPA") prediction that costs to meet the CTR
10 criteria would be "unlikely to reach the high-end of the [cost] range because State authorities are
11 likely to choose implementation options that provide some degree of flexibility or relief to the point
12 source dischargers" was accurate; unfortunately, in practice, this has not been the case. *Id.* at
13 31,706. The purpose of this petition is to request that the State use its presumed flexibility when
14 issuing discharge permits where compliance with water quality criteria (whether these criteria are
15 CTR criteria or narrative objectives) has been demonstrated to be infeasible.

16 The Permit BACWA is appealing contains final and interim concentration limits for dioxin-
17 TEQ. *See* Permit at pgs. 13, 14. Similar limits were challenged by BACWA in previous
18 administrative and court appeals. Unfortunately, the Regional Board is not upholding some of the
19 holdings of those previous appeals. BACWA tried for several years to settle the outstanding
20 petitions on Bay Area POTW permits filed since 2000 by BACWA and others, but disagreement as
21 to legal requirements prevented consummation of a global settlement. Because these issues remain
22 as important today as they did nine years ago, or perhaps more important since the time for final
23 compliance with CTR criteria becomes shorter every day, BACWA continues to press for a final
24 ruling to re-incorporate the "flexibility or relief" promised over the years.

25 BACWA believes that the Regional Board included final numeric water quality-based
26 effluent limitations ("WQBELs") for dioxin-TEQ in the Permit that are contrary to the requirements
27 of the CWA and state law.³ In most cases, these numeric limitations have been demonstrated to be

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

1 infeasible to meet,⁴ and could result in the permitted entities having to construct expensive new
2 treatment facilities before June 1, 2019 in order to meet the final effluent limits, if the technology
3 even exists to provide such treatment. These treatment technologies far exceed the mandated
4 treatment requirements of the CWA and will likely become unnecessary once new water quality
5 objectives, site specific objectives, or TMDLs for this substance is in place and finally approved.⁵
6 Such a waste of resources is neither reasonable nor required (*see* Water Code §13000), and ignores
7 the fact that control of dioxin-TEQ may instead require a “carefully conceived, agency-approved,
8 long-term pollution control procedure for a complex environmental setting.” *Communities for a*
9 *Better Environment v. SWRCB*, 109 Cal.App.4th 1089, 1107 (2003) (“*Tesoro* case”). For these
10 reasons, BACWA challenges these limits as being contrary to federal and state law requirements.

11 1) Numeric Effluent Limitations are Not Required.

12 The Regional Board has imposed numeric WQBELs for various constituents in the Permit
13 based on 40 C.F.R. §122.44(d). *See* Permit at pgs. 13, 14. However, as explained below, section
14 122.44(d) does not require the imposition of *numeric* WQBELs.

15 EPA regulations require that “each NPDES permit shall include the following requirements
16 when applicable.” *See* 40 C.F.R. § 122.44 (emphasis added). Subsection (d) of this section
17 imposes “any requirements in addition to or more stringent than promulgated effluent limitations
18

19
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 guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of the CWA necessary to
2 achieve water quality standards established under Section 303 of the CWA, including State
3 narrative criteria for water quality . . .” 40 C.F.R. § 122.44(d) (emphasis added). The regulations
4 require the imposition of “requirements,” not numeric effluent limitations. Furthermore, when
5 numeric effluent limitations are infeasible, EPA regulations specifically authorize the use of Best
6 Management Practices (“BMPs”) and other non-numeric or narrative requirements in lieu of
7 numeric limits. 40 C.F.R. §122.44(k)(3); *see also* SWRCB Order No. WQ 2003-12 at pg. 9.
8 Alternatively, the Regional Board could have styled this Permit after recent permits in the Central
9 Valley Region, which have imposed final numeric limits, but stated that these limits do not apply if
10 the discharger undertakes certain actions. *See* Order Nos. R5-2007-0036 and R5-2007-0039. This
11 approach, which USEPA did not veto, takes a creative approach to dealing with infeasible final
12 limits without the necessity of compliance schedules.

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

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

28

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

6 2) Dioxin-TEQ Limits

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

8 <u>AMEL (µg/L)</u>	<u>MDEL (µg/L)</u>	<u>Effective Date</u>
9 1.4 x 10 ⁻⁸	2.8 x 10 ⁻⁸	6/01/2019

10 The CTR did not promulgate numeric water quality criteria for dioxin-TEQ, only for
11 2,3,7,8-tetrachlorodibenzo-p-dioxin (“2,3,7,8-TCDD”). In addition, no aquatic life criteria were
12 promulgated in the CTR or the Basin Plan for dioxin-TEQ. Only a human-health criteria for
13 municipal (“Water & Organisms”), and non-municipal drinking water supply waters (e.g.,
14 “Organisms Only”) were set at 0.000000013 and 0.000000014 µg/L, respectively, based on a
15 carcinogenicity risk of 1x10⁻⁶. 40 C.F.R. §131.38(b)(1)(#16). These figures are based on an
16 assumed exposure pathway of consumption of 6.5 grams per day of organisms from the Bay that
17 are contaminated at a level equal to the criteria concentration, but multiplied by a
18 “bioconcentration factor.” 65 Fed. Reg. 31,693 (May 18, 2000). This amount can be consumed
19 over a lifetime (70 years) without expecting an adverse effect. *Id.* However, current detection
20 technologies cannot measure to these levels.

21 Neither the Permit nor the accompanying Fact Sheet demonstrated reasonable potential for
22 2,3,7,8-TCDD. *See* Permit at pg. F-24. However, the same table containing the reasonable
23 potential analysis (“RPA”) shows reasonable potential (“RP”) for dioxin-TEQ, even though no
24 adopted water quality criteria or objective exists for dioxin-TEQ upon which a RPA could be
25
26
27

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

1 performed.⁷ The Regional Board's action in finding reasonable potential in the absence of
2 applicable numeric water quality criteria was unreasonable, in violation of Water Code §13000,
3 and 40 C.F.R. §122.44(d).

