No. _____

In The
Supreme Court of the United States

CITY AND COUNTY OF SAN FRANCISCO,

Petitioner,

v.

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

On Petition For Writ Of Certiorari
To The United States Court Of Appeals
For The Ninth Circuit

APPENDIX VOLUME I

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FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

CITY AND COUNTY OF SAN FRANCISCO, *Petitioner*, v. U.S. ENVIRONMENTAL PROTECTION AGENCY, *Respondent*.	No. 21-70282 Environmental Protection Agency OPINION

On Petition for Review of an Order of the Environmental Protection Agency

Argued and Submitted March 17, 2022
San Francisco, California

Filed July 31, 2023

Before: William A. Fletcher, Ronald M. Gould, and Daniel P. Collins, Circuit Judges.

Opinion by Judge W. Fletcher;
Dissent by Judge Collins

SUMMARY*

National Pollutant Discharge Elimination System Permits

The panel denied the City and County of San Francisco's petition for review of a final order of the U.S.

* This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

Environmental Protection Agency ("EPA") denying review of San Francisco's federal National Pollutant Discharge Elimination System ("NPDES") permit for its Oceanside combined sewer system and wastewater treatment facility.

The NPDES permit, which was issued pursuant to the Clean Water Act of 1972 ("CWA"), 33 U.S.C. §§ 1251-1387, allows San Francisco to discharge from its wastewater system into the Pacific Ocean, and includes (1) two general narrative prohibitions on discharges that cause or contribute to violations of applicable water quality standards, and (2) a requirement that San Francisco update its long-term control plan for its combined sewer overflows.

The panel held that the EPA had authority under the CWA to include the two general narrative prohibitions. Noting that Supreme Court precedent, this Circuit's prior cases, and prior Environmental Appeals Board decisions support the legality and confirm the enforceability of general narrative prohibitions in permits issued under the CWA, the panel held that the two narrative provisions were consistent with the CWA and its implementing regulations. The panel further held that the EPA was not required to follow the procedures set forth in 40 C.F.R. § 122.44(d)(1)(i)-(vii) for deriving pollutant-specific effluent limitations in imposing the general narrative provisions, and that the EPA's decision to impose the general narrative provisions was rationally connected to evidence in the record indicating that a "backstop" to the more specific provisions would be useful in protecting beneficial uses.

The panel next held that the EPA had authority under its Combined Sewer Overflow Control Policy to require San Francisco to update its long-term control plan for its combined sewer overflows and reevaluate alternatives for its combined sewer overflow discharges to sensitive areas. The EPA's ability to require San Francisco to update its long-term control plan was not conditioned on a finding that water quality standards were not being met and was rationally supported by evidence in the record.

Dissenting, Judge Collins would grant San Francisco's petition for review, vacate the challenged permit conditions, and remand the case to the agency for further consideration. First, the two general narrative limitations were inconsistent with the text of the CWA, and, by including them, the EPA fundamentally abdicated the regulatory task assigned to it under the CWA. Second, because no determination was made that San Francisco's Oceanside System had caused the violation of any applicable water control standards, the EPA lacked authority under the Combined Sewer Overflow Control Policy to impose a condition requiring San Francisco to submit a revised long-term control plan.

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OPINION

W. FLETCHER, Circuit Judge.

The City and County of San Francisco ("San Francisco") petitions for review of a final order of the U.S. Environmental Protection Agency ("EPA") denying review of San Francisco's federal National Pollutant Discharge Elimination System ("NPDES") permit for its Oceanside combined sewer system and wastewater treatment facility ("wastewater system"). This NPDES permit, issued pursuant to the Clean Water Act of 1972 ("CWA"), 33 U.S.C. §§ 1251-1387, allows San Francisco to discharge from its wastewater system into the Pacific Ocean. San Francisco contends that EPA acted arbitrarily and capriciously, and contrary to the CWA, by including in the final permit: (1) two general narrative prohibitions on discharges that cause or contribute to violations of applicable standards for water quality, and (2) a requirement that San Francisco update its long-term control plan ("LTCP") for its combined sewer overflows ("CSOs"). We hold that the CWA authorizes EPA to include in the Oceanside NPDES permit the challenged provisions, and that EPA's decision to do so was rationally connected to evidence in the administrative record. We therefore deny San Francisco's petition for review.

We use a number of acronyms and short-form references in this opinion. For the convenience of the reader, we list them here.

Acronyms:

- APA: Administrative Procedure Act
- CSD: Combined sewer discharge
- CSO: Combined sewer overflow
- CWA: Clean Water Act
- EAB: Environmental Appeals Board
- EPA: Environmental Protection Agency
- LTCP: Long-term control plan
- NPDES: National Pollutant Discharge Elimination System
- NRDC: Natural Resources Defense Council
- WQBEL: Water quality-based effluent limitation
- WQS: Water quality standards

Short-form references:

- 1979 Ocean Plan Exception: California State Water Board Order No. 79-16
- Basin Plan: *Water Quality Control Plan for the San Francisco Bay Basin*
- CSO Control Policy or Policy: *Combined Sewer Overflow Control Policy*

- CSO Guidance: *Combined Sewer Overflows: Guidance for Permit Writers*
- LTCP Synthesis: *San Francisco Wastewater Long Term Control Plan Synthesis*
- Ocean Plan: *Water Quality Control Plan for Ocean Waters of California*
- Regional Water Board: California Regional Water Quality Control Board for the San Francisco Bay Region
- Strategy: *National Combined Sewer Overflow Control Strategy*
- Wastewater system: combined sewer system and wastewater treatment facility

I. Background

A. Regulation of Combined Sewer Systems

Most cities in the United States, including San Francisco, operate combined sewer systems. *See* National Combined Sewer Overflow Control Strategy, 54 Fed. Reg. 37370, 38371 (Sept. 8, 1989). Combined sewer systems are wastewater collection systems that convey both sewage and storm water to a treatment plant through a single set of pipes. 40 C.F.R. § 122.2. During heavy rain or snow, combined sewer overflows ("CSOs") can occur when water in the system exceeds the capacity of the pipes or the treatment plant, leading to discharges of pollutants into surface waters. Combined Sewer Overflow (CSO) Control Policy, 59 Fed. Reg. 18688, 18689 (Apr. 19, 1994). CSOs are "mixtures

of domestic sewage, industrial and commercial wastewaters, and storm water runoff." *Id.* They "often contain high levels of suspended solids, pathogenic microorganisms, toxic pollutants, floatables, . . . and other pollutants." *Id.*

Under the CWA, an NPDES permit is required for the discharge of "any pollutant by any person" from any "point source" into the navigable waters of the United States. 33 U.S.C. §§ 1311(a)–(b), 1342(a); 40 C.F.R. § 122.1(b)(1). Municipal CSOs are discharges from "point sources" under the CWA and therefore require NPDES permits. National Combined Sewer Overflow Control Strategy, 54 Fed. Reg. at 37371; *see also* 33 U.S.C § 1342(q) (identifying CSOs as discharges subject to the NPDES permitting requirements).

1. NPDES Permitting System

NPDES permits are issued by both EPA and state authorities. Under the CWA, EPA may authorize States to issue NPDES permits for discharges into waters within the State's jurisdiction. 33 U.S.C. § 1342(b)–(c). However, EPA retains authority to issue permits for discharges into ocean waters more than three miles from the shore. *See id.* § 1362(8) (defining the State's territorial seas as extending three miles from the coast). When both state and federal permits are needed for a particular treatment facility, the permitting processes may be consolidated, and permits may be issued jointly or separately. 40 C.F.R. § 124.4(c).

To issue an NPDES permit for discharges into ocean waters, state and federal authorities must establish that the discharge will satisfy (1) water quality standards; (2) effluent limitations—i.e., restrictions on how much pollutant any point source may discharge; and (3) antidegradation criteria. 33 U.S.C. § 1342(a), 1343; *see also id.* §§ 1311 (effluent limitations), 1313 (water quality standards and implementation plans), 1312 (water-quality related effluent limitations), 1317 (effluent limitations for toxic pollutants); 40 C.F.R. § 122.44. NPDES permits also include monitoring and reporting requirements, compliance schedules, and management practices. *See*, *e.g.*, 40 C.F.R. §§ 122.41, 122.44.

Water quality standards ("WQS") specify (1) a body of water's "designated use" (e.g., recreation, water supply, or propagation of fish) and (2) "water quality criteria" (i.e., numeric or narrative benchmarks to protect a designated use). *Id.* §§ 130.2(d), 131.3(b), 131.10(a). State-defined WQS are used as the basis for specific effluent limitations in NPDES permits. 33 U.S.C. §§ 1311(b)(1)(C), 1370; 40 C.F.R. §§ 122.4(d), 122.44(d)(1), 131.4(a). EPA reviews state-adopted WQS and is authorized to approve or disapprove them in accordance with the CWA's requirements. 40 C.F.R. § 131.5(a).

Effluent limitations are defined as "any restriction imposed . . . on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the United States." *Id.* § 122.2 (internal quotation marks omitted).

Effluent limitations are typically expressed numerically, in the maximum mass of a pollutant that may be discharged. *See id.* § 122.45(f). Technology-based effluent limitations establish discharge standards based on levels of effluent quality achievable by certain pollution treatment technologies for different categories of pollutants. *Id.* §§ 122.44(a)(1), 125.3(a). Water quality-based effluent limitations ("WQBELs") establish more stringent discharge requirements when necessary to meet applicable WQS. 33 U.S.C. § 1311(b)(1)(C); 40 C.F.R. § 122.44(d). Permitting agencies may impose "best management practices," or specific operational requirements or prohibitions, rather than numeric limitations, if numeric effluent limitations are not feasible. 40 C.F.R. §§ 122.2, 122.44(k)(3).

2. NPDES Permits for CSOs

In 1989, EPA issued the *National Combined Sewer Overflow Control Strategy* ("the Strategy"), which sets forth its NPDES permitting strategy to control CSOs. By addressing discharges from combined sewer systems, the Strategy "complement[ed]" the preexisting regulatory control programs for sanitary sewer systems and separate storm sewer systems. National Combined Sewer Overflow Control Strategy, 54 Fed. Reg. at 37371. Recognizing that CSOs "have been shown to have severe adverse impacts on water quality, aquatic biota, and human health," EPA sought to establish a uniform nationwide permitting approach to control these discharges. *Id.* The Strategy provided that under the CWA, "[a]ll CSO discharges must be

brought into compliance with technology-based requirements and State water quality-based requirements" using "a combination of CSO control measures." *Id.* According to the Strategy, a municipality's publicly owned treatment works (water treatment plant) "is responsible for planning and coordinating a system-wide approach" to CSO control. *Id.* at 37372. The Strategy specified that CSO point sources "discharging without a permit are unlawful and must be permitted or eliminated." *Id.* at 37371.

In 1994, EPA issued the *Combined Sewer Overflow Control Policy* ("CSO Control Policy" or "Policy") as part of its national strategy for CSO control. Combined Sewer Overflow Control Policy, 59 Fed. Reg. at 18688-89. In 2000, Congress made the CSO Control Policy legally binding when it enacted the Wet Weather Water Quality Act. Pub. L. No. 106-554, § 112, 114 Stat. 2763, 2763A-224 to 2763A-225 (2000) (codified at 33 U.S.C. § 1342(q)(1)). The CSO Control Policy prohibits all CSOs that occur in dry weather. Combined Sewer Overflow Control Policy, 59 Fed. Reg. at 18689. The Policy requires municipalities with combined sewer systems to implement extensive control measures (the "Nine Minimum Controls") and to develop and implement a Long-Term Control Plan ("LTCP") to protect water quality during wet weather. *Id.* at 18691.

Under the CSO Control Policy, required minimum control measures include elimination of all dry-weather CSOs, control of all "solid and floatable materials in CSOs," maximization of storage and flow to the treatment plant during wet-weather events, public

notification of CSO occurrences, and ongoing monitoring of CSOs and efficacy of the control measures. *Id.* A municipality's LTCP must address the following "minimum elements": (1) characterization, modeling, and monitoring of the combined sewer system and CSOs, including evaluation of rainfall records; (2) a process for public participation in LTCP development; (3) special prioritization of control of CSOs into "sensitive areas," such as waters used for drinking or recreation; (4) evaluation of alternative control measures to achieve different benchmarks, such as zero versus one to three CSOs per year; (5) "cost/performance" analysis of the control measure alternatives; (6) an operational plan to implement the selected CSO controls; (7) a plan to maximize wet-weather water treatment capacity at existing treatment plants; (8) an implementation schedule, including construction phasing; and (9) a post-construction compliance monitoring program. *Id.* at 18691–94.

A municipality's LTCP must adopt one of two approaches to demonstrate that its control program satisfies the requirements of the CWA: a "Presumption Approach" or a "Demonstration Approach." *Id.* at 18692–-93. Under the Presumption Approach, a municipality's selected CSO control program is presumed to meet the water quality-based requirements of the CWA if certain criteria are met. Those criteria include: no more than an average of four CSOs per year; the elimination or treatment of at least 85% of the volume of combined sewage collected during wet-weather events on an annual basis; and equivalent-to-primary

treatment of CSOs (including removal of solids and floatables). *Id.* Under the Demonstration Approach, a municipality must demonstrate that its selected CSO controls will be adequate to meet WQS and protected designated uses of the receiving waters so as to satisfy the requirements of the CWA. *Id.* at 18693. When "natural background conditions or pollution sources other than CSOs" prevent WQS from being met, the LTCP must specify "a total maximum daily load" for the receiving waters. *Id.*

The CSO Control Policy creates a two-phase permitting process for municipalities with combined sewer systems. Phase I NPDES permits require the municipality to develop and implement the Nine Minimum Controls and to develop a LTCP. *Id.* at 18696. Phase II permits apply to the implementation of approved CSO controls, LTCPs, and post-construction monitoring. *Id.* Phase II permits must include provisions requiring the municipality to engage in ongoing modification and reassessment of their CSO control measures. Specifically, Phase II permits must include (1) "[a] requirement to reassess overflows to sensitive areas . . . based on consideration of new or improved techniques to eliminate or relocate overflows or changed circumstances that influence economic achievability" and (2) "[a] reopener clause authorizing the NPDES authority to reopen and modify the permit upon determination that the CSO controls fail to meet WQS or protect designated uses." *Id.*

EPA subsequently issued a manual to aid NPDES permitting authorities in implementing the CSO Control

Policy. U.S. Envt'l Prot. Agency, No. 832-B-95-008, *Combined Sewer Overflows: Guidance for Permit Writers* (1995) ("CSO Guidance"). The CSO Guidance notes that "[a]lthough the two-phased [NPDES permitting] approach may be appropriate if a permittee has not implemented any CSO controls, in many instances, the separation between permit phases may not be distinct and permits may contain both Phase I and Phase II elements." *Id.* at 2-2. For example, under the CSO Control Policy, a Phase II permittee may be required to submit a revised LTCP containing "additional controls" if the NPDES authority determines WQS are not being met or designated uses are not being protected. 59 Fed. Reg. at 18696. After a municipality has finished construction of all the CSO control measures required in a Phase II permit, it may be issued a "post-Phase II permit," which includes post-construction compliance monitoring program requirements to provide ongoing assessment to determine whether the selected controls "are achieving compliance with applicable State water quality standards." CSO Guidance, *supra*, at 5-2.

The CSO Control Policy includes exemptions for communities that, like San Francisco, developed and began implementing a CSO control plan prior to adoption of the Policy in 1994. 59 Fed. Reg. at 18690. Under Section I.C.1 of the Policy, communities that had "completed or substantially completed construction" of their CSO controls are exempt from "the initial planning and construction provisions" of the Policy, but not from the "operational plan and post-construction monitoring provisions." *Id.* The Section I.C.1 exemption further

provides: "If, after monitoring, it is determined that WQS are not being attained, the permittee should be required to submit a revised CSO control plan that, once implemented, will attain WQS." *Id.* Under Section I.C.2, municipalities that had "substantially developed" their CSO control program at the time the Policy issued are to "complete those facilities without further planning activities," but they are not exempt from the post-construction monitoring provisions of the policy. *Id.* Section I.C.3 of the Policy specifies that "[i]n the case of any ongoing or substantially completed CSO control effort, the NPDES permit . . . should be revised to include all appropriate permit requirements consistent with Section IV.B. of this Policy." *Id.* Section IV.B.2.e of the Policy sets forth the requirement that Phase II permits include provisions for the ongoing reassessment of overflows to sensitive areas. *Id.* at 18696.

B. San Francisco's Oceanside Wastewater System

San Francisco has two combined sewer systems and treatment facilities—"Bayside" and "Oceanside." The Bayside wastewater system discharges into the San Francisco Bay from the Eastern side of the city and is authorized under an NPDES permit issued solely by the California Regional Water Quality Control Board for the San Francisco Bay Region ("Regional Water Board"). That permit is not before us. The permit before us is San Francisco's NPDES permit for its Oceanside wastewater system, which discharges from the Western side of the city into the Pacific Ocean at

points under state and federal jurisdiction and is thus authorized jointly by the Regional Water Board and the U.S. EPA.

San Francisco's Oceanside system includes the Oceanside Water Pollution Control Plant, 250 miles of combined sewers, and the Westside Recycled Water Project. Oceanside serves approximately 250,000 residents. San Francisco is authorized to discharge from Oceanside into the Pacific Ocean at eight discharge points. The primary discharge point, Discharge Point No. 001, the "Southwest Ocean Outfall," is more than three miles from the shore, in United States waters. The remaining seven discharge points, CSD-001 through CSD-007, known as "combined sewer discharges" or "CSDs," are located close to the shore, in State waters. CSD-001 through CSD-007 are used when CSOs exceed the capacity of Discharge Point No. 001 during wet weather.

Under normal conditions, water in the Oceanside system receives both primary and secondary treatment prior to discharge. During heavy rains, however, combined waste and storm water can exceed the system's total 65 million gallons per day capacity and can be discharged prior to receiving primary or secondary treatment at the Oceanside plant. In such cases, wastewater receives only "equivalent-to-primary treatment," which includes "skimming of floatable solids," prior to discharge. Four of the seven Oceanside CSD outfalls are connected to transport and storage structures that facilitate solid waste removal; however, three outfalls are not so connected.

1. History of San Francisco's CSO Control

San Francisco started work on its CSO control plan in the late 1960s, before the passage of the CWA in 1972. In 1967, San Francisco was one of the first municipalities in the nation to "characterize" its CSOs and to recommend improvements in treatment. San Francisco developed a Master Plan for its wastewater management in 1971, which included automated monitoring of rainfall and sewer levels, creating a computational model of the sewer system, and conducting studies to assess water quality. The Master Plan also proposed a set of controls to reduce the city's annual CSO frequency from eighty-two to eight.

After the CWA was enacted, San Francisco modified its Master Plan in order to become eligible for federal construction grants. The 1974 revised Master Plan was accompanied by an Environmental Impact Report and Environmental Impact Statement prepared by EPA and San Francisco that described the environmental impacts of the alternatives for wastewater disposal, including CSOs. In 1976, the Regional Water Board issued a series of permits and orders requiring the city to construct facilities to achieve its selected wet-weather controls.

The California State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California* ("Ocean Plan") in 1972, and has amended it several times, most recently in 2019. The Ocean Plan establishes WQS and effluent limitations for the Pacific Ocean within California's jurisdiction in order to

protect the "beneficial uses" of the waters. These beneficial uses include industrial water supply, recreation, fishing, and marine habitat. The Ocean Plan's standards, along with the *Water Quality Control Plan for the San Francisco Bay Basin* ("Basin Plan"), are the applicable state WQS for San Francisco's discharges into the Pacific Ocean under the CWA. *See* 33 U.S.C. §§ 1311(b)(1)(C), 1370; 40 C.F.R. §§ 122.4(d), 122.44(d)(1), 131.4(a).

In 1979, California State Water Board Order No. 79-16 ("1979 Ocean Plan Exception") gave San Francisco a limited exception to the Ocean Plan for its wet-weather CSOs. The State Water Board recognized that San Francisco's "continued use of the wet weather diversion structures" would violate the Ocean Plan's water quality objectives, general management requirements, effluent quality requirements, and discharge prohibitions. The 1979 Ocean Plan Exception exempts San Francisco from compliance with the Ocean Plan during wet weather, allowing an average of eight CSO discharges per year. It requires that San Francisco post warning signs on all recreational beaches affected by CSOs and in all areas where shellfish is harvested during periods when the bacteriological standards of the Ocean Plan are not met. The 1979 Ocean Plan Exception left the door open for the Regional Water Board to modify the terms of the exception: "[I]f the Regional Board finds that changes in location, intensity or importance of affected beneficial uses . . . have occurred, it may require the construction of additional facilities or modification of the operation of existing facilities."

EPA approved the exception in 1979 and the exception was continued in the last state Ocean Plan in 2019.

In reliance on the 1979 Ocean Plan Exception permitting its wet-weather sewage discharges into the Pacific Ocean, San Francisco built the Oceanside CSD transport and storage structures and other CSO controls in the early 1980s. San Francisco completed construction in accordance with its city-wide Master Plan, including the Oceanside facilities, in 1997 at a cost of $1.4 billion. From 1997-2018, Oceanside averaged fewer than its authorized eight CSOs per year from each discharge point.

2. Prior Oceanside NPDES Permits

In 1997, EPA and the Regional Water Board issued San Francisco its first NPDES permit for Oceanside. The 1997 permit stated that because San Francisco's construction projects to control CSOs were "substantially complete," it was exempt from the "planning and construction requirements" of the Policy. The permitting authorities determined that San Francisco's CSO control program adhered to the CSO Control Policy through the city's: (1) implementation of the Nine Minimum Controls; (2) substantial completion of control program construction such that a new long-term control plan ("LTCP") was not necessary under Section I.C of the CSO Control Policy; (3) compliance with the CSO Control Policy's "Presumption' Approach" for ensuring water quality during wet weather; (4) appropriate consideration of "sensitive areas"; and (5) operation of the

Oceanside Water Pollution Control Plant at maximum capacity during wet weather. The 2003 Oceanside NPDES permit reflected a similar finding that San Francisco's LTCP complied with the "Presumption Approach" outlined in the CSO Control Policy, and it ordered continued implementation of the city's LTCP. The 2009 Oceanside NPDES permit, the last permit issued by the EPA and the Regional Water Board prior to the challenged permit, reflected the agencies' determination that San Francisco's CSO control program "long term plan" was "consistent" with the national CSO Control Policy's LTCP requirements. The 2009 permit expired in 2014, but because San Francisco "timely submitted a permit application," the 2009 permit continued in effect until issuance of a new permit.

In 2011, San Francisco launched a Sewer System Improvement Program, a 20-year, nearly $7 billion investment initiative to enhance the reliability and performance of its wastewater system. This program included major capital improvements to the Oceanside facilities, including "the construction of the Westside Recycle Water Project, upgrades to the sludge handling facilities at the Oceanside Water Pollution Control Plant, and upgrades to the Westside Pump Station." As part of the improvement program, San Francisco also conducted studies, including cost-benefit analyses, evaluating the feasibility of further reducing CSO discharges to public beaches.

As presently constituted, San Francisco's LTCP is not a single document. Rather, it is a collection of twenty-three documents. In 2018, San Francisco

prepared a summary of these documents in *San Francisco Wastewater Long Term Control Plan Synthesis* ("LTCP Synthesis"). San Francisco submitted the LTCP Synthesis to the Regional Water Board as part of the NPDES permitting process for its Bayside facilities. Excluding two 1994 documents that were applications for grandfathering status as part of San Francisco's 1994 NPDES application for Bayside, the LTCP includes twenty-one separate planning documents, with dates ranging between 1967 and 1991. San Francisco explained in its introduction to the LTCP Synthesis that its "process of planning for, designing, and constructing projects to minimize and control wet weather discharge was iterative and extended for nearly two decades." Therefore, according to San Francisco, "no single report describes the analyses and assumptions underlying the construction of the City's current facilities."

3. Challenged NPDES Permit

EPA and the Regional Water Board reissued San Francisco's Oceanside NPDES permit on December 10, 2019. The permit sets forth, *inter alia*, specific dry-weather technology and water quality-based effluent limitations ("WQBELs") for Oceanside. The permit specifies that "[d]uring wet weather, the Discharger shall comply with the narrative water quality-based effluent limitations contained in Provision VI.C.5.c (Long-Term Control Plan)."

San Francisco petitions for review of two sets of provisions included in its 2019 Oceanside NPDES permit: (1) two general narrative prohibitions against violating applicable WQS for receiving waters (Section V and Attachment G; Section I.I.1); and (2) a requirement that San Francisco update its LTCP (Section VI.C.5.D).

First, the narrative prohibition in Section V provides:

> Discharge shall not cause or contribute to a violation of any applicable water quality standard (with the exception set forth in [the 1979 Ocean Plan Exception]) for receiving waters adopted by the Regional Water Board, State Water Resources Control Board (State Water Board), or U.S. EPA as required by the CWA and regulations adopted thereunder. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board and U.S. EPA may revise or modify this Order in accordance with the more stringent standards.

The narrative prohibition in Attachment G titled, "Regional Standard Provisions, and Monitoring and Reporting Requirements," provides: "Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 13050."

Second, for the first time since the 1990s, San Francisco is required to update its LTCP. Table 7 of

the permit lists five major tasks that San Francisco must undertake to comply with this requirement: (1) Post-Construction Characterization, Monitoring, and Modeling of Combined Sewer System; (2) Public Participation; (3) Consideration of Sensitive Areas; (4) Operational Plan; (5) Post-Construction Compliance Monitoring Program.

C. Agency Proceedings

1. Early Drafts of the Oceanside NPDES Permit

EPA and the Regional Water Board shared an early draft of the challenged NPDES permit with San Francisco in 2014 and received comments from San Francisco in January 2015. Both of the challenged general narrative prohibitions were present in the initial draft, though in slightly different form than in the final permit. Notably, the draft Section V limitations on receiving waters included, in addition to the general narrative prohibition, more detailed limitations than in the final permit. San Francisco suggested revising the Section V narrative prohibition so that it was limited to "dry-weather" discharges from Discharge Point No. 001; the city did not comment on the Attachment G narrative prohibition. The initial draft text regarding San Francisco's "Long-Term Control Plan Re-Evaluation" also differed from the LTCP required in the final permit. Notably, the initial draft permit conditioned the requirement that the LTCP be updated on the issuance of a prior determination by the permitting

agencies that San Francisco's discharges had violated applicable WQS.

