

requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G are also incorporated into this Order.

- E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.
- F. Technology-Based Effluent Limitations.** CWA Section 301(b) and NPDES regulations at 40 CFR 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 Part 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.
- 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.

Section 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). Under this Order, numeric WQBELs have been established as needed for dry weather discharges from the Treatment Plant.

- 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. The Basin Plan implements State Water Board Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply (MUN). Because of the marine influence on receiving waters of the San Francisco Bay, total dissolved solids levels in the Bay commonly exceed 3,000 mg/L and thereby meet an exception to State Water Board Resolution No. 88-63. Therefore, the MUN designation is not applicable to the Central San Francisco Bay. Beneficial uses applicable to Central San Francisco Bay are as follows.

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

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

Requirements of this Order implement the Basin Plan.

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

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- J. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- K. **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.

- L. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based limits and Water Quality Based Effluent Limits (WQBELs) for individual pollutants. The technology-based effluent limitations consist of restrictions on oil and grease, pH, total suspended solids (TSS), and biochemical oxygen demand (BOD₅). 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 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 and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

- M. 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 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.
- N. Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and NPDES regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Some effluent limitations in 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.

- 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 applicable State and federal law pertaining to threatened and endangered species.
- P. 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.
- Q. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- R. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.C., IV.D. and V.B. of this Order (which are not applicable to this permit) 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.
- S. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet.
- T. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

IT IS HEREBY ORDERED, that this Order supersedes Order No. R2-2002-0097 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 average dry weather flow, as measured at Monitoring Station EFF-001 described in the attached MRP (Attachment E), shall not exceed 0.98 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 Central San Francisco Bay, at any point where it does not receive an initial dilution of at least 74:1 is prohibited.
- D. Discharge from the Discharger's "decommissioned outfall", as shown in Attachment C, is prohibited.
- E. The bypass of untreated or partially treated wastewater and, in particular, undisinfected 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 *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (Attachment G).

Blended wastewater is biologically treated wastewater blended with primary treated wastewater that has been diverted around biological treatment units or advanced treatment units. Such discharges are approved (1) when the Discharger's peak wet weather influent flow volumes exceed the capacity of the secondary treatment unit(s) of 2.3 MGD, and (2) the discharge complies with the effluent and receiving water limitations contained in this Order, and (3) the Discharger is in compliance with Provision VI.C.5.c. Furthermore, the Discharger shall operate its facility as designed and in accordance with the Operation & Maintenance Manual developed for the facility. This means that it shall optimize storage and use of equalization units, and shall fully utilize the biological treatment units and advanced treatment units, if applicable. The Discharger shall report incidents of blended effluent discharges in routine monitoring reports, and shall conduct monitoring of this discharge as specified in the attached MRP (**Attachment E**).

- F. 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 – Discharge Point 001

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001 with compliance measured at Monitoring Location EFF-001-D or EFF-001-S as described in the attached MRP (Attachment E).

a. The discharge shall meet the limitations specified in Table 6.

Table 6. Conventional Effluent Limitations – 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 (BOD ₅)	mg/L	30	45	---	---	---
Chlorine, Total Residual	mg/L	---	---	---	---	0.0 ⁽²⁾

⁽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. pH compliance may be demonstrated at Monitoring Location EFF-001-S.

⁽²⁾ This requirement is defined as below the limit of detection of 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 Order limit. Chlorine residual compliance may be demonstrated by monitoring at Monitoring Location EFF-001-S.

b. **BOD₅ and TSS 85% Percent Removal:** The average monthly percent removal of BOD₅ and TSS values, by concentration, shall not be less than 85 percent.

c. **Total Coliform Bacteria:** The discharge shall meet the following limits of bacteriological quality (Compliance with bacteria requirements may be demonstrated at Monitoring Location EFF-001-D):

(1) The moving median value for the Most Probable Number (MPN) of total coliform bacteria in any five consecutive samples shall not exceed a Most Probable Number (MPN) of 240 organisms/100 mL; and

(2) No single sample shall exceed 10,000 MPN/100 mL.

2. Effluent Limitations for Toxic Substances – Discharge Point 001

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001-S.