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

6 To determine if the discharge of dioxin or dioxin-like compounds from the discharge has
7 reasonable potential to cause or contribute to a violation of the Basin Plan's narrative
8 bioaccumulation WQO, Regional Water Board staff used TEFs [Toxic Equivalent
9 Factors] to express the measured concentrations of 16 dioxin congeners in effluent and
10 background samples as 2,3,7,8-TCDD. These "equivalent" concentrations were then
11 compared to the CTR numeric criterion for 2,3,7,8-TCDD (1.4×10^{-8} µg/L). Although the
12 1998 WHO scheme includes TEFs for dioxin-like PCBs, they are not included in this
13 Order's version of the TEF procedure. The CTR has established a specific WQS for
14 dioxin-like PCBs, and they are included in the analysis of total PCBs.

15 *See* Permit at pg. F-30. Given that 11 years have passed since the TEFs were first adopted by the
16 World Health Organization, it is unreasonable for the Regional Board to continue to use a broad
17 narrative objective and not adopt numeric objectives and an implementation plan through a formal
18 rulemaking process as required by Water Code §13241 and §13242, and the triennial review
19 process required by CWA section 303, 33 U.S.C. §1313(c) and (e). The use of a narrative
20 objective to indefinitely skirt state law requirements also ignores the congressional mandate that
21 water quality standards criteria "shall be specific numeric criteria for such toxic pollutants." 33
22 U.S.C. §1313(c)(2)(B) (emphasis added).

23 Moreover, the Permit mixes criteria in order to create a finding of RP. The Permit states
24 that "because the MEC (4.1×10^{-8} µg/L) exceeds the applicable WQC (1.4×10^{-8} µg/L)," this
25 somehow demonstrates RP. *See* Permit at pg. F-30 para. (4)(ii). The Regional Board should not
26 be allowed to mix and match 2,3,7,8-TCDD and dioxin-TEQ in order to find RP; they must use
27 each independently, taking into account the different TEF values for each cogener, in order to
28 properly determine RP. The Regional Board did not do this, and these limits should be
overturned.

⁷ It should be noted that this is contrary to the RPA for other constituents where the Permit states "No Criteria" in the

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

4 In adopting a numeric effluent limitation for dioxin-TEQ, the Regional Board attempted to
5 justify its actions by claiming that the applicable water quality objectives specified in the Basin Plan
6 require limits to protect against unsafe levels of dioxin in the fatty tissue of fish and other
7 organisms. See Permit at pg. F-29-30. The Basin Plan contains no numeric objectives specifically
8 set to define acceptable levels of these constituents in fish tissue or sediment, and the CTR only set
9 numeric criteria for 2,3,7,8-TCDD, not for all the congeners of dioxins. Thus, the Regional Board
10 improperly relied upon the Basin Plan's narrative objective for Bioaccumulation to justify limits for
11 dioxin-TEQ.

12 In addition, the Regional Board improperly lumped together all of the congeners of dioxin
13 and furans. Had the RPA been done on each individual congener, most if not all would not show
14 reasonable potential because of the varying TEF for each. See Permit at pg. F-30. However,
15 pooling all of the congeners together creates an unnecessary finding of reasonable potential for all
16 congeners. The Regional Board's inclusion of an effluent limit for dioxin-TEQ based on all of the
17 congeners of dioxins and furans improperly ignores that the congeners do not create reasonable
18 potential. Imposition of limits on congeners without reasonable potential violates the specific
19 mandates of the Basin Plan and federal regulations.⁸

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

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

28 table instead of inserting a non-promulgated criteria. See Permit at pg. F-24-26.

⁸ 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 Permit at pg. F-26, para. D.3.f.

1 (emphasis added). Courts have acknowledged that the presence of dioxin may be beyond the
2 Discharger's control. *See, e.g., Communities for a Better Environment*, 109 Cal.App.4th at 1096

3 ("Dioxins are not produced intentionally. They are formed as undesired
4 byproducts of combustion and the manufacture and use of certain chlorinated
5 chemical compounds. They exist in the environment worldwide, particularly in
6 air, water, soils, and sediments. They enter the atmosphere through aerial
7 emissions and widely disperse through a number of processes, including erosion,
8 runoff, and volatilization from land or water. For example, automobile exhaust is
9 a common source of dioxins.").

10 Therefore, control of all of these sources is not within the jurisdiction of Palo Alto. Because the
11 minimal contribution of dioxin-TEQ by Palo Alto's POTW is not a "controllable water quality
12 factor" that is causing a "detrimental increase in concentrations of toxic substances found in bottom
13 sediments or aquatic life," imposing a limit for dioxin-TEQ is neither necessary nor based upon the
14 findings and evidence.

15 Additionally, a numeric effluent limitation can only be imposed through a narrative water
16 quality objective if the narrative objective contains an appropriate mechanism to "translate" the
17 narrative requirement (*i.e.*, to translate a narrative objective into a concentration or mass effluent
18 limitation).⁹ In order for a numeric limit derived from a narrative objective to be appropriate, the
19 derivation of the numeric limit must be transparent. A clear explanation of the translation from the
20 narrative water quality objective must be set forth in the NPDES permit.¹⁰ *See* 40 C.F.R.