In February 2016, EPA requested more information from San Francisco about its CSOs "[f]ollowing reports that raw sewage mixed with stormwater was overflowing . . . into streets, sidewalks, residences and businesses." EPA alleged that San Francisco had failed to include notice of several "widely reported" December 2014 "excursions" in its annual report to the Regional Water Board. (EPA defined "excursion" as "the exit of raw sewage or raw sewage mixed with stormwater from the collection system.") In November 2017, the Regional Water Board requested additional monitoring data in order to better understand the city's compliance with wet- and dry-weather discharge limitations.

In September 2018, after San Francisco submitted its LTCP Synthesis as part of the Bayside NPDES permitting process, the Regional Water Board found that the document did not satisfy the minimum required elements of an LTCP under its permit or under the CSO Control Policy. Specifically, the Regional Water Board found that the LTCP Synthesis failed to: (1) "reflect current circumstances," because it did not incorporate the findings of several of the city's own sewer system and CSO field studies and planning documents from 2013, 2014, and 2015; (2) "set forth any new operational requirements" "to optimize system operations so as to maximize pollutant removal during wet weather and minimize combined sewer discharges"; (3) "set forth additional measures, to the extent technically

and economically feasible, to maximize pollutant removal and minimize combined sewer discharges"; (4) "develop or propose any metrics to evaluate the performance of its wet weather disinfection systems" for its discharge points; and (5) "propose a plan for post-construction compliance monitoring of all wet weather discharges" consistent with the CSO Control Policy.

San Francisco responded by acknowledging the Regional Water Board's concerns about its LTCP. It recognized that the Regional Water Board was likely to include new LTCP requirements in the soon-to-be reissued Oceanside NPDES permit. San Francisco explained that, for that reason, it was "particularly interested" in reaching a mutual understanding with the Regional Water Board about the "LTCP-related permit terms" so as to "avoid[] future miscommunications."

In October 2018, EPA and the Regional Water Board shared another draft permit with San Francisco. The narrative provisions were unchanged from the initial draft. San Francisco again requested that the Section V prohibition be limited to dry-weather discharges from Discharge Point No. 001, and did not comment on the general provision in Attachment G. However, the October 2018 draft included a revised "LTCP Update" provision, detailing the major tasks San Francisco would need to perform to update its LTCP. This revised draft also made the LTCP update nonconditional. In response, San Francisco commented that the entire LTCP Update provision "[r]equires further discussion." The draft permit was revised further, and San Francisco continued to suggest major changes to the draft

regarding the proposed narrative prohibition in Section V and the LTCP Update provision. Representatives of San Francisco met with representatives of both agencies nine times between October 2018 and September 2019.

2. Public Notice and Comment

In April 2019, EPA and the Regional Water Board published a draft Oceanside NPDES permit and solicited public comments. The published draft permit included the general narrative provisions of Section V, Attachment G, and the LTCP update requirement, that are largely consistent with their final form. The only material difference in the final draft was that the timeline for San Francisco's compliance with the LTCP update requirement was extended by up to two years.

On April 15, 2019, EPA issued a memorandum detailing its legal and factual bases for requiring San Francisco to update its LTCP. EPA stated that a number of changes to San Francisco's combined sewer system, including San Francisco's own capital upgrades, as well as its maintenance and operational problems, necessitated an LTCP update. EPA included in its memorandum a table listing cities, including New York City, Washington, D.C., and Philadelphia, that had recently updated their respective LTCPs.

San Francisco submitted detailed comments about the narrative water quality provisions in Section V and Attachment G, as well as the requirement that the LTCP be updated. San Francisco wrote that "[t]he

generic, boilerplate narrative water-quality based permit terms are contrary to law and are unsupported by the available facts." It also wrote that it "strongly disagrees that an update to the City's LTCP is needed or appropriate." Members of the public submitted comments to EPA and Regional Water Board. Many of the comments expressed concern about CSO discharges into private homes and businesses.

EPA and the Regional Water Board responded to San Francisco's comments, defending their inclusion of narrative water quality standards in Section V and Attachment G as lawful under the CWA and federal regulations. In addition to asserting that such narrative provisions were lawful under the CWA, the agencies noted that EPA had included permit terms similar to those of Section V in other NPDES permits for combined sewer systems in other municipalities and for discharges into marine waters elsewhere in the United States. The Regional Water Board stated that it had included a provision identical to that in Attachment G "in nearly all individual NPDES permits since at least 1993."

EPA and the Regional Water Board also defended the requirement of an LTCP update, citing legal support and factual findings. The agencies stated that San Francisco is not exempt "from planning requirements in perpetuity" under the CSO Control Policy. The agencies also explained their view that the current CSO discharges to Ocean Beach (CSD-001, CSD-002, CSD-003), China Beach (CSD-005), and Baker Beach (CSD-006 and CSD-007) affected "sensitive areas" because

they discharge to "primary contact recreation waters" and "waters with threatened or endangered species." These discharges therefore threaten the "beneficial uses" of the Pacific Ocean.

The agencies included the following four factual findings in their response: (1) between 2011 and 2014, 100 million gallons of combined sewage and storm water were discharged from the Oceanside CSDs; (2) between 2008 and 2014, surveys indicated 20% of recreational beach users were in contact with receiving water after CSOs; (3) between July 2012 and June 2013, 56 of 468 samples collected at 10 shoreline monitoring locations exceeded water-quality criteria for at least one bacteria indicator, and 39 of those elevated samples (70%) were associated with a CSO event; and (4) between 2004 and 2014, pollutant concentrations (e.g., copper and zinc) in the CSOs exceeded water quality objectives. "Given these facts," the agencies responded, "it is appropriate to assess ways to reduce the volume, frequency, and magnitude of the combined sewer discharges to sensitive areas to better protect beneficial uses."

3. Administrative Review of Final Permit

The Regional Water Board approved the final Oceanside NPDES permit (No. R2-2019-0028) on September 12, 2019. EPA approved the permit (No. CA0037681) several months later, on December 10, 2019.

After EPA approved the final permit in December 2019, San Francisco filed a petition for review of the permit with EPA's Environmental Appeals Board ("EAB"). The EAB heard oral argument on October 8, 2020. San Francisco's petition challenged the narrative prohibitions and the LTCP update requirement, contending that they are inconsistent with the CWA, its implementing regulations, and the facts in the record. San Francisco also challenged a provision regarding reporting of isolated CSOs, but it is not seeking judicial review of that provision.

While San Francisco's petition for review was pending before the EAB, the EPA stayed the contested provisions of the Oceanside permit. The EAB denied San Francisco's petition for review in its entirety on December 1, 2020. *City and County of San Francisco*, 18 E.A.D. 322 (EAB 2020). EPA issued its Notice of Final Permit Decision on December 22, 2020. The Oceanside NPDES permit became fully effective and enforceable on February 1, 2021.

San Francisco timely petitioned for review in this court. We have jurisdiction to review EPA's actions issuing or denying an NPDES permit under 33 U.S.C. § 1369(b)(1)(F).

II. Standard of Review

The Administrative Procedure Act ("APA") governs EPA's issuance of NPDES permits. *See Nat. Res. Def. Council v. U.S. EPA*, 279 F.3d 1180, 1186 (9th Cir. 2002). Under the APA, we must set aside an agency's

decision if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). This standard of review is "highly deferential." *Kern Cnty. Farm Bureau v. Allen*, 450 F.3d 1072, 1076 (9th Cir. 2006) (quoting *Indep. Acceptance Co. v. California*, 204 F.3d 1247, 1251 (9th Cir. 2000)). "We may not substitute our judgment for that of the agency." *Food & Water Watch v. U.S. EPA*, 20 F.4th 506, 514 (9th Cir. 2021).

An agency's reasonable interpretation of a statute it administers is entitled to deference, *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 843–44 (1984), as is an agency's reasonable interpretation of its genuinely ambiguous regulations, *Kisor v. Wilkie*, 139 S. Ct. 2400, 2415–16 (2019). Furthermore, courts "must defer to a great extent to the expertise of the EPA" when reviewing the agency's scientific determinations in an area within the agency's expertise. *Nat. Res. Def. Council, Inc. v. U.S. EPA*, 863 F.2d 1420, 1430 (9th Cir. 1988) (citing *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983)).

III. Discussion

A. Narrative Prohibitions

San Francisco argues that two general narrative prohibitions included in the Oceanside NPDES permit, Section V and Attachment G, are unlawful because (1) they "contravene EPA's obligation under the CWA to specify pollutant limits or operational requirements that will achieve compliance with WQS"; (2) by

including these provisions in the permit, EPA failed to "follow its own rules" for setting WQBELs; and (3) EPA justified the need for the provisions "with only conclusory assertions."

For the convenience of the reader, we again quote the general narrative prohibitions. The first, Section V, "Receiving Water Limitations," provides:

> Discharge shall not cause or contribute to a violation of any applicable water quality standard (with the exception set forth in [the 1979 Ocean Plan Exception]) for receiving waters adopted by the Regional Water Board, State Water Resources Control Board (State Water Board), or U.S. EPA as required by the CWA and regulations adopted thereunder. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board and U.S. EPA may revise or modify this Order in accordance with the more stringent standards.

The second, part of Attachment G, provides: "Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 13050."[1]

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[1] Section 13050 defines "pollution" as "an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either . . . waters for beneficial uses [or] [f]acilities which serve beneficial uses." Cal. Water Code § 13050(l). "Contamination" is "an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease." *Id.*

We address in turn San Francisco's challenges to the general narrative prohibitions.

1. Consistency with the CWA

San Francisco argues that EPA's inclusion of the general narrative prohibitions is inconsistent with the CWA because they are too vague to ensure the city's control measures will protect water quality. We disagree.

The plain text of the CWA and its implementing regulations provide NPDES permitting agencies with broad authority to impose limitations necessary to ensure the discharger's adherence to "any applicable water quality standard." 33 U.S.C. § 1311(b)(1)(C). Consistent with this statutory directive, federal regulations require all NPDES permits to include "any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards . . . necessary to . . . [a]chieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d). The CWA and its implementing regulations thus require EPA to impose "any more stringent limitation" necessary to satisfy "State narrative criteria for water quality," including those beyond

§ 13050(k). And "nuisance" is defined as "anything which . . . (1) [i]s injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property . . . (2) [a]ffects at the same time an entire community or neighborhood, or any considerable number of persons . . . and (3) [o]ccurs during, or as a result of, the treatment or disposal of wastes." *Id.* § 13050(m).

"effluent limitations." *Id.*; 33 U.S.C. § 1311(b)(1)(C). Moreover, the CSO Control Policy, which is legally binding under 33 U.S.C. § 1342(q)(1), specifies that Phase I NPDES permits must include a provision requiring municipalities to "[c]omply with applicable WQS, no later than the date allowed under the State's WQS, *expressed in the form of a narrative limitation.*" 59 Fed. Reg. at 18696 (emphasis added). These provisions do not merely authorize a permitting agency's inclusion of narrative limitations on discharges that may violate state WQS; they *require* such narrative limitations when necessary to satisfy applicable WQS.

Supreme Court precedent, our prior cases, and prior EAB decisions support the legality and confirm the enforceability of general narrative prohibitions in permits issued under the CWA. In *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, 715–16 (1994), the Supreme Court upheld the state agency's use of "open-ended" criteria using "broad, narrative terms," in addition to "numerical criteria," to certify a hydroelectric power plant's compliance with the CWA. In *Northwest Environmental Advocates v. City of Portland*, 56 F.3d 979, 989 (9th Cir. 1995), a CSO case, we relied on *Jefferson County* to uphold citizen-suit enforcement of "water quality standards that are not translated into quantitative limitations." We recognized that citizen suits to enforce such "qualitative regulations" are "an important enforcement tool," especially in cases where effluent limitations either do not apply at all, or merely establish "minimum requirements." *Id.* More recently, in

Natural Resources Defense Council, Inc. v. County of Los Angeles, 725 F.3d 1194, 1199, 1205–07 (9th Cir. 2013), we enforced a narrative NPDES provision that was nearly identical to that of Section V, "Receiving Water Limitations," in this case. Finally, in a closely analogous recent EAB decision, *In re City of Lowell*, 18 E.A.D. 115, 176 (EAB 2020), the EAB held that EPA did not err in issuing a general, narrative NPDES permit provision "alongside more specific 'end of pipe' pollutant-specific effluent limits."

In the Oceanside NPDES permit at issue before us, EPA included, along with numeric effluent limitations for dry- and wet-weather discharges, the two general narrative prohibitions quoted above, forbidding discharges that "cause or contribute to a violation of any applicable water quality standard," or "create pollution, contamination, or nuisance." The two narrative provisions are consistent with the CWA and its implementing regulations. They simply require that San Francisco's discharges comply with applicable state WQS. Indeed, EPA points out that the language of Section V's prohibition is frequently employed by EPA in other NPDES permits it issues for combined sewer systems, and that the Attachment G provision is included in nearly all individual NPDES permits the Regional Water Board has issued over the past three decades. *See Ohio Valley Env't Coal. v. Fola Coal Co.*, 845 F.3d 133, 141–42 (4th Cir. 2017) (noting the frequency with which EPA imposes general narrative water quality standards in its NPDES permits and their consistent enforcement).

San Francisco nevertheless contends that the general narrative provisions violate the CWA, arguing that the permit fails to provide the city with sufficiently clear directions as to how to ensure that its discharges comply with WQS. In support of its contention, San Francisco cites *Natural Resource Defense Council v. U.S. EPA* ("*NRDC*"), 808 F.3d 556 (2d Cir. 2015). In that case, a narrative WQBEL—that is, a general narrative standard—mandated that ships "control discharges as necessary to meet applicable water quality standards in the receiving water body or another water body impacted by [the] discharges." *Id.* at 568 (alteration in original) (quotation marks and citations omitted). The Natural Resources Defense Council ("NRDC") challenged the narrative WQBEL on the ground that it was insufficient to satisfy EPA's regulatory obligations under the CWA to ensure clean water. The Second Circuit agreed with NRDC, holding that the narrative provision, standing alone, was insufficient to satisfy EPA's obligations under the CWA. The court wrote, "By requiring shipowners to control discharges 'as necessary to meet applicable water quality standards' without giving specific guidance on the discharge limits, EPA fails to fulfill its duty to 'regulat[e] in fact, not only in principle.'" *Id.* at 578 (alteration in original) (citation omitted).

The case before us is the converse of *NRDC.* In that case, petitioner NRDC sought more stringent enforcement than the EPA permit required. Here, by contrast, San Francisco seeks less stringent enforcement. It seeks to turn *NRDC* on its head, relying on a

decision requiring more effective enforcement to support an argument in favor of less effective enforcement.

Even if we were to regard *NRDC* as a relevant precedent, we would conclude that the general narrative provision is consistent with the CWA. In contrast to the permit in *NRDC*, which contained only the two general narrative WQBEL provisions, *see id.* at 568, the Oceanside NPDES permit in the case before us includes several numeric and specific narrative WQBELs in addition to the challenged general narrative provisions. For example, the wet-weather discharge provisions in the Oceanside NPDES permit include specifications for the percentage of combined wastewater and storm water that Oceanside must capture during precipitation events; the specific flow rates that must be obtained prior to discharge from the different CSDs; and the percent chance of rain that triggers maximization of secondary treatment capacities. In other words, specific provisions in the Oceanside NPDES permit provide San Francisco with substantial guidance as to how to satisfy the applicable WQS. The challenged general narrative provisions operate as a "backstop" to those provisions, seeking to ensure that permitted discharges protect the water quality of the Pacific Ocean if the specific technological and water-quality based effluent limitations fail to achieve compliance with the CWA.

2. Conformity with Procedural Requirements

San Francisco also argues that the general narrative prohibitions are unlawful because EPA failed "to follow its own rules for setting WQBELs." Specifically, San Francisco argues that EPA failed to follow the procedures set forth in 40 C.F.R. § 122.44(d)(1)(i)–(vii) when it formulated its general narrative provisions. In deciding San Francisco's appeal within the agency, the EAB of EPA disagreed with San Francisco's argument. The EAB wrote:

> Although 40 C.F.R. § 122.44(d) sets forth a process for deriving pollutant-specific effluent limits when the permitting authority determines that a particular pollutant has the reasonable potential to cause or contribute to an exceedence of water quality standards, the regulations do not require all permit conditions necessary to meet water quality standards to be expressed in terms of specific pollutant-by-pollutant limitations.

We agree with the EAB.

Under § 122.44(d)(1), NPDES permit limitations "must control all pollutants . . . which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d)(1)(i). San Francisco reads this regulation as requiring EPA to "conduct a reasonable potential analysis" prior to setting

any limitations—including general narrative prohibitions. San Francisco is mistaken.

Section 122.44(d)(1) does not set forth an exclusive process for imposing WQBELs. The regulations in this section set forth minimum requirements for imposing pollutant-specific WQBELs. It does not state that the permitting authority cannot set general narrative limitations limits to achieve compliance with WQS. The governing statutory section, 33 U.S.C. § 1311(b)(1)(C), requires EPA to impose limitations "necessary" to meet "water quality standards" without restricting the agency to the sort of pollutant-by-pollutant regulation contemplated in § 122.44(d)(1). We therefore conclude that EPA did not abuse its discretion or act contrary to §1311(b)(1)(C) in issuing its general narrative prohibitions.

3. Factual Basis for Narrative Provisions

San Francisco further contends that EPA arbitrarily imposed the contested narrative prohibitions based on "a pair of unsupported assertions," namely (1) that the limits are "necessary to ensure compliance with applicable water quality standards," and, relatedly, (2) that the prohibitions "serve as backstops in the event that the effluent limitations . . . prove to be inadequate." San Francisco argues that the record demonstrates that the permit's other effluent limitations "are sufficient to protect receiving water quality," and that EPA's decision to set WQBELs "necessarily included

determinations that these Permit limits are sufficient to protect WQS on their own."

In response, EPA argues that the record supports its determination "that compliance with end-of-pipe numeric effluent limitations in the permit might not ensure compliance with water quality standards, including protection of beneficial uses." EPA contends that because the CWA, under the binding CSO Control Policy, requires that permit writers ensure municipalities' "compliance with water quality standards *and* protection of designated uses," the numeric effluent limitations for discharges may not be sufficient to ensure that wet-weather CSOs comply with the mandate to protect beneficial uses such as recreation. *See* 59 Fed. Reg. at 18668 (emphasis added). In support, EPA cites evidence in the record of impairments to beneficial uses resulting from Oceanside's wet-weather CSO discharges onto "popular recreational areas" including Ocean Beach, China Beach, and Baker Beach.

Under the APA, an agency's decision is arbitrary and capricious if it "offered an explanation for its decision that runs counter to the evidence before the agency." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). An agency must "examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" *Id.* at 43 (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)).

Here, in its response to San Francisco's comments on the draft permit, EPA explained its decision to include the narrative provisions in Section V and Attachment G due to its concerns about San Francisco's wet-weather CSOs. Specifically, the agency noted its determination that "particular assumptions about the frequency of combined sewer discharges" made by the State Water Board in its 1979 Ocean Plan Exception order, which authorized Oceanside an average of eight CSOs per year, "may not ensure protection of beneficial uses today." In response to another comment made by San Francisco (regarding the LTCP Update provision), EPA further cited factual evidence in support of its concern that current limitations in the Oceanside NPDES permit may not ensure the protection of "beneficial uses"—namely that the combined sewer discharges at Ocean Beach, China Beach, and Baker Beach, while under the eight CSO per year limit, nevertheless may not adequately protect recreational use.

Because EPA's general narrative provisions were included as a "backstop" to ensure compliance with WQS not addressed by specific effluent limitations elsewhere in the permit—namely, protection of beneficial uses such as recreation—its decision is rationally supported by the evidence in the record describing negative impacts of CSOs on users of San Francisco's beaches.

4. Summary

We hold that EPA appropriately implemented the CWA by including the two challenged general narrative prohibitions in addition to more specific effluent limitations in the Oceanside NPDES permit; that EPA was not required to follow the procedures set forth in 40 C.F.R. § 122.44(d)(1) for deriving pollutant-specific effluent limitations in imposing the general narrative provisions; and that EPA's decision to impose the general narrative provisions was rationally connected to evidence in the record indicating that a "backstop" to the more specific provisions would be useful in protecting beneficial uses.

B. LTCP Update

San Francisco also challenges the Oceanside NPDES permit requirement that it update its LTCP for CSO control. For the convenience of the reader, we reiterate that the LTCP Update provision requires San Francisco to undertake five major tasks, including: (1) "characteriz[ing]" the updated combined sewer system; (2) describing its efforts to engage the public in its decision-making processes; (3) reporting on its consideration of options to "eliminate, relocate, or reduce the magnitude or frequency of discharges to sensitive areas," including cost/benefit analyses; (4) proposing an operational plan to minimize CSOs; and (5) submitting a revised post-construction compliance monitoring program plan.

San Francisco argues that: (1) EPA did not make a factual finding necessary to require San Francisco to update its LTCP under the CSO Control Policy; and (2) the requirement that San Francisco specifically address "sensitive areas" in the update exceeds the agency's authority.

We address San Francisco's arguments in turn.

1. Factual Finding Supporting the LTCP Update Requirement

San Francisco argues that there is "only one circumstance when EPA can order an LTCP update: when the plan is not attaining compliance with WQS." San Francisco argues that because EPA did not make a finding of noncompliance, the LTCP Update requirement is unlawful.

It is undisputed that San Francisco was exempted from creating an initial LTCP in 1997. At that time San Francisco had "substantially completed" the construction of its CSO control program facilities. The parties dispute whether San Francisco was exempted under Section I.C.1 or Section I.C.2. We agree with San Francisco that the Section I.C.1 exemption was applied in its first NPDES permit.

The Section I.C.1 exemption in the CSO Control Policy provides:

> Any permittee that, on the date of publication of this final Policy, has completed or substantially completed construction of CSO control

> facilities that are designed to meet WQS and protect designated uses, and where it has been determined that WQS are being or will be attained, is not covered by the initial planning and construction provisions in this Policy; however, the operational plan and post-construction monitoring provisions continue to apply. *If, after monitoring, it is determined that WQS are not being attained, the permittee should be required to submit a revised CSO control plan that, once implemented, will attain WQS.*

59 Fed. Reg. at 18690 (emphasis added).

San Francisco argues that the final sentence of the Section I.C.1 exemption, italicized above, is the only basis on which a permitting agency may require an LTCP update from a city that was exempt from initial LTCP planning requirements. San Francisco cites in support of its argument the interpretative canon of *expressio unius est exclusio alterius.* It also relies on another provision of the CSO Control Policy, Section IV.B.2.g, the "reopener clause" provision, *id.* at 18696, arguing that "[t]he Policy expects no further planning or revisions to an approved LTCP, except 'upon determination that the CSO controls fail to meet water quality standards. . . .'" San Francisco also points to another EPA CSO Guidance manual from 1995, which specifies that "[i]f post-construction monitoring indicates that existing WQS are not being met, the data generated can be used to identify the additional CSO controls necessary to achieve WQS." U.S. Envt'l Prot.

Agency, No. 832-B-95-002, *Combined Sewer Overflows: Guidance for Long-Term Control Plan* 4-16 (1995).

EPA argues that a prior determination that WQS are not being met is not the only basis on which it may require an LTCP update. EPA cites provisions in the CSO Control Policy that grant EPA authority to reassess, modify, and require revisions to NPDES permits, even for those programs exempted from initial planning requirements, in support of its interpretation.

Reading the CSO Control Policy as a whole, especially Section I.C, we agree with EPA. Most important, Section I.C.3 of the CSO Control Policy states: "In the case of any ongoing *or substantially completed CSO control effort*, the NPDES permit or other enforceable mechanism, as appropriate, should be revised to include all appropriate *permit requirements consistent with section IV.B* of this Policy." 59 Fed. Reg. at 18690 (emphases added). We note that the Control Policy refers to Section IV.B without limitation, not just Section IV.B.2.g cited by San Francisco. Section IV.B sets forth all the NPDES permit requirements for CSOs. *Id.* at 18695–96. We read Section I.C.3 to provide NPDES permitting authorities with broad discretion to impose revised permit requirements, as set forth in Section IV.B, on municipalities initially exempted from planning and construction requirements under either Section I.C.1 (exempting municipalities with "completed or substantially completed construction of CSO control facilities") or Section I.C.2 (exempting municipalities with a "substantially developed" or ongoing "implement[ation]" of a CSO control program). *Id.* at 18690.

Standard Phase II permit provisions set forth in the CSO Control Policy under Section IV.B further support EPA's interpretation of Section I.C. The Policy mandates in Section IV.B.2.e that every Phase II permit—a permit given only to municipalities that have completed their LTCP and construction of their controls—include "[a] requirement to reassess overflows to sensitive areas in those cases where elimination or relocation of the overflows is not physically possible and economically achievable." *Id.* at 18696. All Phase II permittees are to conduct a reassessment of their CSOs to sensitive areas "based on consideration of new or improved techniques to eliminate or relocate overflows or changed circumstances that influence economic achievability." *Id.* In addition, as San Francisco acknowledges, the Policy mandates in Section IV.B.2.g that every Phase II NPDES permit include a "reopener clause authorizing the NPDES authority to reopen and modify the permit upon determination that the CSO controls fail to meet WQS *or protect designated uses.*" *Id.* (emphasis added). When an NPDES authority decides to modify a permit because "the CSO controls fail[ed] to . . . protect designated uses," it can do so without necessarily having found a failure to attain WQS. These standard Phase II provisions demonstrate that even post-construction, the CSO Control Policy authorizes permitting agencies to order municipalities to periodically reassess their CSO control program for potential improvement with respect to designated uses, irrespective of any failure to meet WQS.

Our dissenting colleague believes that Section IV.B.2.g's reference to "protecting 'designated uses' . . . adds nothing to the concept of achieving water quality standards." Dissenting Op. at 64. But the CSO Control Policy does not reference the "protect[ion] of designated uses" only in Section IV.B.2.g. The "protect[ion] of designated uses" language appears close to thirty times in the CSO Control Policy. Each time, the CSO Control Policy describes "protection of designated uses" as distinct from achieving water quality standards. For example, the Policy instructs permittees to "develop long-term CSO control plans which evaluate alternatives for attaining compliance with the CWA, including compliance with water quality standards *and protection of designated uses*." 59 Fed. Reg. at 18688 (emphasis added). The Policy further advises that "[s]chedules for implementation of the long-term CSO control plan may be phased based on the relative importance of adverse impacts upon water quality standards *and designated uses*. . . ." *Id.* (emphasis added). The CSO Control Policy thus treats the "protection of designated uses" as an independently significant obligation, and not simply a byproduct of attaining the relevant water quality standard.

