



California Regional Water Quality Control Board

San Francisco Bay Region



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Arnold Schwarzenegger
Governor

REVISED TENTATIVE ORDER NO. R2-2006-XXXX NPDES NO. CA0038598

WASTE DISCHARGE REQUIREMENTS FOR THE SEWER AUTHORITY MID-COASTSIDE, CITY OF HALF MOON BAY, MONTARA SANITATION DISTRICT, AND GRANADA SANITATION DISTRICT DISCHARGE TO THE PACIFIC OCEAN VIA DISCHARGE POINT 001

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

Table 1. Discharger Information

Discharger	Sewer Authority Mid-Coastside
Name of Facility	Sewer Authority Mid-Coastside WWTP and the Intertie Pipeline System
Facility Address	1000 North Cabrillo Highway
	Half Moon Bay, California 94019
	San Mateo County

The discharge by the Sewer Authority Mid-Coastside from the discharge point identified below is subject to waste discharge requirements as set forth in this Order.

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	secondary treated effluent	37°, 28', 23" N	122°, 27', 00" W	Pacific Ocean

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	December 13, 2006
This Order shall become effective on:	February 1, 2007
This Order shall expire on:	January 31, 2012
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of this Order's expiration date as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that this Order supersedes Order No. 00-016 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.

I, Bruce 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 **December 13, 2006**.

Bruce Wolfe, Executive Officer

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The following documents are part of this Permit, but are not physically attached due to volume. They are available on the internet site at

www.waterboards.ca.gov/sanfranciscobay

- Self-Monitoring Program, Part A, adopted August 1993
- Standard Provisions and Reporting Requirements, August 1993
- Regional Water Board Resolution 74-10

I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	Sewer Authority Mid-Coastline
Name of Facility	Sewer Authority Mid-Coastline WWTP and the Intertie Pipeline System
Facility Address	1000 North Cabrillo Highway
	Half Moon Bay, CA 94019
	San Mateo County
Facility Contact, Title, and Phone	John F. Foley III, Manager, (650) 726-0124
Mailing Address	P.O. Box 3100, Half Moon Bay, CA 94019
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	4 MGD (dry weather treatment capacity)
	15 MGD (wet weather treatment capacity)

II. FINDINGS

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

A. Background. Sewer Authority Mid-Coastside (hereinafter Discharger) is currently discharging pursuant to Order No. 00-016 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038598. The Discharger submitted a Report of Waste Discharge, dated September 10, 2004, and applied for an NPDES permit renewal to discharge an average dry weather flow of up to 4 MGD and a wet weather flow of up to 15 MGD of treated wastewater from Sewer Authority Mid-Coastline Wastewater Treatment Plant (WWTP).

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

B. Facility Description. The Discharger owns and operates a sanitary sewage treatment plant and a collection system that collects sewage from satellite collection systems serving the City of Half Moon Bay, Granada Sanitary District, and Montara Sanitary District, and conveys it to the plant. The treatment system, which consists of influent screening, grit removal, primary clarification, activated sludge, secondary clarification, chlorination, and dechlorination, provides secondary treatment of domestic and commercial wastewater from the service area. The combined service population is approximately 20,500. The collection system, called the Intertie Pipeline System (IPS), consists of approximately 8 miles of force mains and gravity interceptors and three pump stations that convey wastewater from the City of Half Moon Bay, Montara Sanitary Sewer District and Granada Sanitary Sewer District to the plant. Montara Sanitary Sewer District, Granada Sanitary Sewer District, and the City of Half Moon Bay, each acting independently under the direction of its governing board, own, operate, and maintain sewer collection systems in their respective service areas.

Treated wastewater is discharged west of Pilarcitos Creek to the Pacific Ocean, a water of the United States, through a discharge pipe and a submerged diffuser extending approximately 1,900

feet from the shoreline and terminating at a depth of approximately 37 feet (-37 MLLW). The discharge pipe is constructed laying on ballast rock on the sea floor; it is covered with sand much of the year due to seasonal sand shifting. The diffuser consists of the westernmost 238 feet of the discharge pipe, with 35 3-inch iron risers extending vertically from the discharge pipe approximately 7 feet apart. Treated wastewater is discharged through the risers. Recent modifications to the diffuser structure included adding duckbill valves to the risers. The discharger reports that the discharge receives a dilution ratio of 119 to 1. The discharge is located within the Monterey Bay National Marine Sanctuary. Sludge is treated by anaerobic digestion and dewatered by belt filter press. Sludge is transported to a sanitary landfill for disposal. Attachment B provides a map of the area around the facility. Attachment C provides a flow schematic of the facility.

- C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the California Water Code (commencing with section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of the CEQA, Public Resources Code sections 21100-21177.
- F. Technology-Based Effluent Limitations.** NPDES regulations at 40 CFR 122.44(a) require that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Secondary Treatment Standards at 40 CFR 133. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. Water Quality-Based Effluent Limitations.** 40 CFR 122.44(d) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).
- H. Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan for the San Francisco Bay Basin* (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve

those objectives for the Pacific Ocean and other receiving waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. With total dissolved solids levels exceeding 3,000 mg/L, ocean waters meet an exception to State Water Board Resolution No. 88-63 and are not considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the coastal areas in the San Francisco Bay Region are as follows.

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean	Water contact recreation Non-contact water recreation Industrial service supply Navigation Marine habitat Shellfish harvesting Ocean, commercial and sport fishing Preservation of rare and endangered species.

Requirements of this Order implement the Basin Plan.

- I. California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below.

Table 6. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean	Industrial water supply Water contact and non-contact recreation (including aesthetic enjoyment) Navigation Commercial and sport fishing Mariculture Preservation and enhancement of designated Areas of Special Biological Significance (ASBS) Rare and endangered species Marine habitat Fish spawning and shellfish harvesting

To protect beneficial uses, the Ocean Plan establishes WQOs and a program of implementation. Requirements of this Order implement the Ocean Plan.

- J. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes [40 CFR § 131.21; 65 Fed. Reg. 24641; (April 27, 2000)] Under the revised regulation (also known

as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

- K. Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and WQBELs. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand, total suspended solids, settleable solids, oil and grease, turbidity and pH. Restrictions on these pollutants are specified in federal regulations as discussed in the Fact Sheet (Attachment F), and the permit's technology-based pollutant restrictions are no more stringent than required by the CWA. WQBELs have been scientifically 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. The scientific procedures for calculating the individual WQBELs are based on the Ocean Plan, which was approved by USEPA on February 14, 2006. All beneficial uses and WQOs contained in the Ocean Plan were approved under state law and submitted to and approved by 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 purposes of the CWA" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.
- L. Antidegradation Policy.** 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
- M. 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. All effluent limitations in this Order are consistent with anti-backsliding requirements of the CWA and its implementing regulations.
- N. Monitoring and Reporting.** 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 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.
- O. 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 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.

- P. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, and V.B of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- Q. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- R. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

III. DISCHARGE PROHIBITIONS

- A. Discharge of treated wastewater at locations or in a manner different from that described in section II.B of this Order is prohibited.
- B. Discharge rates (MGD) shall not exceed the design capacities of the treatment facility—4 MGD (average dry weather capacity determined over three consecutive dry weather months each year) and 15 MGD (wet weather capacity).
- C. The discharge of municipal or industrial waste sludge either directly or indirectly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or into a waste stream that discharges to the ocean without further treatment, is prohibited.
- D. Waste shall not be discharged to designated Areas of Special Biological Significance except as provided in Chapter III.E of the Ocean Plan.
- E. The bypass of untreated waste containing concentrations of pollutants in excess of those listed in Table A or Table B of the Ocean Plan is prohibited.
- 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. Final Effluent Limitations – Discharge Point 001

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001 with compliance measured at Monitoring Location E-001 as described in the attached MRP:

Table 7. Effluent Limitations

Parameter	Units	Effluent Limitations ^[1]				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum	6-month Median
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	30	45	--	--	--
Total Suspended Solids (TSS)	mg/L	30	45	--	--	--
Oil and Grease	mg/L	25	40	--	75	--
Settleable Solids	mL/L	1.0	1.5	--	--	3.0
Turbidity	NTU	75	100	--	225	--
Acute Toxicity	TU _a ^[2]	--	--	3.87	--	--
Chronic Toxicity	TU _c ^[3]	--	--	120	--	--
Total Chlorine Residual	mg/L	--	--	0.96	7.2	0.24
	kg/day	--	--	15	--	3.6

[1] Mass emission limitations are based on a peak dry weather capacity of 4 MGD, and apply only during dry weather months. Weekly and monthly mass effluent limitations shall be calculated by averaging the reported daily values over the relevant number of days for the monitoring interval.

[2] Acute toxicity concentration shall be determined as follows:

$$TU_a = \frac{100}{96\text{-hr } LC_{50}}$$

Where LC₅₀ (percent waste giving 50% survival of test organisms) shall be determined using marine test species.

When it is not possible to measure the 96-hour LC₅₀ due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TU_a = \frac{\text{Log}(100 - S)}{1.7}$$

[3] $TU_c = \frac{100}{NOEL}$

Where NOEL (No Observed Effect Level) is expressed as the maximum percent effluent or receiving water that causes no observable effect on the test organism as determined by the result of a critical life stage toxicity test listed in Appendix III of the Ocean Plan (2005) adopted and effective February 14, 2006

[4] Requirement defined as below the limit of detection in standard test methods defined in the latest edition of Standard Methods for the Examination of Water and Wastewater. The Discharger may elect to use a continuous on-line monitoring system(s) for measuring flows, chlorine residual and sodium bisulfite (or other dechlorinating chemical) dosage (including safety factor) and concentration to prove that chlorine residual exceedances are false positives. If convincing evidence is provided, Regional Board staff may conclude that these false positive chlorine residual exceedances are not violations of this permit limitation.

b. 85 Percent Removal, BOD₅ and TSS: The arithmetic mean of the BOD₅ and TSS values, by weight, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period.

c. pH: The pH of the discharge shall not exceed 9.0 nor be less than 6.0.

- d. **Enterococcus Bacteria:** The treated wastewater, prior to discharge, shall not exceed a geometric mean value of 4,200 CFU/100 mL for any five consecutive samples. No single sample may exceed 12,500 CFU/100 mL.

B. Land Discharge Specifications

Not applicable.