Table 7. Effluent Limitations for Toxic Pollutants

Parameter	Units	Effluent Limitations ^(1, 3)	
		Average Monthly	Maximum Daily
Copper ⁽²⁾	µg/L	72	98
Selenium	µg/L	3.7	9.0
Cyanide	µg/L	20	45
Dioxin-TEQ ⁽⁴⁾	µg/L	1.4 x 10 ⁻⁸	2.8 x 10 ⁻⁸
Bis(2-ethylhexyl)phthalate	µg/L	58	120
Total Ammonia	mg/L N	100	210

- (1) a. Limitations apply to the average concentration of all samples collected during the averaging period (daily = 24-hour period; monthly = calendar month).
 b. All metals limitations are expressed as total recoverable metal.
- (2) Alternate Effluent Limits for Copper:
 a. If a copper SSO for the receiving water becomes legally effective, resulting in adjusted saltwater Criterion Continuous Concentration of 2.5 µg/L and Criterion Maximum Concentration (CMC) of 3.9 µg/L (Basin Plan Amendment approved by the Regional Water Board Resolution R2-2007-0042, June 13, 2007, based on the Staff Report "Copper Site-Specific Objective in San Francisco Bay" June 6, 2007). Upon its effective date, the following limitations shall supersede those copper limitations listed in Table 7: AMEL of 54 µg/L and MDEL of 73 µg/L.
 b. If a different copper SSO for the receiving water is adopted, the alternate WQBELs based on the SSO will be determined after the SSO effective date.
- (3) A daily maximum or average monthly value for a given constituent shall be considered noncompliant with the effluent limitations only if it exceeds the effluent limitation and the Reporting Level for that constituent. As outlined in Section 2.4.5 of the SIP, the table below indicates the Minimum Level (ML) for compliance determination purposes. In addition, in order to perform reasonable potential analyses for future permit re-issuances, the Discharger shall use methods with MLs lower than the applicable water quality objectives or water quality criteria. A Minimum Level is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.
- (4) These limits become effective on the date indicated in the Compliance Schedule, Table 10, §VI..C.7.

Table 8. Minimum Levels for Pollutants with Effluent Limitations

Parameter	Minimum Level	Units
Copper	0.5	µg/L
Selenium	1	µg/L
Cyanide	5	µg/L
Dioxin-TEQ	½ the USEPA specified MLs for Method 1613	µg/L
Bis(2-ethylhexyl)phthalate	5	µg/L
Total Ammonia ⁽¹⁾	0.2	mg/L as N

(1) Measured as N in total ammonia.

3. Acute Toxicity

- a. Representative samples of the effluent at Monitoring Location EFF-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 96-hour flow through bioassays of undiluted effluent shall be:

- an eleven (11) sample median value of not less than 90 percent survival, and
- an eleven (11) sample 90 percentile value of not less than 70 percent survival.

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

11 sample median: A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if five or more of the past ten or less bioassay tests show less than 90 percent survival.

90th percentile: A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit, if one or more of the past ten or less bioassay tests show less than 70 percent survival.

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

4. Chronic Toxicity

- a. Compliance with the Basin Plan narrative chronic toxicity objective shall be demonstrated according to the following tiered requirements based on results from representative samples of the treated final effluent at Monitoring Location EFF-001 meeting test acceptability criteria and Section V.B of the MRP (Attachment E). Failure to conduct the required toxicity tests or a TRE within a designated period shall result in the establishment of effluent limitations for chronic toxicity.

- (1) Conduct annual routine monitoring.
- (2) Accelerate monitoring after exceeding a single-sample maximum of 10 chronic toxicity units (TUc), consistent with Table 4-5 of the Basin Plan for dischargers monitoring chronic toxicity annually. Accelerated monitoring shall consist of monthly monitoring.
- (3) Return to routine monitoring if accelerated monitoring does not exceed the "trigger" in (2), above.
- (4) If accelerated monitoring confirms consistent toxicity above the "trigger" in (2), above, initiate toxicity identification evaluation/toxicity reduction evaluation (TIE/TRE) in accordance with a work plan submitted in accordance with Section V.B.3 of the MRP (Attachment E), and that incorporates any and all comments from the Executive Officer.
- (5) Return to routine monitoring after appropriate elements of TRE work plan are implemented and either the toxicity drops below "trigger" levels in (2), above, or, based on the results of the TRE, the Executive Officer authorizes a return to routine monitoring.

b. Test Species and Methods

The Discharger shall conduct routine monitoring with the test species and protocols specified in Section V.B of the MRP (Attachment E). The Discharger shall also perform Chronic Toxicity Screening Phase monitoring as described in the Appendix E-1 of the MRP (Attachment E). Chronic Toxicity Monitoring Screening Phase Requirements, Critical Life Stage Toxicity Tests and definitions of terms used in the chronic toxicity monitoring are identified in Appendices E-1 and E-2 of the MRP (Attachment E).