We therefore hold that EPA's ability to require San Francisco to update its LTCP is not conditioned on a finding that WQS were not being met. However, EPA's requirement that San Francisco update its LTCP must be rationally supported by record evidence. *See Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). We hold that there is

adequate evidentiary support in the record. As we noted above, San Francisco's current LTCP (a collection of twenty-one relevant documents) has not been updated since 1991, more than thirty years ago, despite San Francisco's extensive investment in operational assessments and capital improvements through its Sewer System Improvement Plan since then. The fact that the LTCP is so outdated is enough, by itself, to support EPA's conclusion that an updated LTCP is needed. Moreover, San Francisco's current LTCP was found by the Regional Water Board to be inadequate to ensure compliance with the CWA. Evidence of these deficiencies in San Francisco's current LTCP supports EPA's requirement that San Francisco accurately characterize its contemporary sewer systems and evaluate control alternatives. In requiring an updated LTCP, EPA is ensuring that San Francisco satisfies applicable state WQS, most notably the 1979 Ocean Plan Exception, which was conditioned on San Francisco's efforts to protect water quality "to the greatest extent practical," taking into consideration "changes in location, intensity or importance of affected beneficial uses or demonstrated unacceptable adverse impacts [of the CSOs]."

2. Requirement to Consider Sensitive Areas

San Francisco also contends that LTCP Update Task 3, one of its five assigned LTCP Update tasks, is "uniquely inconsistent with San Francisco's exemption under Section I.C.1 of the Policy and EPA's authority more generally." LTCP Update Task 3, "Consideration

of Sensitive Areas," requires that San Francisco reevaluate alternatives for the six of its seven CSD outfalls that are located adjacent to popular recreational beaches. Whereas the Section I.C.2 exemption explicitly provides that programs falling under this exemption "should be reviewed and modified to be consistent with the sensitive area, financial capability, and post-construction monitoring provisions of this Policy," the Section I.C.1 exemption does not contain this provision for routine sensitive area reassessment. 59 Fed. Reg. at 18690. San Francisco argues that because it was granted an exemption under Section I.C.1 rather than I.C.2, "EPA cannot require the city to undertake *any* sensitive areas analysis." EPA argues that the CSO Control Policy provides it with authority to require San Francisco to reassess its CSOs to sensitive areas on an ongoing basis even assuming it was granted an exception from initial LTCP planning and construction under Section I.C.1 rather than Section I.C.2.

Here, too, we agree with EPA. As discussed above, Section I.C.3 provides NPDES permitting authorities with broad discretion to impose revised permit requirements on municipalities initially exempted from planning and construction requirements under *either* Section I.C.1 or Section I.C.2 of the Policy. *Id.* at 18690. This discretion includes the ability to impose a requirement that municipalities reassess CSOs to sensitive areas. *See id.* at 18696 (Section IV.B.2.e). The Policy mandates that all Phase II permits include a provision requiring a permittee to "reassess overflows to

sensitive areas in those cases where elimination or relocation of the overflows is not physically possible and economically achievable." *Id.* This reassessment requirement aligns squarely with the CSO Control Policy's objective that "a permittee's long-term CSO control plan . . . give the highest priority to controlling overflows to sensitive areas." *Id.* at 18692.

San Francisco contends that even if it were bound to reassess discharges into sensitive areas, the Task 3 requirement stretches beyond EPA's authority to require it to assess alternatives intended to "eliminate or relocate" CSOs. *Id.* In the view of San Francisco, EPA cannot instead require it to assess the alternative of "reducing the magnitude and frequency" of CSOs. However, alternative controls that would aid in "reducing the magnitude and frequency" of CSOs are likely to be less costly than alternatives that would entail relocating or eliminating CSOs altogether. We decline to overturn EPA's interpretation of the CSO Control Policy, which allows it to require a less expensive and potentially more effective measure.

3. Summary

In sum, the CSO Control Policy provides EPA with authority to require San Francisco to update its LTCP and reevaluate alternatives for its CSO discharges to sensitive areas. EPA's decision to require an updated LTCP is rationally supported by evidence in the record, and we hold that EPA did not act unlawfully in

including the provision in the 2019 Oceanside NPDES permit.

Conclusion

We hold that EPA had authority under the CWA to include in the Oceanside NPDES permit two narrative prohibitions against violating applicable WQS; that EPA had authority to require San Francisco to update its LTCP for CSOs; and that EPA's decisions were rationally connected to evidence in the record. We therefore deny San Francisco's petition for review.

Petition DENIED.

COLLINS, Circuit Judge, dissenting:

The City and County of San Francisco ("San Francisco") challenges three specific conditions that the Environmental Protection Agency ("EPA") included in the permit that the EPA issued to San Francisco, under the "National Pollutant Discharge Elimination System" ("NPDES"), in connection with the operation of a combined wastewater and stormwater collection and treatment system. In my view, all three conditions are invalid, and I would therefore grant San Francisco's petition for review, vacate the challenged provisions, and remand the matter to the agency. Because the majority instead upholds each condition, I respectfully dissent.

I

To place the issues raised by the parties in their proper context, it is helpful first to provide some appropriate background concerning the Clean Water Act, the special rules governing combined sewer systems, and the permit at issue here.

A

The current federal water pollution control system dates back to the enactment of the Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (1972). That Act, which itself is often colloquially called the Clean Water Act, completely rewrote the then-existing Federal Water Pollution Control Act ("FWPCA"). *See City of Milwaukee v. Illinois*, 451 U.S. 304, 317 (1981). The revised FWPCA—which was officially given the alternative title of the "Clean Water Act" in 1977, *see* Pub. L. No. 95-217, § 2, 91 Stat. 1566 (1977)—remains, as amended, the principal federal statute governing the regulation and control of water pollution, and it has been classified to chapter 26 of the unenacted title 33 of the United States Code. *See* 33 U.S.C. § 1251 *et seq*.

Prior to its amendment in 1972, the FWPCA "employed ambient water quality standards specifying the acceptable levels of pollution in a State's interstate navigable waters as the primary mechanism in its program for the control of water pollution." *EPA v. California ex rel. State Water Res. Control Bd.* (*EPA v. California*), 426 U.S. 200, 202 (1976). These overall

standards for particular bodies of water were intended "to serve both to guide performance by polluters and to trigger legal action to abate pollution." *Id.* But the system "proved ineffective" in practice. *Id.* Because the focus was on the ultimate aggregate level of pollution in the body of water as a whole, rather than on "the preventable *causes* of water pollution" into that body of water, enforcement of the standards required "work[ing] *backward* from an overpolluted body of water to determine which point sources are responsible and which must be abated." *Id.* at 202, 204 (emphasis added). That feature, combined with "the awkwardly shared federal and state responsibility for promulgating such standards" and the "cumbrous enforcement procedures," made it "very difficult to develop and enforce standards to govern the conduct of individual polluters." *Id.* at 202–03.

As the Supreme Court has explained, the Clean Water Act ("CWA") takes an entirely different approach that includes two major changes. First, rather than measuring an individual polluter's performance "against limitations derived from water quality standards to which it and other polluters must *collectively* conform," the CWA directly regulates discharges from specific point sources by setting "effluent limitations" —*i.e.*, "restrictions . . . on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources." *Id.* at 204–05 (emphasis added). Second, to implement this shift to a direct regulation of discharges, the CWA "establish[ed] the National Pollutant Discharge

Elimination System (NPDES) as a means of achieving and enforcing the effluent limitations." *Id.* at 205 (footnote omitted). "Under the NPDES, it is unlawful for any person to discharge a pollutant without obtaining a permit and complying with its terms," which include the applicable effluent limitations for the relevant point sources. *Id.*; *see also* 33 U.S.C. § 1311(a).

Thus, under the revised regulatory scheme established by the CWA, the regulators issuing individual NPDES permits are ultimately required to translate the *overall* water quality standards for a given body of water—which are typically set by States—into "obligations (including a timetable for compliance) of the individual discharger," as expressed in that discharger's NPDES permit. *EPA v. California*, 426 U.S. at 205. The effluent limitations contained in an NPDES permit include, in the first instance, "*technology-based limitations* on individual discharges" from point sources. *PUD No. 1 of Jefferson County v. Washington Dep't of Ecology*, 511 U.S. 700, 704 (1994); *see also Our Children's Earth Foundation v. EPA*, 527 F.3d 842, 848 (9th Cir. 2008) (explaining that such "technology-based" effluent limitations are "determined according to the best available or practicable technology" for reducing pollution at the source); *Natural Res. Def. Council, Inc. v. EPA* (*NRDC I*), 822 F.2d 104, 110 (D.C. Cir. 1987) (stating that "technology-based effluent limitations, as their name suggests, derive from standards formulated with reference to pollution control technology").

However, if such technology-based effluent limitations "are insufficient to attain or maintain water

quality standards, the CWA requires NPDES permits to include additional *water quality-based* effluent limits." *Natural Res. Def. Council, Inc. v. EPA* (*NRDC II*), 808 F.3d 556, 564 (2d Cir. 2015) (emphasis added). Such water-quality-based effluent limitations are set "based on the amounts and kinds of pollutants in the water in which the point source discharges," *NRDC I*, 822 F.2d at 110, and they are set "without regard to cost or technological availability," *NRDC II*, 808 F.3d at 565. In addition to such numerically-based effluent limitations, an NPDES permit may also contain "narrative" conditions that specify, in descriptive terms, how particular activities are to be conducted, so as to achieve compliance with the relevant water quality standards. *PUD No. 1*, 511 U.S. at 716.

The various specific limitations contained in the NPDES permit are then subject to "direct administrative and judicial enforcement." *EPA v. California*, 426 U.S. at 205. But, "[w]ith few exceptions," if an NPDES permit holder complies with the conditions of its permit, that discharger will be "deemed to be in compliance" with the principal provisions of the CWA. *Id.*; *see also* 33 U.S.C. § 1342(k). And that remains true even if the discharges released in compliance with the discharger's NPDES permit "would reach waters already in violation of existing water quality standards." *Arkansas v. Oklahoma*, 503 U.S. 91, 107 (1992).

B

Operators of a combined wastewater and stormwater collection and treatment system—such as the one operated by San Francisco here—are subject to specialized rules that govern both the NPDES permitting process for such systems and other aspects of their operation. A key objective of these special rules is to address the fact that such a "combined sewer system" ("CSS"), which "conveys sanitary wastewaters . . . and storm water through a single-pipe system" to a water-treatment plant, may on occasion experience a "combined sewer overflow" ("CSO"), *i.e.*, a discharge "at a point *prior*" to treatment at the water-treatment plant. *See Combined Sewer Overflow (CSO) Control Policy*, 59 Fed. Reg. 18687, 18689 (Apr. 19, 1994) (emphasis added). Such an overflow can occur when, for example, heavy rains result in the system being overwhelmed by an increased flow of water that exceeds the capacity of the treatment plant. To help combat the dangers such CSOs pose, the EPA promulgated a special "CSO Control Policy" in 1994. *Id.* at 18687-97. Pursuant to a 2000 amendment to the CWA, this CSO Control Policy document effectively has the force of a statute. *See* 33 U.S.C. § 1342(q)(1) (requiring that "[e]ach permit, order, or decree issued" under the CWA, after December 21, 2000, "for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy" issued in 1994).

The CSO Control Policy relies on two primary mechanisms for achieving its overall objectives of controlling and mitigating CSO events. First, under § II.C

of the Policy, each permittee operating a system that experiences CSOs must "develop[] and implement[]" a "long-term CSO control plan[] that will ultimately result in compliance with the requirements of the CWA." 59 Fed. Reg. at 18691. A full-blown long-term control plan ("LTCP") would include, *inter alia*, (1) preliminary work, including public consultation, to identify and evaluate appropriate alternatives for building the infrastructure to achieve the objectives of the CSO Control Policy in a cost-effective manner; (2) an implementation schedule for the selected alternatives, including a "construction and financing schedule"; and (3) "a post-construction water quality monitoring program." *Id.* at 18691-94.

Second, the Policy relies on the NPDES permitting process to support both the LTCP process and the overall objectives of the Policy. Thus, § IV.B.1 of the Policy provides that, in the "Phase I" stage in which a permittee is developing an LTCP, the NPDES permit must contain specific conditions to ensure that the permittee, *inter alia*, (1) accomplishes the necessary tasks for developing and submitting an LTCP; and (2) immediately implements certain minimum controls. *Id.* at 18696. Section IV.B.2 of the Policy states that, at "Phase II," the permit must contain various enumerated conditions, including: (1) appropriate "requirements for implementation of the long-term CSO control plan"; (2) requirements for appropriate monitoring; (3) a "requirement to reassess overflows to sensitive areas" under certain circumstances; and (4) a "reopener clause authorizing the NPDES authority to reopen and

modify the permit upon determination that the CSO controls fail to meet WQS [*i.e.*, water quality standards] or protect designated uses." *Id.* Section IV.B.2.g specifically provides that, in the event of "such determination," the "permittee should be required to develop, submit, and implement, as soon as practicable, a revised CSO control plan which contains additional controls to meet WQS and designated uses." *Id.*

C

San Francisco currently "provides wastewater treatment [services] for western San Francisco and a small portion of [nearby] Daly City"—a service area with a population totaling approximately 250,000 people. It does so by way of its Oceanside Water Pollution Control Plant (the "Oceanside Plant") and a combined sewer system that collects wastewater and stormwater and transports it to that plant. (I will refer to the Oceanside Plant and the combined sewer system, collectively, as the "Oceanside System"). The Oceanside System's combined sewer system consists of "approximately 250 miles of pipe, one major pump station . . . six minor pump stations . . . and three large transport/storage structures." Since 1997, San Francisco has discharged treated wastewater from its Oceanside System into the Pacific Ocean pursuant to the terms and conditions of successive NPDES permits that have been jointly issued by the EPA and the California Regional Water Quality Control Board for the San Francisco Bay Region (the "Regional Board"). In the 25 years prior to receiving its 1997 NPDES Permit, San

Francisco spent approximately $1.4 billion dollars fully implementing an integrated plan for wastewater management (the "Master Plan") that it had begun developing in 1971—the latter being a time when San Francisco's then-existing sewage and wastewater treatment systems were experiencing an average of 82 CSOs per year. The Master Plan was designed to reduce the average frequency of overflow events by approximately 90%, to just eight per year.

Congress passed the CWA one year after San Francisco developed its 1971 Master Plan. In addition to the NPDES permitting regime described above, the CWA also established a construction grant program in which the EPA would provide States and municipalities with federal funding to cover significant portions of the construction costs for projects that "demonstrate[d] a new or improved method of preventing, reducing, and eliminating the discharge into any waters of pollutants from sewers which carry storm water or both storm water and pollutants." 33 U.S.C. § 1255(a). To be eligible for those funds, an applicant had to submit a "Facility Plan" to the EPA and to the State showing that its proposed project "complied with the National Environmental Policy Act." Seeking to take advantage of this new grant program, San Francisco spent the next two years revising its Master Plan. As part of that process, an "Environmental Impact Report . . . and Environmental Impact Statement" were "prepared by the EPA and the San Francisco Department of Planning" and issued in 1974.

The following year, the Regional Board adopted "the first comprehensive Basin Plan for the San Francisco Bay Region" and began issuing "a series of permits and orders that included enforceable schedules for implementing [San Francisco]'s selected wet weather controls," which included "milestones for planning, design, and construction." In particular, in March 1976, the Regional Board ordered San Francisco to construct facilities to "reduce the frequency of discharge" from "an average of 114 overflow events per year to an average of one overflow event per year" and to submit a "study to better define the costs and water quality benefits of facilities designed to achieve various overflow frequencies." San Francisco completed the required study and submitted the results to the Regional Board on December 15, 1978, accompanied by a request that the Regional Board increase its maximum number of allowable overflow events from one per year to eight per year. That change required an exemption from the applicable "Water Quality Control Plan for Ocean Waters of California," and the Regional Board granted the requested exemption on March 23, 1979, and the EPA approved it a few months later. This exemption order, together with the revised Master Plan San Francisco adopted in 1980, "became the basis for all subsequent planning, design, and construction of" the Oceanside System.

With these provisions in place, San Francisco began constructing the Oceanside System in the early 1980s and had fully implemented the revised Master Plan by 1997, at a total cost of approximately $1.4

billion in 1997 dollars. That same year, the EPA and the Regional Board jointly issued an NPDES Permit authorizing San Francisco to discharge pollutants from the Oceanside System into the Pacific Ocean from the System's eight designated discharge points, provided that those discharges complied with the terms and conditions set forth in the permit. In that permit, the Regional Board and the EPA expressly found that, by implementing the Master Plan it had originally began developing in the 1970s, San Francisco had "substantially completed the wasterwater projects needed to control combined sewer overflows and to reduce water quality impact from the [Oceanside System]" and was thus "exempt from the planning and construction requirements" of the CSO Control Policy under § I.C.1 of that Policy. The EPA and the Regional Board also concluded that San Francisco had "otherwise demonstrated compliance with section I.C.1 of the CSO Control Policy" and therefore was "not required to complete a (new) CSO long-term plan." The administrative record elsewhere specifically reflects what is implicit in the 1997 permit's findings, which is that San Francisco's LTCP "is not a single document, as is the case with most combined sewer systems," but rather "is a collection of documents" that were "developed over the course of two decades, dating from 1971."

The Regional Board and the EPA subsequently renewed San Francisco's NPDES Permit for the Oceanside System in 2003 and 2009. In both permits it reiterated that San Francisco's program was consistent

with the CSO Control Policy and that San Francisco was not required to prepare a revised LTCP.

The most recent 2019 renewal of the NDPES permit for the Oceanside System included three conditions that, after exhausting its administrative remedies, San Francisco timely challenges here.

II

Two of the conditions challenged by San Francisco consist of narrative limitations that are based *solely* on whether the receiving waters are meeting the applicable water quality standards. First, § V of the permit prohibits the City from making any discharge that (1) "*contribute[s]*" to a violation of "any applicable water quality standard . . . for receiving waters" (emphasis added). Second, Provision I.I.1 of Attachment G to the permit similarly states that San Francisco may not make a discharge that "create[s] pollution, contamination, or nuisance as defined by California Water Code section 13050." Because § 13050 defines the terms "pollution," "contamination," and "nuisance" in a manner that focuses on the overall condition of the receiving waters, San Francisco's compliance with this condition likewise turns on that overall condition.[2] In my view,

[2] California Water Code § 13050(k) defines "[c]ontamination" as "an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease," and the term "includes any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected." Similarly, "[p]ollution" is defined as "an alteration of the quality of the

the EPA's imposition of these narrative limitations was "arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). I would therefore set aside these two conditions.

A

These narrative limitations are inconsistent with the text of the CWA. Section 301(a)(1) requires the EPA to set specified types of "effluent limitations," as well as "any more stringent limitation, including those [that are] necessary to *meet* water quality standards" established under applicable state or federal law or that are "required to *implement* any applicable water quality standard established pursuant to [the CWA]." 33 U.S.C. § 1311(b)(1)(C) (emphasis added). On its face, the statute draws an explicit distinction between the "limitations" that the agency must devise and impose on a particular permittee's discharges and the overall "water quality standards" that govern the applicable waters into which those discharges will be made. The

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waters of the state by waste to a degree which unreasonably affects either": (1) "[t]he waters for beneficial uses," or (2) "[f]acilities which serve th[o]se beneficial uses." *Id.* § 13050(*l*)(1)(A)–(B). And " '[n]uisance' means anything which meets all of the following requirements": (1) it "[i]s injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property"; (2) it "[a]ffects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal"; and (3) it "[o]ccurs during, or as a result of, the treatment or disposal of wastes." *Id.* § 13050(m)(1)–(3).

narrative conditions challenged here effectively ignore this critical distinction by making the ultimate, overall "water quality standards" themselves the applicable "limitation" for an individual discharger.

Moreover, the agency's erasure of this crucial distinction is fundamentally inconsistent with the CWA's regulatory approach. As explained earlier, *see supra* section I(A), the CWA largely rejected the prior ex post system of "work[ing] backward from an overpolluted body of water" in favor of an ex ante system of fashioning, using the agency's expertise, the "direct restrictions on discharges" that are needed to achieve the overall water quality standards for the relevant waters. *EPA v. California*, 426 U.S. at 204–05; *see also City of Milwaukee v. Illinois*, 451 U.S. at 320–21. Indeed, the agency generally must rely, in the first instance, on *technology-based* effluent limitations that regulate discharges at the point source. *See Our Children's Earth Foundation*, 527 F.3d at 848. If those are inadequate, then the *agency* can work backward from the applicable water quality standards to fashion, for the relevant dischargers, "any more stringent limitations" on discharges that are necessary to meet those standards. 33 U.S.C. § 1311(b)(1)(C); *see also EPA v. California*, 426 U.S. at 205 n.12 (noting that, if technology-based effluent limitations are inadequate, "[w]ater quality standards are retained as a supplementary basis for effluent limitations"); *NRDC II*, 808 F.3d at 577–78 (similar). Here, by failing to articulate any "specific guidance" as to the "practices" or "procedures" that dischargers should undertake, *NRDC II*, 808 F.3d at

578–79, and by instead directing the permittee to figure out how to ensure compliance with the water quality standards, the agency has effectively required the *permittee* to ensure that its discharges—taken together with any *other* sources of pollution into the applicable waters—do not result in a breach of the applicable water quality standards. In doing so, the agency has fundamentally abdicated the regulatory task assigned to it under the CWA. *See id.* (holding that a similar narrative condition reflected a failure of the agency "to fulfill its duty to regulate in fact, not only in principle").

As the Second Circuit explained in invalidating a similar condition, this analysis is further confirmed by § 402 of the CWA, which governs the issuance of NPDES permits. *See NRDC II*, 808 F.3d at 579-80. That section states that the conditions fashioned by the agency for a given permit must "assure compliance" with the relevant requirements of the CWA, including the achievement of the applicable water quality standards. *See* 33 U.S.C. § 1342(a)(2). The agency can "hardly" be said to have satisfied that obligation when it issues a generic instruction not to let the water quality standards be violated, because such a mere recitation of the ultimate objective "in fact adds nothing" in terms of specifying meaningful permit conditions that will "assure" ex ante compliance with the water quality standards. *NRDC II*, 808 F.3d at 578. Even if crafting such conditions is "difficult," the EPA "cannot simply give up and refuse to issue more specific guidelines." *Id.* at 578. Including the sort

of generic narrative condition employed here therefore "violate[s]" § 402's "requirement that NPDES permits ensure compliance with the CWA." *Id.* at 580.

I hasten to add that there is one limited sense in which this generalized narrative condition *does* provide specific guidance, but it is the proverbial exception that proves the rule. In the case of a body of water that, for whatever reason (*e.g.*, pollution from another source), happens to contain pollution levels that exceed the applicable water quality standards, the inclusion of such a narrative condition would automatically make unlawful *any* further discharges of the same pollutant into those waters. That is, because any such further discharges into a body of water that is already out of compliance would necessarily "contribute" to a violation of "any applicable water quality standard . . . for receiving waters," any such discharges would violate that generic permit condition and would therefore be unlawful under the CWA. That would automatically trigger the "crushing consequences" that the CWA provides "even for inadvertent violations." *Sackett v. EPA*, 143 S. Ct. 1322, 1330 (2023). Even negligent discharges in violation of a permit condition can lead to "severe criminal penalties including imprisonment," as well as substantial civil penalties that "can be nearly as crushing as their criminal counterparts." *Id.* (citing 33 U.S.C. § 1319(c)). Routine inclusion of such a narrative condition in permits would thus *automatically* require, in the event of excessive pollution from another source, the immediate cessation of discharges involving the same pollutant from *all* other sources, without

regard to the importance of those sources' operations or, indeed, any other consideration. But as the Supreme Court unanimously held in *Arkansas v. Oklahoma*, the CWA has never been construed as "mandat[ing] a complete ban on discharges into a waterway that is [already] in violation of [water quality] standards." 503 U.S. at 108. As the Court noted, such an automatic ban on any other discharges might impede other important and competing objectives of the CWA. *Id.* Application of regulatory judgment, using the "broad authority" vested in the agency to address such a situation, is more consistent with achieving the overall objectives of the CWA than an automatic prohibition on any and all discharges involving waters that, for whatever reason, may happen to be out of compliance with water quality standards. *Id.*[3]

Accordingly, I would vacate these two narrative conditions, which are "arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

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[3] The majority is therefore quite wrong when it goes further and says that, not only is such a narrative condition consistent with the CWA, it is "*require[d]*" by that statute. *See* Opin. at 29. *That* holding—*viz.*, that the CWA *mandates* such a prohibition on further discharges into a body of water that is not compliant with applicable water quality standards—is flatly contrary to *Arkansas v. Oklahoma.* The majority is likewise wrong in contending that the transitional provisions of the CSO Control Policy that govern "Phase I" permits required the inclusion of such a narrative condition in this case. *See* Opin. at 29. Even assuming *arguendo* that the majority's construction of the relevant Phase I provision were correct, it is irrelevant to the *Phase II permit* at issue here.

B

The various reasons offered by the majority for its contrary conclusion all lack merit.

First, the majority notes that the Supreme Court in *PUD No. 1* upheld the inclusion of NPDES permit limitations that use "broad, narrative terms." *See* Opin. at 30 (quoting *PUD No. 1*, 511 U.S. at 716). But that general proposition does not address the further question of whether *this* particular narrative limitation is consistent with the CWA. The Court's endorsement of broadly framed narrative conditions simply does not support the agency's wholesale erasure of the distinction between the "limitations" to be crafted by the agency and the ultimate water quality standards those limitations are supposed to help to achieve. Indeed, the contrast between the narrative conditions in this case and those in *PUD No. 1* only underscores this critical difference: the specific limitation that the Court upheld in *PUD No. 1* was not a vague instruction to ensure that water quality standards were ultimately met, but a specific instruction to a proposed hydroelectric project to maintain, in the river from which the water was taken, "a minimum stream flow requirement of between 100 and 200 [cubic feet per second] depending on the season." 511 U.S. at 709.