C. Reclamation Specifications

Not applicable.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on WQOs contained in the Ocean Plan and are a required part of this Order. Compliance shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

1. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Water Board (i.e., waters designated REC-1), but including all kelp beds, the following bacterial objectives shall be maintained throughout the water column:
 - a. The geometric mean total coliform density of the five most recent samples from each site shall not exceed 1,000 CFU/100 mL, nor shall any single sample shall exceed 10,000 CFU/100 mL, or 1,000 CFU/100 mL if the ratio of fecal coliform to total coliform exceeds 0.1.
 - b. The geometric mean fecal coliform density of the five most recent samples from each site shall not exceed 200 CFU/100 mL, nor shall any single sample exceed 400 CFU/100 mL.
 - c. The geometric mean enterococcus density of the five most recent samples from each site shall not exceed 35 CFU/100 mL, nor shall any single sample exceed 104 CFU/100 mL.
2. The “Initial Dilution Zone” of wastewater outfalls shall be excluded from designation as “kelp beds” for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards.
3. Shellfish harvesting receiving water quality objectives are determined not to apply in the vicinity of this Discharger’s outfall, as there is no evidence to indicate the shoreline in the harbor area supports recreational shellfish harvesting. No commercial shellfish beds are in the vicinity of the discharge.
4. Floating particulates and grease and oil shall not be visible.

5. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
6. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
7. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
8. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally as a result of the discharge of oxygen demanding waste material.
9. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
10. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
11. The concentration of substances set forth in Chapter IV, Table B of the Ocean Plan in marine sediments shall not be increased to levels that would degrade indigenous biota.
12. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
13. Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota.
14. Ocean Plan Table B water quality objectives apply to all discharges within the jurisdiction of the Ocean Plan.
15. Marine communities, including vertebrate, invertebrate and plant species, shall not be degraded.
16. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
17. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
18. Discharge of low-level radioactive waste shall not degrade marine life.

B. Groundwater Limitations

Not applicable.

VI. PROVISIONS

A. Standard Provisions

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

1. **Monitoring and Reporting Program:** The Discharger shall comply with the Monitoring and Reporting Program (MRP), and future revisions thereto, in Attachment E of this Order. The MRP includes monitoring for conventional, non-conventional, and toxic pollutants in influent, effluent, and receiving water, as well as requirements to record observations made on the site of the POTW and collection system.
2. **Monterey Bay National Marine Sanctuary (MBNMS):** In addition to reporting to the Regional Water Board, the Discharger shall also concurrently notify the MBNMS offices in Monterey, in writing, about any violations of effluent limitations, receiving water limitations, and sludge management practices. The MBNMS shall be notified at:

Permit Coordinator
Monterey Bay National Marine Sanctuary
209 Foam Street
Monterey, CA 93940
(650) 678-4943

C. Special Provisions

1. Reopener Provisions.

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

- a. If present or future investigations demonstrate that the discharge governed by this Order will have, or will cease to have, adverse impacts on water quality and/or beneficial uses of the receiving waters.
- b. As new or revised WQOs come into effect for surface waters of the State (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order will be modified as necessary to reflect updated WQOs.

- c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified.
- d. An administrative or judicial decision on this Order or a separate NPDES permit or WDR that addresses requirements similar to this discharge; and
- e. As authorized by law.

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

2. Best Management Practices and Pollutant Minimization Program

a. Pollutant Minimization Program (PMP)

The Discharger shall develop and conduct a 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 pollutant is present in the effluent above an effluent limitation and either:

- (1) The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the reported ML; or
- (2) The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in the MRP.

The 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 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 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 pollutant(s) in the effluent at or below the effluent limitation;
- (4) Implementation of appropriate cost-effective control measures for the reportable pollutant(s), consistent with the control strategy; and
- (5) An annual status report that shall be sent to the Regional Water Board including:

- (a) All PMP monitoring results for the previous year;
- (b) A list of potential sources of the reportable 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.

3. 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) so that the document(s) may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary. For any significant changes in treatment facility equipment or operation practices, applicable revisions shall be completed within 90 days of completion of such changes.
- (3) The Discharger shall provide the Executive Officer, upon 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.

4. Special Provisions for Municipal Facilities (POTWs Only)

a. Sludge Practices

- (1) For sludge management, the Discharger shall comply with all requirements of 40 CFR Part 503.
- (2) The Discharger shall not allow sludge material to be deposited in or leach to waters of the State. Sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.
- (3) Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR Part 258. In the annual self-monitoring report, the Discharger shall include the amount of sludge disposed of, and the landfill to which it was sent.
- (4) This Order does not authorize permanent on-site storage or disposal of sludge. A Report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activities.
- (5) The Discharger shall submit an annual report to the USEPA and the Regional Water Board containing reuse information and other information pertaining to sludge, as required at 40 CFR Part 503.

b. Sanitary Sewer Overflows and Sewer System Management Plan

The Discharger's collection system is part of the facility that is subject to this Order. As such, the 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. Compliance with these requirements will also satisfy the federal NPDES requirements specified in this Order. Furthermore, the Discharger shall comply with the schedule for development of sewer system management plans (SSMPs) as indicated in the letter issued by the Regional Water Board on July 7, 2005, pursuant to Water Code Section 13267. Until the statewide on-line reporting system becomes operational, the Discharger shall report sanitary sewer overflows electronically according to the Regional Water Board's SSO reporting program. The Discharger shall also immediately notify the Monterey Bay National Marine Sanctuary of any SSOs likely to enter ocean waters at (650) 678-4943, and shall send a written notification within five days of SSOs larger than 1,000 gallons or that occur where public contact is likely to the following address:

Permit Coordinator
Monterey Bay National Marine Sanctuary
209 Foam Street
Monterey, CA 93940

5. Other Special Provisions

- a. **Dilution Study:** The Discharger shall provide documentation to verify that the discharge receives an initial dilution of 119:1 (i.e., 119 parts ocean water to one part effluent) for discharge conditions anticipated under this Order and during the next permit cycle (10 years total). The Discharger shall provide this documentation within one year of the date this Order becomes effective.

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 reportable pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be

deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

B. Multiple Sample Data

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

ATTACHMENT A – DEFINITIONS

Acute Toxicity:

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{96\text{-hr LC } 50\%}$$

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log(100 - S)}{1.7}$$

where:

S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

Areas of Special Biological Significance (ASBS): are those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordane-alpha, chlordane-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Chronic Toxicity: This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$TUc = \frac{100}{NOEL}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix III. NOEL for compliance determination is equal to IC25 or EC25. If the IC25 or the EC25 cannot be statistically determined, the NOEL shall be equal to the no observed effect concentration (NOEC) derived using hypothesis testing.

Daily Discharge: Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

DDT shall mean the sum of 4,4' DDT, 2,4' DDT, 4,4' DDE, 2,4' DDE, 4,4' DDD, and 2,4' DDD.

Degrade: Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ) are those sample results less than the reported Minimum Level, but greater than or equal to the laboratory's MDL.

Dichlorobenzenes shall mean the sum of 1,2- and 1,3-dichlorobenzene.

Downstream Ocean Waters shall mean waters downstream with respect to ocean currents.

Dredged Material: Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil".

Enclosed Bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between

headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

Endosulfan shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estuaries and Coastal Lagoons are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Initial Dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Water Board, whichever results in the lower estimate for initial dilution.

Instantaneous Maximum Effluent Limitation: the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation: the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Kelp Beds, for purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera *Macrocystis* and *Nereocystis*. Kelp beds include the total foliage canopy of *Macrocystis* and *Nereocystis* plants throughout the water column.

Mariculture is the culture of plants and animals in marine waters independent of any pollution source.

Material: (a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

Maximum Daily Effluent Limitation (MDEL): the highest allowable daily discharge of a pollutant.

MDL (Method Detection Limit) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, PART 136, Appendix B.

Minimum Level (ML) is the concentrations 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.

Natural Light: Reduction of natural light may be determined by the Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Water Board.

Not Detected (ND) are those sample results less than the laboratory's MDL.

Ocean Waters are the territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

Pollutant Minimization Program (PMP) means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table B pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention

Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Reported Minimum Level is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

Satellite Collection System is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Shellfish are organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-month Median Effluent Limitation: the highest allowable moving median of all daily discharges for any 180-day period.

State Water Quality Protection Areas (SWQPAs) are non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

TCDD Equivalentents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5

2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

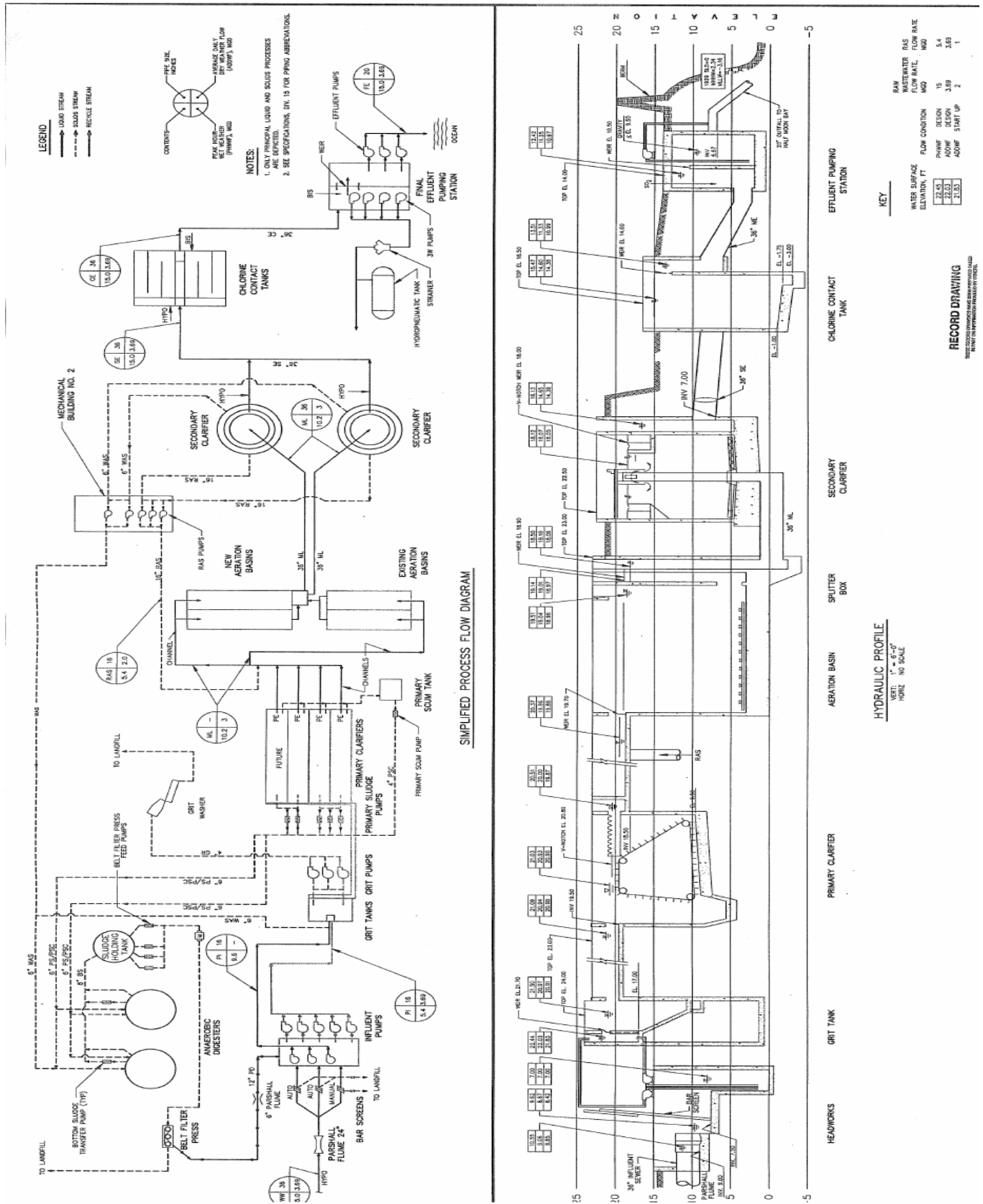
Waste: As used in the Ocean Plan, waste includes a Discharger’s total discharge, of whatever origin, i.e., gross, not net, discharge.