B. 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 discharges shall not cause the following in Central San Francisco Bay:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foams in concentrations that cause nuisance or adversely affect beneficial uses;
 - b. Suspended sediment, dissolved solids, settleable material that results in bottom deposition, or aquatic growths resulting from biostimulatory substances 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 uses;
 - e. Visible, floating, suspended, or deposited oil and other products of petroleum origin; and
 - f. Toxic, bioaccumulative, or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State within one foot of the water surface:
 - a. Dissolved Oxygen 5.0 mg/L, minimum

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

 - b. Dissolved Sulfide Natural background levels

 - c. pH Within 6.5 and 8.5

B. Groundwater Limitations

Not Applicable.

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with Federal Standard Provisions included in **Attachment D** of this Order.
2. *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 Federal Standard Provisions, 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. The Discharger shall also comply with the requirements contained in *Self Monitoring Programs, Part A, August 1993 (Attachment G)*.

C. Special Provisions

1. Re-opener Provisions

The Regional Water Board may modify or re-open 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 an administrative or judicial decision on a separate NPDES permit or WDR that addresses requirements similar to this discharge provides a basis for permit modification.
- 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 anti-backsliding 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 at EFF-001-S for the constituents listed in Enclosure A of the Regional Water Board's August 6, 2001 Letter, according to the sampling frequency specified in the attached MRP (Attachment E). Compliance with this requirement shall be achieved in accordance with the specifications stated in the Regional Water Board's August 6, 2001 Letter under Effluent Monitoring for Major Dischargers.

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

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

b. Ambient Background Receiving Water Study

The Discharger shall collect or participate in collecting background ambient receiving water monitoring data for priority pollutants that is required to perform reasonable potential analyses and to calculate effluent limitations. Data collected on the conventional water quality parameters (pH, salinity, and hardness) shall

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

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

c. Optional Mass Offset

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

a. Pollution Minimization Program

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

b. Annual Pollution Prevention Report

The Discharger shall submit an annual report, acceptable to the Executive Officer, no later than February 28 of each calendar year. The Discharger may submit one annual report that documents all pollution prevention activities undertaken to reduce pollutant loadings at both the Tiburon and Paradise Cove wastewater treatment plants (since both plants are owned and operated by the Discharger). 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 analyze its own situation to determine which pollutants are currently a problem and/or which pollutants may be potential future problems. This discussion shall include the reasons why the pollutants were chosen.*

- (3) *Identification of sources for the pollutants of concern.* This discussion shall include how the Discharger intends to estimate and identify sources of the pollutants. The Discharger should also identify sources or potential sources not directly within the ability or authority of the Discharger to control, such as pollutants in the potable water supply and air deposition.
- (4) *Identification of tasks to reduce the sources of the pollutants of concern.* This discussion shall identify and prioritize tasks to address the Discharger's pollutants of concern. The Discharger may implement tasks themselves or participate in group, regional, or national tasks that will address its pollutants of concern. The Discharger is strongly encouraged to participate in group, regional, or national tasks that will address its pollutants of concern whenever it is efficient and appropriate to do so. A time line shall be included for the implementation of each task.
- (5) *Outreach to employees.* The Discharger shall inform employees about the pollutants of concern, potential sources, and how they might be able to help reduce the discharge of these pollutants of concern into the treatment facilities. The Discharger may provide a forum for employees to provide input to the program.
- (6) *Continuation of Public Outreach Program.* The Discharger shall prepare a public outreach program to communicate pollution prevention to its service area. Outreach may include participation in existing community events such as county fairs, initiating new community events such as displays and contests during Pollution Prevention Week, conducting school outreach programs, conducting plant tours, and providing public information in newspaper articles or advertisements, radio or television stories or spots, newsletters, utility bill inserts, and web site. Information shall be specific to the target audiences. The Discharger shall coordinate with other agencies as appropriate.
- (7) *Discussion of criteria used to measure Program's and tasks' effectiveness.* The Discharger shall establish criteria to evaluate the effectiveness of its Pollution Minimization Program. This shall also include a discussion of the specific criteria used to measure the effectiveness of each of the tasks in items b(3), b(4), b(5), and b(6), above.
- (8) *Documentation of efforts and progress.* This discussion shall detail all of the Discharger's activities in the Pollution Minimization Program during the reporting year.
- (9) *Evaluation of Program's and tasks' effectiveness.* This Discharger shall utilize the criteria established in b(7) to evaluate the Program's and tasks' effectiveness.
- (10) *Identification of specific tasks and time schedules for future efforts.* Based on the evaluation, the Discharger shall detail how it intends to continue or