Second, the majority contends that this court's prior decisions have already upheld the validity of including such a narrative condition in an NPDES permit. *See* Opin. at 30. That is wrong. In the two cases cited by the majority, the only question that was

presented and resolved was whether, in a situation in which such a condition has already been included in a permit that has not been challenged by the permittee, that condition is enforceable by private parties by way of an action under § 505 of the CWA. *See Northwest Env't Advocs. v. City of Portland*, 56 F.3d 979, 990 (9th Cir. 1995) (holding that CWA § 505(a) "confer[s] jurisdiction for citizen suits to enforce water quality standards *when they are conditions of a CWA permit*" (emphasis added)); *see also Natural Res. Def. Council, Inc. v. County of Los Angeles*, 725 F.3d 1194, 1205 (9th Cir. 2013) ("Our sole task at this point of the case is to determine what Plaintiffs are required to show in order to establish *liability* under the terms of *this particular* NPDES permit."); *see also* 33 U.S.C. § 1365(a) (authorizing private civil actions against persons who are in violation of a "limitation" imposed under the CWA). Neither decision addressed the *antecedent* question of whether such a condition, when timely challenged by the permittee, is properly included in such a permit in the first place. As the EPA conceded at oral argument, the *only* circuit court to have addressed that question is the Second Circuit, and it held that the condition was invalid for the same reasons that I have already explained. *See NRDC II v. EPA*, 808 F.3d at 577–80; *see supra* section II(A).[4]

[4] The majority implausibly attempts to distinguish *NRDC II* on the ground that in that case the narrative condition was challenged by a third party rather than by the permittee. *See* Opin. at 32. But regardless of which party is seeking greater regulatory

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For all of these reasons, I would grant San Francisco's petition, vacate the two challenged narrative conditions, and remand to the agency.[5]

III

The third permit condition challenged here requires San Francisco to "update its LTCP by implementing" five enumerated tasks that the permit asserts are "based on" the CSO Control Policy. Among other things, San Francisco is required to undertake a "Consideration of Sensitive Areas" and to develop "control alternatives," including infrastructure changes, for "eliminat[ing], relocat[ing], or reduc[ing] the magnitude or frequency of discharges to sensitive areas." I agree with San Francisco that this condition is contrary to law and must be set aside. *See* 5 U.S.C. § 706(2)(A).'

A

As noted earlier, the CSO Control Policy is an unusual document in that, under § 402(q)(1) of the CWA, it effectively has the force of a statute. *See* 33 U.S.C. § 1342(q)(1) (requiring that "[e]ach permit, order, or

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clarification, the agency's abdication of its regulatory responsibility is equally indefensible.

[5] I therefore have no occasion to address San Francisco's further argument that the EPA failed to follow its own procedures under 40 C.F.R. § 122.44(d) when it imposed these two narrative conditions.

decree issued pursuant to this chapter after December 21, 2000, for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by the Administrator on April 11, 1994"). In my view, the EPA's direction to San Francisco to prepare an updated LTCP does not conform to the CSO Control Policy's limitations on when an amended LTCP may be required. It therefore violates § 402(q)(1) of the CWA.

The EPA has previously and repeatedly recognized that San Francisco developed an LTCP that, although spanning multiple documents over several years, "demonstrated compliance with section I.C.1 of the CSO Control Policy" and that the City therefore was "not required to complete a (new) CSO long-term plan." *See supra* at 53-54. But in this most recent permit, the EPA has concluded that San Francisco must now complete a new LTCP. The question, then, is whether the provisions of the CSO Control Policy authorize the EPA to require the preparation of a new "updated" LTCP in the current circumstances. The answer is no.

As the CSO Control Policy acknowledges, the preparation of an LTCP involves consideration of alternative methods of CSO control that may include substantial and costly infrastructure projects. *See*, *e.g.*, 59 Fed. Reg. at 18693-94 (requiring consideration of "cost/performance" considerations in evaluating options and providing for consideration of a "permittee's financial capability" when establishing "[c]onstruction phasing"). It is therefore hardly surprising that, in two

respects, the Policy expressly addresses the circumstances in which the agency may require the preparation of an amended LTCP.

First, § I.C.1 of the Policy, which allows substantially completed CSO control facilities to be exempted from the "initial planning and construction provisions" governing LTCPs, states that such permittees remain subject to the Policy's monitoring requirements and that, "[i]f after monitoring, it is determined that WQS are not being attained, the permittee should be required to submit *a revised CSO control plan* that, once implemented, will attain WQS." 59 Fed. Reg. at 18690 (emphasis added). Second, § IV.B.2.g of the Policy states that the Phase II permits applicable to permittees that have "completed development of the long-term CSO control plan" must include a "reopener clause authorizing the NPDES authority to reopen and modify the permit upon determination that the CSO controls fail to meet WQS or protect designated uses. " *Id.* at 18696. In the event of such a determination, then "the permittee should be required to develop, submit and implement, as soon as practicable, *a revised CSO control plan* which contains additional controls to meet WQSs and designated uses." *Id.* (emphasis added). As the plain language of these provisions makes clear, there is only one circumstance in which a permittee may be required to create a "revised CSO control plan," and that is when the water quality standards

established to protect the relevant designated uses are not being attained.[6]

When the EPA included a permit condition requiring San Francisco to update its LTCP, the EPA explained that it was doing so for several enumerated reasons. However, none of those reasons involved (or otherwise referred to) a finding that San Francisco's Oceanside System had caused the violation of any applicable water quality standards. Because no such determination was made, the Policy's trigger for requiring submission of a revised LTCP has not been met. The EPA therefore lacked authority under the Policy to impose a condition requiring San Francisco to prepare and submit a revised LTCP.

B

The majority pointedly does *not* contend that water quality standards are not being met here. Instead, noting that § IV.B.2.g states that a revised LTCP may be required "upon determination that the CSO controls fail to meet WQS *or protect designated uses,*" 59 Fed. Reg. at 18696 (emphasis added), the majority holds that this conjunctive phrasing gives the EPA authority to require a new LTCP—even where water quality standards *are* being met—if the EPA determines that there nonetheless is, in some undefined sense, a failure

[6] "Designated uses" refers to those "uses of the navigable waters involved" that form the basis for the "water quality criteria" for those waters. 33 U.S.C. § 1313(c)(2)(A); *see generally PUD No. 1*, 511 U.S. at 714–15.

to "protect designated uses." *See* Opin. at 40–41. The majority's peculiar notion that the protection of designated uses will be assessed *independently* of water quality standards makes no sense. Under § 303 of the CWA, the applicable "water quality criteria" contained in the "water quality standards" *are* the measuring stick for assessing whether "designated uses" are being protected. 33 U.S.C. § 1313(c)(2)(A); *see also PUD No. 1*, 511 U.S. at 714–18. Considered in context, § IV.B.2.g's reference to protecting "designated uses"—which are merely a "component[]" of the broader concept of "water quality standards," *see Upper Missouri Waterkeeper v. EPA*, 15 F.4th 966, 969–70 (9th Cir. 2021)—thus adds nothing to the concept of achieving water quality standards. And because the EPA has not determined that water quality standards are not being met, § IV.B.2.g did not authorize the EPA to require a new LTCP.

The majority also claims that the EPA nonetheless possesses such authority by virtue of § I.C.3 of the Policy, *see* Opin. at 39-40, but that is wrong. The relevant language cited by the majority states that, "[i]n the case of any ongoing or substantially completed CSO control effort, the NPDES permit or other enforceable mechanism, as appropriate, should be revised to include all appropriate permit requirements consistent with Section IV.B. of this Policy." *See* 59 Fed. Reg. at 18690. To the extent that the majority thinks that § I.C.3 establishes a free-floating authority to impose permit requirements without regard to § IV.B's provisions governing "NDPES Permit Requirements," that

is plainly incorrect. On its face, § I.C.3 merely states that, for partially exempted systems (such as San Francisco's), the NPDES permit should include "all appropriate permit requirements *consistent with Section IV.B. of this Policy.*" *Id.* (emphasis added). Any authority conferred by § I.C.3 to impose permit conditions therefore remains subject to the provisions of § IV.B. And, as I have explained, § IV.B of the Policy expressly addresses the issue of preparation of a revised LTCP, and it only authorizes requiring such a revised plan "upon determination that the CSO controls fail to meet WQS or protect designated uses." *Id.* at 18696. Because that condition is not satisfied here, the EPA's imposition of such a requirement is not "consistent with Section IV.B. of this Policy" and is therefore not authorized by § I.C.3. *Id.*

The majority consequently errs in concluding that the assertedly "outdated" nature of San Francisco's LTCP is "enough, by itself, to support EPA's conclusion that an updated LTCP is needed." Opin. at 41–42. This holding rewrites the CSO Control Policy rather than applies it. Perhaps the Policy should have included a broader provision that gave the agency greater authority to require a new LTCP, and perhaps Congress should have mandated such a change before it adopted the 1994 Policy as the statutory standard for permits involving combined sewer systems. But, as written, the policy allows the agency to order a revised LTCP only when a determination is made that the permittee's CSO controls *have led to water quality standards not being met.* As explained, that condition has not been

established here. Merely labeling San Francisco's LTCP as "outdated" or "inadequate" in some more vague or general sense is not enough.

Finally, I note that this conclusion does not leave the agency powerless to address specific deficiencies in the performance of San Francisco's system, including with respect to protection of sensitive areas. Section IV.B of the Policy leaves the agency with ample authority to craft targeted conditions addressed to the range of issues covered by the provisions of that section. But absent a determination that the permittee's CSO controls have failed to meet water quality standards, the agency may not take the much more sweeping step of requiring a revision of the LTCP itself. Such a condition is "not in accordance with law." 5 U.S.C. § 706(2)(A).

* * *

Accordingly, I would grant the petition for review on this issue as well and would vacate the current permit condition requiring San Francisco to prepare an updated LTCP. I would do so without prejudice to the agency's re-evaluation of whether particular targeted components of that LTCP-revision condition could be adopted as free-standing conditions consistent with § IV.B of the Policy.

IV

For the foregoing reasons, I would grant San Francisco's petition for review, vacate the challenged permit conditions, and remand this case to the agency for further consideration. I respectfully dissent.

[SEAL] UNITED STATES
ENVIRONMENTAL
PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

OFFICE OF THE
REGIONAL ADMINISTRATOR

NOTICE OF FINAL PERMIT DECISION
NPDES Permit No. CA0037681
For the City and County of San Francisco
Oceanside Water Pollution Control Plant,
Wastewater Collection System, and
Westside Recycled Water Project

In accordance with the requirements of the Code of Federal Regulations (C.F.R.), Title 40 § 124.19(m), the United States Environmental Protection Agency, Region 9 (EPA) is issuing a Notice of Final Permit Decision for NPDES Permit No. CA0037681 to the City and County of San Francisco for the Oceanside Water Pollution Control Plant, Wastewater Collection System, and Westside Recycled Water Project (San Francisco), reissued on December 10, 2019. The final NPDES Permit and copy of this notice are available on EPA's web page at: https://www.epa.gov/npdes-permits/city-and-county-san-francisco-oceanside-water-pollution-control-plant-wastewater.

San Francisco filed a petition for review (Petition) of the final Permit with EPA's Environmental Appeals Board (EAB) on January 13, 2020. In the Petition, San

Francisco contested certain conditions of the Final Permit. The uncontested and severable portions of the Final Permit were placed into effect pursuant to a Notice of Uncontested and Severable Conditions, dated February 7, 2020. The contested conditions were stayed pending a decision by the EAB on the Petition and final agency action.

On December 1, 2020, the EAB issued an order denying the Petition in its entirety. *In re City and County of San Francisco*, NPDES Appeal No. 20-01, 18 EAB 322. Under 40 C.F.R. § 124.19(m)(2)(i), the Regional Administrator must issue a final permit decision when the Board issues notice to the parties that a petition for review has been denied. I am, accordingly, hereby issuing my final permit decision. The contested conditions shall become fully effective and enforceable in accordance with the terms of the Final Permit on February 1, 2021.[1]

This decision constitutes final agency action under 40 C.F.R. § 124.19(m)(1). Under 40 C.F.R. § 23.2 this Notice becomes effective for purposes of judicial review

[1] The permit expiration date remains unchanged and is October 31, 2024.

under 33 U.S.C. § 1369(b) and 5 U.S.C. § 704 two weeks after the Notice is signed.

Dated: _____ /s/ JOHN BUSTERUD Digitally signed by JOHN BUSTERUD Date: 2020.12.22 10:28:43-08'00'

John W. Busterud
Regional Administrator

U.S. ENVIRONMENTAL PROTECTION AGENCY
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1515 Clay Street, Suite 1400, Oakland, CA 94612
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ORDER No. R2-2019-0028
NPDES No. CA0037681

WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR CITY AND COUNTY OF SAN FRANCISCO OCEANSIDE WATER POLLUTION CONTROL PLANT, WASTEWATER COLLECTION SYSTEM, AND WESTSIDE RECYCLED WATER PROJECT

The following Discharger is authorized to discharge from the locations listed in Table 2 in accordance with the waste discharge requirements (WDRs) and federal National Pollutant Discharge Elimination System (NPDES) permit requirements set forth in this Order:

Table 1. Discharger Information

Discharger	City and County of San Francisco
Facility Name	Oceanside Water Pollution Control Plant, Wastewater

	Collection System, and Westside Recycled Water Project
Facility Address	3500 Great Highway San Francisco, CA 94132 San Francisco County
CIWQS Place Number	256498

Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated effluent, including the following: • Secondary-treated effluent from Oceanside Water Pollution Control Plant (dry weather); • Primary- and secondary-treated effluent from Oceanside Water Pollution Control Plant (wet weather); • Equivalent-to-primary-treated	37.70500	-122.57750	Pacific Ocean, Offshore

	effluent from Westside Transport/Storage Structure (wet weather); and • Reverse osmosis concentrate from Westside Recycled Water Project, when operational (dry and wet weather).			
CSD-001	Equivalent-to-primary-treated effluent (wet weather)	37.71528	-122.50444	Pacific Ocean (Fort Funston, Ocean Beach)
[2] CSD-002	Equivalent-to-primary-treated effluent (wet weather)	37.73778	-122.50806	Pacific Ocean (Vicente St., Ocean Beach
CSD-003	Equivalent-to-primary-treated effluent (wet weather)	37.76389	-122.51167	Pacific Ocean (Lincoln Way, Ocean Beach)

CSD-004	Equivalent-to-primary-treated effluent (wet weather)	37.78472	-122.51028	Pacific Ocean (Mile Rock)
CSD-005	Equivalent-to-primary-treated effluent (wet weather)	37.78778	-122.49167	Pacific Ocean (China Beach)
CSD-006	Equivalent-to-primary-treated effluent (wet weather)	37.78944	-122.48778	Pacific Ocean (Baker Beach)
CSD-007	Equivalent-to-primary-treated effluent (wet weather)	37.78944	-122.48694	Pacific Ocean (Baker Beach)

Table 3. Administrative Information

The U.S. Environmental Protection Agency, Region IX, issued this Order on:	
The San Francisco Bay Regional Water Quality Control Board adopted this Order on:	September 11, 2019
This Order shall become effective on:	November 1, 2019
This Order shall expire on:	October 31, 2024
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with California Code	February 1, 2024

of Regulations, title 23, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	
This discharge is classified as follows:	Major

Administrative Information for U.S. Environmental Protection Agency Region IX

This permit was issued on:	December 10, 2019
This permit shall become effective on:	February 1, 2019
Permit reapplication due no later than:	February 1, 2024
This permit shall expire at midnight on:	October 31, 2024

In accordance with 40 CFR 122.21(d), the permittee shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.

Signed this 10th day of December, 2019, for the Regional Administrator.

/s/ Tomás Torres
Tomás Torres, Director
Water Division

[3] The signatures below certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on the date indicated above, and an NPDES permit issued by the U.S. Environmental Protection Agency, Region IX, on the date above.

9/12/2019

/s/ Michael Montgomery

Michael Montgomery,
Executive Officer
San Francisco Bay
Regional Water Board

Tomás Torres, Water
Division Director
U.S. Environmental
Protection Agency

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[5] **I. FACILITY INFORMATION**

Information describing the Oceanside Water Pollution Control Plant, Wastewater Collection System, and Westside Recycled Water Project (collectively, the Facility) is summarized in Table 1 and in Fact Sheet (Attachment F) sections I and II.

II. FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), and the U.S. Environmental Protection Agency (U.S. EPA) find:

A. Legal Authorities. This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant

to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by U.S. EPA and Water Code chapter 5.5, division 7 (commencing with § 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States as listed in Table 2 subject to the WDRs and NPDES permit requirements in this Order.

B. Background and Rationale for Requirements. The Regional Water Board and U.S. EPA developed the requirements in this Order based on information the Discharger submitted as part of its application, information obtained through monitoring and reporting programs, and other available information. The Fact Sheet contains background information and rationale for the requirements in this Order and is hereby incorporated into and constitutes findings for this Order. Attachments A through E, G, and H are also incorporated into this Order.

C. Notification of Interested Parties. The Regional Water Board and U.S. EPA notified the Discharger and interested agencies and persons of their intent to jointly issue WDRs and NPDES permit requirements, and provided an opportunity to submit written comments and recommendations. The Fact Sheet provides details regarding the notification.

D. Consideration of Public Comment. The Regional Water Board, in a public meeting,

heard all comments pertaining to the discharge. The Fact Sheet provides details regarding the public hearing. The Regional Water Board and U.S. EPA considered all comments pertaining to the discharge.

THEREFORE, IT IS HEREBY ORDERED that Order No. R2-2009-0062 (previous order) is rescinded upon the effective date of this Order, except for enforcement purposes, and in order to meet the provisions of Water Code division 7 (commencing with § 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. The Regional Water Board intends that joint issuance of this Order with U.S. EPA will serve as its certification under CWA section 401 that discharges pursuant to this Order comply with 33 U.S.C. sections 1311, 1312, 1313, 1316, and 1317. This action in no way prevents the Regional Water Board or U.S. EPA from taking enforcement action for past violations of the previous order.

[6] **III. DISCHARGE PROHIBITIONS**

A. Discharge of treated wastewater at a location or in a manner different than described in this Order is prohibited.

B. Bypass of untreated or partially-treated wastewater to waters of the United States is prohibited, except as provided for in Attachment D section I.G. Combined sewer discharges during wet weather (as defined in Attachment A)

authorized by this Order are not subject to this prohibition.

Blended wastewater is biologically-treated wastewater blended with wastewater diverted around biological treatment units at the Oceanside Water Pollution Control Plant. These anticipated discharges are approved under the bypass conditions when (1) the Discharger's instantaneous wet weather influent flow exceeds the capacity of the biological treatment units of 43 MGD, (2) all wet weather flows passing the headworks of the plant receive at least primary treatment, and (3) the discharge complies with the applicable effluent and receiving water limitations contained in this Order. Furthermore, the Discharger shall operate its Facility as designed and in accordance with the Operation and Maintenance Manual for the Facility. This means it shall optimize storage and use of equalization units and shall fully utilize the biological treatment units. The Discharger shall report incidents of blended effluent discharges in monthly self-monitoring reports and shall conduct monitoring of this discharge as specified in the attached Monitoring and Reporting Program (MRP) (Attachment E).

C. Discharge at Discharge Point No. 001 is prohibited when the discharge does not receive a minimum initial dilution of at least 148:1 (parts seawater per part wastewater), as modeled assuming no currents. Compliance shall be achieved by proper operation and maintenance of the discharge outfall to ensure that

it (or its replacement, in whole or part) is in good working order and is consistent with, or can achieve better mixing than, 148:1. The Discharger shall describe measures taken to ensure compliance in its Report of Waste Discharge and application for permit reissuance.

D. Discharge to a water of the United States from any location other than Discharge Point No. 001 is prohibited, except from Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007 during wet weather (as defined in Attachment A) in accordance with the requirements in this Order.

E. Average dry weather Oceanside Water Pollution Control Plant influent flow in excess of 43 MGD is prohibited. Average dry weather influent flow shall be determined from three consecutive dry weather months each year, with compliance measured at Monitoring Location INF-001A as described in the MRP.

[7] **IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

A. Technology-Based Effluent Limitations

1. Oceanside Water Pollution Control Plant

During dry weather, the Discharger shall comply with the following effluent limitations for discharges from the Oceanside Water Pollution Control Plant, with compliance measured at Monitoring Location EFF-001A as described in the MRP, as follows:

Table 4. Effluent Limitations – Oceanside Water Pollution Control Plant

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Carbonaceous Biochemical Oxygen Demand, 5-day @ 20°C ($CBOD_5$)	mg/L	25	40	–	–	–
Total Suspended Solids (TSS)	mg/L	30	45	–	–	–
$CBOD_5$ Removal [1]	%	85 (minimum)	–	–	–	–
TSS Removal [1]	%	85 (minimum)	–	–	–	–
pH [2]	s.u.	–	–	–	6.0	9.0

Abbreviations:
mg/L = milligrams per liter
s.u. = standard units
% = percent

Footnotes:
[1] The arithmetic mean of $CBOD_5$ and TSS, by concentration, of effluent samples collected at Monitoring Location EFF-001A as described in the MRP shall not exceed 15 percent of the arithmetic mean of the CBOD5 and TSS, by concentration, of influent samples collected at Monitoring Location INF-001A as described in the MRP, at approximately the same times during the same periods.

[2] If the Discharger monitors pH continuously, pursuant to 40 C.F.R. § 401,17 the Discharger shall be in compliance with this pH limitation provided that both of the following conditions are satisfied: (i) the total time during which the pH is outside the required range shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the required pH range shall exceed 60 minutes.

During wet weather, the Discharger shall comply with the narrative technology-based effluent limitations contained in Provision VI.C.5.a (Nine Minimum Controls).

2. Westside Recycled Water Project

When recycled water is being produced, the Discharger shall comply with the following effluent limitations for discharges from the Westside Recycled Water Project, with compliance measured at Monitoring Location EFF-001R as described in the MRP, as follows:

[8] **Table 5. Effluent Limitations – Westside Recycled Water Project**

Parameter	Units	Effluent Limitations				
		Average Monthly	**Average Weekly**	**Maximum Daily**	**Instantaneous Minimum**	**Instantaneous Maximum**
TSS	mg/L	60	–	–	–	–
pH [1]	s.u.	–	–	–	6.0	9.0
Oil and Grease	mg/L	25	40	–	–	75
Settleable Solids	mL/L	1.0	1.5	–	–	3.0
Turbidity	NTU	75	100	–	–	225

Abbreviations:
mg/L = milligrams per liter
mL/L = milliliters per liter
NTU = nephelometric turbidity units
s.u. = standard units

Footnote:
[1] If the Discharger monitors pH continuously, pursuant to 40 C.F.R. § 401.17 the Discharger shall be in compliance with this pH limitation provided that both of the following conditions are satisfied: (i) the total time during which the pH is outside the required range shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the required pH range shall exceed 60 minutes.

B. Water Quality-Based Effluent Limitations

During dry weather, the Discharger shall comply with the following effluent limitation for discharges at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001C as described in the MRP, as follows:

Table 6. Effluent Limitations – Discharge Point No. 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Chronic Toxicity[1]	mg/L	60	–	–	–	–

Footnote:

[1] MRP section V sets forth chronic toxicity monitoring requirements. The discharge is subject to determination of "Pass" or "Fail" from a single chronic toxicity test conducted at the in-stream waste concentration (IWC) defined in MRP section V.A.2 using the Test of Significant Toxicity (TST) statistical approach (Welch's t-test) in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1.

The TST null hypothesis shall be the following:

Mean discharge IWC response 50.75 x Mean control response

A test result that rejects this null hypothesis shall be reported as "Pass." A test result that does not reject this null hypothesis shall be reported as "Fail." The relative "Percent Effect" at the discharge IWC shall also be reported as:

([Mean control response -Mean discharge IWC response] ÷ Mean control response) x 100

During wet weather, the Discharger shall comply with the narrative water quality-based effluent limitations contained in Provision VI.C.5.c (Long-Term Control Plan) for the Discharge Points in Table 2.

[9] **V. RECEIVING WATER LIMITATIONS**

Discharge shall not cause or contribute to a violation of any applicable water quality standard (with the exception set forth in State Water Board Order No. WQ 79-16) for receiving waters adopted by the Regional Water Board, State Water Resources Control Board (State Water Board), or U.S. EPA as required by the CWA and regulations adopted thereunder. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board and U.S. EPA may revise or modify this Order in accordance with the more stringent standards.

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all "Standard Provisions" included in Attachment D. In Attachment D, references to "Regional Water Board" shall be interpreted as "Regional Water Board and U.S. EPA," and references to "Regional Water Board Executive Officer" shall be interpreted as "Regional Water Board Executive Officer and U.S. EPA."

2. The Discharger shall comply with all applicable provisions of the "Regional

Standard Provisions, and Monitoring and Reporting Requirements" (Attachment G), except as follows:

a. **Attachment G section V.C.1.d.iv (Dioxin-TEQ).** The Discharger shall calculate and report dioxin-TEQs using the definition of TCDD Equivalents in Attachment A, which supersedes the definition in Attachment G.

b. **Attachment G section III.A.2 (Minimum Levels).** The Discharger shall comply with the minimum levels listed in Ocean Plan Appendix II in lieu of those listed in Attachment G Table B.

c. **Attachment G section III.A.3.b.v(b) (Approved Wet Weather Bypasses).** The Discharger shall comply with the monitoring requirements for wet weather secondary bypasses in MRP Table E-5 (Monitoring Location EFF-001B) in lieu of those listed in Attachment G section II.A.3.b.v(b).

In Attachment G, references to "Regional Water Board" shall be interpreted as "Regional Water Board and U.S. EPA," and references to "Regional Water Board Executive Officer" shall be interpreted as "Regional Water Board Executive Officer and U.S. EPA."

B. Monitoring and Reporting

The Discharger shall comply with the MRP, and future revisions thereto, and applicable sampling and reporting requirements in Attachments D and G.

[10] **C. Special Provisions**

1. Reopener Provisions

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

a. If present or future investigations demonstrate that the discharges governed by this Order have or will have a reasonable potential to cause or contribute to, or will cease to have, adverse impacts on water quality or beneficial uses of the receiving waters.

b. As new or revised water quality standards or total maximum daily loads (TMDLs) come into effect for surface waters of the State (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order may be modified as necessary to reflect updated water quality standards and wasteload allocations in TMDLs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally

adopted water quality objectives, TMDLs, or as otherwise permitted under federal regulations governing NPDES permit modifications.

c. If translator, dilution, or other water quality studies provide a basis for determining that a permit condition should be modified.

d. If State Water Board precedential decisions, new policies, new laws, or new regulations are adopted.

e. If an administrative or judicial decision on a separate NPDES permit or WDRs addresses requirements similar to this discharge.

f. If combined sewer system discharge controls fail to meet water quality standards or protect designated uses.

g. Or as otherwise authorized by law.

The Discharger may request a permit modification based on any of the circumstances above. With any such request, the Discharger shall include antidegradation and anti-backsliding analyses.