Water Reclamation: The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D –STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 CFR § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 CFR § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR § 122.41(i)(4).)

G. Bypass

1. Definitions
 - a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i).)
 - b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A));
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment

- should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and
- c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)
 5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR § 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 CFR § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and

- d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 CFR § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR § 122.41(j)(1).)
- B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

- A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 CFR § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 CFR § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR § 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR § 122.22(a)(3).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));

- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and
- c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 CFR § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.41(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 CFR § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 CFR § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR § 122.41(l)(6)(ii)):
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR § 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR § 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR § 122.41(1)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR § 122.41(1)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR § 122.41(1)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 CFR § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of this Order. (40 CFR § 122.42(b)(2).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 CFR § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A. The Discharger shall comply with the MRP for this Order as adopted by the Regional Water Board, and with all of the Self-Monitoring Program, Part A, adopted August 1993 (SMP). The MRP and SMP may be amended by the Executive Officer pursuant to USEPA regulations 40 CFR Parts 122.62, 122.63, and 124.5. If any discrepancies exist between the MRP and SMP, the MRP prevails.
- B. Sampling is required during the entire year when discharging. All analyses shall be conducted using current USEPA methods, or methods that have been approved by the USEPA Regional Administrator pursuant to 40 CFR Part 136.4 and 40 CFR Part 136.5, or equivalent methods that are commercially and reasonably available, and that provide quantification of sampling parameters and constituents sufficient to evaluate compliance with applicable effluent limits. The Regional Water Board will find the Discharger in violation of the limitation if the discharge concentration exceeds the effluent limitation and the Reported Minimum Level for the analysis for that constituent.
- C. Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order.

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
Influent	INF-001 (A-001)	At any point in the treatment facility’s headworks at which all waste tributary to the system is present, preceding any phase of treatment, and exclusive of any return flows or process side streams.
Effluent	M-001 (E-001)	At any point in the treatment works between the point of discharge and the point at which all waste tributary to the outfall is present and following dechlorination.
	M-001D (E-001D)	At any point in the treatment facilities after disinfection is complete and prior to dechlorination.
Receiving Waters	R-001 through R-004	At the corners of a 500 ft x 500 ft square having one side parallel to the shoreline. Station R-001 shall be located at the northeastern corner, and stations R-002 through R-004 shall be located at successive corners in a clockwise direction.
	R-005	A reference location approximately 7,500 ft north of the outfall parallel to the shoreline at Magellan Avenue.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

1. The Discharger shall monitor influent to the facility at INF-001 as follows:

Table E-2. Influent Monitoring

Parameter	Units ^[1]	Sample Type ^[2]	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Continuous	--	--
BOD ₅ ^[3, 4]	mg/L	C-24	1X / Week	405.1
TSS ^[4]	mg/L	C-24	2X / Week	160.2

[1] Unit Abbreviations:

- MGD = million gallons per day
- mg/L = milligrams per liter
- kg/day = kilograms per day

[2] Sample Type Abbreviations:

- C-24 = 24-hour composite

[3] 5-Day Biochemical Oxygen Demand at 20° C

[4] During any day when bypassing occurs from any treatment unit(s) in the plant or from the outfall, the monitoring program for the influent shall include, in addition to the above schedule for sampling, measurement, and analysis, composite samples for BOD and TSS for the duration of the bypass or 24 hours, whichever is shorter.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-001

1. The Discharger shall monitor treated effluent at M-001 at as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table E-3. Effluent Monitoring M-001

Parameter	Units ^[1]	Sample Type ^[2]	Minimum Sampling Frequency	Required Analytical Test Method ^[3]
Flow Rate ^[4,5]	MGD	Continuous	Continuous	---
BOD ₅ ^[5]	mg/L	C-24	1X / Week	405.1
TSS ^[5]	mg/L	C-24	2X / Week	160.2
Settleable Solids	mg/L	C-24	2X / Week	160.5
Oil & Grease ^[5, 6]	mg/L	Grab	1X / Quarter	1664
Turbidity	NTU	C-24	2X / Week	180.1
Acute Toxicity, 96-hr LC ₅₀ ^[7, 8, 9]	TUa	Flow through	1X / Quarter	821-R-02-012
Chronic Toxicity	TUc	C-24	1X / Year ^[10]	821-R-02-012
Ammonia Nitrogen & Unionized Ammonia ^[9]	mg/L	Grab	2X / Month	350.3
pH ^[8]	pH units	Grab	1X / Day	150.1 or 9040
Dissolved Oxygen ^[8]	mg/L, % saturation	Grab	1X / Day	---
Temperature ^[8]	°C	Grab	1X / Day	---

Parameter	Units ^[1]	Sample Type ^[2]	Minimum Sampling Frequency	Required Analytical Test Method ^[3]
Sulfides (if DO < 5.0 mg/L) Total and Dissolved	mg/L	Grab	1X / Day	376.2
Priority Pollutants ^[11]	µg/L	^[12]	1X / Year	^[12]

[1] Unit Abbreviations:

- mg/L = milligrams per liter
- kg/day = kilograms per day
- µg/L = micrograms per liter
- NTU = Nephelometric Turbidity Units
- % Saturation = percent saturation of dissolved oxygen in water
- ° C = degree Celsius

[2] Sample Type Abbreviations:

- 2M = Bimonthly
 - Continuous = Measured continuously, and recorded and reported daily
 - C-24 = 24-hour composite
 - Grab = Grab sample
- Grab samples shall be taken on days of composite sampling.

[3] Or other equivalent test method as specified in 40 CFR 136.

[4] Effluent flow is calculated using data from the influent and mid plant flow meters.

[5] During any day when bypassing occurs from any treatment unit(s) in the plant or from the outfall, the monitoring program for the effluent and any near shore discharge shall include the following in addition to the above schedule for sampling, measurement, and analysis:

- a. Composite sample for BOD and TSS for the duration of the bypass or 24 hours, whichever is shorter.
- b. Grab samples for total coliform, oil and grease, and chlorine residual (continuous or every 2 hours).
- c. Continuous monitoring of flow.

[6] In the event that sampling for oil and grease once every two weeks or less frequently shows an apparent violation of the monthly average limitation (considering the result of one or two days' sampling as a monthly average), then the sampling frequency shall be increased to weekly so that a true monthly average can be computed and compliance can be determined.

[7] Acute toxicity shall be measured in accordance with approved protocols in 40 CFR 136, using a marine test species approved by the Executive Officer.

[8] Dissolved oxygen, pH, and temperature shall be analyzed only when acute toxicity is being monitored - on the same composite sample(s) used for the bioassay(s) at the start of the bioassay(s) and at intervals of 24, 48, 72, and 96 hours after starting the bioassay(s).

[9] Ammonia nitrogen and unionized ammonia shall be analyzed only when acute toxicity is being monitored - on the same composite sample(s) used for the bioassay(s) at the start of the bioassay test(s). The method of calculating unionized ammonia shall be indicated.

[10] TUC shall be measured using the critical life stage toxicity tests specified in Appendix III of the Ocean Plan, and Section V.B of this MRP.

[11] All pollutants listed in Table B of the Ocean Plan (2005), except acute and chronic toxicity and total chlorine residual, as noted above.

[12] Analytical method shall be as specified in Appendix III of the Ocean Plan (2005); sample type shall be as needed for the specified analytical method.

B. Monitoring Location M-001-D

1. The Discharger shall monitor treated effluent at M-001D as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table E-4. Effluent Monitoring M-001-D

Parameter	Units ^[1]	Sample Type ^[2]	Minimum Sampling Frequency	Required Analytical Test Method ^[3]
Enterococcus	CFU/100 mL	Grab	1X / Week	1600 Series
Total Chlorine Residual ^[4]	mg/L	Grab or Continuous	Every 2 hours or Continuous	---

[1] Unit Abbreviations:

- mg/L = milligrams per liter
- CFU/100 mL = Colony Forming Units per 100 milliliters

[2] Sample Type Abbreviations:

- Grab = Grab sample

[3] Or other equivalent test method as specified in 40 CFR 136.

[4] Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. When applicable, the Discharger may record discrete readings from the continuous monitoring every hour on the hour, and report, on a daily basis, the maximum concentration observed following dechlorination. Total chlorine dosage (mg/day) shall be recorded on a daily basis.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Whole Effluent Acute Toxicity

1. All bioassays shall be performed according to the most up-to-date protocols in 40 CFR Part 136, currently in “Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms,” 5th Edition.
2. The Discharger has performed a TIE on SAM effluent confirming that unionized ammonia was responsible for past observed toxicity, and that the concentration and form of ammonia in the effluent do not cause similar toxicity in the receiving water. The Discharger is therefore granted approval to control unionized ammonia formation in effluent samples by pH control prior to acute toxicity testing.
3. Effluent used for fish bioassays must be dechlorinated prior to testing. Monitoring of the bioassay water shall include, on a daily basis, the following parameters: pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported. If a violation of acute toxicity effluent limitation occurs or if the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new batches of fish and shall continue back to back until compliance is demonstrated.