change its tasks in order to more effectively reduce the amount of pollutants to the treatment plant, and subsequently in its effluent.

c. Pollutant Minimization Program for Reportable Priority Pollutants

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

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

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

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

(d) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

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

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

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

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

c. Contingency Plan, Review and Status Reports

- (1) The Discharger shall maintain a Contingency Plan as required by Regional Water Board Resolution 74-10 (Attachment G) and as prudent in accordance with current municipal facility emergency planning. The discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or adequately implement a Contingency Plan will be the basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
- (2) The Discharger shall regularly review and update, as necessary, the Contingency Plan so that the plan may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and updates shall be completed as necessary.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its Contingency Plan review and update. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures and applicable changes to its Contingency Plan.

5. Special Provisions for POTW

a. Sludge Management Requirements

- (1) All sludge generated by the Discharger must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR §503. If the Discharger desires to dispose of sludge by a different method, a request for permit modification must be submitted to USEPA 180 days before start-up of the alternative disposal practice. All the requirements in 40 CFR §503 are enforceable by USEPA whether or not they are stated in an NPDES permit or other permit issued to the Discharger. The Regional Water Board should be copied on relevant correspondence and reports forwarded to USEPA regarding sludge management practices.
- (2) Sludge treatment, storage and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.
- (3) The Discharger shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.
- (4) Sludge storage, treatment, and handling shall not cause waste material to be in a position where it is or can be carried from the sludge treatment and storage site and deposited into waters of the State.
- (5) The sludge treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the

materials in the temporary storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.

- (6) For sludge that is applied to the land, placed on a surface disposal site, or fired in a sludge incinerator as defined in 40 CFR §503, the Discharger shall submit an annual report to USEPA and the Regional Water Board containing monitoring results and pathogen and vector attraction reduction requirements as specified by 40 CFR §503, postmarked February 15 of each year, for the period covering the previous calendar year.
- (7) Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR §258. In the annual self-monitoring report, the Discharger shall include the amount of sludge disposed of and the landfill(s) to which it was sent.
- (8) Permanent on-site sludge storage or disposal activities are not authorized by this Order. A Report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activity by the Discharger.
- (9) Sludge Monitoring and Reporting Provisions of this Regional Water Board's Standard Provisions (Attachment G), apply to sludge handling, disposal and reporting practices.
- (10) The Regional Water Board may amend this Order prior to expiration if changes occur in applicable state and federal sludge regulations.

b. Utility Analysis and Implementation Schedule for Wet Weather Bypass of Secondary Treatment

180 days prior to the Order expiration date, the Discharger shall complete a Utility Analysis if it seeks to continue to divert peak wet weather flows around its secondary treatment units. The Utility Analysis must satisfy 40 CFR 122.4(m)(4)(i)(A)-(C), and any applicable policy or guidance such as the process set forth in Part 1 of USEPA's Peak Wet Weather Policy's No Feasible Alternatives Analysis Process (available at <http://cfpub.epa.gov/npdes/wetweather.cfm>) once it is finalized. Specifically, the Discharger shall more fully evaluate the extent to which it maximizes its ability to reduce inflow/infiltration (I/I) throughout the entire collection system to the extent feasible, including the use of existing legal authorities and potential improvements in the timing or quality of such efforts.