21 ⁹ Federal regulations mandate that "[w]here a State adopts narrative criteria for toxic pollutants to protect designated
22 uses, the State must provide information identifying the method by which the State intends to regulate point source
23 dischargers of toxic pollutants on water quality limited segments based on such narrative criteria. Such information
24 may be included as part of the standards . . ." 40 C.F.R. §131.11(a)(2). Since the Basin Plan's narrative objective for
25 Bioaccumulation does not contain an appropriate translation mechanism, the only conclusion can be that subjective,
26 arbitrary, or wholly inapplicable WQBELs for dioxin-TEQ have been imposed in the Permit. The rationale in the
27 *EBMUD* Order, SWRCB Order No. WQ 2002-0012 at pgs. 6-7 does not apply in this case, since the dioxin-TEQ limits
28 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>.

¹⁰ In EPA's official guidance documents, EPA explains at length the process the State must go through to implement an
adequate translator mechanism. *See* EPA Water Quality Standards Handbook at 3-13 to 3-26 (1994). Among other
things, EPA provides that a State's translator procedure for narrative criteria should specifically describe:

- specific, scientifically defensible methods by which the state will implement its narrative toxicity standard for all priority pollutants;
- how these methods will be integrated into the State's priority pollutant control program;
- methods the State will use to identify those pollutants to be regulated in a specific discharge;
- an incremental cancer risk for carcinogens;

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.

7 Moreover, the Permit fails to show that dioxin-TEQ levels in the discharge have caused a
8 detrimental impact in concentrations of toxic substances found in bottom sediments or aquatic life.
9 Without such a showing, no limits may be imposed under the narrative bioaccumulation objective.

10 b) Meeting the Dioxin Concentration Limit is Not Feasible

11 As stated above, dioxins enter the environment from a variety of sources, primarily
12 combustion sources. See *Communities for a Better Environment*, 109 Cal. App. 4th at 1096
13 (“automobile exhaust is a common source of dioxins.”). Further, the Regional Board has concurred
14 with Palo Alto that compliance with the dioxin-TEQ limits is infeasible. See Permit at pg. F-30.
15 For these reasons, numeric effluent limitations were not required and represent an abuse of
16 discretion.¹¹

17 **B. The Regional Board Improperly Included Daily Maximum Effluent**
18 **Limitations.**

19 Where effluent limitations are authorized, federal regulations provide that for discharges
20 from POTWs, all permit effluent limits shall, unless impracticable, be stated as average weekly and

- 21
- 22 ▪ methods for identifying compliance thresholds in permits where calculated limits are below detection;
 - 23 ▪ methods for selecting appropriate hardness, pH, and temperature variables for criteria expressed as functions;
 - 24 ▪ methods or policies controlling the size and in-zone quality of mixing zones;
 - 25 ▪ design flows to be used in translating chemical-specific numeric criteria for aquatic life and human health into permit limits; and
 - 26 ▪ other methods and information needed to apply standards on a case-by-case basis.

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

28 ¹¹ The Regional Board should have done what it did in the Vallejo permit, Order No. R2-2006-0056, which was to state: “Due to the limited monitoring data, no dioxin limits (final or interim) are established. The final limits for dioxin TEQ will be based on the WLA assigned to the Discharger in the TMDL. This Order requires additional dioxin 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.

1 average monthly discharge limitations.¹² 40 C.F.R. § 122.45(d)(2). The Permit contains several
2 unsupported daily maximum limits, including, among others, the limit for dioxin-TEQ. *See* Permit
3 at pg. 13.

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

13 The second justification also fails. *See* Permit at pg. F-20, para. D.1.B.(2). The State
14 Implementation Policy (SIP) did not change the federal requirements. In enacting the SIP, the State
15 Board may have attempted to modify the federal regulatory prohibition on the use of daily
16 maximum limits for POTWs by stating: “For this method only [referring to limits for aquatic life
17 protection] maximum daily effluent limitations shall be used for publicly-owned treatment works
18 (POTWs) in place of average weekly limitations.” SIP at 8, §1.4. However, prior to authorizing the
19 use of daily maximum limitations in POTW permits for compliance with aquatic life criteria in the
20 SIP, the State Board did not make the required demonstration that the imposition of average weekly
21 and average monthly effluent limitations for the protection of aquatic life was “impracticable” per
22 the requirements of 40 C.F.R. §122.45(d). Therefore, the State Board’s authorization of daily
23 maximum limitations for compliance with aquatic life criteria does not meet federal requirements or
24 California Water Code Chapter 5.5 requirements for consistency with federal requirements. As
25 such, the Regional Board should remove all daily maximum effluent limitations based on aquatic
26 life criteria.

27
28 ¹² 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 Further, the State Board did not include in the SIP the same language purportedly allowing
2 for the inclusion of daily maximum limitations in POTW permits for effluent limitations based upon
3 technological requirements (for conventional pollutants) or upon human health criteria. Therefore,
4 even if the SIP provisions pertaining to maximum daily limits for aquatic life criteria were valid, 40
5 C.F.R. §122.45(d) requires the Regional Board to remove all daily maximum interim and final
6 effluent limitations based on human health criteria or technological requirements. The criteria for
7 2,3,7,8-TCDD is human health-based. *See* 40 CFR §131.38(b)(1)(16). Thus, daily maximum limits
8 are not necessary.

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

14 Furthermore, at most, these justifications would address only limits based on acute aquatic
15 life criteria. However, the Regional Board did not include limits based on acute aquatic life
16 protection, rather, the limits for dioxin-TEQ are based on long-term chronic human exposure. *See*
17 *In the Matter of the Own Motion Review of the City of Woodland*, SWRCB Order No. WQ 2004-
18 0010 (holding that “implementing the limits as instantaneous maximums appears to be incorrect
19 because the criteria guidance value . . . is intended to protect against chronic effects”).