B. Chronic Toxicity Effluent Monitoring Program

1. The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100 percent effluent samples in accordance with Appendix III of the Ocean Plan; and using USEPA’s *Short Term Methods for Estimating the Chronic Toxicity of Effluents and*

Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002 (EPA/821/R-02-014); and/or USEPA's *Short-Term Methods for Estimating Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms*, August, 1995 (EPA/600/R-95/136).

2. Effluent samples shall be collected after all treatment processes, including dechlorination, and before discharge to the receiving water.
3. Test Species and Methods:
 - a. The Discharger shall conduct tests using the most sensitive species, currently red abalone (*H. rufescens*), or as approved by the Executive Officer.
 - b. Re-screening is required:
 - (1) Subsequent to any significant change in the nature of the effluent discharged through changes in sources or treatment, except those changes resulting from reductions in pollutant concentrations attributable to source control efforts, or
 - (2) Prior to permit reissuance. Screening phase monitoring data shall be included in the NPDES permit application for reissuance. The information shall be as recent as possible, but may be based on screening phase monitoring conducted within 5 years before the permit expiration date.

The Discharger shall re-screen once during the five-year term of this permit with three species, if possible including a vertebrate, an invertebrate, and an aquatic plant, and continue to monitor with the most sensitive species.
 - c. The Discharger shall conduct tests at a dilution series centered on the calculated effluent concentration at the edge of the zone of initial dilution. For example, with a dilution ratio of 119:1 the five dilutions are: 3.4%, 1/7%, 0.84%, 0.42%, 0.21% and 0% (Control). The “%” represents percent effluent as discharged.

C. Quality Assurance

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).
2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/821-R-02-014), then the Discharger must re-sample and re-test at the earliest time possible.
3. Control and dilution water should be obtained from an unaffected area of the receiving waters. If the dilution water used is different from the culture water, a second control using culture water shall be used. If it is not practicable to collect samples from the unaffected area of the receiving water then a laboratory prepared control and dilution water should be used.

D. Accelerated Monitoring

Accelerated monitoring is required after exceeding the chronic toxicity effluent limit in Section IV.A.1 of this Order. Accelerated monitoring shall consist of quarterly monitoring. The discharger may return to routine monitoring if accelerated monitoring does not exceed the chronic toxicity effluent limit in Section IV.A.1 of this Order.

If accelerated monitoring confirms consistent toxicity above the chronic toxicity effluent limit in Section IV.A.1 of this Order, the Discharger is required to initiate a toxicity identification evaluation/toxicity reduction evaluation (TIE/TRE), in accordance with a TIE/TRE workplan developed as described in Section V.E below, and incorporating any and all comments from the Executive Officer. The Discharger may return to routine monitoring after appropriate elements of TRE workplan are implemented and either the toxicity drops below the chronic toxicity effluent limit in Section IV.A.1 of this Order or, based on the results of the TRE, the Executive Officer authorizes a return to routine monitoring.

E. Chronic Toxicity Reduction Evaluation (TRE)/Toxicity Identification Evaluation (TIE)

1. To be prepared for responding to toxicity events, the Discharger shall prepare a generic TRE work plan within 120 days of the effective date of this Order. The Discharger shall review and update the work plan as necessary to remain current and applicable to the discharge and discharge facilities.
2. Within 30 days of exceeding either trigger for accelerated monitoring, the Discharge shall submit to the Regional Water Board a TRE work plan, which should be the generic work plan revised as appropriate for this toxicity event after consideration of available discharge data.
3. Within 30 days of the date of completion of the accelerated monitoring tests observed to exceed either trigger, the Discharger shall initiate a TRE in accordance with a TRE work plan that incorporates any and all comments from the Executive Officer.
4. The TRE shall be specific to the discharge and be in accordance with current technical guidance and reference materials, including USEPA guidance materials. The TRE shall be conducted as a tiered evaluation process, such as summarized below:
 - i. Tier 1 consists of basic data collection (routine and accelerated monitoring).
 - ii. Tier 2 consists of evaluation of optimization of the treatment process, including operation practices and in-plant process chemicals.
 - iii. Tier 3 consists of a toxicity identification evaluation (TIE).
 - iv. Tier 4 consists of evaluation of options for additional effluent treatment processes.
 - v. Tier 5 consists of evaluation of options for modifications of in-plant treatment processes.
 - vi. Tier 6 consists of implementation of selected toxicity control measures, and follow-up monitoring and confirmation of implementation success.
5. The TRE may be ended at any stage if monitoring finds there is no longer consistent toxicity (complying with Effluent Limitations Section IV.6.a).

6. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity. All reasonable efforts using currently available TIE methodologies shall be employed.
7. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the source(s) and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with chronic toxicity evaluation parameters.
8. Many recommended TRE elements parallel required or recommended efforts of source control, pollution prevention and storm water control programs. TRE efforts should be coordinated with such efforts. To prevent duplication of efforts, evidence of complying with requirements or recommended efforts of such programs may be acceptable to comply with TRE requirements.
9. The Regional Water Board recognizes that chronic toxicity may be episodic and identification of causes of and reduction of sources of chronic toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

F. Reporting

1. Chronic Toxicity. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the Discharge Monitoring Report (DMR). Routine reporting shall include, at a minimum, as applicable, for each test:
 - a. Sample date(s);
 - b. Test initiation date;
 - c. Test species;
 - d. End point values for each dilution (e.g., number of young, growth rate, percent survival);
 - e. NOEL value(s) in percent effluent;
 - f. IC₁₅, IC₂₅, IC₄₀ and IC₅₀ values in percent effluent;
 - g. TU_c values $\left(TU_c = \frac{100}{NOEL} \right)$;
 - h. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);
 - i. NOEL and LOEC values for reference toxicant test(s);
 - j. C₂₅ value for reference toxicant test(s);

- k. Applicable charts; and
- l. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
- 2. The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from all samples collected during that year in the annual self-monitoring report.

The Discharger shall notify by telephone or electronically this Regional Water Board of any toxicity exceedance of the limit or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

Not Applicable.

VII. RECLAMATION MONITORING REQUIREMENTS

Not Applicable.

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Monitoring Locations

- 1. The Discharger shall monitor the Pacific Ocean at fixed monitoring locations R-001, R-002, R-003, and R-004 as follows:

Table E-5. Receiving Water Monitoring Requirements

Parameter	Units ^[1]	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ^[2]
Ammonia Nitrogen and Unionized Ammonia ^[3]	mg/L	Grab	1X / Quarter	350.3
pH	pH Units	Grab	1X / Quarter	150.1 or 9040
Dissolved Oxygen	mg/L, % saturation	Grab	1X / Quarter	--
Temperature	°C	Grab	1X / Quarter	--
Total Coliform	CFU/100 mL	Grab	1X / Year	1600 Series
Fecal Coliform	CFU/100 mL	Grab	1X / Quarter	1600 Series
Enterococcus	CFU/100 mL	Grab	1X / Year	1600 Series
Salinity	Ppt	Grab	1X / Quarter	--
All Applicable Standard Observations ^[4]	--	--	1X / Quarter	--
Daily Rainfall	Cm	--	1X / Day	--

Parameter	Units ^[1]	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ^[2]
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[1] Unit Abbreviations:

- mg/L = milligrams per liter
- µg/L = micrograms per liter
- % Saturation = percent saturation of dissolved oxygen in water
- CFU/100 mL = Colony Forming Units per 100 milliliters
- °C = degree Celsius
- ppt = parts per thousand
- cm = centimeters

[2] Or other equivalent test method as specified in 40 CFR 136.

[3] The method of calculating unionized ammonia shall be indicated.

[4] Discharger shall record standard observations of effluent, including color, presence of sheen or foam, etc.

IX. OTHER MONITORING REQUIREMENTS

A. Dewatered Sludge

Daily records shall be kept of the quantity and solids content of dewatered sludge disposed of and the location of disposal.

B. Increased Monitoring Frequency

If any sample is in violation of effluent limitations sampling for that parameter shall be increased in accordance with the Self-Monitoring Program, Part A, Sections C.2.d and e (Attachment G).

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachments D and G) related to monitoring, reporting, and recordkeeping, except as otherwise specified below.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit self-monitoring reports. Until such notification is given, the Discharger shall submit self-monitoring reports in accordance with the requirements described below.
2. The Discharger shall submit monthly Self Monitoring Reports including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. Monthly reports shall be due no later than 30 days after the end of each calendar month.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-6. Monitoring and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
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Continuous	Effective date of permit	All	First day of second calendar month following month of sampling
2X / Hour	Effective date of permit	Hour	First day of second calendar month following month of sampling
1X / Day	Effective date of permit	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	First day of second calendar month following month of sampling
1X / Week	Effective date of permit	Sunday through Saturday	First day of second calendar month following month of sampling
2X / Week	Effective date of permit	Sunday through Saturday	First day of second calendar month following month of sampling
2X / Month	Effective date of permit	1 st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling
1X / Quarter	Effective date of permit	March, June, September and December	First day of second calendar month following month of sampling
2X / Year	Effective date of permit	March 1 through March 31 September 1 through September 30	May 1 November 1

4. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the ML, but greater than or equal to the laboratory’s MDL, shall be reported as “Detected, but Not Quantified,” or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words “Estimated Concentration” (may be shortened to “Est. Conc.”). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory’s MDL shall be reported as “Not Detected,” or ND.
- d. The Dischargers shall instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. The Discharger shall not use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic

submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

6. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
7. SMRs must be submitted to the Regional Water Board, signed and certified as required by the standard provisions (Attachment D), to the address listed below:

Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
ATTN: NPDES Wastewater Division

8. The Discharger has the option to submit all monitoring results in an electronic reporting format approved by the Executive Officer. The Electronic Reporting System (ERS) format includes, but is not limited to, a transmittal letter, summary of violation details and corrective actions, and transmittal receipt. If there are any discrepancies between the ERS requirements and the “hard copy” requirements listed in the MRP, then the approved ERS requirements supersede.

C. Discharge Monitoring Reports (DMRs)

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit self-monitoring reports that will satisfy federal requirements for submittal of DMRs. Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy of the DMR to the address listed below:

State Water Resources Control Board
Discharge Monitoring Report Processing Center
Post Office Box 671
Sacramento, CA 95812

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.