c. Sanitary Sewer Overflows and Sewer System Management Plan

The Discharger's collection system is part of the facility that is subject to this Order. As such, the Discharger must properly operate and maintain its collection

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

Implementation of the General Collection System WDR requirements for proper operation and maintenance and mitigation of spills will satisfy the corresponding federal NPDES requirements specified in this Order. Following reporting requirements in the General Collection System WDR will satisfy NPDES reporting requirements for sewage spills. Furthermore, the Discharger shall comply with the schedule for development of sewer system management plans as indicated in the letter issued by the Regional Water Board on July 7, 2005, pursuant to Water Code Section 13267.

6. Corrective Measures to Minimize Blending

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

Table 9. Requirements to Minimize Blending Events

Task:	Compliance Date
<p>1. <i>Wet weather Improvements.</i> The Discharger shall submit to the Regional Water Board a technical report that describes the studies completed over the two year period 2004-2005 that evaluated the condition of the Tiburon and Belvedere collection systems and analyzed alternatives to reduce wet weather diversions. This will include:</p> <ul style="list-style-type: none"> • Analysis of the condition of all the sewage lines covered by closed circuit video camera. • GPS identification of all structures including pumping stations, trunk lines, collector lines and other parts of the system. • A summary of the geographic information system (GIS) data base used to maintain records and information on the collection system. • The recommendations from the study. 	<p>October 1, 2008</p>

2. <i>Work Plan.</i> The Discharger shall submit a copy of the 10-year, \$3.5 million Sewer Rehabilitation Plan to implement the recommendations proposed in Task 1.	October 1, 2008
3. <i>Implementation.</i> The Discharger shall implement the measures identified in the 10-year, \$3.5 million Sewer Rehabilitation Plan.	In accordance with the Sewer Rehabilitation Plan.
4. <i>Progress Reports.</i> The Discharger shall report on its progress in completing measures specified in the 10-year, \$3.5 million Sewer Rehabilitation Plan together with the impact on reducing blending events.	January 31, 2009 and thereafter annually in the Annual Self - Monitoring Report
5. No Feasible Alternatives Analysis. Complete a utility analysis if the Discharger seeks to continue to bypass peak wet weather flows around its secondary treatment units. The utility analysis must satisfy 40 CFR 122.41(m)(4)(i)(A)-(c) and any applicable policy or guidance such as the process set forth in Part 1 of USEPA's Peak Wet Weather Policy's No Feasible Alternatives Analysis Process (available at: http://cfpub.epa.gov/npdes/wetweather.cfm) once it is finalized.	180 days prior to the Order expiration date.

7. Compliance Schedules

The Discharger shall comply with the following tasks and deadlines to ensure compliance with the final limits.

Table 10. Requirements to Ensure Compliance with Dioxin-TEQ Limits

Task	Deadline
1. Continue semi-annual monitoring for dioxin-TEQ at Monitoring Location EFF- 001-S.	Upon effective date of the Order
2. Report on the status of dioxin-TEQ monitoring and analytical results semi-annually no later than April 15 and October 15 of each calendar year in the March and September self-monitoring reports.	Upon effective date of the Order
3. If dioxin-TEQ monitoring data show that the Discharger is out of compliance, as described in Section 2.4.5, Compliance Determination, of the State Implementation Policy, with the final water quality based effluent limits specified in Effluent Limitations and Discharge Specifications A.2, the Discharger shall identify and implement source control measures to reduce concentrations of dioxin-TEQ to the treatment plant, and therefore to receiving waters.	No later than 12 months after a detection of dioxin-TEQ that is out of compliance with the final effluent limits.
4. The Discharger shall evaluate and report on the effectiveness of its source control measures in reducing concentrations of dioxin-TEQ to its treatment plant. If, following previous measures, monitoring data show that the Discharger remains out of compliance with final limits for dioxin-TEQ, the Discharger shall also identify and implement additional source control	Annually in the Annual Best Management Practices and Pollutant Minimization Report required by Provision VI.C.3.