2. Effluent Characterization Study and Report

a. Study Elements. The Discharger shall characterize and evaluate the dry weather discharge from Discharge Point No. 001 to verify that the reasonable potential analysis conclusions of this

Order remain valid and to inform the next permit reissuance. The Discharger shall monitor Ocean Plan Table 1 pollutants as described in the MRP and evaluate on an annual basis whether concentrations of any Ocean Plan Table 1 pollutants significantly increase over past performance. The Discharger shall investigate the cause of any such increases. The investigation may include, but need not be limited to, increasing the monitoring frequency, monitoring internal process streams, and monitoring of influent sources. The Discharger shall establish remedial measures addressing any increases resulting in reasonable potential to cause or contribute to an exceedance [11] of applicable water quality objectives (see Fact Sheet Tables F-9 and F-10 for the objectives). This requirement to establish remedial measures may be satisfied through identification of the constituent as a "pollutant of concern" in the Discharger's Pollutant Minimization Program, described in Provision VI.C.3.

b. Reporting Requirements

i. Routine Reporting. The Discharger shall, within 45 days of receipt of analytical results, report the identity of any Ocean Plan Table 1 pollutant detected at or above the applicable water

quality objective to the Regional Water Board and U.S. EPA.

ii. **Annual Reporting.** The Discharger shall summarize the annual data evaluation and source investigation in its annual self-monitoring report (see MRP § VIII.B).

3. Pollutant Minimization Program

a. The Discharger shall continue to improve its Pollutant Minimization Program to promote minimization of pollutant loadings to the sewer system and therefore to the receiving waters.

b. The Discharger shall submit an annual report no later than February 28 each year. Each annual report shall include at least the following information:

i. **Brief description of treatment plant.** The description shall include the service area and treatment plant processes.

ii. **Discussion of current pollutants of concern.** Periodically, the Discharger shall analyze its circumstances to determine which pollutants are currently a problem and which pollutants may be potential future problems. This discussion shall include the

reasons for choosing the pollutants. At a minimum, the Discharger shall consider copper and zinc as pollutants of concern.

iii. **Identification of sources for pollutants of concern.** This discussion shall include how the Discharger intends to estimate and identify pollutant sources. The Discharger shall include sources or potential sources not directly within the ability or authority of the Discharger to control, such as pollutants in the potable water supply and air deposition.

iv. **Identification of tasks to reduce the sources of pollutants of concern.** This discussion shall identify and prioritize tasks to address the Discharger's pollutants of concern. The Discharger may implement the tasks by itself or participate in group, regional, or national tasks that address its pollutants of concern. The Discharger is strongly encouraged to participate in group, regional, or national tasks that address its pollutants of concern whenever it is efficient and appropriate to do so. An implementation timeline shall be included for each task.

v. **Outreach to employees.** The Discharger shall inform employees about the pollutants of concern, potential sources, and how they might be able to help reduce the [12] discharge of these pollutants of concern into the Facility. The Discharger may provide a forum for employees to provide input.

vi. **Continuation of Public Outreach Program.** The Discharger shall continue a pollution prevention public outreach program for its service area. Outreach may include participation in existing community events, such as county fairs; initiating new community events, such as displays and contests during Pollution Prevention Week; conducting school outreach programs; conducting plant tours; and providing public information in newspaper articles or advertisements, radio or television stories or spots, newsletters, utility bill inserts, or web sites. Information shall be specific to target audiences. The Discharger shall coordinate with other agencies as appropriate.

vii. **Discussion of criteria used to measure Pollutant Minimization Program and task effectiveness.** The Discharger shall

establish criteria to evaluate the effectiveness of its Pollutant Minimization Program. This discussion shall identify the specific criteria used to measure the effectiveness of each task in Provisions VI.C.3.b.iii, iv, v, and vi.

viii. **Documentation of efforts and progress.** This discussion shall detail all of the Discharger's Pollutant Minimization Program activities during the reporting year.

ix. **Evaluation of Pollutant Minimization Program and task effectiveness.** The Discharger shall use the criteria established in Provision VI.C.3.b.vii to evaluate the program and task effectiveness.

x. **Identification of specific tasks and timelines for future efforts.** Based on the evaluation, the Discharger shall explain how it intends to continue or change its tasks to more effectively reduce the amount of pollutants flowing to the Facility, and subsequently in its effluent.

c. The Discharger shall develop and conduct a Pollutant Minimization Program as further described below when there is evidence that a priority pollutant is present in the effluent above

an effluent limitation (e.g., sample results reported as detected but not quantified [DNQ] when the effluent limitation is less than the method detection limit [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, or results of benthic or aquatic organism tissue sampling) and either:

i. A sample result is reported as DNQ and the effluent limitation is less than the Reporting Level (RL); or

ii. A sample result is reported as not detected (ND) and the effluent limitation is less than the MDL using definitions in Attachment A and reporting protocols described in the MRP.

d. If triggered by the reasons set forth in Provision VI.C.3.c, the Discharger's Pollutant Minimization Program shall include, but not be limited to, the following actions and submittals:

[13] **i.** Annual review and semiannual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other biouptake sampling, or alternative

measures when source monitoring is unlikely to produce useful analytical data;

ii. Quarterly monitoring for the reportable pollutant in treatment plant influent. The Regional Water Board Executive Officer and U.S. EPA may approve alternative measures when influent monitoring is unlikely to produce useful analytical data;

iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant in the effluent at or below the effluent limitation;

iv. Implementation of appropriate cost-effective control measures for the reportable pollutant, consistent with the control strategy; and

v. Inclusion of the following within the annual report required by Provision VI.C.3.b:

(a) All Pollutant Minimization Program monitoring results for the previous year;

(b) List of potential sources of the reportable pollutant;

(c) Summary of all actions undertaken pursuant to the control strategy; and

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

4. Special Provisions for Publicly-Owned Treatment Works (POTWs)

a. Sludge and Biosolids Management. The Discharger shall manage its sludge and biosolids in accordance with federal regulations (40 C.F.R. parts 258 and 503) and Attachment H.

i. Sludge and biosolids treatment and storage shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.

ii. Sludge and biosolids treatment and storage facilities shall be adequate to divert surface runoff from adjacent areas, to protect site boundaries from erosion, and to prevent conditions that would cause drainage from stored materials. Adequate protection is defined as protection from at least a 100-year storm and the highest possible tidal state that may occur.

iii. This Order does not authorize permanent onsite sludge or biosolids

storage or disposal. A Report of Waste Discharge shall be filed and the site brought into compliance with applicable regulations prior to commencement of any such activity.

b. Pretreatment Program. The Discharger shall implement and enforce its approved pretreatment program in accordance with federal pretreatment regulations (40 C.F.R. part 403); pretreatment standards promulgated under CWA sections 307(b), 307(c), and 307(d); pretreatment requirements specified under 40 C.F.R. section 122.44(j); and the requirements in Attachment H, "Pretreatment Requirements." The Discharger's responsibilities include, but are not limited to, the following:

[14] **i.** Enforcement of the National Pretreatment Standards of 40 C.F.R. sections 403.5 and 403.6;

ii. Implementation of its pretreatment program in accordance with legal authorities, policies, procedures, and financial provisions described in the National Pretreatment Program (40 C.F.R. part 403);

iii. Submission of reports to the State Water Board, the Regional

Water Board, and U.S. EPA as described in Attachment H; and

iv. Evaluation of the need to revise local limits as required under 40 C.F.R. sections 122.44(j)(2)(ii) and 403.5(c)(1) and, by November 1, 2020, submission of a report describing the changes to local limits with a plan and schedule for implementation, or the rationale for making no changes to local limits.

c. Anaerobically-Digestible Material. If the Discharger receives hauled-in anaerobically-digestible material for injection into an anaerobic digester, the Discharger shall notify the Regional Water Board and develop and implement Standard Operating Procedures for this activity. The Standard Operating Procedures shall be developed prior to initiation of hauling. The Standard Operating Procedures shall address material handling, including unloading, screening, or other processing prior to anaerobic digestion; transportation; spill prevention; spill response; avoidance of the introduction of materials that could cause interference, pass through, or upset of the treatment processes; avoidance of prohibited material; vector control; odor control; operation and maintenance; and the disposition of

any solid waste segregated from introduction to the digester. The Discharger shall train its staff on the Standard Operating Procedures and maintain records for a minimum of three years for each load received, describing the hauler, waste type, and quantity received. In addition, the Discharger shall maintain records for a minimum of three years for the disposition, location, and quantity of cumulative pre-digestion segregated solid waste hauled offsite.

d. Separate Sanitary Sewer Systems. The Discharger shall properly operate and maintain its separate sanitary collection systems (see Attachments D and G, section I.D), report any noncompliance with respect to its separate sanitary collection systems (see Attachments D and G, sections V.E.1 and V.E.2), and mitigate any discharges in violation of this Order associated with its separate sanitary collection systems (see Attachments D and G, section I.C).

State Water Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, as amended by State Water Board Order No. WQ 2013-0058-EXEC (statewide WDRs), contains requirements for operation and maintenance of collection systems

and for reporting and mitigating sanitary sewer overflows. The statewide WDRs clearly and specifically stipulate requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows. Implementing the requirements for operation and maintenance and mitigation of sanitary sewer overflows set forth in the statewide WDRs (and any subsequent order updating those requirements) shall satisfy the corresponding federal NPDES requirements [15] specified in Attachments D and G of this Order for the separate sanitary collection systems. Following the reporting requirements set forth in the statewide WDRs (and any subsequent order updating these requirements) shall satisfy the NPDES reporting requirements for sanitary sewer overflows specified in Attachments D and G.

5. Combined Sewer System

a. Nine Minimum Controls. The Discharger shall implement the following nine minimum controls:

i. Control No. 1: Conduct Proper Operations and Maintenance Program. The Discharger shall implement an operations and maintenance program that establishes operation, maintenance,

and inspection procedures to ensure that the combined sewer system is operated and maintained in a manner that complies with the requirements of this Order. The program shall include the elements listed below:

(a) Organizational Structure. The Discharger shall maintain an up-to-date directory of operations and maintenance staff, and a designated primary contact person for the Facility. The Discharger shall notify the Regional Water Board and U.S. EPA within 90 days of designating a new primary contact person.

(b) Budget. The Discharger shall allocate sufficient funds and personnel for routine operations and maintenance, and to provide for possible emergencies.

(c) Critical Facilities and Major System Components. The Discharger shall maintain a written inventory of critical facilities and major system components (i.e., those facilities and system components that affect the performance of the combined sewer

system). The inventory shall include force mains, pump stations, major treatment plant units, transport/storage structures, combined sewer discharge outfalls, Discharge Point No. 001 outfall, tide gates, overflow weirs, and baffles. The Discharger shall include the following information for each critical facility and major system component in the inventory:

(1) Physical description (e.g., capacity, dimensions, age) and location;
(2) Status (e.g., elements out of service or planned to be taken out of service); and
(3) Description of preventative maintenance planned and completed.

At a minimum, the Discharger shall review and update the inventory once every 12 months. The Discharger may combine the inventory and the Wastewater Facilities Status Report (see Attachment G section I.D.2) into one document.

(d) Procedures for Routine Maintenance. The Discharger shall document procedures for routine maintenance and timely repair of the critical facilities and major system components listed in the inventory required by Provision VI.C.5.a.i(c). Routine maintenance shall focus on preventative maintenance to avoid failures during critical times.

(e) Non-Routine Maintenance and Emergency Situations. The Discharger shall develop and implement an emergency response plan for each critical facility to [16] minimize the likelihood and adverse impacts of failure to the maximum extent practicable. The emergency response plan shall be consistent with the Contingency Plan required by Attachment G section I.C.1.

(f) Inspections. The Discharger shall conduct an inspection program of the combined sewer system to provide reasonable assurance that unpermitted discharges, obstructions, and damage will be discovered.

At a minimum, the Discharger shall do the following:

(1) Inspect each critical facility and major system component identified in accordance with Provision VI.C.5.a.i(c), above, at least once every 12 months to ensure they are in good working condition. The inspection shall include, but not be limited to, entering the regulator structure, if accessible; determining the extent of any structural defects or debris and grit buildup; removing any debris that may constrict flow, cause blockage, or result in a prohibited discharge; and adjusting tide gates to minimize combined sewer discharges and to prevent tidal inflow.

(2) Record all inspection results, including the date and time of the inspection, the inspection findings, and description of any corrective actions taken.

(g) Training. The Discharger shall provide training to operations and maintenance staff regarding operation and maintenance duties and standard operation procedures. Training shall be consistent with the Discharger's Operation and Maintenance Manual required by Attachment G section I.D.1 (Operation and Maintenance Manual).

(h) Operation and Maintenance Program Review. The Discharger shall review and modify its operations and maintenance program as necessary and in accordance with sections I.C (Duty to Mitigate) and I.D (Proper Operation and Maintenance) of Attachments D and G. At a minimum, the Discharger shall review and update the Operation and Maintenance Manual required by Attachment G section I.D.1 (Operation and Maintenance Manual) once per calendar year.

ii. Control No. 2: Maximize Use of Collection System for Storage

(a) The Discharger shall maximize use of the combined

sewer system for in-line storage to reduce the magnitude, frequency, and duration of combined sewer discharges. At a minimum, the Discharger shall implement the following controls:

(1) Prevent intrusion of receiving waters into the combined sewer system;

(2) Use all facilities, including any inoperative or unused treatment facilities, to store or treat wet weather flows to the maximum extent practicable; and

(3) Implement programs to remove and prevent flow obstructions in the combined sewer system, including but not limited to catch basin cleaning; gravity sewer cleaning; fats, oils and grease control; gravity sewer condition assessment; [17] gravity sewer rehabilitation and replacement; and disconnection of illegal connections.

(b) The Discharger shall notify and report sewer overflows

from the combined sewer system by implementing the following within six months of the effective date of this Order:

(1) The Discharger shall complete the CIWQS Online Collection System Questionnaire, as required by the CIWQS system, and enter information regarding all sewer overflows from the combined sewer system into the CIWQS Online SSO Database, including all required database fields. The Discharger's Legally Responsible Official, as required by the CIWQS system, shall certify all information submitted. The Discharger shall update and certify the Collection System Questionnaire at least every 12 months.

(2) For sewer overflows from the combined sewer system with volumes 1,000 gallons or greater, the Discharger shall submit draft reports through the CIWQS Online SSO

database within 3 business days of becoming aware of the sewer overflow from the combined sewer system and certify the reports within 15 calendar days of the end date of the sewer overflow from the combined sewer system.

(3) For sewer overflows from the combined sewer system with volumes 50,000 gallons or greater that reach surface waters, the Discharger shall submit a technical report within 45 calendar days of the end date for such overflows that further explains the causes and circumstances, including the method and data used to calculate the volume, and lists response actions completed and planned.

(4) For sewer overflows from the combined sewer system with volumes less than 1,000 gallons, the Discharger shall submit certified reports to the CIWQS Online SSO

database within 30 calendar days of the end of the month during which such overflows occur.

(5) For each month during which no sewer overflow from the combined sewer system occurs, the Discharger shall certify, within 30 calendar days of the end of the month during which no sewer overflow from the combined sewer system occurred, that no sewer overflow from the combined sewer system occurred.

Following the reporting requirements set forth above shall satisfy the reporting requirements for sewer overflows from the combined sewer system specified in Attachments D and G.

iii. Control No. 3: Review and Modify Pretreatment Program. The Discharger shall implement controls to minimize the impact of non-domestic discharges to its collection system. At three-year intervals, the Discharger shall re-evaluate whether additional

modifications to its pretreatment program, such as requirements for [18] detention during wet weather, are feasible or practical. The Discharger shall document this re-evaluation in the annual report required by Provision VI.C.4.b and Attachment H.

iv. **Control No. 4: Maximize Flow to Treatment Plant.** During wet weather, the Discharger shall maximize the volume of wastewater that receives treatment at the Oceanside Water Pollution Control Plant (i.e., secondary treatment for 43 MGD and primary treatment for an additional 22 MGD) and is discharged at Discharge Point No. 001.

v. **Control No. 5: Prohibit Dry Weather Combined Sewer Overflows.** Dry weather discharges at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007 are prohibited (see Discharge Prohibition III.D). During any dry weather discharge at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, or CSD-007, the Discharger shall inspect the associated outfall structure each day until the unauthorized discharge

stops. For each prohibited dry weather discharge, the Discharger shall submit the information required by Attachment G section V.C.1.a (e.g., duration, cause, corrective actions taken or planned).

vi. **Control No. 6: Control Solid and Floatable Materials in Combined Sewer Discharges.** The Discharger shall implement measures to minimize the volume of solid and floatable materials in combined sewer discharges (e.g., equip Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007 with baffles, screens, racks, or other means to reduce the volume of solid and floatable materials). The Discharger shall also remove and properly dispose of solid and floatable materials captured in the combined sewer system.

vii. **Control No. 7: Develop and Implement Pollution Prevention Program.** The Discharger shall implement a pollution prevention program focused on reducing the amount of pollutants that enter the combined sewer system. The Discharger shall develop and implement this program in accordance with Provision

VI.C.3 (Pollutant Minimization Program). As part of this program, the Discharger shall implement a street sweeping program and clean catch basins at a frequency sufficient to minimize large accumulations of pollutants and debris.

viii. **Control No. 8: Notify Public of Combined Sewer Discharges.** The Discharger shall inform the public of the location of combined sewer discharge outfalls (i.e., Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-005, CSD-006, and CSD-007), the actual occurrences of combined sewer discharges, the possible health and environmental impacts of combined sewer discharges, and the recreational or commercial activities (e.g., swimming, shellfish harvesting) curtailed as a result of combined sewer discharges. Notification shall include the following, at a minimum:

(a) The Discharger shall maintain permanent identification signs at the locations of Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-005, CSD-006, and CSD-007, and at public access points. The

Discharger shall inspect, and replace as necessary, all permanent signs at least once per calendar year to ensure [19] that the signs are visible and readable. New or replacement signs shall be visible and legible from a distance of 50 feet onshore and offshore, and contain the following information, at a minimum:

- Discharge Point No. (discharge identification number).
- Telephone number to report dry weather discharges.
- Description of discharge, including the words "sewage" and "pathogens that can cause illness."
- Warning, alert, caution, or other term to notify the public that caution is needed.

(b) The Discharger shall post warning signs, including "No Swimming" signs, at beach locations whenever a combined sewer discharge occurs to inform users that bacteria concentrations may be elevated. The Discharger shall post warning signs within

four hours of the time the discharge commences unless the discharge begins after 4:00 p.m., in which case, the Discharger shall post warning signs by 8:00 a.m. the following day. Signs shall remain posted until analysis indicates that water quality meets bacteriological criteria for recreation.

(c) The Discharger shall post warning signs at public access points where shellfish may be harvested for human consumption whenever a combined sewer discharge occurs. The Discharger shall post warning signs within four hours of the time the discharge commences unless the discharge begins after 4:00 p.m., in which case, the Discharger shall post warning signs by 8:00 a.m. the following day. Signs shall be posted until the City and County Health Department indicates that posting is no longer required.

(d) The Discharger shall provide electronic notification of combined sewer discharges through a free-access website and

telephone hotline. The electronic notification shall include information about the location and impacts of combined sewer discharges, and provide a telephone number for the public to report discharges.

ix. **Control No. 9: Monitor to Characterize Combined Sewer Discharge Impacts and Efficacy of Controls.** The Discharger shall monitor to determine the occurrence and apparent impacts of combined sewer discharges, and the efficacy of controls, as described in Provision VI.C.8 and the MRP.

b. **Documentation of Nine Minimum Controls.** The Discharger shall maintain records documenting implementation of the nine minimum controls described in Provision VI.C.5.a. By February 1 each year, the Discharger shall submit a report to the Regional Water Board and U.S. EPA covering the prior October 1 through September 30. The first such report shall be due February 1, 2021, and cover November 1, 2019, through September 30, 2020. The report shall summarize actions taken and planned to implement the nine minimum controls.

[20] **c. Long-Term Control Plan (LTCP).** The Discharger shall implement its Long-Term Control Plan (LTCP) and shall comply with the following provisions:

i. The Discharger shall optimize system operations to minimize combined sewer discharges and maximize pollutant removal during wet weather.

ii. The Discharger shall use all facilities, including any inoperative or unused facilities, to store or treat wet weather flows to the maximum extent practicable.

iii. The Discharger shall capture for treatment, or storage and subsequent treatment, 100 percent of the combined wastewater and stormwater flow collected in the combined sewer system during precipitation events. Captured flows shall receive the minimum treatment specified in Table 2.

iv. The Discharger shall operate the facilities as set forth below and maintain records documenting implementation. If the Discharger demonstrates that changes to these operating parameters will result in additional storage or treatment, it shall implement such changes

after receiving written concurrence from the Regional Water Board Executive Officer and U.S. EPA.

(a) The Oceanside Water Pollution Control Plant shall have an instantaneous influent flow rate of at least 43 MGD prior to discharging primary-treated effluent from the plant to Discharge Point No. 001.

(b) The Oceanside Water Pollution Control Plant shall have an instantaneous influent flow rate of at least 60 MGD prior to initiating discharge from the Westside Transport/Storage Structure to Discharge Point No. 001.

(c) The flow at Discharge Point No. 001 shall be at least 165 MGD within 2 hours of a discharge from Discharge Point No. CSD-002 or CSD-003.

(d) The Discharger shall ensure that two duty pumps at the Sea Cliff No. 1 Pump Station are operating at maximum capacity prior to

discharging at Discharge Point No. CSD-005.

(e) The Discharger shall ensure that the Sea Cliff No. 2 Pump Station is operating at maximum capacity and at least 1,100 gallons per minute prior to discharging at Discharge Point Nos. CSD-006 and CSD-007.

(f) The Discharger shall comply with the following after rain and combined sewer discharges subside:

(1) If the National Weather Service predicts at least a 30 percent chance of rain within the next 24 hours, the Discharger shall maximize storage capacity for predicted rain by pumping down the Westside Transport/ Storage Structure to dry weather levels (i.e., ten feet or less in the East Box).

(2) If the National Weather Service predicts less than a 30 percent chance of rain within the next 24 hours, the Discharger shall maximize secondary

treatment [21] at the Oceanside Water Pollution Control Plant by ceasing the discharge of primary-treated plant effluent and Westside Transport/Storage Structure effluent to Discharge Point No. 001.

d. LTCP Update. The Discharger shall update its LTCP by implementing the following tasks based on the *Combined Sewer Overflow (CSO) Control Policy* and shall submit the required reports to the Regional Water Board and U.S. EPA as specified in the table below. In doing so, the Discharger may use previously completed studies to the extent that they accurately provide the required information.

Table 7. Tasks to Update Long-Term Control Plan (LTCP)

Task	Compliance Date
1. Post-Construction Characterization, Monitoring, and Modeling of Combined Sewer System	Within 48 months of this Order's effective date

The Discharger shall submit a System Characterization Report with a comprehensive characterization of the combined sewer system developed through records review, monitoring, modeling, and other means as appropriate to establish the existing conditions upon which the Consideration of Sensitive Areas Report (Task 3) will be based. At a minimum, the System Characterization Report shall include the following: **a.** Thorough description of the entire combined sewer system, including how it responds during a modeled typical year and various precipitation events (including 3-hour duration, 5-year and 10-year return frequency storms). This description will consider the volume and frequency of combined sewer system discharges and sewer overflows from the combined sewer system, and the impacts of climate change and sea level rise; **b.** Description of each model used, including a discussion of model calibration and validation; **c.** Location, frequency, and characteristics of actual combined	

sewer discharges and sewer overflows from the combined sewer system, and their locations relative to sensitive areas, for at least the last 10 years; **d.** Description of any temporal or spatial trends of sewer overflows from the combined sewer system; **e.** Based on available information, evaluation of how combined sewer discharges affect receiving water quality. At a minimum, the Discharger shall compare wet weather average and maximum discharge characteristics and receiving water monitoring data with Ocean Plan Table 1 water quality objectives; and **f.** Evaluation of combined sewer discharge control efficacy (e.g., using TSS as a proxy for pollutant removal efficiency), including a description of any method used.	
2. Public Participation The Discharger shall submit a description of its completed and planned public participation efforts to actively involve the affected public in its decision-making	Within 48 months of this Order's effective date

process related to capital planning, including implementation of any additional long-term combined sewer system controls based on the results of the Consideration of Sensitive Areas Report. The affected public includes rate-payers (including rate-payers in separate sanitary sewer system service areas), industrial users, persons who use the receiving waters, and any other interested persons. The public participation efforts may include outreach through methods such as public meetings, direct mailers, billing inserts, press releases, postings of information on the Discharger's website, and development of advisory committees.	
[22] **3. Consideration of Sensitive Areas** Based on the findings of the System Characterization Report (Task 1), the Discharger shall submit a Consideration of Sensitive Areas Report that evaluates, prioritizes, and proposes control alternatives needed to eliminate, relocate, or reduce the magnitude or frequency of discharges to sensitive areas from Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-005, CSD-006, and CSD-007. The	Within 48 months of this Order's effective date

Consideration of Sensitive Areas Report shall include the following, at a minimum: **a.** Provide updated water contact recreational use surveys, focusing particularly on recreational use following combined sewer discharges; **b.** Identify control alternatives for each combined sewer discharge structure and the combined sewer system as a whole, including but not limited to the following: **i.** Green infrastructure and low impact development; **ii.** Increased storage within the combined sewer system and at the Oceanside Water Pollution Control Plant; **iii.** Increased treatment capacity; **iv.** Operational changes; **v.** Increased pumping capacity at the Westside Pump Station; and **vi.** Use of high-rate treatment technologies and disinfection to minimize pollutant loads.	

c. Evaluate the practical and technical feasibility of the proposed alternatives;	
d. Using a model, simulate existing conditions and expected conditions after construction and operation of each proposed alternative, including how the alternative would be expected to affect water quality and combined sewer discharge volumes and frequencies at each combined sewer discharge outfall, and incorporating consideration of climate change and sea level rise;	
e. Evaluate the feasibility, costs, and benefits of the alternatives. Evaluate financial capabilities (e.g., using U.S. EPA's *Combined Sewer Overflows, Guidance for Financial Capability Assessment and Schedule Development* [EPA 832-B-97-004, February 1997] or other appropriate guidance);	
f. Consider costs relative to water quality and other public benefits, financial capabilities, other infrastructure needs, and integrated planning considerations, and prioritize and propose for implementation alternatives to	

eliminate, relocate, or reduce the magnitude or frequency of discharges from Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-005, CSD-006, and CSD-007 based on Tasks 3.a through 3.e, above; and **g.** Provide an implementation schedule that includes interim milestones.	
4. Operational Plan **a.** The Discharger shall submit a Wet Weather Operations Report that proposes a set of operational parameters to be used as performance measures to ensure that wet weather operations maximize pollutant removal and minimize the frequency, volume, and duration of combined sewer discharges and sewer overflows from the combined sewer system. The performance measures may include all or a portion of those listed in Provision VI.C.5.c.iv and shall include measures to evaluate compliance. The Discharger shall provide the technical basis for proposing new performance measures or retaining the existing ones.	Within 24 months of this Order's effective date

b. Within 90 days of receiving written concurrence from the Regional Water Board Executive Officer and U.S. EPA, the Discharger shall update its Operation and Maintenance Manual, implement the proposed performance measures in lieu of those in Provision VI.C.5.c.iv, and demonstrate compliance.	Within 90 days of receiving written concurrence
[23] **5. Post-Construction Compliance Monitoring Program** The MRP contains post-construction compliance monitoring requirements. The Discharger shall submit a Post-Construction Compliance Monitoring Plan proposing modifications, as appropriate, to the MRP for the next permit term to verify compliance with applicable water quality standards and protection of designated uses, as well as to ascertain the effectiveness of combined sewer system controls. At a minimum, the Post-Construction Compliance Monitoring Plan shall evaluate whether any reduction or increase in monitoring, or alternative monitoring, is appropriate.	With Report of Waste Discharge

6. Westside Recycled Water Project Operations Notification

The Discharger shall notify the Regional Water Board and U.S. EPA at least 30 days prior to commencing Westside Recycled Water Project operations. The notification shall include the following:

a. Date that operations will commence;

b. Description of the project as constructed, including a description and flow diagram of all treatment processes;

c. Description and line diagram of how and where the concentrate from the reverse osmosis process is to be discharged to Discharge Point No. 001;

d. Description of anticipated changes in the quality of effluent discharged to Discharge Point No. 001; and

e. Verification that effluent discharged to Discharge Point No. 001 will comply with this Order's requirements.