20 Therefore, the Regional Board’s inclusion of daily maximum effluent limitations in the
21 Permit, without a specific, pollutant-by-pollutant impracticability analysis, violated 40 C.F.R.
22 §122.45(d)(2) and Water Code Chapter 5.5. By violating federal and state law, the Regional Board
23 proceeded without, or in excess of, its jurisdiction and has committed a prejudicial abuse of
24 discretion by not proceeding in a manner required by law. For these reasons, the State Board should
25 direct the Regional Board to remove the daily maximum effluent limitations not properly analyzed
26 for impracticability. *See accord* SWRCB Order No. 2002-0012 at pg. 20-21 (July 18, 2002) (“the
27 Regional Board must include a finding in the permit on remand explaining the impracticability of
28 weekly average limits.”); SWRCB Order No. 2002-0015 at pg. 56; *City of Woodland v. Regional*

1 *Water Quality Control Board for the Central Valley Region, and SWRCB, Case No. RG04-188200,*
2 *Statement of Decision at pg. 20.*

3 **C. The Regional Board Improperly Imposed A Compliance Schedule**
4 **Action Plan for Dioxin-TEQ in the Permit which is Overly Stringent.**

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

11 Also, this Permit contains a compliance schedule for dioxin-TEQ, which cannot be source
12 controlled, or for which wastewater treatment plant effluents have been identified as non-
13 significant sources. *See Permit at pg. 29-30.* Additionally, dioxin-TEQ is already being addressed
14 through an alternative regulatory strategy that will appropriately resolve beneficial use concerns
15 for the San Francisco Bay. The compliance schedule in the Permit is overly burdensome for
16 dioxin-TEQ, as specified below.

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

25 For these reasons, the action plans in the Permit should be revised to remove all activities
26 related to installation of capital improvements. In addition, any pollution prevention activities
27 should be identical to resolutions or orders already adopted by the Regional Board for specific
28 constituents. No new or different activities should be required for dioxin-TEQ.

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

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

12 BACWA is aggrieved by unreasonable permit prohibitions that may put Palo Alto in non-
13 compliance with the Permit. BACWA's membership will be aggrieved by any permit provisions
14 that cannot now or in the future be met as federal and state law provide harsh sanctions for non-
15 compliance with effluent limitations in a wastewater discharge permit. For example, California
16 Water Code §13385 prescribes mandatory minimum penalties of \$3,000 per day per violation, with
17 narrow exceptions. With this statute, the State has no latitude to excuse noncompliance with the
18 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 No. R2-2009-0032 to
15 the Regional Board for revisions and will direct the Regional Board to:

- 16 A. Remove the numeric effluent limits for dioxin-TEQ;
- 17 B. Remove daily maximum effluent limitations where the Regional Board failed to
18 conduct an impracticability analysis; and
- 19 C. Revise the compliance schedule action plan for dioxin-TEQ to (1) remove all
20 activities related to installation of capital improvements and (2) ensure that any
21 pollution prevention activities are identical to resolutions or orders already adopted
22 by the Regional Board.

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

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

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

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

13 A true and correct copy of this Petition was mailed by First Class mail on May 8, 2009, to
14 the Discharger, and to the Regional Board at the following address:

15 Bruce Wolfe, Executive Officer
16 California Regional Water Quality Control Board,
17 San Francisco Region
18 1515 Clay Street, Suite 1400
19 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 in this
24 permitting action through written comments.

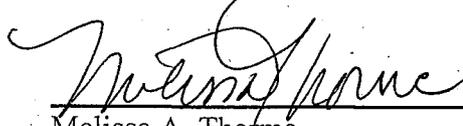
25 **10. PETITIONER'S REQUEST FOR ABEYANCE:**

26 Notwithstanding the vital importance of the issues contained herein, BACWA requests that
27 the State Board place BACWA's Petition for Review in abeyance pursuant to 23 C.C.R. §2050.5(d)
28 to allow time for BACWA to attempt to resolve its concerns with the Regional Board informally.

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DATED: May 7, 2009

Respectfully submitted,



Melissa A. Thorne
DOWNEY-BRAND LLP
BACWA Special Counsel

EXHIBIT A



Linda S. Adams
Secretary for
Environmental Protection

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

San Francisco Bay Region
1515 Clay Street, Suite 1400, Oakland CA 94612
(510) 622-2300 • Fax (510) 622-2460
http://www.waterboards.ca.gov/sanfranciscobay



Arnold Schwarzenegger
Governor

**ORDER NO. R2-2009-0032
NPDES PERMIT NO. CA0037834**

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

Table 1. Discharger Information

Discharger	City of Palo Alto
Name of Facility	Palo Alto Regional Water Quality Control Plant and City of Palo Alto's sewage collection system
Facility Address	2501 Embarcadero Way
	Palo Alto, CA 94303
	Santa Clara County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the facility, consisting of the Palo Alto Regional Water Quality Control Plant and the City of Palo Alto's sewage collection system, from the discharge points identified below are 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	Tertiary-treated municipal wastewater	37° 27' 30" N	122° 06' 37" W	South San Francisco Bay
002	Tertiary-treated municipal wastewater	37° 26' 30" N	122° 06' 45" W	Matadero Creek

Table 3. Administrative Information

This Order was adopted by the Regional Water Board on:	April 8, 2009
This Order shall become effective on:	June 1, 2009
This Order shall expire on:	May 31, 2014
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date

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 April 8, 2009.