Task	Deadline
measures to reduce concentrations of this pollutant.	
5. In the event that, following previously implemented source control measures, monitoring data show that the Discharger is out of compliance with final water quality based effluent limits specified in Effluent Limitations and Discharge Specifications A.2 for dioxin-TEQ, the Discharger shall submit a schedule for implementation of additional actions to reduce the concentrations of this pollutants.	January 1, 2012
6. The Discharger shall commence implementation of the identified additional actions in accordance with the schedule submitted in task 5, above.	April 1, 2012
7. Full Compliance with IV. Effluent Limitations and Discharger Specifications A.2 for dioxin-TEQ. (Alternatively, the Discharger may implement a mass offset strategy for dioxin-TEQ in accordance with policies in effect at that time.)	June 1, 2018

NPDES NO. CA0037753
Sanitary District #5 of Marin County
Wastewater Treatment Plant

ORDER NO. R2-2008-0057
JULY 9, 2008

8. Other Special Provisions

- a. Cyanide Action Plan** The Discharger shall implement monitoring and surveillance, pretreatment, source control, and pollution prevention for cyanide in accordance with the following tasks and time schedule.

Table 11. Cyanide Action Plan

Task	Compliance Date
<p>1. Review Potential Cyanide Contributors The Discharger shall submit an inventory of potential contributors of cyanide to the treatment plant (e.g., metal plating operations, hazardous waste recycling, etc.). If no contributors of cyanide are identified, Tasks 2 and 3 are not required, unless the Discharger receives a request to discharge detectable levels of cyanide to the sanitary sewer. If so, the Discharger shall notify the Executive Officer and implement Tasks 2 and 3.</p>	<p>With the November 2008 SMR submitted on December 31, 2008.</p>
<p>2. Implement Cyanide Control Program The Discharger shall submit a plan for and begin implementation of a program to minimize cyanide discharges to the sewer system consisting, at a minimum, of the following elements:</p> <ul style="list-style-type: none"> a. Inspect each potential contributor to assess the need to include that contributing source in the control program. b. Inspect contributing sources included in the control program annually. Inspection elements may be based on U.S. EPA guidance, such as Industrial User Inspection and Sampling Manual for POTWs (EPA 831-B-94-01). c. Develop and distribute educational materials to contributing sources and potential contributing sources regarding the need to prevent cyanide discharges. d. Prepare an emergency monitoring and response plan to be implemented if a significant cyanide discharge occurs. e. If ambient monitoring shows cyanide concentrations of 1.0 µg/L or higher in the main body of the Bay, undertake actions to identify and abate cyanide sources responsible for the elevated ambient concentrations. 	<p>With the Annual Pollution Prevention report due each year on February 28, or within 90 days of completing Task 1.</p>
<p>3. Report Status of Cyanide Control Program Submit a report to the Regional Water Board documenting implementation of the cyanide control program.</p>	<p>With Annual Pollution Prevention report due February 28.</p>

b. Copper Action Plan The Discharger shall implement pretreatment, source control, and pollution prevention for copper in accordance with the following tasks and time schedule.

Table 12. Copper Action Plan

Task	Compliance Date
<p>1. Review Potential Copper Sources The Discharger shall submit an inventory of all potential copper sources to the treatment plant.</p>	<p>With the November 2008 SMR submitted on December 31, 2008</p>
<p>2. Implement Copper Control Program The Discharger shall submit a plan for and begin implementation of a program to reduce copper discharges to the sewer system. This plan shall consist of, at a minimum, providing education and outreach to the public (e.g., focusing on proper pool and spa maintenance and plumbers' roles in reducing corrosion).</p>	<p>With the Annual Pollution Prevention report due each year on February 28. (Elements of this task may also be implemented as part of a regional program.)</p>
<p>3. Implement Additional Measures If the three-year rolling mean copper concentration of the receiving water exceeds 2.2 µg/L, evaluate the effluent copper concentration trend, and if it is increasing, develop and implement additional measures to control copper discharges.</p>	<p>Within 90 days of exceedance</p>
<p>4. Report Status of Copper Control Program Submit a report to the Regional Water Board documenting implementation of the copper control program.</p>	<p>With Annual Pollution Prevention report due February 28.</p>

VII. COMPLIANCE DETERMINATION

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

A. General.

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP, Attachment A – Definitions, and Section VI of the Fact Sheet of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data.

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

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.