If pollutant concentrations are expected to increase by more than considered in the reasonable potential analysis based on future effluent quality with the Westside Recycled Water Project (see Fact Sheet § IV.C.4.b), the notification shall also summarize anticipated maximum receiving water concentrations and compare

them to the water quality objectives listed in Fact Sheet Tables F-9 and F-10.

7. Flame Retardant Special Study

The Discharger shall propose a special study to evaluate Oceanside Water Pollution Control Plant effluent flame retardant concentrations and flame retardant mass loadings to the Pacific Ocean from Discharge Point No. 001. The Discharger shall submit a special study work plan to the U.S. EPA Water Division Director within one year of the effective date of this Order and shall submit the special study final report with the application for permit reissuance.

8. Efficacy of Combined Sewer System Controls Special Study

By August 1, 2023, the Discharger shall submit a report to the Regional Water Board and U.S. EPA evaluating the quality of the combined sewer discharges and the efficacy of the combined sewer discharge controls during wet weather (i.e., control of solid and floatable [24] material in combined sewer discharges) at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-005, CSD-006, and CSD-007. At a minimum, the Discharger shall monitor for TSS, copper, lead, and zinc. The Discharger shall also evaluate floatables removal.

[A-1] ATTACHMENT A – DEFINITIONS

Areas of Special Biological Significance (ASBS)

Areas designated by the State Water Resources Control Board as ocean areas requiring protection of species or biological communities to the extent that maintenance of natural water quality is assured. All Areas of Special Biological Significance are also classified as a subset of State Water Quality Protection Areas.

Average Monthly Effluent Limitation (AMEL)

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)

Highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative

Taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Chlordane

Sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Combined Sewer Discharge

Authorized combined sewer overflow during a wet weather day from an approved combined sewer discharge point. Table 2 of the Order lists approved combined sewer discharge points.

Combined Sewer Discharge Event

Discharge from one or more approved combined sewer discharge points during wet weather separated by at least six hours from any other combined sewer discharge event. Table 2 of the Order lists approved combined sewer discharge points.

Combined Sewer Overflow

The *Combined Sewer Overflow (CSO) Control Policy* defines a combined sewer overflow as the discharge from a combined sewer system at a point prior to the POTW's treatment plant.

Daily Discharge

Either: (1) total mass of the constituent discharged over a calendar day (12:00 a.m. through 11:59 p.m.) 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) unweighted arithmetic mean measurement of the constituent over a day for a

constituent with limitations expressed in other units of measurement (e.g., concentration).

[A-2] 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 a day.

For composite sampling, if a 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

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 or sites 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)

Sample results that are less than the reported Minimum Level, but greater than or equal to the laboratory's method detection limit (MDL). Sample results reported as DNQ are estimated concentrations.

Dichlorobenzenes

Sum of 1,2-diehlorobenzene and 1,3-dichlorobenzene.

Dilution Credit

Amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation based on the allowance of a specified mixing zone. It is calculated from the dilution ratio, or determined by conducting a mixing zone study or modeling the discharge and receiving water.

Downstream Ocean Waters

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."

Dry Weather

Any weather not defined as wet weather (determined on a day-by-day basis).

Effective Concentration (EC)

Point estimate of the toxicant concentration that would cause an adverse effect on a quantal, "all or nothing," response (such as death, immobilization, or

serious incapacitation) in a given percent of the test organisms. If the effect is death or immobility, the term lethal concentration (LC) may be used. EC values may be calculated using point estimation techniques such as probit, logit, and Spearman-[A-3]Karber. EC25 is the concentration of toxicant (in percent effluent) that causes a response in 25 percent of the test organisms.

Enclosed Bays

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

Sum of endosulfan-alpha, endosulfan-beta, and endosulfan sulfate.

Estuaries and Coastal Lagoons

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 California Water Code section 12220, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

Halomethanes

Sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).

HCH

Sum of the alpha, beta, gamma (lindane), and delta isomers of hexachlorocyclohexane.

Initial Dilution

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.

[A-4] **Instantaneous Maximum Effluent Limitation**

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

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).

In-Stream Waste Concentration (IWC)

The concentration of a toxicant in the receiving water after mixing.

Kelp Beds

For purposes of the Ocean Plan bacteriological standards, 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.

Maricultnre

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 Ocean Plan purposes relating to waste disposal, dredging, and the disposal of dredged material and fill: matter of any kind or description that is subject to regulation as waste or any material dredged from the navigable waters of the United States. See "dredged material."

Maximum Daily Effluent Limitation (MDEL)

Highest allowable daily discharge of a pollutant.

Method Detection Limit (MDL)

Minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 C.F.R. part 136, Appendix B.

Minimum Level (ML)

Concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified

sample weights, volumes, and processing steps have been followed.

Natural Light

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

No Observed Effect Concentration (NOEC)

Highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation. It is determined using hypothesis testing.

[A-5] **Not Detected (ND)**

Sample results less than the laboratory's MDL.

PAHs (polynuclear aromatic hydrocarbons)

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)

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)

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 PMP goal shall be to reduce potential sources 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 and U.S. EPA may consider cost effectiveness when establishing PMF requirements. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), fulfill the PMP requirements.

Reporting Level (RL)

Minimum Level (ML) and its associated analytical method chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein (also known as the "Reported Minimum Level"). The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected either from Ocean Plan Appendix II in accordance with Ocean Plan chapter III.C.5.a or established in accordance with Ocean Plan chapter III.C.5.b. The ML is based on the proper

application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Sewer Overflow from the Combined Sewer System

Release or diversion of untreated or partially-treated wastewater or combined wastewater and stormwater from the combined sewer collection system. Sewer overflows from the combined sewer system can occur in public rights of way or on private property. Sewer overflows from the combined sewer system do not include releases due to failures in privately-owned sewer laterals or authorized combined sewer discharges at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, or CSD-007.

Shellfish

Organisms identified by the California Department of Public Health as shellfish for public health purposes (i.e., mussels, clams and oysters).

[A-6] **Significant Difference**

Statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-Month Median Effluent Limitation

Highest allowable moving median of all daily discharges for any 180-day period.

State Water Quality Protection Areas (SWQPAs)

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) previously designated by the State Water Board in Resolutions 74-28, 74-32, and 75-61 are now also classified as a subset of SWQPAs and require the special protections the Ocean Plan affords.

TCDD Equivalents

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 Equivalency Factors (TEFs) and Bioaccumulation Equivalency Factors (BEFs), as defined in Table A-1. When calculating TCDD Equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. This approach is based on 40 C.F.R. part 132, Appendix F, Procedure 4, Tables I and 2, and TEFs listed in the Ocean Plan. This TCDD equivalents definition supersedes the dioxin-TEQ definition in Attachment G section V.C.I.d.iv.

Table A-1. Minimum Levels, Toxicity Equivalency Factors, and Bioaccumulation Equivalency Factors

Isomer Group	Minimum Level (pg/L)	Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-TCDD	10	1.0	1.0
1,2,3,7,8-PeCDD	50	0.5	0.9
1,2,3,4,7,8-HxCDD	50	0.1	0.3
1,2,3,6,7,8-HxCDD	50	0.1	0.1
1,2,3,7,8,9-HxCDD	50	0.1	0.1
1,2,3,4,6,7,8-HpCDD	50	0.01	0.05
OCDD	100	0.001	0.01
2,3,7,8-TCDF	10	0.1	0.8
1,2,3,7,8-PeCDF	50	0.05	0.2
2,3,4,7,8-PeCDF	50	0.5	1.6
1,2,3,4,7,8-1-1xCDF	50	0.1	0.08

1,2,3,6,7,8-HxCDF	50	0.1	0.2
1,2,3,7,8,9-HxCDF	50	0.1	0.6
2,3,4,6,7,8-HxCDF	50	0.1	0.7
1,2,3,4,6,7,8-HpCDF	50	0.01	0.01
1,2,3,4,7,8,9-HpCDF	50	0.01	0.4
OCDF	100	0.001	0.02

[A-7] **Test of Significant Toxicity (TST)**

A statistical approach used to analyze toxicity test data. The TST statistical approach is described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010).

Toxicity Reduction Evaluation (TRE)

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 or chemicals 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, a Discharger's total discharge, of whatever origin (i.e., gross, not net, discharge).

Water Recycling

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.

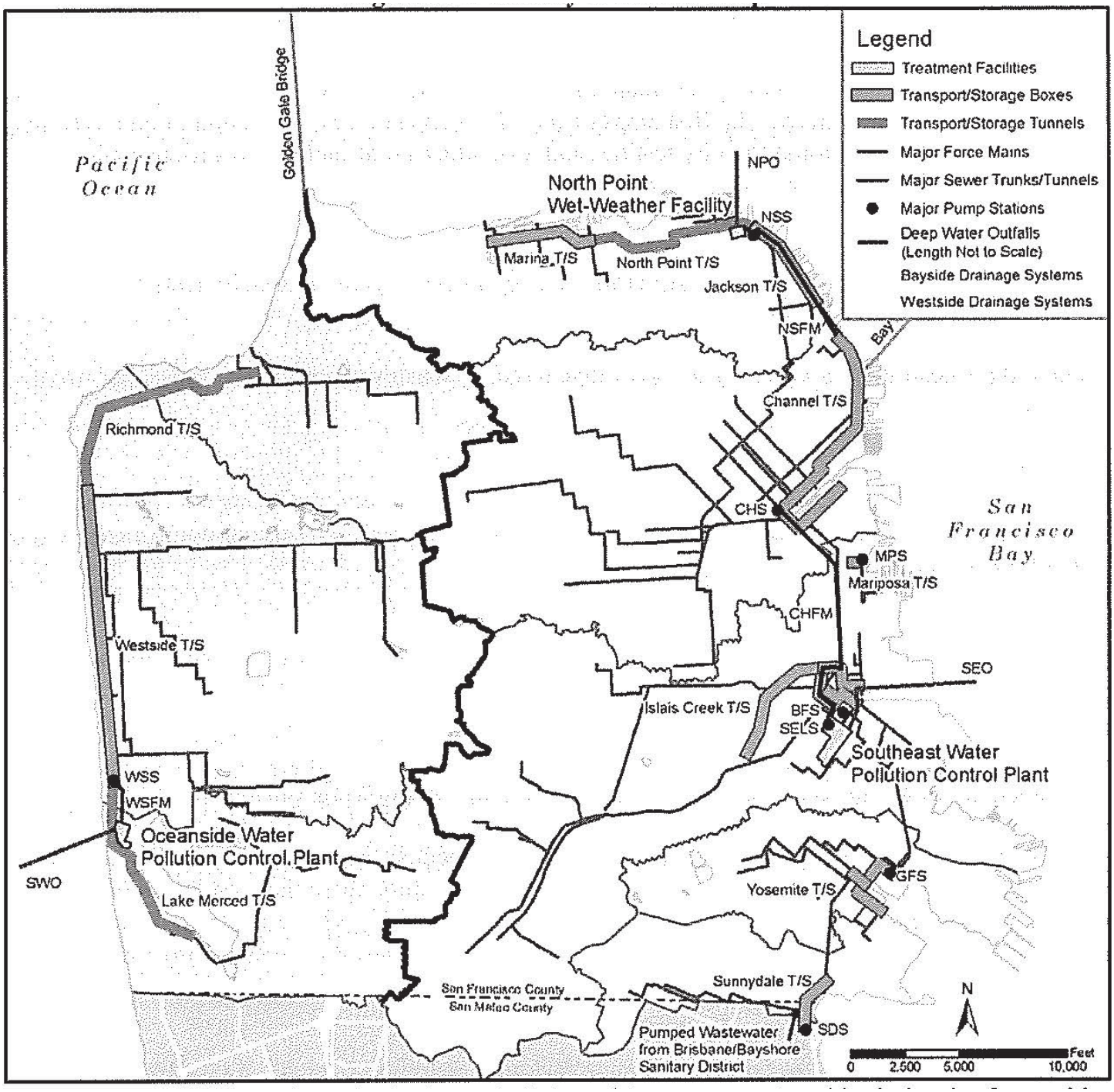
Wet Weather

Weather in which any one of the following conditions exists as a result of rain (determined on a day-by-day basis):

1. Instantaneous influent flow to the Oceanside Water Pollution Control Plant exceeds 43 MGD; or
2. Average daily influent concentration of TSS is less than 100 mg/L; or
3. Westside Transport/Storage Structure flow elevation exceeds 0 feet in the West Box or 18 feet in the East Box. (Flow from the East Box to the West Box occurs only when the East Box storage level exceeds 18 feet.)

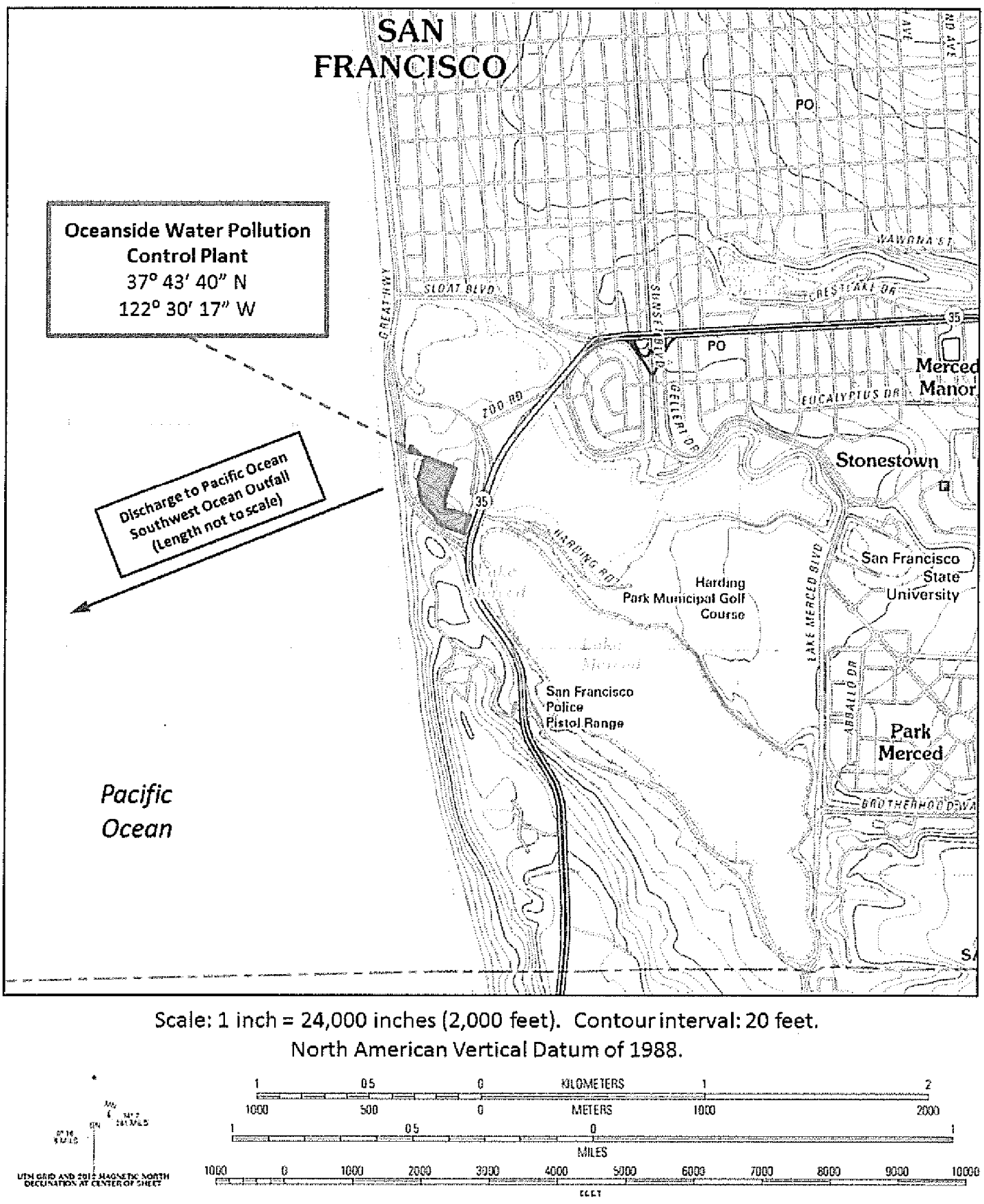
[B-1] **ATTACHMENT B – FACILITY AND RECEIVING WATER MAPS**

Figure B-1. Facility Overview Map



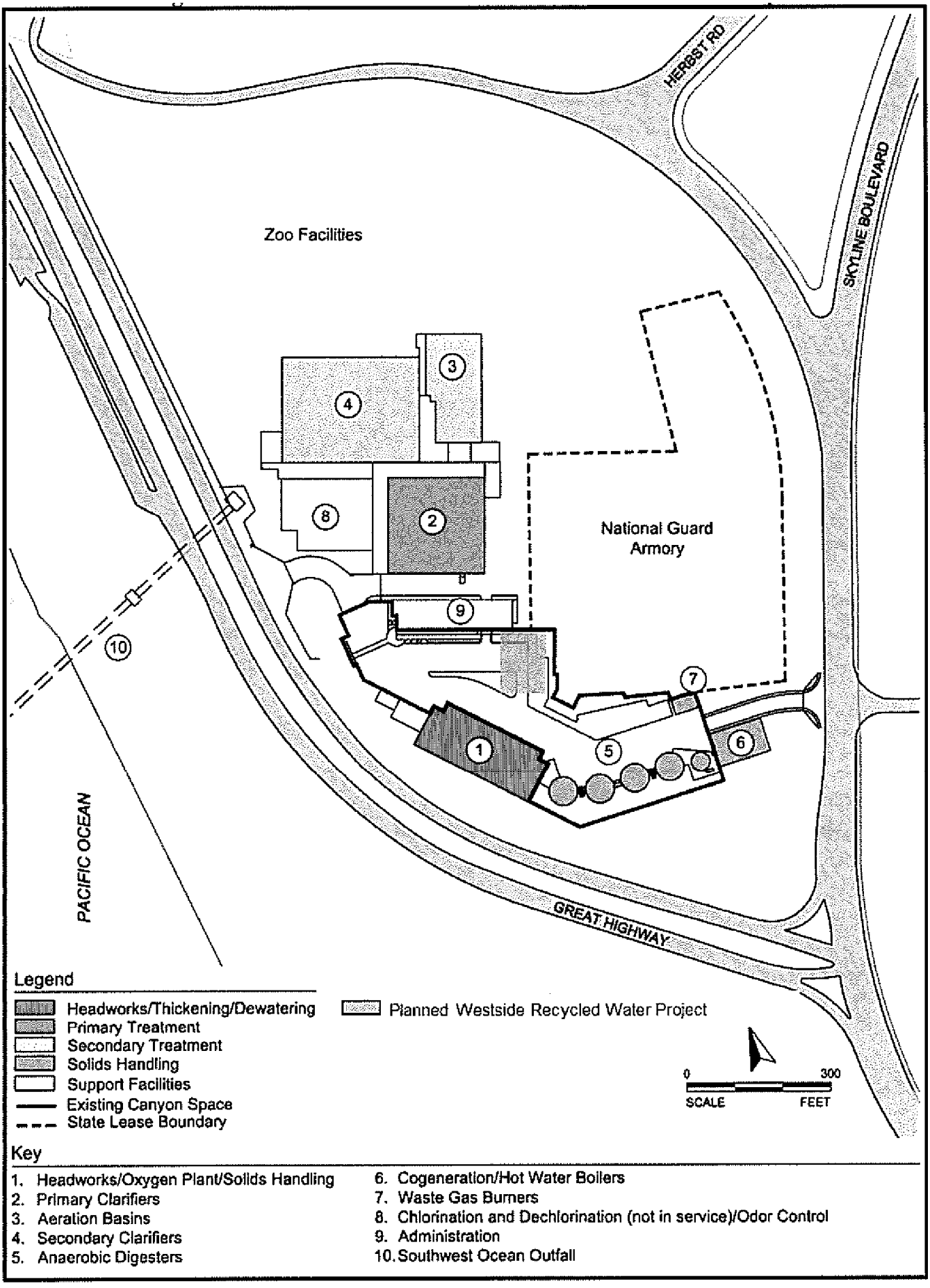
The Facility subject to this Order is shown in light red (western area) and includes the Oceanside Water Pollution Control Plant, wastewater collection system, and Westside Recycled Water Project. The Southeast Water Pollution Control Plant, North Point Wet Weather Facility, and Bayside Wet Weather Facilities are shown only for reference in light green (eastern area).

[B-2] **Figure B-2. Topographical Map**

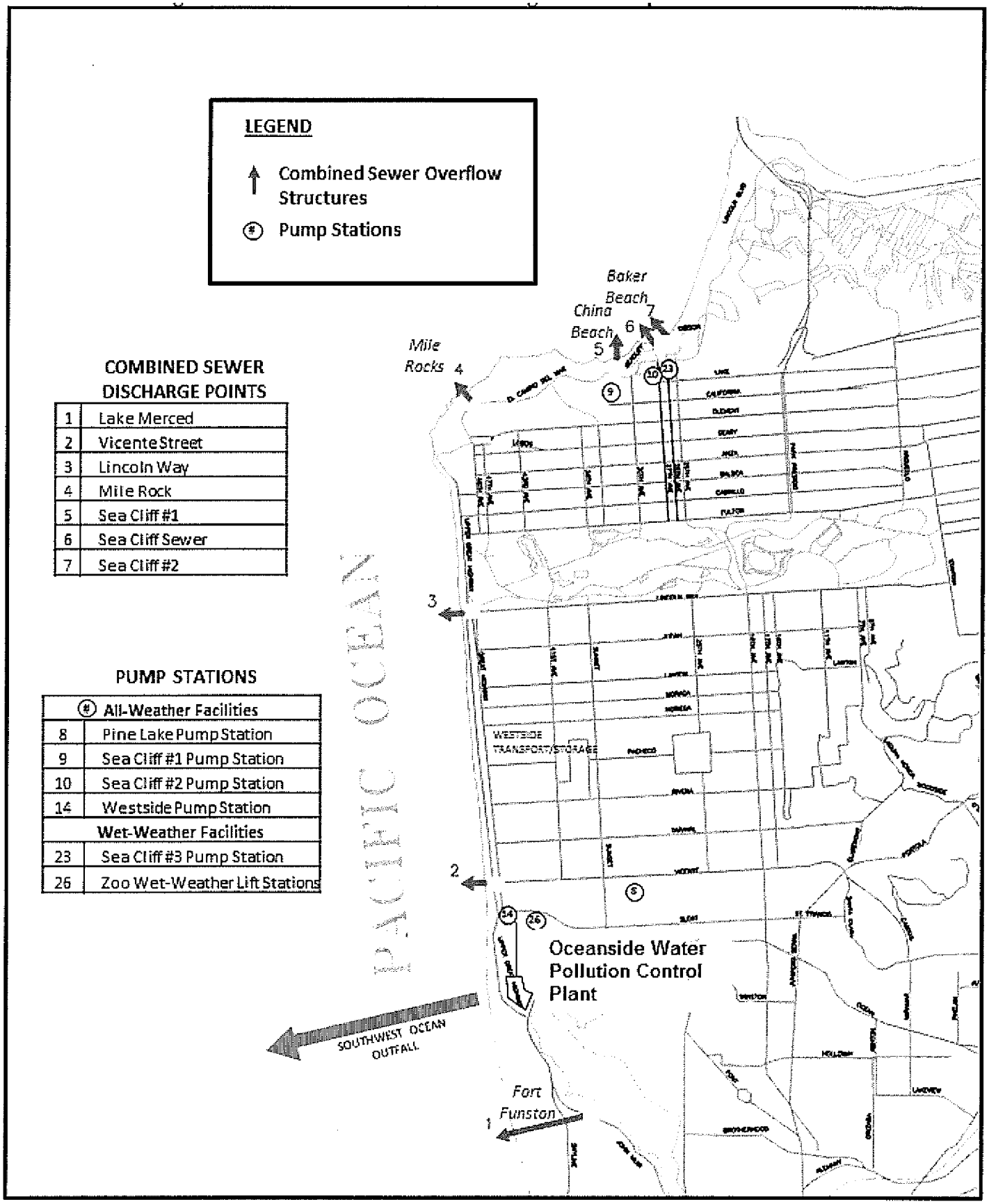


Scale: 1 inch = 24,000 inches (2,000 feet). Contour interval: 20 feet.
North American Vertical Datum of 1988.