Digitally signed
by Bruce Wolfe
Date: 2009.04.10
14:14:15 -07'00'

Bruce H. Wolfe, Executive Officer

Table of Contents

- I. Facility Information4
- II. Findings.....4
- III. Discharge Prohibitions.....11
- IV. Effluent Limitations and Discharge Specifications 11
 - A. Effluent Limitations for Conventional and Non-Conventional Pollutants – Discharge Points 001 and 002 11
 - B. Effluent Limitations for Toxic Pollutants – Discharge Points 001 and 002 12
 - C. Interim Effluent Limitation for Dioxin-TEQ 14
 - D. Whole Effluent Toxicity..... 14
 - 1. Whole Effluent Acute Toxicity:14
 - 2. Whole Effluent Chronic Toxicity..... 15
 - E. Land Discharge Specifications 16
 - F. Reclamation Specifications 16
- V. Receiving Water Limitations16
 - A. Surface Water Limitations..... 16
 - B. Groundwater Limitations 17
- VI. Provisions.....17
 - A. Standard Provisions 17
 - B. MRP Requirements 17
 - C. Special Provisions 18
 - 1. Reopener Provisions..... 18
 - 2. Special Studies, Technical Reports and Additional Monitoring Requirements..... 18
 - 3. Best Management Practices and Pollutant Minimization..... 22
 - 4. Construction, Operation and Maintenance Specifications 24
 - 5. Special Provisions for POTWs..... 25
 - 6. Other Special Provisions 28
- VII. Compliance Determination30
 - A. General 30
 - B. Multiple Sample Data..... 31

List of Tables

- Table 1. Discharger Information..... 1
- Table 2. Discharge Location 1
- Table 3. Administrative Information 1
- Table 4. Facility Information 4
- Table 5. Beneficial Uses of South San Francisco Bay and Matadero Creek..... 8
- Table 6. Effluent Limitations for CBOD, TSS, Oil and Grease, pH, Total Chlorine Residual, and Turbidity – Discharge Points 001 and 002 12
- Table 7. Effluent Limitations for Toxic Pollutants^(1, 2) 13
- Table 8. MLs for Pollutants with Effluent Limitations..... 13
- Table 9. Interim Effluent Limitation for Dioxin-TEQ..... 14
- Table 10. Receiving Water Ammonia Characterization Study Tasks and Schedule..... 20
- Table 11. Optional Site-Specific Translator Study Tasks and Schedules..... 21
- Table 12. Cyanide Action Plan 28
- Table 13. Copper Action Plan..... 29
- Table 14. Dioxin-TEQ Compliance Schedule 29

Attachments

Attachment A – Definitions A-1
Attachment B – Facility Map B-1
Attachment C – Process Flow Diagram C-1
Attachment D – Federal Standard Provisions D-1
Attachment E – Monitoring and Reporting Program (MRP) E-1
Attachment F – Fact Sheet F-1
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: *Requirement for Priority Pollutant Monitoring in Receiving Water and Wastewater Discharges*
- Regional Water Board Resolution No. 74-10
Attachment H – Pretreatment Requirements H-1
Attachment I – Actions to Meet the Requirements of State Water Board Order No. WQ 90-5 I-1

I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	City of Palo Alto
Name of Facility	Palo Alto Regional Water Quality Control Plant (Plant) and City of Palo Alto's sewage collection system
Facility Address	2501 Embarcadero Way
	Palo Alto, CA 94303
	Santa Clara County
Facility Contact, Title, and Phone	Phil Bobel, Environmental Compliance Division Manager, (650) 329-2285
Mailing Address	Same as Facility Address
Type of Facility	Publicly Owned Treatment Works (POTW)
Facility Design Flow	39 million gallons per day (MGD) (average dry weather flow design capacity with full tertiary treatment)
	80 MGD (peak wet weather flow design capacity with full secondary treatment)
Service Areas	Cities of Los Altos, Los Altos Hills, Palo Alto, and Mountain View; East Palo Sanitary District; and the unincorporated area of the Stanford University Campus
Service Area Population	228,500

II. FINDINGS

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

A. Background. The City of Palo Alto (hereinafter the Discharger) owns and operates the Palo Alto Regional Water Quality Control Plant (Plant). The discharge of treated wastewater from the Plant has been regulated under Order No. R2-2003-0078 (previous Order) and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037834. The Discharger submitted a Report of Waste Discharge (ROWD), dated March 27, 2008, and applied for reissuance of its NPDES permit to discharge tertiary treated wastewater from the Plant to waters of the State and the United States.

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 and Discharge Description

1. **Facility Description.** The Plant is located at 2501 Embarcadero Way, Palo Alto, Santa Clara County. The Plant provides tertiary treatment of domestic, commercial and industrial wastewater collected from its service areas indicated in Table 4, above. The current total service area population is approximately 228,500.

Wastewater treatment processes at the Plant include screening and grit removal, primary sedimentation, fixed film reactors, activated sludge treatment, secondary clarification, dual-media filtration, chloramine disinfection, and dechlorination. The design capacity of the fixed film reactors and the dual media filters is 40 MGD, such that the fixed film reactors treat the

first 40 MGD, and any flow in excess of this flow is routed around these units, where it is blended with fixed film reactor effluent and routed to the activated sludge units. Similarly, any excess flow above 40 MGD is routed around the dual-media filters and blended with filter effluent prior to disinfection and dechlorination.

The Discharger's collection system is a 100% separate sanitary sewer. It consists of approximately 207 miles of pipes ranging from 4 inches to 72 inches in diameter, and one small lift station.