D. Other Reports

1. **Annual Reports.** By February 1st of each year, the Discharger shall submit an annual report to the Regional Water Board covering the previous calendar year. The report shall contain the items described in *Standard Provisions and Reporting Requirements, and SMP Part A, August 1993* (Attachment G).

A copy shall also be sent to the MBNMS at the following address:

Permit Coordinator
Monterey Bay National Marine Sanctuary
209 Foam Street
Monterey, CA 93940

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	2_417068001
Discharger	Sewer Authority Mid-Coastside
Name of Facility	Sewer Authority Mid-Coastside WWTP and its collection facilities
Facility Address	1000 North Cabrillo Highway
	Half Moon Bay, CA 94019
	San Mateo County
Facility Contact, Title and Phone	John F. Foley III, Manager, (650) 726-0124
Authorized Person to Sign and Submit Reports	Same as Facility Contact
Mailing Address	P.O. Box 3100, Half Moon Bay, CA 94019
Billing Address	Same as Mailing Address
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	N
Reclamation Requirements	NA
Facility Permitted Flow	4 MGD (average dry weather design flow)
Facility Design Flow	4 MGD (average dry weather design flow)
	15 MGD (wet weather peak capacity)
Watershed	San Mateo Coast
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

A. Sewer Authority Mid-Coastside (hereinafter Discharger) is the owner and operator of the Sewer Authority Mid-Coastside Wastewater Treatment Plant, a publicly owned treatment works.

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. The facility discharges secondary treated wastewater to the Pacific Ocean, a water of the United States, and has been regulated by Order 00-016, which was adopted on March 15, 2000 and expired

on March 15, 2005. The terms and conditions of that Order were automatically continued and remained in effect until the adoption of new Waste Discharge Requirements (WDRs) and a new National Pollutant Discharge Elimination System (NPDES) permit pursuant to this Order.

- C. The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for renewal of its WDRs and NPDES permit on September 10, 2004.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Sludge Treatment or Controls

The Discharger owns and operates a sanitary sewage treatment plant and a collection system that collects sewage from satellite collection systems serving the City of Half Moon Bay, Granada Sanitary District, and Montara Sanitary District, and conveys it to the plant. The treatment system, which consists of influent screening, grit removal, primary clarification, activated sludge, secondary clarification, chlorination, and dechlorination, provides secondary treatment of domestic and commercial wastewater from the service area. The combined service population is approximately 20,500. The collection system, called the Intertie Pipeline System (IPS), consists of approximately 8 miles of force mains and gravity interceptors and three pump stations that convey wastewater from the City of Half Moon Bay, Montara Sanitary Sewer District and Granada Sanitary Sewer District to the plant. Montara Sanitary Sewer District, Granada Sanitary Sewer District, and the City of Half Moon Bay, each acting independently under the direction of its governing board, own, operate, and maintain sewer collection systems in their respective service areas. The treatment plant's design capacity is an average dry weather flow of 4 MGD and a peak wet weather flow of 15 MGD. The facility discharges an annual average flow of 1.88 MGD.

Sludge is treated by anaerobic digestion and belt filter press dewatering. Final sludge is disposed at a sanitary landfill. Attachment B provides a map of the area around the facility. Attachment C provides a flow schematic of the facility.

B. Discharge Points and Receiving Waters

Treated wastewater is discharged west of Pilarcitos Creek to the Pacific Ocean, a water of the United States, through a discharge pipe and a submerged diffuser extending approximately 1,900 feet from the shoreline and terminating at a depth of approximately 37 feet (-37 MLLW) (Discharge Point 001). The discharge pipe is constructed laying on ballast rock on the sea floor; it is covered with sand much of the year due to seasonal sand shifting. The diffuser consists of the westernmost 238 feet of the discharge pipe, with 35 3-inch iron risers extending vertically from the discharge pipe approximately 7 feet apart. Treated wastewater is discharged through the risers. Recent modifications to the diffuser structure included adding duckbill valves to the risers. The wastewater is discharged directly into Monterey Bay National Marine Sanctuary (MBNMS). The Discharger reports that the discharge achieves an initial dilution ratio of 119:1.

The Discharger requested the Regional Water Board increase the authorized initial dilution to 310:1 in the May 21, 1999, NPDES Permit Application (ROWD) transmittal letter Item 5. The July 14, 1998, Antidegradation Analysis by K. P. Lindstrom, Inc. for the SAM plant expansion from 2.0 to 4.0 MGD, included as Attachment D to the May 21, 1999, ROWD, used an initial dilution of 215:1 (average of 119:1 and 310:1) in its calculations of water quality impacts. A 1995 Carollo Report "Ocean Outfall Flow Characteristics Study, Letter Report to Mr. Gary

Vallado of the Sewer Authority Mid-Coastside from Michael Britten, Associate of Carollo Engineers, May 2, 1995, was included as Attachment E to the May 21, 1999, ROWD. The letter report references the original construction plans "Unit 4: Outfall and Pumping Facilities," dated February 1979. The outfall was inspected by divers in October 1994 and found to have all the vertical risers sheared off and 31 of the 35 diffuser ports partially filled with sand. The sand was cleaned out by the divers. New 3-inch risers with check valves (to keep out sand) were installed in 1995. Prior to being upgraded in 1995, the SAM outfall was estimated to have a conservative (worst case) initial dilution of 119:1. The dilution ratio of the upgraded outfall was estimated by Carollo Engineers using the USEPA CORMIX Model Version 3.0 to provide an initial dilution of 310:1.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

1. Effluent limitations contained in Order No. 00-016 for discharges from Discharge Point 001 and representative monitoring data from the term of that Order are as follows.

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From 1/2002 to 4/2006)	
		Average Monthly	Average Weekly	Max at any Time	Highest Average Weekly	Highest Max at any Time
BOD ₅ at 20° C	mg/L	30	45	60	--	47
Oil & Grease (mg/L)	mg/L	25	40	75	--	7
Total Suspended Solids	mg/L	30	45	60	46	--
Settleable Solids	mL/L-hr	1.0	1.5	3.0	--	3.5
Turbidity	NTU	75	100	225	--	NA ^[1]
Acute Toxicity	TU _a	1.5	2.0	2.5	--	1.11
		6-Month Median	Daily Maximum	Instantaneous Maximum		
Cyanide	µg/L	120	480	1,200		ND ^[2]
		Range			Minimum	Maximum
pH	s.u.	6.0 – 9.0			6.74	7.91

[1] Not available.

[2] Not Detected.

2. Total Coliform Bacteria: Maximum moving median value in any five (5) consecutive samples: 2,400 CFU/100 mL. Data provided by the Discharger indicate a maximum 5-day median of 800 CFU/100 mL.

D. Compliance Summary

The following table summarizes the number of effluent limitation exceedances for Discharge Point 001 during the previous permit period.

Table F-3. Compliance Summary

Parameter ^[1]	Number of Exceedances					
	2000	2001	2002	2003	2004	2005
Total Suspended Solids (Monthly average)		1				
Total Suspended Solids (Weekly Average)		2				
Total Suspended Solids (Daily Maximum)		4				
Total Suspended Solids (Percent Removal)		1				
Settleable Solids (Monthly Average)		1				
Settleable Solids (Weekly Average)		1				
Settleable Solids (Instantaneous)		1	1			
BOD ₅ (Weekly Average)					1	
Total Coliform Bacteria (Moving Median)	6					
Total Coliform Bacteria (Daily Maximum)	1					

[1] Parameters not listed did not exceed effluent limitations during the period from 3/2000 – 12/2005.

Enforcement actions taken during the term of Order No. 00-016 include Order No. 01-033, consisting of Mandatory Minimum Penalties (MMPs) totaling \$21,000; and Order No. 01-128, consisting of MMPs totaling \$30,000. Prior to this, the Regional Water Board issued Cease and Desist Order 95-150 requiring treatment system upgrades. The Discharger completed these upgrades in 1999. The CDO was rescinded by Order No. 00-016.

Between the years 2000 and 2004, SAM reported 174 sanitary sewer overflows (SSOs) from its collection system. Fifty-two of these SSOs were identified as having entered storm drains or surface waters; 19 were equal to or greater than 1,000 gallons in volume. SAM reported six SSOs that were at least 10,000 gallons in volume, and another two SSOs exceeded 9,000 gallons. From 2000 to 2004, SAM identified 14 SSOs as flowing directly to the Pacific Ocean (i.e., the MBNMS). However, wastewater that enters storm drains and creeks in SAM’s service area will reach the ocean. Therefore it is possible that any of the 52 SSOs to storm drains and surface waters could have entered the MBNMS. These SSOs to surface waters and storm drains totaled a minimum of 417,800 gallons of wastewater from 2000 to 2004 (several SSOs had no volume estimate).

The Discharger has since developed and implemented various plans and policies to improve its Operation and Maintenance Program, Overflow Emergency Response Plan, Fats, Oils and Grease (FOG) Control Program, Capital Improvement Plan. In 2005, there was a marked decrease in SSO frequency and volume compared to previous years. Between January 1 and December 31, 2005, there were a total of 23 SSOs, compared to 40, 44 and 25 SSOs in 2002, 2003 and 2004, respectively. SAM reported a total spill volume of 3,562 gallons in 2005 compared to about 108,000 gallons spilled in both 2003 and 2004. In 2005, only four SSOs were equal to or greater than 100 gallons, and each of these was reported to the Regional Water Board’s SSO database. The spill volumes were less in 2005 than previous years because there were no capacity or pump station related SSOs. The system successfully conveyed all wastewater without a capacity related spill during rainy weather in early 2005 and through some heavy storms in December 2005. Only two SSOs in 2005 reached surface waters and both of these were to the golf course lake in Ocean Colony in Half Moon Bay.

The Regional Water Board, the State Water Board, and the MBNMS have taken enforcement or regulatory actions in response either to SAM's SSOs, or to address SSOs on a regional or statewide basis. In 2003, the National Oceanic and Atmospheric Administration (NOAA), the agency which has jurisdiction over the Monterey Bay National Marine Sanctuary, issued a warning letter to the Discharger in response to SSOs that occurred on or about May 5-7, 2000. On November 15, 2004, the Regional Water Board sent sewer system authorities in Region 2 a letter pursuant to Section 13267 of the California Water Code, *New Requirements for Reporting of Sanitary Sewer Overflows*, which strengthened requirements for SSO reporting and subsequent monitoring, and also first required each sewer system develop and implement a system-specific Sewer System Management Plan (SSMP). As of May 2, 2006, the State Water Board adopted Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*, which expanded on the requirement for development and implementation of system-specific SSMPs.