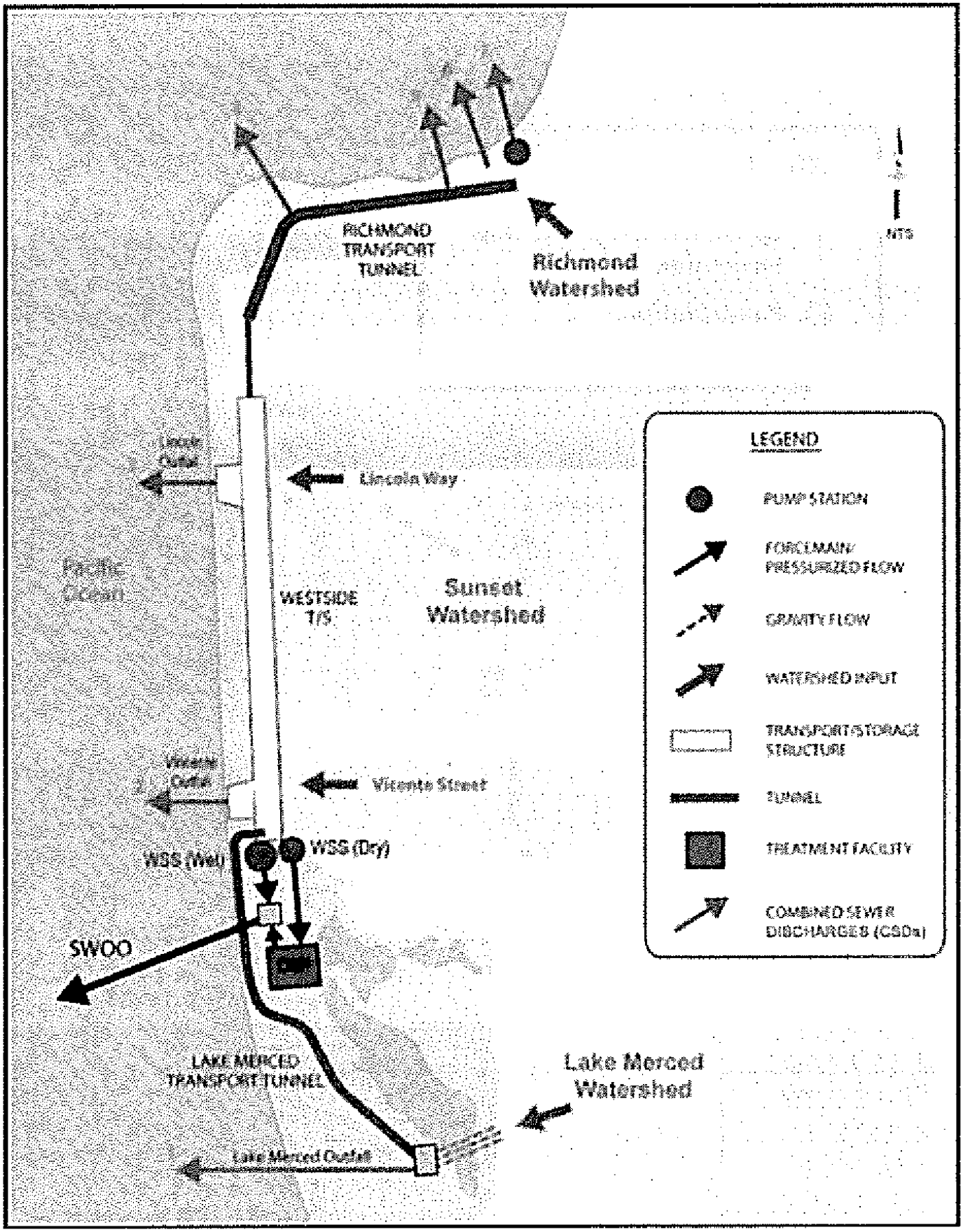
[B-3] **Figure B-3. Oceanside Water Pollution Control Plant Map**



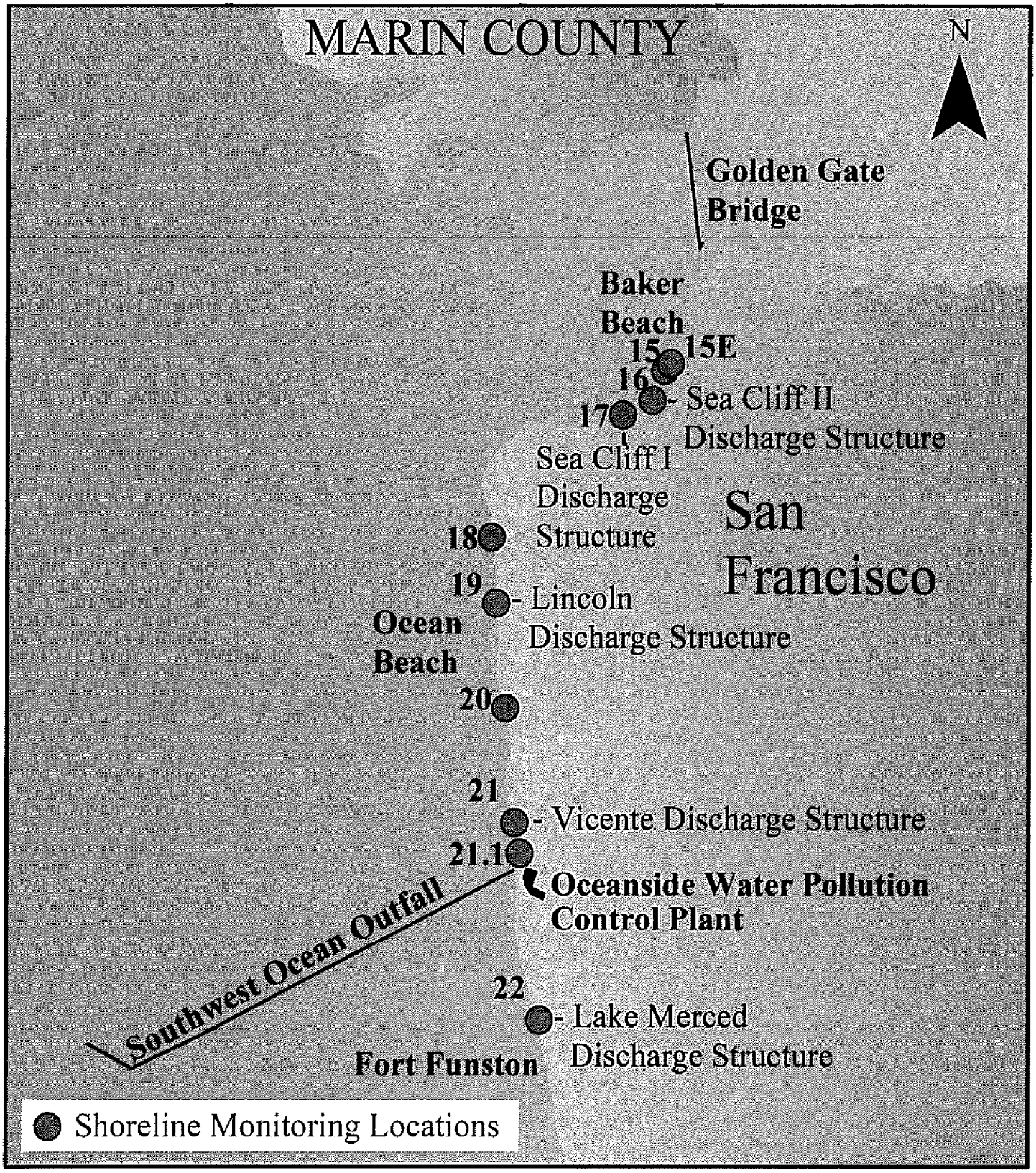
[B-4] **Figure B-4. Combined Sewer Discharge and Pumn Station Location**



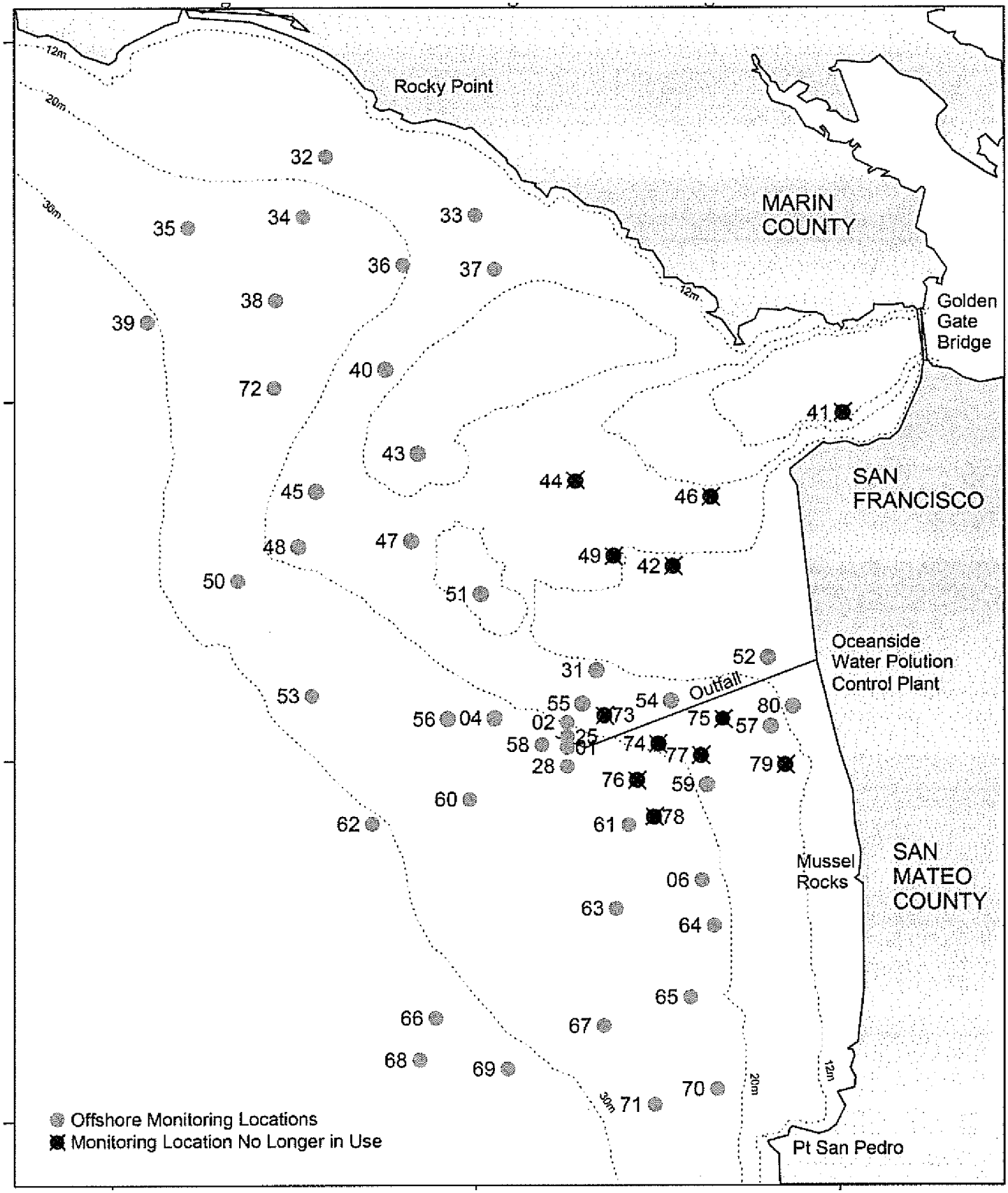
[B-5] **Figure B-5. Combined Sewer Discharge and Transport/Storage Structure Locations**



[B-6] **Figure B-6. Shoreline Receiving Water Monitoring Locations**

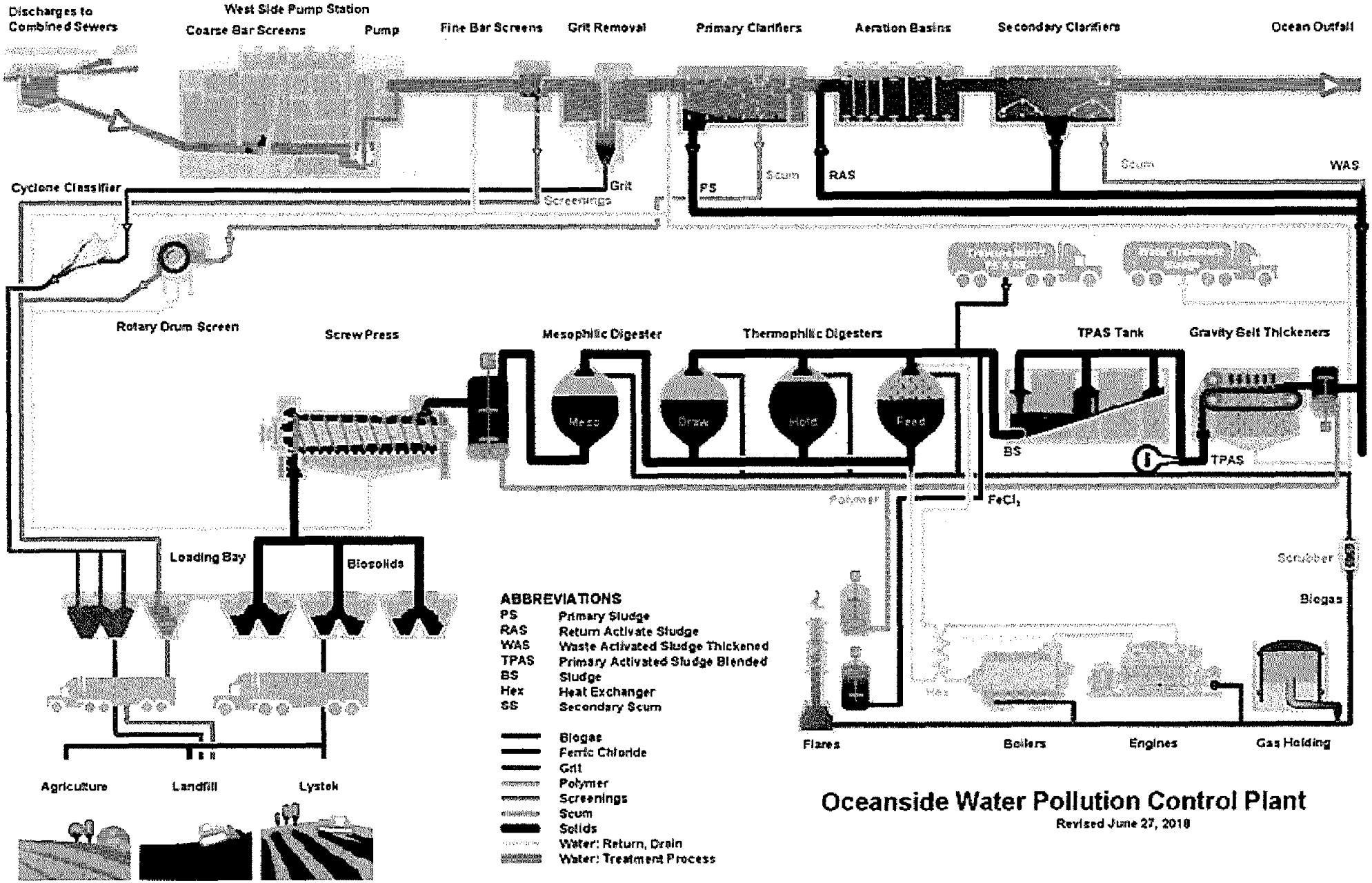


[B-7] **Figure B-7. Offshore Receiving Water Monitoring Locations**

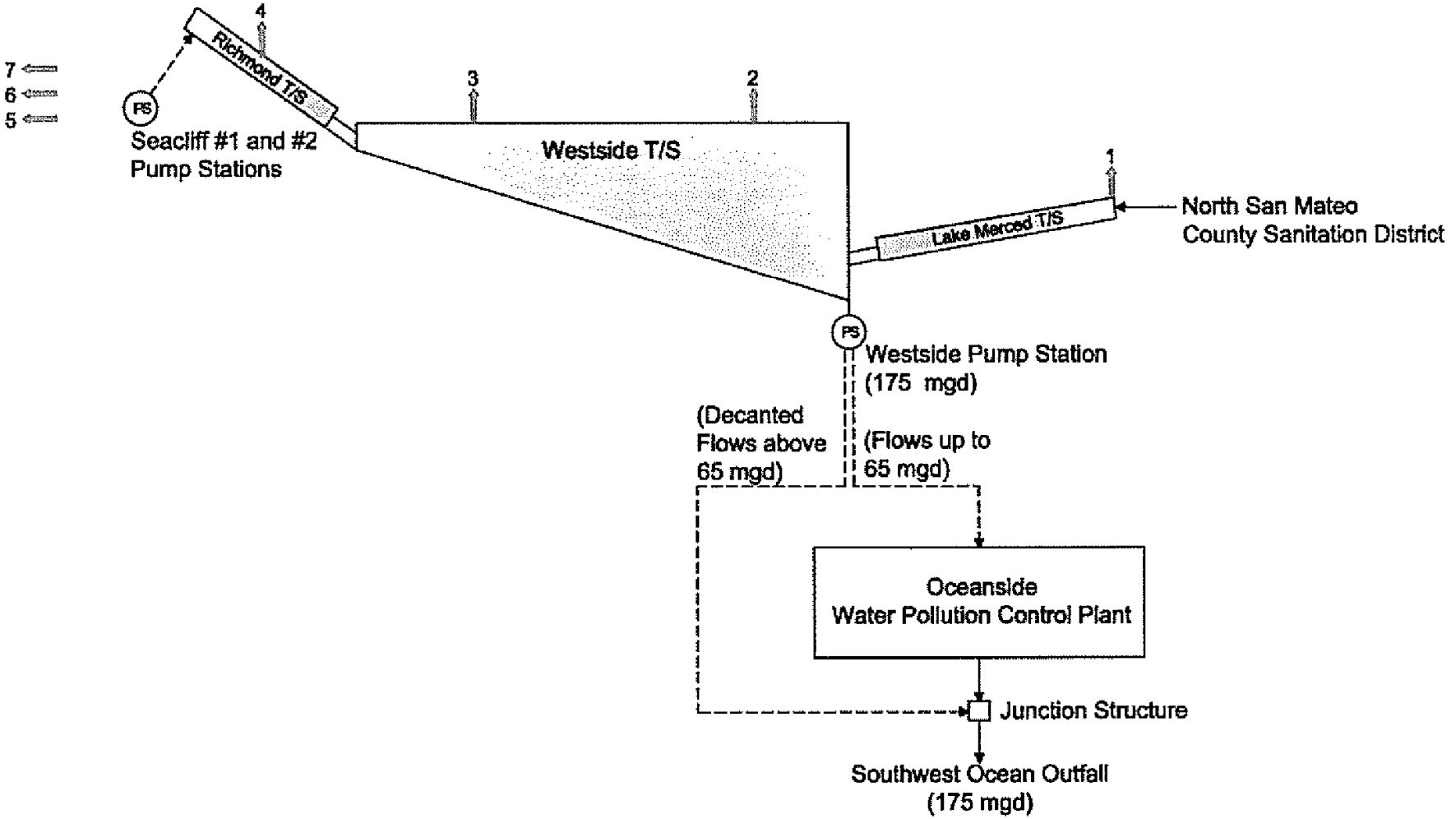


[C-1] ATTACHMENT C — PROCESS FLOW SCHEMATICS

Figure C-1. Oceanside Water Pollution Control Plant Process Flow



[C-2] **Figure C-2. Oceanside Water Pollution Control Plant Wet Weather Operations**



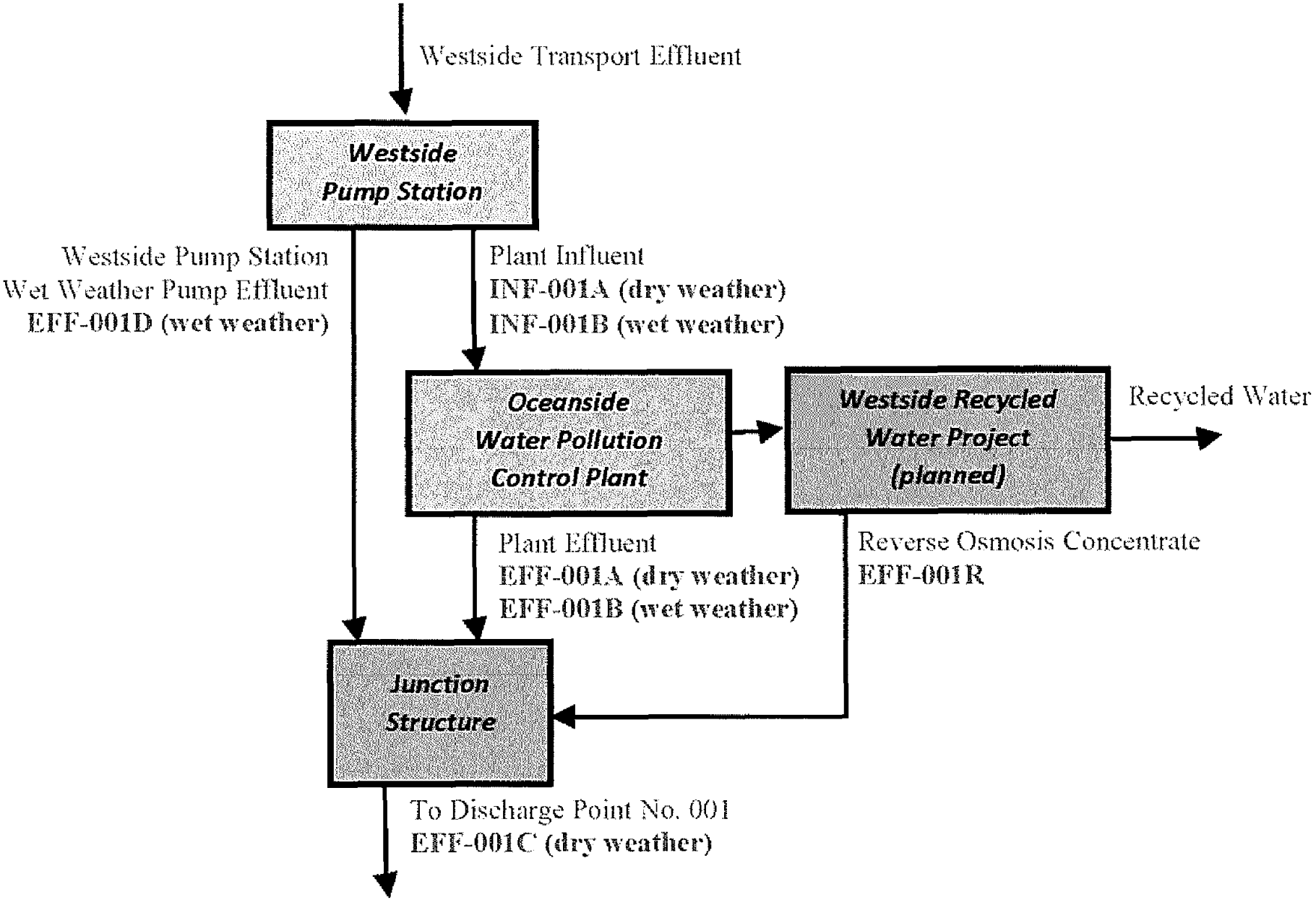
Pump/Lift Stations	
Peak Wet-Weather Flows (mgd)	
Name	
Seacliff #1	0.005
Seacliff #2	0.090
Westside	175.000

CSD Number and Name
CSD-001 Lake Merced
CSD-002 Vicente Street
CSD-003 Lincoln Way
CSD-004 Mile Rock
CSD-005 Seacliff #1 PS
CSD-006 Seacliff
CSD-007 Seacliff #2 PS

Transport/Storage Structures	
Name	Usable Storage (MG)
Richmond Transport	12.0
Westside Transport	49.3
Lake Merced Transport	10.0

Legend	
CSD	Combined Sewer Discharge
MG	million gallons
mgd	million gallons per day
T/S	Transport/Storage Structure
—→	Force Main
⟶	Gravity Flow Lines
# ⇐	Combined Sewer Discharge
PS	Pump Station

[C-3] **Figure C-3. Oceanside Water Pollution Control Plant and Planned Westside Recycled Water Project Monitoring Locations (see Monitoring and Reporting Program [MRP] Table E-1 in Attachment E of this Order for monitoring location descriptions)**



[D-1] ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS—PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the terms, requirements, and 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; or a combination thereof. (40 C.F.R. § 122.41(a); Wat. Code §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

2. The Discharger shall comply with effluent standards or prohibitions established under CWA section 307(a) for toxic pollutants 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 C.F.R. § 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 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 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 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

[D-2] **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 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, U.S. EPA, 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 (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 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 (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); 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. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

G. Bypass

1. Definitions

a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.41(m)(2).)

[D-3] **3. Prohibition of bypass.** Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.41(m)(4)(i)(C).)

4. Approval. 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 C.F.R. § 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 prior notice, if possible at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2020, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions—Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i).)

b. Unanticipated bypass. The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions—Reporting V.E below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2020, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions—Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 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 C.F.R. § 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 [D-4] 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 C.F.R. § 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 C.F.R. § 122.41(n)(3)):

a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 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 C.F.R. § 122.41(n)(3)(iii)); and

d. The Discharger complied with any remedial measures required under Standard Provisions—Permit Compliance I.C. above. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 the 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 C.F.R. §§ 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 C.F.R. § 122.41(j)(1).)

[D-5] **B.** Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40

C.F.R. part 136 for the analysis of pollutants or pollutant parameters or required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

1. The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either (a) the method ML is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter, or (b) the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N, for the measured pollutant or pollutant parameter.

In the case of pollutants or pollutant parameters for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40

C.F.R. §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS—RECORDS

A. 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 C.F.R. § 122.41(j)(2)).

B. Records of monitoring information shall include the following:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

3. The date(s) the analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

[D-6] **C.** Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

2. Permit applications and attachments, permits, and effluent data. (40 C.F.R. § 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 U.S. EPA within a reasonable time, any information which the Regional Water Board, State Water Board, or U.S. EPA 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 U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with

Standard Provisions—Reporting V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 C.F.R. § 122.41(k).)

2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

For a partnership or sole proprietorship, all permit applications shall be signed by

a general partner or the proprietor, respectively. (40 C.F.R. § 122.22(a)(2).)

For a municipality, State, federal, or other public agency, 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 U.S. EPA). (40 C.F.R. § 122.22(a)(3).).

[D-7] **3.** All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA 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 C.F.R. § 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 C.F.R. § 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.22(d).)

6. Any person providing the electronic signature for documents described in Standard Provisions—V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions—Reporting V.B, and shall ensure that all relevant requirements of 40 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R § 122.22(e).)

[D-8] **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in this Order. (40 C.F.R. § 122.22(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. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions—Reporting V.J and comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR reporting form specified by the Regional Water Board or State Water Board. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written report 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.

For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2020, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Regional Water Board and must be [D-9] submitted electronically to the initial recipient defined in Standard Provisions—Reporting V.J. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours:

a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 40 C.F.R. section 122.29(b) (40 C.F.R. § 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. (Alternatively, for an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a), this notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under 40 C.F.R. section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1).) (40 C.F.R. § 122.41(l)(1)(ii).)