2. **Discharge Description.** The Plant has an average dry weather flow design capacity of 39 MGD with full tertiary treatment, and a peak wet weather flow capacity of 80 MGD with full secondary treatment. The average dry weather flow, based on flows from June through October, was 23.4 MGD during 2004–2007; the average daily effluent flow rate was 24.8 MGD, based on flow data during 2003–2008; and the maximum single day effluent flow rate during 2003–2008 was 46.4 MGD. Approximately 95% of the treated wastewater is discharged to an unnamed manmade channel, tributary to South San Francisco Bay, through outfall 001 (Latitude 37° 27' 30" and Longitude 122° 06' 37"). Approximately 5% of the treated wastewater is discharged to the Renzel Marsh Pond through outfall 002 (Latitude 37° 26' 30" and Longitude 122° 06' 45"), where the treated wastewater flows via a controlled outfall to Matadero Creek. The discharge to the Renzel Marsh Pond is a reclamation project that supports a habitat restoration project initiated by the Discharger to enhance a habitat area cut off from freshwater and saltwater inflow by a series of levees and roads built in the early and mid-1900s. The project created a 15-acre freshwater pond with treated effluent, which does not receive flows from other sources, such as storm water or inflow from Matadero Creek. Because Renzel Marsh Pond is exclusively maintained by the Plant's discharge and has a controlled outfall to Matadero Creek, it is not a water of the State or United States. Therefore, the receiving water for outfall 002 is Matadero Creek. Both the unnamed channel and Matadero Creek are waters of the United States.
3. **Biosolids Management.** Solids handling consists of four gravity sludge thickeners (three operational, one not mechanically equipped, two typically in service, and one stand-by) and three belt presses. Dewatered sludge is incinerated on site. Ash is hauled offsite to a hazardous waste landfill. Wet air pollution controls for the incinerator generate approximately 1 MGD of wastewater that is routed to the headworks prior to the bar screens.
4. **Reclamation Activities.** Approximately 0.25 MGD of tertiary-treated, chloraminated wastewater undergoes additional filtration and chlorination prior to use for irrigation and dust suppression purposes, as well as use in the City of Palo Alto's duck pond. Reclaimed water production is expected to increase to approximately 3 MGD upon completion of the Mountain View pipeline project in April 2009. The Discharger's reclamation activities are regulated under Regional Water Board Order No. 93-160. The discharge to Renzel Marsh Pond described in Section II.B.2 of this Order is also a component of the Discharger's reclamation program.
5. **Storm Water Discharge.** The Discharger is not required to be covered under the State Water Resources Control Board's (State Water Board) statewide NPDES permit for storm water discharges associated with industrial activities (NPDES General Permit CAS000001) because all of the storm water captured within the Plant storm drain system is directed to the headworks of the Plant and treated to the standards contained in this Order.

6. **Satellite Collection Systems.** The Plant serves multiple cities and wastewater districts as indicated in Table 4 above. In addition to the City of Palo Alto's collection system, wastewater is conveyed to the Plant from several satellite sewage collection systems serving the Cities of Los Altos and Mountain View, the Town of Los Altos Hills, the East Palo Alto Sanitary District, and unincorporated areas of the Stanford University Campus. Each of these satellite municipalities and districts is obligated by agreement or contract with the Discharger, to operate, maintain, and improve its collection system to ensure no adverse impacts to the Plant. Ownership and operation of the satellite collection systems is further described in Fact Sheet Section II, Facility Description.

Attachment B provides a map of the area around the Plant. Attachment C provides a flow schematic of the Plant.

- C. **Legal Authorities.** This Order is issued pursuant to Clean Water Act (CWA) section 402 and implementing regulations adopted by the USEPA and chapters 5.5, division 7 of the California Water Code (CWC or 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 CWC (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 through I 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.** CWA Section 301(b) and NPDES regulations at Title 40 of the Code of Federal Regulations (40 CFR) section 122.44 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/or Best Professional Judgment (BPJ) pursuant to 40 CFR 125.3. A detailed discussion of development of the technology-based effluent limitations is included in the Fact Sheet (Attachment E).
- G. **Water Quality-Based Effluent Limitations (WQBELs).** 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) mandate 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, 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 (WQC), 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 (WQOs) for waters of the state, including surface waters and groundwater. It also includes programs of implementation to achieve WQOs. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Board, USEPA, and the State's Office of Administrative Law (OAL), as required. Requirements of this Order implement the Basin Plan.

Table 5 identifies existing and potential beneficial uses that are assigned to South San Francisco Bay and Matadero Creek. State Water Board Resolution No. 88-63 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 tidal and marine influence on the unnamed channel receiving water for the majority of the discharge, total dissolved solids (TDS) levels exceed 3,000 milligrams per liter (mg/L). Matadero Creek is tidally influenced and subject to inflows from South San Francisco Bay, and likewise TDS is expected to exceed 3,000 mg/L. The unnamed channel and Matadero Creek, therefore, meet an exception to Resolution No. 88-63, and the MUN designation does not apply.

Although South San Francisco Bay is listed to support shellfish harvesting, according to the Discharger's submittal dated July 9, 2008, there is no shellfish harvesting in the vicinity of the discharge outfall. The wetlands near the outfall are largely inaccessible and unsuitable for shellfish harvesting. The outfall is surrounded by the Palo Alto Baylands Nature Preserve; public shellfish harvesting for consumption is not allowed under any circumstances on the extensive shoreline of the preserve. The practice would be disruptive to the ecosystem and would therefore be contradictory to the concept of a nature preserve. Furthermore, representatives from the California Department of Fish and Game have stated that no shellfish harvesting occurs in the San Francisco Bay south of Foster City (City of San Jose, *Alternative Effluent Bacteriological Standards Pilot Study*, 2003). In addition, a Senior Ranger with the Palo Alto Baylands Nature Preserve stated in a June 12, 2008, phone conversation with the Discharger that the only shellfish harvesting occurring in the area is that performed by Stanford University and USGS staff for specific scientific surveys (July 9, 2008, City of Palo Alto Evaluation of Bacteria Effluent Limits).