E. Planned Changes

Not Applicable

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to CWA section 402 and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with section 13260).

B. 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 through 21177.

C. State and Federal Regulations, Policies, and Plans

- 1. Technology-Based Effluent Limitations.** NPDES regulations at 40 CFR 122.44(a) require that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Secondary Treatment Standards at 40 CFR 133. A detailed discussion of the technology-based effluent limitations development is included in this Fact Sheet.
- 2. Water Quality-Based Effluent Limitations.** 40 CFR 122.44(d) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant,

water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state’s narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

- 3. Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan for the San Francisco Basin* (hereinafter, the Basin Plan) that designates beneficial uses, establishes WQOs, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean and other receiving waters addressed through the plan. The Basin Plan was amended on January 21, 2004 by Resolution No. R2-2004-003. This amendment was approved by the State Water Board and the Office of Administrative Law on July 22, 2004, and October 4, 2004, respectively. USEPA gave final approval to the amendment on January 5, 2005.

Beneficial uses applicable to the Pacific Ocean are as follows.

Table F-4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean	<ul style="list-style-type: none"> • Water contact recreation • noncontact water recreation • industrial service supply • navigation • marine habitat • shellfish harvesting • ocean • commercial and sport fishing • preservation of rare and endangered species.

Requirements of this Order implement the Basin Plan.

- 4. Thermal Plan.** The State Water Board adopted a 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 ocean waters.
- 5. California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 20, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below.

Table F-5. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001	Pacific Ocean	<ul style="list-style-type: none"> • Industrial water supply • water contact and non-contact recreation, including aesthetic enjoyment • navigation • commercial and sport fishing • mariculture • preservation and enhancement of designated Areas of Special Biological Significance (ASBS) • rare and endangered species • marine habitat; fish spawning and shellfish harvesting

To protect beneficial uses, the Ocean Plan establishes WQOs and a program of implementation. Requirements of this Order implement the Ocean Plan.

6. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes [40 CFR § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)]. Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

7. **Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand, total suspended solids, settleable solids, oil and grease, turbidity, and pH. The permit’s technology-based pollutant restrictions are no more stringent than required by the CWA. WQBELs have been scientifically 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. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the Ocean Plan, which was approved by USEPA on February 14, 2006. All beneficial uses and WQOs contained in the Ocean Plan were approved under state law and submitted to and approved by 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 purposes of the CWA” pursuant to 40 CFR 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

8. **Antidegradation Policy.** 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be

maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

- 9. Anti-Backsliding Requirements.** CWA sections 402(o)(2) and 303(d)(4) and NPDES regulations at 40 CFR 122.44(1) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in this Order are consistent with anti-backsliding requirements of the CWA and its implementing regulations.

D. Impaired Water Bodies on CWA 303(d) List

The Pacific Ocean at Half Moon Bay is not on the 303(d) list as an impaired water body.

E. Other Plans, Policies and Regulations

Not Applicable.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 122.44(d) requires that permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs may be established: (1) using USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

A. Discharge Prohibitions

1. Prohibition III.A (No discharge except as contemplated by this Order and/or as described by the Discharger). This prohibition is based on CWC Section 13260, which requires submittal of a ROWD, including all information required by the Regional Water Board, by any person discharging waste to waters of the State. Discharges not described by the Discharger in its ROWD, and therefore not contemplated by the Regional Water Board in issuing this Order, are viewed as unauthorized discharges to waters of the State.
2. Prohibition III.B (No discharge in excess of design flow capacities). Order No. 00-016 prohibited flows in excess of the facility's average dry weather capacity of 4.0 MGD. This Order expands on this prohibition to prohibit flows in excess of the facility's peak wet weather capacity (15 MGD). The prohibition assures adequate treatment of wastewater in all

circumstances anticipated by the facility's design and, in effect, requires the Discharger to increase treatment capacities when actual flows approach/exceed current design capacity.

3. Prohibition III.C (No discharge of sludge or untreated supernatant). This prohibition is based on Ocean Plan prohibitions against the discharge of sludge or untreated sludge supernatant to ocean waters (Ocean Plan Section III.H.3).
4. Prohibition III.D (No discharge to Areas of Special Biological Significance). This prohibition is based on the Ocean Plan prohibition against discharges of treated wastewater to Areas of Special Biological Significance (Ocean Plan Section III.H.2). Discharges must be located a sufficient distance from designated areas to ensure maintenance of water quality conditions. No such areas have been designated in the vicinity of the discharge location.
5. Prohibition III.E (No bypass of untreated waste). This prohibition is based on the Ocean Plan prohibition against the bypass of untreated wastes that contain concentrations of pollutants in excess of the effluent limitations and WQOs listed in Table A or Table B (Ocean Plan Section III.H.4).
6. Prohibition III.F (No SSO that results in a discharge of untreated or partially treated waste). The Clean Water Act prohibits the discharge of wastewater to surface waters except as authorized under an NPDES permit. POTWs must achieve secondary treatment, at a minimum, and any more stringent limitations that are necessary to achieve water quality standards (33U.S.C §1311(b)(1)(B) and (C)). Thus, an SSO that results in the discharge of raw sewage, or sewage not meeting secondary treatment standards, to surface waters is prohibited under the Clean Water Act.

B. Technology-Based Effluent Limitations

NPDES regulations at 40 CFR 122.44(a) require that permits include applicable technology-based limitations and standards. This Order includes such limitations based on the minimum level of effluent quality attainable by secondary treatment, as established at 40 CFR 133. This Secondary Treatment Regulation includes requirements for BOD₅, suspended solids, and pH. The State Water Board, in Ocean Plan Table A, has supplemented these technology based requirements with additional requirements for conventional pollutants (i.e., settleable matter, oil and grease) that apply to the facility.

Regulations promulgated at 40 CFR 125.3(a)(1) require technology-based effluent limitations for municipal dischargers to be placed in NPDES permits based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards. Where the USEPA has not yet developed technology based standards for a particular industry or a particular pollutant, CWA Section 402(a)(1) and USEPA regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 CFR 125.3.

1. **Biochemical Oxygen Demand (5-day)**. Effluent limitations for BOD₅, including 85 percent removal, are retained from Order No. 00-016, with the exception of the instantaneous maximum limit for which we could find no basis and which is inconsistent with 40 CFR 122.45(d). These limitations are based on secondary treatment requirements at 40 CFR Part 133.102(a).

2. **Total Suspended Solids.** Effluent limitations for TSS, including 85 percent removal, are retained from Order No. 00-016, with the exception of the instantaneous maximum limit for which we could find no basis and which is inconsistent with 40 CFR 122.45(d). These limitations are based on secondary treatment requirements at 40 CFR § 133.102(b). These requirements are more stringent than the Ocean Plan requirements.
3. **Oil and Grease.** Effluent limitations for oil and grease are retained from Order No. 00-016. These limitations are based on implementation requirements in Ocean Plan Table A.
4. **Turbidity.** Effluent limitations for turbidity are retained from Order No. 00-016. These limitations are based on implementation requirements Ocean Plan in Table A.
5. **pH.** This effluent limitation is unchanged from Order No. 00-016, and is based on the requirements of Ocean Plan Table A.
6. **Settleable Solids.** This effluent limitation is unchanged from the previous permit, and is based on the requirements of Ocean Plan Table A.
7. **Bacteria Effluent Limitations.** In 2004, USEPA recommended that enterococcus bacteria be used in lieu of total coliform bacteria for bacteriological limitations in marine waters because it had been shown to be a good indicator of gastrointestinal illness in marine waters. In accordance with this recommendation, limitations on total coliform bacteria from Order No. 00-016 are replaced by limitations on enterococcus bacteria. The new water quality based enterococcus limitation replaces the previous performance-based total coliform limitation. See section IV.C.7, below.
8. **Technology-based Effluent Limits.** Technology-based effluent limits are summarized in Table F-6 and below.

Table F-6. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Average Daily	6-month Median	Maximum Daily	Instantaneous Maximum
BOD ₅	mg/L	30	45	--	--	--	--
TSS	mg/L	30	45	--	--	--	--
Oil and Grease	mg/L	25	40	--	--	--	75
Settleable Solids	mL/L	1.0	1.5	--	--	--	3.0
Turbidity	NTU	75	100	--	--	--	225

- a. **85 Percent Removal:** The arithmetic mean of the BOD₅ and TSS values, by weight, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period.
- b. **pH:** The pH of the discharge shall not exceed 9.0 nor be less than 6.0.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

As specified at 40 CFR 122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an in-stream excursion above any water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and to achieve applicable WQOs and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the Ocean Plan and, if applicable, the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

a. Basin Plan

Basin Plan beneficial uses are listed in Section III.C.3, Table F-4, Basin Plan Beneficial Uses, of this Fact Sheet.

b. Ocean Plan

Ocean Plan beneficial uses are listed in Section III.C.5, Table F-5, Ocean Plan Beneficial Uses, of this Fact Sheet.

The Ocean Plan includes general provisions and water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. The water quality objectives of the Ocean Plan have been incorporated as receiving water limitations in this Order. In addition, Table B of the Ocean Plan contains numeric water quality objectives for 83 toxic pollutants for the protection of marine aquatic life and human health. Pursuant to NPDES regulations at 40 CFR 122.44 (d)(1) and in accordance with procedures established in the Ocean Plan (2005), the Regional Water Board has performed a reasonable potential analysis (RPA) to determine the need for effluent limitations for the Table B pollutants present in effluent from the Sewer Authority Mid-Coastside facility at concentrations that cause, have reasonable potential to cause, or contribute to an excursion above applicable WQOs.

3. Determining the Need for WQBELs

Procedures for performing an RPA for ocean dischargers are described in Section III C and Appendix VI of the Ocean Plan. In general, the procedure is a statistical method that evaluates an effluent data set while taking into account the averaging period of WQOs, the long term variability of pollutants in the effluent, limitations associated with sparse data sets, and uncertainty associated with censored data sets. The procedure assumes a lognormal distribution of the effluent data set and compares the 95th percentile concentration at 95 percent confidence of each Table B pollutant, accounting for dilution, to the applicable water quality criterion. The RPA results in one of three endpoints:

Endpoint 1 – There is “reasonable potential,” and a WQBEL and monitoring are required.

Endpoint 2 - There is no “reasonable potential.” WQBELs are not required, and monitoring is required at the discretion of the Regional Water Board.

Endpoint 3 - The RPA is inconclusive. Existing WQBELs are retained, and monitoring is required.

The State Water Resources Control Board has developed a reasonable potential calculator, which is available at <http://www.waterboards.ca.gov/plnspols/docs/oplans/rpcalc.zip>. The calculator (RPcalc 2.0) was used in the development of this Order and considers several pathways in the determination of reasonable potential.

a. First Path

If available information about the receiving water or the discharge supports a finding of reasonable potential without analysis of effluent data, the Regional Water Board may decide that WQBELs are necessary after a review of such information. Such information may include the facility or discharge type, solids loading, lack of dilution, history of compliance problems, potential toxic effects, fish tissue data, 303(d) status of the receiving water, the presence of threatened or endangered species or their critical habitat, or other information.

b. Second Path

If any pollutant concentration, adjusted to account for dilution, is greater than the most stringent applicable WQO, there is reasonable potential for that pollutant.

c. Third Path

If the effluent data contains 3 or more detected and quantified values (i.e., values that are at or above the ML), and all values in the data set are at or above the ML, a parametric RPA is conducted to project the range of possible effluent values. The 95th percentile concentration is determined at 95 percent confidence for each pollutant, and compared to the most stringent applicable WQO to determine reasonable potential. A parametric analysis assumes that the range of possible effluent values is distributed lognormally. If the 95th percentile value is greater than the most stringent applicable WQO, there is reasonable potential for that pollutant.

d. Fourth Path

If the effluent data contains 3 or more detected and quantified values (i.e., values that are at or above the ML), but at least one value in the data set is less than the ML, a parametric RPA is conducted according to the following steps.

- (1) If the number of censored values (those expressed as a “less than” value) account for less than 80 percent of the total number of effluent values, calculate the M_L (the mean of the natural log of transformed data) and S_L (the standard deviation of the natural log of transformed data) and conduct a parametric RPA as described above for the Third Path.

- (2) If the number of censored values account for 80 percent or more of the total number of effluent values, conduct a non-parametric RPA, as described below for the Fifth Path. (A non-parametric analysis becomes necessary when the effluent data are limited and no assumptions can be made regarding its possible distribution.)

e. Fifth Path

A non-parametric RPA is conducted when the effluent data set contains less than 3 detected and quantified values, or when the effluent data set contains 3 or more detected and quantified values but the number of censored values account for 80 percent or more of the total number of effluent values. A non-parametric analysis is conducted by ordering the data, comparing each result to the applicable WQO, and accounting for ties. The sample number is reduced by one for each tie, when the dilution-adjusted method detection limit (MDL) is greater than the WQO. If the adjusted sample number, after accounting for ties, is greater than 15, the pollutant has no reasonable potential to exceed the WQO. If the sample number is 15 or less, the RPA is inconclusive, monitoring is required, and any existing effluent limits in the expiring permit are retained.

The following table presents the results of the RPA, performed in accordance with procedures described by the Ocean Plan and summarized above, for the Sewer Authority Mid-Coastside facility. The RPA endpoint for each Table B pollutant is identified. As shown in the following table, the RPA commonly leads to Endpoint 3, meaning that the RPA is inconclusive, when a majority of the effluent data are reported as ND (not detected). In these circumstances, the Regional Water Board views the “inconclusive” result as an indication of no concern for a particular pollutant; however, additional monitoring will be required for those pollutants during the term of the reissued permit.

Table F-7. RPA Results for Sewer Authority Mid-Coastside

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
Objectives for Protection of Marine Aquatic Life					
Arsenic	8	8	3	1.3	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Cadmium	1	7	4	0.1	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Chlorinated Phenolics	1	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chromium (VI)	2	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Copper	3	7	2	26	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Cyanide	1	16	16	ND	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Endosulfan (total)	0.009	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Endrin	0.002	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
HCH	0.004	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Lead	2	7	3	0.58	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Mercury	0.04	7	3	0.012	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Nickel	5	7	3	5.1	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Non-chlorinated Phenolics	30	7	6	2	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Selenium	15	7	5	1.0	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Silver	0.7	7	3	0.12	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Zinc	20	7	0	36.4	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Objectives for Protection of Human Health – Noncarcinogens					
1,1,1-Trichloroethane	540000	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4-Dinitrophenol	4.0	7	6	2	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2-Methyl-4,6-Dinitrophenol	220	7	6	2	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Acrolein	220	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Antimony	1200	7	3	0.38	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Bis(2-Chloroethoxy)Methane	4.4	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroisopropyl)Ether	1200	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorobenzene	570	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chromium (III)	190000	5	1	3.3	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Dichlorobenzenes	5100	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Diethyl Phthalate	33000	7	6	3	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dimethyl Phthalate	820000	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Di-n-Butyl Phthalate	3500	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Ethylbenzene	4100	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Fluoranthene	15	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorocyclopentadiene	58	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
					detects or greater than 80% ND.
Nitrobenzene	4.9	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Thallium	2	5	4	0.02	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Toluene	85000	7	3	1.3	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Tributyltin	0.0014	NA	NA	NA	No Effluent Data.
Objectives for Protection of Human Health – Carcinogens					
1,1,2,2-Tetrachloroethane	2.3	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,1,2-Trichloroethane	9.4	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,1-Dichloroethylene	0.9	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,2-Dichloroethane	28	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,2-Diphenylhydrazine	0.16	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,3-Dichloropropylene	8.9	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,4 Dichlorobenzene	18	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
TCDD Equivalents	3.9E-9	7	5	2.6E-09	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4,6-Trichlorophenol	0.29	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4-Dinitrotoluene	2.6	7	6	1	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
3,3'-Dichlorobenzidine	0.0081	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Acrylonitrile	0.10	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Aldrin	2.2E-5	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Benzene	5.9	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Benzidine	6.9E-5	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Beryllium	0.033	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroethyl)Ether	0.045	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Ethylhexyl)Phthalate	3.5	7	2	6.7	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
Carbon Tetrachloride	0.90	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlordane	2.3E-5	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorodibromomethane	8.6	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
Chloroform	130	7	1	3.5	Endpoint 2 – An effluent limitation is not required for this pollutant. Monitoring may be required as appropriate.
DDT (total)	0.00017	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dichlorobromomethane	6.2	5	4	0.65	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dieldrin	0.00004	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Halomethanes	130	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Heptachlor	0.00005	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Heptachlor Epoxide	0.00002	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorobenzene	0.00021	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorobutadiene	14	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachloroethane	2.5	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Isophorone	730	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Methylene Chloride	450	5	4	5	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodimethylamine	7.3	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodi-n-Propylamine	0.38	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodiphenylamine	2.5	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
PAHs (total)	0.0088	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
PCBs	1.9E-5	4	4	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Tetrachloroethylene	2.0	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Toxaphene	0.00021	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Trichloroethylene	27	5	5	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Vinyl Chloride	36	7	7	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
<p>NA indicates that effluent data are not available ND indicates that the pollutant was not detected. Minimum probable initial dilution for this Discharger is 119:1. Effluent data used for this RPA are from March 2003 to March 2006 except for cyanide, where the data from December 1999 to March 2003 are used at the discharger's request because of the infrequent monitoring and predominance of non-detects. All units are ug/L.</p>					

4. WQBEL Calculations

As described by Section III. C of the Ocean Plan, effluent limits for Table B pollutants that show reasonable potential are calculated according to the following equation.

$$C_e = C_o + D_m (C_o - C_s)$$

Where ...

C_e = the effluent limitation ($\mu\text{g/L}$)

C_o = the concentration (the WQO) to be met at the completion of initial dilution ($\mu\text{g/L}$).

C_s = background seawater concentration ($\mu\text{g/L}$)

D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

Except for Arsenic, Copper, Mercury, Silver and Zinc, background concentrations of all Table B pollutants are considered to be zero ($C_s = 0$).

5. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) testing protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

Order 00-016 was based, in part, on criteria set forth in the 1997 Ocean Plan, which established acute toxicity limitations but did not include requirements for chronic toxicity. Section III.C of the 2005 Ocean Plan requires chronic toxicity monitoring when the minimum initial dilution is between 100:1 and 350:1. Discharge Point No. 001 has a minimum initial dilution of 119:1. The daily maximum chronic toxicity limit of 120 TU_c is derived based on the daily maximum receiving water limit given in Ocean Plan Table B of 1 TU_c and the Discharger’s dilution factor of 119. The effluent limit is calculated as follows:

Daily Maximum: $C_e = 1. + 119 (1. - 0.0) = 120 \text{ TU}_c$

Six chronic toxicity screening tests were performed from 2000 to 2005. Chronic toxicity results ranged from 0 to 29 TU_c.

In addition, the Ocean Plan permits the Regional Water Board to require acute toxicity monitoring for discharges with a minimum initial dilution ratio of between 100:1 and 350:1 in order to protect beneficial uses of the receiving water. The Regional Water Board finds that there is reasonable potential for this discharge to contribute to an excursion from the acute toxicity water quality objective based on the sensitivity of the receiving water (Monterey Bay National Marine Sanctuary) and Best Professional Judgement. The specific beneficial uses of the receiving water that this judgment is intended to protect include (but are not limited to) protection of rare and endangered species, preservation of critical marine habitat, and use for fish spawning and fish migration, all of which are uses intrinsic to the

Sanctuary. Therefore, this order includes an acute toxicity limitation. The acute toxicity limitation is recalculated as a water quality based effluent limitation based on the 2005 Ocean Plan, and replaces the technology based acute toxicity limitations from Order 00-016. The Regional Water Board concludes that this action for this provision of the Ocean Plan does not violate federal anti-backsliding provisions because the U.S. EPA took the same action on the acute toxicity limitations when reissuing NPDES Permit No. CA 0037681 for the San Francisco Oceanside Treatment Plant. Acute toxicity results over the term of Order No. 00-016 ranged from 0 to 1.20 TUa, which is well within that order’s limit.

The acute toxicity effluent limitation is calculated according to Section III.C.4.b of the Ocean Plan as follows:

Daily Maximum: $C_e = 0.3 + (0.1)119(0.3) = 3.87 \text{ TUa}$

6. Total Chlorine Residual

The Regional Water Board finds reasonable potential for Total Chlorine Residual based on Best Professional Judgement and information about the discharge and the receiving water. Specifically, the effluent is disinfected with chlorine, and then dechlorinated prior to discharge; and the effluent is discharged directly to the Monterey Bay National Marine Sanctuary. Although chlorination/dechlorination is a common and reliable process that SAM has operated effectively, it still creates a reasonable potential for the discharge to contribute to an excursion above the Total Chlorine Residual water quality objective. In addition, the Total Chlorine Residual water quality objective is established for the protection of marine aquatic life. This is a particular concern due to the need to protect the beneficial uses of the Sanctuary and in addition to comply with other Federal law prohibiting discharges to the Sanctuary that would injure Sanctuary resources or qualities.