Table 5. Beneficial Uses of South San Francisco Bay and Matadero Creek

Discharge Point	Receiving Water Name	Existing and Potential Beneficial Uses
001	South San Francisco Bay	Industrial Service Supply (IND) Ocean, Commercial and Sport Fishing (COMM) Shellfish Harvesting (SHELL) Estuarine Habitat (EST) Fish Migration (MIGR) Preservation of Rare and Endangered Species (RARE) Fish Spawning (SPWN) Wildlife Habitat (WILD) Contact Recreation (REC1) Non-contact Water Recreation (REC2) Navigation (NAV)
002	Matadero Creek	Cold Freshwater Habitat (COLD) Fish Migration (MIGR) Fish Spawning (SPWN) Warm Freshwater Habitat (WARM) Wildlife Habitat (WILD) Water Contact Recreation (REC1) Non-Contact Water Recreation (REC2)

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 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 that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. The Basin Plan allows compliance schedules and interim effluent limitations or discharge specifications to allow time to implement a new or revised WQO.

The State Water Board adopted Resolution No. 2008-0025 on April 15, 2008, titled "Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits", which includes compliance schedule policies for pollutants that are not addressed by the SIP. This policy has been approved by USEPA and OAL, and became effective on August 27, 2008, superseding the Basin Plan's compliance schedule policy.

This Order includes a compliance schedule for dioxin-TEQ as allowed by the Basin Plan, consistent with the State Water Board's new policy. A detailed discussion of the basis for the compliance schedules and interim effluent limitations and/or discharge specifications is included in the Fact Sheet (Attachment F).

- L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards 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 oil and grease, pH, total suspended solids (TSS), and carbonaceous biochemical oxygen demand (CBOD). Derivation 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 minimum federal technology-based requirements that are necessary to meet water quality standards.

WQBELs have been derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the WQOs 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 procedures for calculating the individual WQBELs for priority pollutants are based on the SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and WQOs contained in the Basin Plan were approved under State law and submitted to USEPA prior to May 30, 2000. Any WQOs 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 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 and 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. Anti-Backsliding Requirements.** CWA sections 402(o)(2) and 303(d)(4) and NPDES regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous Order, with some exceptions where limitations may be relaxed. All effluent limitations established by this Order are at least as stringent as those established by the previous Order.
- P. 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 applicable State and federal law pertaining to threatened and endangered species.
- Q. Monitoring and Reporting Program (MRP, Attachment E).** 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 MRP establishes monitoring and reporting requirements to implement federal and state requirements. This MRP 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.** No provisions or requirements in this Order are included to implement State law only. All provisions and requirements are required or authorized under the federal CWA; consequently, violations of these provisions and requirements are subject to the enforcement remedies that are available for NPDES violations.
- T. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of this notification are provided in the Fact Sheet (Attachment F).
- 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).

IT IS HEREBY ORDERED, that this Order supersedes Order No. R2-2003-0078 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California 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.

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. 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 Subsections I.G.2 and I.G.4 of Attachment D of this Order.

The bypass of fixed film reactors or dual media filters is only allowed (1) during wet weather when the primary effluent flow exceeds the fixed film reactors' capacity of 40 MGD, or when the activated sludge treatment units' effluent flow exceeds the filter capacity of 40 MGD; and (2) when the discharge complies with the effluent and receiving water limitations contained in this Order. Furthermore, the Discharger shall operate the facility as designed and in accordance with the Operation & Maintenance Manual developed for the Plant. This means that the Discharger shall optimize storage and shall fully utilize the advanced treatment units, if applicable. The Discharger shall report incidents of blended effluent discharges in routine monitoring reports and shall conduct monitoring of these discharges as specified elsewhere in this Order.

- C. The total average dry weather effluent flow, determined at Monitoring Locations EFF-001 and EFF-002 as described in the MRP (Attachment E), shall not exceed 39 MGD. Average dry weather flow shall be determined by the average during the months of June through October.
- D. 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 for Conventional and Non-Conventional Pollutants – Discharge Points 001 and 002

The Discharger shall maintain compliance with the following effluent limitations at Discharge Points 001 and 002, with compliance measured at Monitoring Locations EFF-001 and EFF-002, as described in the MRP (Attachment E).

1. CBOD, TSS, Oil and Grease, pH, Total Chlorine Residual, and Turbidity

Table 6. Effluent Limitations for CBOD, TSS, Oil and Grease, pH, Total Chlorine Residual, and Turbidity – Discharge Points 001 and 002

Parameters	Units ⁽¹⁾	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
CBOD ₅ ⁽²⁾	mg/L	10	---	20	---	---
TSS	mg/L	10	---	20	---	---
Oil and Grease	mg/L	5	---	10	---	---
pH ⁽³⁾	standard units	---	---	---	6.5	8.5
Total Chlorine Residual ⁽⁴⁾	mg/L	---	---	---	---	0.0
Turbidity	NTU	---	---	---	---	10

Footnotes for Table 6:

(1) Unit abbreviation:

mg/L= milligrams per liter

NTU = Nephelometric turbidity units

(2) The Discharger may elect to monitor for CBOD in lieu of BOD, as defined in the latest edition of *Standard Methods for the Examination of Water and Wastewater*.

(3) 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.

(4) 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 will conclude that these false positive chlorine residual exceedances are not violations of the effluent limitation. The Discharger may also use the Chlorine Residual reporting and compliance demonstration procedure contained in Footnote 6 to Table E-4 of the MRP (Attachment E).

2. CBOD₅ and TSS 85% Percent Removal. The average monthly percent removal of CBOD₅ and TSS values, by concentration, shall not be less than 85 percent.

3. Enterococcus Bacteria. The treated wastewater shall meet the following limit of bacteriological quality:

The 30-day geometric mean value for all samples analyzed for enterococcus bacteria shall not exceed 35 colonies per 100 mL.

B. Effluent Limitations for Toxic Pollutants – Discharge Points 001 and 002

The Discharger shall maintain compliance with the following effluent limitations at Discharge Points 001 and 002, with compliance measured at Monitoring Location EFF-001 or EFF-002, as described in the MRP (Attachment E).