Order No. 00-016 did not include a Total Chlorine Residual effluent limit, replacing the Total Chlorine Residual effluent limit from the previous permit with a non-enforceable Performance Goal. The previous Fact Sheet states that the Performance Goal provision was based on Best Professional Judgement, but does not explain further, and particularly does not discuss the justification for removing the previous effluent limit. The Regional Water Board does not believe that a Performance Goal for Total Residual Chlorine is sufficiently protective of the beneficial uses of the receiving water.

The effluent limitations for total chlorine residual are based on the following Ocean Plan WQOs:

Table F-8. Water Quality Objectives for Chlorine

Pollutant	Units	6-month Median	Daily Maximum	Instantaneous Maximum
Total Chlorine Residual	µg/L	2	8	60

Using the equation, $C_e = C_o + Dm (C_o - C_s)$, effluent limitations for total chlorine residual are calculated:

6-month median: $C_e = 2 + 119 (2 - 0.0) = 240 \text{ µg/L (0.24 mg/L)}$

Daily maximum: $C_e = 8 + 119 (8 - 0.0) = 960 \text{ µg/L (0.96 mg/L)}$

Instantaneous maximum: $C_e = 60 + 119 (60 - 0.0) = 7200 \mu\text{g/L} (7.2 \text{ mg/L})$

Mass emission limitations, as required by the Ocean Plan, are also included in this Order, and are calculated using a dry weather capacity of 4 MGD and a conversion factor of 3.78:

6-month median: $0.24 \text{ mg/L} * 4.0 \text{ MGD} * 3.78 = 3.6 \text{ kg/day}$

Daily maximum: $0.57 \text{ mg/L} * 4.0 \text{ MGD} * 3.78 = 15 \text{ kg/day}$

7. Bacteria Effluent Limitations

The effluent limitations for bacteria are based on the Ocean Plan water quality objectives, specifically the 30-day geometric mean enterococcus density shall not exceed 35 per 100 mL and the single sample maximum shall not exceed 104 per 100 mL. Using the equation, $C_e = C_o + D_m (C_s - C_s)$, to account for dilution, effluent limitations for enterococcus are calculated as follows:

30-day geometric mean: $C_e = 35 + 119 (35 - 0.0) = 4,200 \text{ per } 100 \text{ mL}$

Single sample maximum: $C_e = 104 + 119 (104 - 0.0) = 12,500 \text{ per } 100 \text{ mL}$

D. Land Discharge Specifications

Not Applicable

E. Reclamation Specifications

Not Applicable.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving Water Limitations V.A.1 through V.A.18 are based on the narrative/numerical objectives contained in Section II of the Ocean Plan, and the implementation provisions contained in Section III of the Ocean Plan. Sections V.A.1.a through V.A.1.c are revised from Order 00-016 based on updated narrative/numerical objectives and implementation provisions for bacteria. Section V.A.3 is revised from Order 00-016 based on the Regional Water Board's finding that no commercial shellfish beds are located in the vicinity of the discharge, and that recreational shellfish harvesting is not known to occur near the discharge. All other provisions of Sections V.A.1 through V.A.18 are retained from Order 00-016.

B. Groundwater

Not Applicable.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 CFR 122.48 requires 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 (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. For SSO reporting, the Discharger is subject to the Regional Water Board reporting requirements set forth in a letter issued on November 15, 2004, pursuant to Water Code Section 13267 until such time as the statewide on-line reporting system becomes operational, at which time the Discharger will report SSOs under the Monitoring and Reporting Program No. 2006-0003. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

The principal purposes of a monitoring program by a discharger are to:

1. Document compliance with waste discharge requirements and prohibitions established by the Regional Water Board,
2. Facilitate self-policing by the discharger in the prevention and abatement of pollution arising from waste discharge,
3. Develop or assist in the development of limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and to
4. Prepare water and wastewater quality inventories.

The MRP is a standard requirement in NPDES permits issued by the Regional Water Board, including this Order. It contains definitions of terms, specifies general sampling and analytical protocols, and sets out requirements for reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board's policies. The MRP also contains a sampling program specific for this facility. It defines the sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all parameters for which effluent limitations are specified. Monitoring for additional constituents, for which no effluent limitations are established, is also required to provide on-going characterization of influent, effluent, and receiving waters.

A. Influent Monitoring

Influent monitoring requirements for flow, BOD₅ and TSS are retained from Order No. 00-016 to allow determination of treatment removals (percent).

B. Effluent Monitoring

1. Effluent monitoring requirements for the following pollutants are retained from Order No. 00-016: flow, BOD₅, TSS, settleable solids, oil and grease, turbidity, ammonia nitrogen, and sulfides. Effluent monitoring for total coliform bacteria has been replaced by effluent monitoring for enterococcus bacteria, with the effluent limitation calculated by Ocean Plan procedures for water-quality based effluent limitations, and based on the Ocean Plan receiving water enterococcus bacteria limitation, per USEPA recommendations.
2. Chronic toxicity monitoring, as required by the Ocean Plan, is included in the MRP based on the inclusion of corresponding effluent limitations. Acute toxicity monitoring is retained, but

has been revised to be consistent with the Ocean Plan's requirement for using a marine test species that makes the previous permit's flow-through testing infeasible.

3. Effluent monitoring for dissolved oxygen, pH, and temperature using 24-hour composite samples is no longer required because results may not be representative of effluent when samples are composited over a 24-hour period. Grab samples of effluent are required for monitoring these parameters.
4. Effluent monitoring for cyanide is no longer required because of the finding of no reasonable potential.
5. Sampling of all priority pollutants listed in Table B of the Ocean Plan, as required by Appendix III, must be conducted on an annual basis, at a minimum, for dischargers with effluent volumes between 1 and 10 MGD. More frequent monitoring is required for total chlorine residual. The Discharger's average annual discharge rate of 1.88 MGD is used to determine the sampling frequency.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing is retained from Order 00-016. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. This Order includes limitations for chronic toxicity, and therefore, monitoring requirements are included in the MRP (Attachment E) to determine compliance with the effluent limitations established in Limitations and Discharge Requirements, Effluent Limitations, Section IV.A.1.a of this Order.

D. Receiving Water Monitoring

1. **Surface Water.** The MRP retains most monitoring requirements at new monitoring locations R-1 through R-5; however, specific receiving water monitoring requirements for toxic pollutants, as listed at 40 CFR 401.15 pursuant to section 307(a)(1) of the Clean Water Act, are not included in the MRP.

2. **Groundwater.**

Not Applicable.

E. Other Monitoring Requirements

Not Applicable.

VII. RATIONALE FOR PROVISIONS

A. Standard 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 to this Order.

40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in this Order. 40 CFR 123.25(a)(12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

- 1. Reopener Provisions.** These provisions are based on 40 CFR 123 and allow future modification of this Order and its effluent limitations as necessary in response to updated WQOs that may be established in the future.
- 2. Best Management Practices and Pollution Minimization Program.** This provision is based on the Ocean Plan, Section III.C.9.
- 3. Construction, Operation and Maintenance Specifications**
 - a. Wastewater Facilities, Review and Evaluation, Status Reports.** This provision is based on the previous permit and the Basin Plan. It is the Discharger's responsibility to determine the necessary staffing, supervision, financing, operation, maintenance, repairs and upgrades to meet the requirements of this section. Training, qualification, and certification requirements for staff and supervisors are established by CCR Title 23, Division 3, State Water Resources Control Board and Regional Water Quality Control Boards, Chapter 26, *Classification of Wastewater Treatment Plants and Operator Certification*.
 - b. Operations and Maintenance Manual, Review and Status Reports.** This provision is based on the Basin Plan, the requirements of 40 CFR §122, and the previous permit.
 - c. Contingency Plan, Review and Status Reports.** This provision is based on the Basin Plan, the requirements of 40 CFR §122, and the previous permit.
- 4. Special Provisions for Municipal Facilities (POTWs Only)**
 - a. Sludge Practices.** This provision is based on 40 CFR Part 503.
 - b. Sanitary Sewer Overflows and Sewer System Management Plan.** This provision is to explain the Order's requirements as they relate to the Discharger's collection system, and to promote consistency with the State Water Resources Control Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Overflow (SSO WDRs) and a related Monitoring and Reporting Program (Order No. 2006-0003-DWQ). The bases for these requirements are described elsewhere in this Fact Sheet.
- 5. Other Special Provisions**
 - a. Effluent limits for Table B pollutants in this Order are calculated using the previously granted initial dilution factor of 119:1 (i.e., 119 parts ocean water to one part effluent),**

which was based on data submitted by the Discharger to support a previous permit for this discharge, Order No. 84-059. The most recent calculation of a dilution factor was performed by Carollo Engineers in May 1995 using the U.S. EPA CORMIX Model Version 3.0, assuming that the discharge pipe and diffuser structure were constructed according to the original construction plans. Carollo's calculation found an initial dilution ratio of 310:1, but the previous 119:1 to ratio was retained to be conservative. The dilution factor needs to be verified and documented to ensure that the previous conditions and assumptions are still consistent with current operations. This provision requires the Discharger to provide documentation within one year of the date the Order becomes effective.

VIII. PUBLIC PARTICIPATION

The San Francisco Bay Regional Water Board is considering the issuance of WDRs that will serve as an NPDES permit for Sewer Authority Mid-Coastside WWTP. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. 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. Notification was provided through the Regional Water Board web site and publication in the San Mateo Times.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on **November 15, 2006**.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: December 13, 2006
Time: 9:00 AM
Location: Elihu Harris State Office Building
1515 Clay Street, 1st Floor Auditorium
Oakland, CA
Contact: John Madigan, (510) 622-2405, jmadigan@waterboards.ca.gov

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is www.waterboards.ca.gov/sanfranciscobay where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling **(510) 622-2300**.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to **John H. Madigan** at **(510) 622-2405**.

ATTACHMENT G – REGIONAL WATER BOARD ATTACHMENTS

The following documents are part of this Order but are not physically attached due to volume. They are available on the Internet at: <http://www.waterboards.ca.gov/sanfranciscobay/Download.htm>.

- Self-Monitoring Program, Part A (August 1993)
- Standard Provisions and Reporting Requirements, August 1993
- Regional Water Board Resolution No. 74-10