Table 7. Effluent Limitations for Toxic Pollutants^(1, 2)

Pollutants	Units ⁽⁴⁾	Effluent Limitations	
		Average Monthly Effluent Limitation (AMEL)	Maximum Daily Effluent Limitation (MDEL)
Copper	µg/L	12	16
Nickel	µg/L	26	31
Cyanide	µg/L	7.1	14
Dioxin-TEQ ⁽³⁾	µg/L	1.4×10^{-8}	2.8×10^{-8}
Chlorodibromomethane	µg/L	34	62
Total Ammonia as Nitrogen	mg/L	2.7	9.5

Footnotes for Table 7:

- (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 limitations for metals 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, Table 8, 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 analyses for future permit reissuances, the Discharger shall make every effort to use methods with MLs lower than the applicable WQOs or water quality criteria, or, in cases where the available MLs exceed the WQO, the lowest available ML. An 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.
- (3) Final effluent limitations for dioxin-TEQ shall become effective starting June 1, 2019 (10 years from Order effective date).

Table 8. MLs for Pollutants with Effluent Limitations

Pollutant	ML	Units ⁽⁴⁾
Copper	2	µg/L
Nickel	1	µg/L
Cyanide	5	µg/L
Chlorodibromomethane	0.5	µg/L
Dioxin-TEQ	As specified below	
2,3,7,8-TetraCDD	5	pg/L
1,2,3,7,8-PentaCDD	25	pg/L
1,2,3,4,7,8-HexaCDD	25	pg/L
1,2,3,6,7,8-HexaCDD	25	pg/L
1,2,3,7,8,9-HexaCDD	25	pg/L
1,2,3,4,6,7,8-HeptaCDD	25	pg/L
OctaCDD	50	pg/L
2,3,7,8-TetraCDF	5	pg/L
2,3,7,8-TetraCDF	5	pg/L
1,2,3,7,8-PentaCDF	25	pg/L
2,3,4,7,8-PentaCDF	25	pg/L
1,2,3,4,7,8-HexaCDF	25	pg/L
1,2,3,6,7,8-HexaCDF	25	pg/L

Pollutant	ML	Units ⁽⁴⁾
1,2,3,7,8,9-HexaCDF	25	pg/L
2,3,4,6,7,8-HexaCDF	25	pg/L
1,2,3,4,6,7,8-HeptaCDF	25	pg/L
1,2,3,4,7,8,9-HeptaCDF	25	pg/L
OctaCDF	50	pg/L

- (4) Unit Abbreviation
 mg/L = milligrams per liter
 µg/L = micrograms per liter
 pg/L = picograms per liter

C. Interim Effluent Limitation for Dioxin-TEQ

The Discharger shall comply with the following interim effluent limit for dioxin-TEQ at Discharge Points 001 and 002, with compliance measured at Monitoring Locations EFF-001 and EFF-002 as described in the MRP (Attachment E). The interim limit for dioxin-TEQ shall remain in effect until May 31, 2019. Starting June 1, 2019, the final effluent limit in Table 7 for dioxin-TEQ shall become effective.

Table 9. Interim Effluent Limitation for Dioxin-TEQ

Pollutant	Units	Average Monthly Effluent Limitation
Dioxin-TEQ	µg/L	6.3×10^{-5}

D. Whole Effluent Toxicity

1. Whole Effluent Acute Toxicity:

- a. Representative samples of the effluent at Discharge Points 001 and 002, with compliance measured at EFF-001 and EFF-002 as described in the MRP (Attachment E), shall meet the following limits for acute toxicity. Bioassays shall be conducted in compliance with Section V.A of the MRP (Attachment E).
 - (1) an eleven (11)-sample median value of not less than 90 percent survival, and
 - (2) an eleven (11)-sample 90th percentile value of not less than 70 percent survival.
- b. These acute toxicity limitations are further defined as follows:
 - (1) **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 less bioassay tests show less than 90 percent survival.
 - (2) **11-sample 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 bioassay tests show less than 70 percent survival.
- c. Bioassays shall be performed using the most up-to-date USEPA protocol and the most sensitive species as specified in writing by the Executive Officer based on the most recent screening test results. Bioassays shall be conducted in compliance with Methods for

Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, currently 5th Edition (EPA-821-R-02-012), with exceptions granted to the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP) upon the Discharger's request with justification.

- d. If the Discharger can demonstrate to the satisfaction of the Executive Officer that toxicity exceeding the levels cited above is caused by ammonia and that the ammonia in the discharge is in compliance with effluent limitations, then such toxicity does not constitute a violation of this effluent limitation.

2. Whole Effluent 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 effluent at Discharge Points 001 and 002, with compliance measured at EFF-001 and EFF-002 as described in the MRP (Attachment E), 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 may result in the establishment of effluent limitations for chronic toxicity.
 - (1) Conduct routine monitoring.
 - (2) Conduct accelerated monitoring after exceeding a three sample median of 1 chronic toxicity unit (TUc¹) or a single-sample maximum of 2 TUc or greater.
 - (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) procedures in accordance with a workplan submitted in accordance with Provision VI.C.2.c that incorporates 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. 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). In

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

addition, bioassays shall be conducted in compliance with the most recently promulgated test methods, *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, currently third edition (EPA-821-R-02-014), and *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, currently fourth Edition (EPA-821-R-02-013), with exceptions granted by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).

E. Land Discharge Specifications

Not Applicable.

F. Reclamation Specifications

Water reclamation requirements are regulated under Regional Water Board Order No. 93-160.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

1. Receiving water limitations are based on WQOs contained in the Basin Plan and are a required part of this Order. The discharges shall not cause the following in the unnamed channel, Matadero Creek, or South 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;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil and other products of petroleum origin; and
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State within one foot of the water surface:
 - a. Dissolved Oxygen 5.0 mg/L, minimum
Furthermore, 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.