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 this Order's requirements. (40 C.F.R. § 122.41(l)(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 Provisions—Reporting V.E above. For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provisions—[D-10] Reporting V.E and the applicable required data in appendix A to 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(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 U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

J. Initial Recipient for Electronic Reporting Data

The owner, operator, or duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. section 127.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group (see 40 C.F.R. § 127.2(c)). U.S. EPA will update and maintain this list. (40 C.F.R. § 122.41(l)(9))

VI. STANDARD PROVISIONS—ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this Order under several provisions of the Water Code, including, but not limited to, sections 13268, 13350, 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS—NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest

of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):

a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

d. The level established by the Regional Water Board in accordance with section 40 C.F.R. section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

[D-11] **2.** That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(2)):

a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

c. Ten (10) times the maximum concentration value reported for that pollutant

in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

d. The level established by the Regional Water Board in accordance with 40 C.F.R. section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

B. Publicly-Owned Treatment Works (POTWs)

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

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA sections 301 or 306 if it were directly discharging those pollutants (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.42(b)(3).)

[E-1] ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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[E-2] ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Clean Water Act section 308 and 40 C.F.R. sections 122.41(h), 122.41(j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and State laws and regulations.

I. GENERAL MONITORING PROVISIONS

A. The Discharger shall comply with this MRP. The Regional Water Board Executive Officer and U.S. EPA may amend this MRP pursuant to 40 C.F.R. sections 122.62, 122.63, and 124.5. If any discrepancies exist between this MRP and the "Regional Standard Provisions, and Monitoring and Reporting Requirements (Supplement to Attachment D) for NPDES Wastewater Discharge Permits" (Attachment G), this MRP shall prevail.

B. The Discharger shall conduct all monitoring in accordance with Attachment D section III, as supplemented by Attachment G. Equivalent test methods must be more sensitive than those specified in 40 C.F.R. part 136 and must be specified in this permit.

C. The Discharger shall ensure that results of the Discharge Monitoring Report-Quality

Assurance (DMR-QA) Study or most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address or as otherwise directed:

State Water Resources Control Board
Quality Assurance Program Officer
Office of Information Management and Analysis
1001 I Street, Sacramento, CA 95814

D. The Discharger shall implement a Quality Assurance-Quality Control Program for any onsite field tests (e.g., turbidity, pH, temperature, dissolved oxygen, conductivity, disinfectant residual) analyzed by a noncertified laboratory. The Discharger shall keep a manual onsite containing the steps followed in this program and must demonstrate sufficient capability to adequately perform these field tests (e.g., qualified and trained employees, properly calibrated and maintained field instruments). The program shall conform to U.S. EPA guidelines or other approved procedures.

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 Locations

Monitoring Location Type	Monitoring Location Name	Monitoring Location Description[1]
Oceanside Water Pollution Control Plant Influent (dry weather)	INF-001A	During dry weather, any point in the plant headworks where all waste tributary to the plant is present and preceding any phase of treatment at the plant, exclusive of any return flows or process side streams.
[E-3] Oceanside Water Pollution Control Plant Influent (wet weather)	INF-001B	During wet weather, any point in the plant headworks where all waste tributary to the plant is present and preceding any phase of treatment at the plant, exclusive of any return flows or process side streams.
Oceanside Water Pollution Control Plant Effluent (dry weather)	EFF-001A	During dry weather, any point at the plant following all phases of treatment, prior to contact with Westside Recycled Water Project concentrate and the receiving water at Discharge Point No. 001.

Oceanside Water Pollution Control Plant Effluent (wet weather)	EFF-001B	During wet weather, any point at the plant following all phases of treatment, prior to contact with Westside Transport/Storage Structure effluent, Westside Recycled Water Project concentrate, and the receiving water at Discharge Point No. 001.
Oceanside Water Pollution Control Plant Effluent and Westside Recycled Water Project Concentrate (dry weather)	EFF-001C	During dry weather, any point at which all plant effluent and Westside Recycled Water Project concentrate tributary to Discharge Point No. 001 is present and after all phases of treatment. The Discharger may combine 24-hour composite samples from Monitoring Locations EFF-001A and EFF-00IR to create a volumetrically flow-weighted representative sample for Monitoring Location EFF-001C.
Westside Transport/Storage Structure Effluent (wet	EFF-001D	During wet weather, any point following the Westside Pump Station wet weather pumps, prior to contact with

weather) (identified in the previous order as "decant")		treated plant effluent, Westside Recycled Water Project concentrate, and the receiving water at Discharge Point No. 001.
Westside Recycled Water Project Reverse Osmosis Concentrate	EFF-001R	Any point at the Westside Recycled Water Project following all phases of treatment, prior to contact with plant effluent, Westside Transport/Storage Structure effluent, and the receiving water at Discharge Point No. 001.
Combined Sewer Discharge Effluent	EFF-CSD	A monitoring location representative of combined sewer discharges from the Westside Transport/Storage Structure.
Shoreline Receiving Water	SRF-15	Nearshore receiving water along Baker Beach, in the surf at the terminus of Lobos Creek.
Shoreline Receiving Water	SRF-15 east	Nearshore receiving water along Baker Beach, in the surf east of Monitoring Location SRF-15.

Shoreline Receiving Water	SRF-16	Nearshore receiving water along Baker Beach, in the surf opposite the Sea Cliff No. 2 Pump Station.
Shoreline Receiving Water	SRF-17	Nearshore receiving water along China Beach, in the surf opposite the Sea Cliff No. I Pump Station.
Shoreline Receiving Water	SRF-18	Nearshore receiving water along Ocean Beach, in the surf at the foot of Balboa Street.
Shoreline Receiving Water	SRF-19	Nearshore receiving water along Ocean Beach, in the surf at the foot of Lincoln Way, opposite the Lincoln Combined Sewer Discharge Structure.
Shoreline Receiving Water	SRF-20	Nearshore receiving water along Ocean Beach, in the surf at the foot of Pacheco Street.
Shoreline Receiving Water	SRF-21	Nearshore receiving water along Ocean Beach, in the surf at the foot of Vicente Street, opposite the Vicente Combined Sewer Discharge Structure.

Shoreline Receiving Water	SRF-21.1	Nearshore receiving water along Ocean Beach, in the surf at the foot of Sloat Boulevard.
[E-4] Shoreline Receiving Water	SRF-22	Nearshore receiving water along Ocean Beach, in the surf at Fort Funston, opposite the Lake Merced Combined Sewer Discharge Structure.
Offshore Receiving Water	Station 1	Offshore monitoring program station location. *Longitude -122.57533°, Latitude 37.70333°*
Offshore Receiving Water	Station 2	Offshore monitoring program station location. *Longitude -122.57500°, Latitude 37.71050°*
Offshore Receiving Water	Station 4	Offshore monitoring program station location. *Longitude -122.59500°, Latitude 37.71167°*
Offshore Receiving Water	Station 6	Offshore monitoring program station location. *Longitude -122.53750°, Latitude 37.66667°*
Offshore Receiving Water	Station 25	Offshore monitoring program station location. *Longitude -122.57500°, Latitude 37.70383°*

Offshore Receiving Water	Station 28	Offshore monitoring program station location. *Longitude -122.57467°, Latitude 37.69833°*
Offshore Receiving Water	Station 31	Offshore monitoring program station location. *Longitude -122.56717°, Latitude 37.72467°*
Offshore Receiving Water	Station 32 (formerly R1)	Offshore monitoring program station location. *Longitude -122.64128°, Latitude 37.86799°*
Offshore Receiving Water	Station 33 (formerly R2)	Offshore monitoring program station location. *Longitude -122.60024°, Latitude 3785171°*
Offshore Receiving Water	Station 34 (formerly R3)	Offshore monitoring program station location. *Longitude -122.64744°, Latitude 37.85129°*
Offshore Receiving Water	Station 35 (formerly R4)	Offshore monitoring program station location. *Longitude -122.67920°, Latitude 37.84832°*
Offshore Receiving Water	Station 36 (formerly R5)	Offshore monitoring program station location. *Longitude -122.62008°, Latitude 3 7 83773°*
Offshore Receiving Water	Station 37 (formerly R6)	Offshore monitoring program station location. *Longitude -122.59485°, Latitude 37.83656°*

Offshore Receiving Water	Station 38 (formerly R7)	Offshore monitoring program station location. *Longitude -122.65501°, Latitude 37.82802°*
Offshore Receiving Water	Station 39 (formerly R8)	Offshore monitoring program station location. *Longitude -122.69042°, Latitude 37.82200°*
Offshore Receiving Water	Station 40 (formerly R9)	Offshore monitoring program station location. *Longitude -122.62493°, Latitude 37.80880°*
Offshore Receiving Water	Station 43 (formerly R12)	Offshore monitoring program station location. *Longitude -122.61608°, Latitude 37.78552°*
Offshore Receiving Water	Station 45 (formerly R14)	Offshore monitoring program station location. *Longitude -122.64399°, Latitude 37.77483°*
Offshore Receiving Water	Station 47 (formerly R16)	Offshore monitoring program station location. *Longitude -122.61792°, Latitude 37.76106°*
Offshore Receiving Water	Station 48 (formerly R17)	Offshore monitoring program station location. *Longitude -122.64888°, Latitude 3775941°*
Offshore Receiving Water	Station 50 (formerly R19)	Offshore monitoring program station location. *Longitude -122.66556°, Latitude 37.75000°*

[E-5] Offshore Receiving Water	Station 51 (formerly R20)	Offshore monitoring program station location. *Longitude -122.59875°, Latitude 37.74622°*
Offshore Receiving Water	Station 52 (formerly R21)	Offshore monitoring program station location. *Longitude -122.51989°, Latitude 37.72863°*
Offshore Receiving Water	Station 53 (formerly R22)	Offshore monitoring program station location. *Longitude -122.64514°, Latitude 37.71787°*
Offshore Receiving Water	Station 54 (formerly R23)	Offshore monitoring program station location. *Longitude -122.54650°, Latitude 37.71651°*
Offshore Receiving Water	Station 55 (formerly R24)	Offshore monitoring program station location. *Longitude -122.57086°, Latitude 37.71569°*
Offshore Receiving Water	Station 56 (formerly R25)	Offshore monitoring program station location. *Longitude -122.60786°, Latitude 37.71146°*
Offshore Receiving Water	Station 57 (formerly R26)	Offshore monitoring program station location. *Longitude -122.51912°, Latitude 37.70940°*
Offshore Receiving Water	Station 58 (formerly R27)	Offshore monitoring program station location. *Longitude -122.58201°, Latitude 37.70430°*

Offshore Receiving Water	Station 59 (formerly R28)	Offshore monitoring program station location. *Longitude -122.53662°, Latitude 37.69324°*
Offshore Receiving Water	Station 60 (formerly R29)	Offshore monitoring program station location. *Longitude -122.60180°, Latitude 37.68914°*
Offshore Receiving Water	Station 61 (formerly R30)	Offshore monitoring program station location. *Longitude -122.55807°, Latitude 37.68204°*
Offshore Receiving Water	Station 62 (formerly R31)	Offshore monitoring program station location. *Longitude -122.62865°, Latitude 37.68227°*
Offshore Receiving Water	Station 63 (formerly R32)	Offshore monitoring program station location. *Longitude -122.56150°, Latitude 37.65879°*
Offshore Receiving Water	Station 64 (formerly R33)	Offshore monitoring program station location. *Longitude -122.53465°, Latitude 37.65406°*
Offshore Receiving Water	Station 65 (formerly R34)	Offshore monitoring program station location. *Longitude -122.54111°, Latitude 37.63414°*
Offshore Receiving Water	Station 66 (formerly R35)	Offshore monitoring program station location. *Longitude -122.61113°, Latitude 37.62840°*

Offshore Receiving Water	Station 67 (formerly R36)	Offshore monitoring program station location. *Longitude -122.56486°, Latitude 37.62633°*
Offshore Receiving Water	Station 68 (formerly R37)	Offshore monitoring program station location. *Longitude -122.61549°, Latitude 37.61694°*
Offshore Receiving Water	Station 69 (formerly R38)	Offshore monitoring program station location. *Longitude -122.59134°, Latitude 37.61449°*
Offshore Receiving Water	Station 70 (formerly R39)	Offshore monitoring program station location. *Longitude -122.53371°, Latitude 37.60893°*
Offshore Receiving Water	Station 71 (formerly R40)	Offshore monitoring program station location. *Longitude -122.55084°, Latitude 37.60465°*
Offshore Receiving Water	Station 72 (formerly R41)	Offshore monitoring program station location. *Longitude -122.65550°, Latitude 37.80367°*
Offshore Receiving Water	Station 80 (formerly R49)	Offshore monitoring program station location. *Longitude -122.51500°, Latitude 37.71500°*
[E-6] Biosolids	BIO-001	Biosolids (treated sludge)

Footnote:

[1] Latitude and longitude information is approximate.

III. INFLUENT MONITORING REQUIREMENTS

The Discharger shall monitor Oceanside Water Pollution Control Plant influent at Monitoring Location INF-001A during dry weather and Monitoring Location INF-001B during wet weather as follows:

Table E-2. Plant Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency[2]
Flow[1]	MG/ MGD	Continuous	Continuous/ D
Carbonaceous Biochemical Oxygen Demand (5-day @ 20°C) ($CBOD_5$)[3]	mg/L	C-24	1/Week
Total Suspended Solids (TSS)	mg/L	C-24	5/Week

Abbreviations:

MG = million gallons
MGD = million gallons per day
mg/L = milligrams per liter

Sample Types and Frequencies:

Continuous = measured continuously
Continuous/D = measured continuously, and recorded and reported daily
C-24 = 24-hour composite

1/Week = once per week
5/Week = five times per week

Footnotes:

[1] The following information shall be reported in monthly self-monitoring reports:

- Daily average flow (MGD)
- Total monthly flow volume (MG)

[2] The minimum sampling frequency is the total number of influent samples to be collected during the specified sampling period, including samples collected during dry and wet weather at Monitoring Locations INF-001A and INF-001B.

[3] The Discharger may monitor Chemical Oxygen Demand at Monitoring Location INF-001B in lieu of $CBOD_5$ during wet weather.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Oceanside Water Pollution Control Plant

1. Dry and Wet Weather. The Discharger shall monitor plant effluent at Monitoring Location EFF-001A during dry weather and at Monitoring Location EFF-001B during wet weather as follows:

[E-7] **Table E-3. Plant Effluent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency[3]
Flow[1]	MG/ MGD	Continuous	Continuous/D
$CBOD_5$[2]	mg/L	C-24	1/Week
TSS	mg/L	C-24	5/Week

pH	standard units	Continuous or Grab	1/Week

Abbreviations:

MG = million gallons
MGD = million gallons per day
mg/L = milligrams per liter

Sample Types and Frequencies:

Continuous = measured continuously
Continuous/D = measured continuously, and recorded and reported daily
C-24 = 24-hour composite
Grab = grab sample
1/Week = once per week
5/Week = five times per week

Footnotes:

[1] The following information shall be reported in monthly self-monitoring reports:

- Daily average flow (MGD)
- Total monthly flow volume (MG)

[2] The Discharger may monitor Chemical Oxygen Demand at Monitoring Location INF-001B in lieu of $CBOD_5$ during wet weather.

[3] The minimum sampling frequency is the total number of influent samples to be collected during the specified sampling period, including samples collected during dry and wet weather at Monitoring Locations INF-001A and INF-001B.

2. Dry Weather. During dry weather, the Discharger shall monitor plant effluent at Monitoring Location EFF-001A as follows:

Table E-4.
Dry Weather Plant Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Oil and Grease	mg/L	Grab	1/Quarter
Ammonia, total	mg/L as N	C-24	1/Quarter
Arsenic	µg/L	C-24	1/Quarter
Cadmium	µg/L	C-24	1/Quarter
Copper	µg/L	C-24	1/Quarter
Lead	µg/L	C-24	1/Quarter
Nickel	µg/L	C-24	1/Quarter
Selenium	µg/L	C-24	1/Quarter
Silver	µg/L	C-24	1/Quarter
Zinc	µg/L	C-24	1/Quarter
Remaining Ocean Plan Table 1 Pollutants[1]	µg/L	C-24[2]	1/Year

Abbreviations:

mg/L = milligrams per liter
mg/L as N = milligrams per liter as nitrogen
µg/L = micrograms per liter

[E-8] Sample Types and Frequencies:

C-24 = 24-hour composite
Grab = grab sample
1/Quarter = once per quarter
1/Year = once per year

Footnotes:

[1] The Discharger shall monitor for the pollutants listed in Ocean Plan Table 1, except chlorine, tributyltin, radioactivity, acute toxicity, and chronic toxicity, The Discharger may monitor for total chromium in lieu of hexavalent chromium.

[2] For mercury and other parameters with analytical methods that require grab sampling. the Discharger may collect a grab sample instead of a 24-hour composite sample.

3. Wet Weather. During wet weather, the Discharger shall monitor plant effluent at Monitoring Location EFF-001B as follows:

Table E-5. Wet Weather Plant Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Duration of Blending[1]	minutes	Calculated	Continuous/D
Volume of Blended Wastewater Discharged[1]	MG	Calculated	Continuous/D
Ocean Plan Table 1 Pollutants[2]	µg/L	C-24131	1/Year

Abbreviations:

MG = million gallons
µg/L = micrograms per liter

Sample Types and Frequencies:

Continuous/D = measured continuously, and recorded and reported daily

C-24 = 24-hour composite
1/Year = once per year

Footnotes:

[1] Blended wastewater is biologically-treated wastewater blended with wastewater diverted around biological treatment units at the Oceanside Water Pollution Control Plant. For each day on which blending occurs, the Discharger shall report the duration of blending and the volume of primary-only-treated wastewater blended.

[2] The Discharger shall monitor for the pollutants listed in Ocean Plan Table 1, except chlorine, tributyltin, radioactivity, acute toxicity, and chronic toxicity. The Discharger may monitor for total chromium in lieu of hexavalent chromium.

[3] For mercury and other parameters with analytical methods that require grab sampling, the Discharger may collect a grab sample instead of a 24-hour composite sample.

B. Combined Sewer System

1. Westside Transport/Storage Structure Effluent. During wet weather, the Discharger shall monitor Westside Transport/Storage Structure effluent at Monitoring Location EFF-001D as shown in Table E-6.

Table E-6. Westside Transport/ Storage Structure Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow Volume[1]	MG	Continuous	Continuous/ D
TSS	mg/L	C-X[3]	3/Year

Ammonia, total	mg/L as N	C-X[3]	3/Year
Arsenic	µg/L	C-X[3]	3/Year
[E-9] Cadmium	µg/L	C-X[3]	3/Year
Copper	µg/L	C-X[3]	3/Year
Lead	µg/L	C-X[3]	3/Year
Nickel	µg/L	C-X[3]	3/Year
Selenium	µg/L	C-X[3]	3/Year
Silver	µg/L	C-X[3]	3/Year
Zinc	µg/L	C-X[3]	3/Year
Remaining Ocean Plan Table 1 Pollutants[2]	µg/L	C-X[3, 4]	1/Year

Abbreviations:

MG = million gallons
mg/L = milligrams per liter
mg/L as N = milligrams per liter as nitrogen
µg/L = micrograms per liter

Sample Types and Frequencies:

Continuous = measured continuously
Continuous/D = measured continuously, and recorded and reported daily
C-X = composite sample comprised of individual grab samples collected at equal intervals of no more than one hour at least until a sufficient sample volume for the required analyses is obtained.
1/Year = once per year
3/Year = three times per year

Footnotes:

[1] The following information shall be reported in monthly self-monitoring reports:

- Total daily flow volume from the Westside Transport/ Storage Structure to Discharge Point No. 001
- Total monthly flow volume from the Westside Transport/ Storage Structure to Discharge Point No. 001

[2] The Discharger shall monitor for the pollutants listed in Ocean Plan Table 1, except chlorine, tributyltin, radioactivity, acute toxicity, chronic toxicity, and volatile organic compounds. The Discharger may monitor for total chromium in lieu of hexavalent chromium.

[3] If the discharge lasts less than 24 hours, the Discharger shall sample at equal intervals for as long as possible and record the duration. The Discharger shall begin collecting aliquots or grab samples within two hours of commencing discharge from the Westside Transport/Storage Structure directly to Discharge Point No. 001.

[4] For mercury and other parameters with analytical methods that require grab sampling. the Discharger may collect a grab sample instead of a 24-hour composite sample.

2. Combined Sewer Discharges

a. During combined sewer discharge events, the Discharger shall monitor combined sewer discharge effluent at Monitoring Location EFF-CSD as follows:

Table E-7.
Combined Sewer Discharge Momtoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
TSS	mg/L	C-X[2]	1/Event
Ammonia, total	mg/L as N	C-X[2]	1/Event
Arsenic	µg/L	C-X[2]	1/Event
Cadmium	µg/L	C-X[2]	1/Event
Copper	µg/L	C-X[2]	1/Event
Lead	µg/L	C-X[2]	1/Event
Nickel	µg/L	C-X[2]	1/Event
[E-10] Selenium	µg/L	C-X[2]	1/Event
Silver	µg/L	C-X[2]	1/Event
Zinc	µg/L	C-X[2]	1/Event
Remaining Ocean Plan Table 1 Pollutants[1]	µg/L	C-X[2, 3]	1/Year

Abbreviations:

mg/L = milligrams per liter
mg/L as N = milligrams per liter as nitrogen
µg/L = micrograms per liter

Sample Types and Frequencies:

C-X = composite sample comprised of individual grab samples collected at equal intervals of no more than one hour at least until a sufficient sample volume for the required analyses is obtained.
Grab = grab sample

1/Event = once per combined sewer discharge event
1/Year = once per year

Footnotes:

[1] The Discharger shall monitor for the pollutants listed in Ocean Plan Table 1, except chlorine, tributyltin, radioactivity, acute toxicity, chronic toxicity, and volatile organic compounds. The Discharger may monitor for total chromium in lieu of hexavalent chromium.

[2] If the discharge lasts less than 24 hours, the Discharger shall sample for as long as possible at equal intervals and record the duration. If the discharge lasts less than one hour, the Discharger shall collect at least one grab sample.

[3] For mercury and other parameters with analytical methods that require grab sampling, the Discharger may collect a grab sample instead of a composite sample.

b. The Discharger shall record and report in each self-monitoring report the following information for each discharge at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007:

i. Date and time the combined sewer discharge started;

ii. Event duration (in minutes) and volume (in million gallons);

iii. Rainfall intensity and amount (in inches per day and peak hourly rainfall intensity per day) at representative locations where rainfall was measured;

iv. Information supporting discharge volume estimates (if estimated); and

v. Documentation of compliance or noncompliance with each wet weather operational requirement in Provision VI.C.5.c of the Order.

C. Westside Recycled Water Project

When the Westside Recycled Water Project is operating, the Discharger shall monitor reverse osmosis concentrate at Monitoring Location EFF-001R as follows:

Table E-8. Westside Recycled Water Project Concentrate Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow[1]	MG/MGD	Continuous	Continuous/D
[E-11] TSS	mg/L	C-24	1/Month
pH	standard units	Continuous or Grab	1/Month
Settleable Solids	mL/L	Grab or C-24	1/Month
Turbidity	NTU	C-24	1/Month
Oil and Grease	mg/L	Grab	1/Quarter

Ocean Plan Table 1 Pollutants[2]	µg/L	C-24[3]	1/Year

Abbreviations:

MG	= million gallons
MGD	= million gallons per day
mg/L	= milligrams per liter
mL/L	= milliliters per liter
µg/L	= micrograms per liter
NTU	= nephelometric turbidity units

Sample Types and Frequencies:

Continuous	= measured continuously
Continuous/D	= measured continuously, and recorded and reported daily
C-24	= 24-hour composite
Grab	= grab sample
1/Month	= once per month
1/Quarter	= once per quarter
1/Year	= once per year

Footnotes:

[1] The following information shall be reported in monthly self-monitoring reports:

- Daily average flow (MGD)
- Total monthly flow volume (MG)

[2] The Discharger shall monitor for the pollutants listed in Ocean Plan Table 1, except chlorine, tributyltin, radioactivity, acute toxicity, and chronic toxicity. The Discharger may monitor for total chromium in lieu of hexavalent chromium.

[3] For mercury and other parameters with analytical methods that require grab sampling, the Discharger may collect a grab sample instead of a 24-hour composite sample.

D. Discharge Point No. 001

During dry weather, the Discharger shall monitor discharges at Discharge Point No. 001 at Monitoring Location EFF-001C as specified in Table E-9, below. If during the year the discharge at Discharge Point No. 001 is ever entirely reverse osmosis concentrate, the Discharger shall collect at least one sample during that time, if feasible. Otherwise, the Discharger shall collect samples when the Recycled Water Project is operating, if possible.

Table E-9. Dry Weather Discharge Point No. 001 Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chronic Toxicity[1]	Pass or Fail and Percent Effect	C-24	1/Quarter

Sample Type and Frequency:

C-24 = 24-hour composite
1/Quarter = once per quarter

Footnote:

[1] Chronic toxicity test samples shall be collected coincident with routine composite effluent samples and analyzed in accordance with MRP section V.

[E-12] **V. CHRONIC TOXICITY MONITORING REQUIREMENTS**

A. Methodology

1. The Discharger shall conduct static non-renewal chronic toxicity tests with the purple sea urchin *(Strongylocentrotus purpuratus)* or the sand dollar *(Dendraster excentricus)* with the embryo-larval development test method. Bioassays shall be conducted in compliance with the most recently promulgated test methods, currently *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA 600/R-95/136, 1995). If these protocols prove unworkable, the Regional Water Board and U.S. EPA may grant exceptions in writing upon the Discharger's request with justification.

2. The in-stream waste concentration (IWC) shall depend on the amount of recycled water being produced. When the Westside Recycled Water Project produces less than 1.0 MGD of recycled water for distribution, the IWC shall be 0.67 percent effluent. When the Westside Recycled Water Project produces at least 1.0 MGD of recycled water for distribution, the IWC shall be 0.37 percent effluent. Recycled water production for this purpose shall be determined based on the volume of recycled water produced during the

24-hour composite sampling period for the chronic toxicity test.

3. If an effluent toxicity test does not meet all test acceptability criteria in the test methods manual, the Discharger shall resample and retest within 14 days.

4. Dilution and control water, including brine controls, shall be 1-µm-filtered uncontaminated natural seawater, hypersaline brine prepared using uncontaminated natural seawater, or laboratory water prepared and used as specified in the test methods manual. If dilution water and control water are different from test organism culture water, the Discharger shall test a second control using culture water.

5. The Discharger shall conduct concurrent reference toxicant tests at least quarterly. The Discharger shall review and report all reference toxicant test results using the EC_{25} and EC_{50}.

B. Compliance Determination

Samples collected during routine and accelerated monitoring shall be used to evaluate compliance. Compliance with the chronic toxicity effluent limitation shall be evaluated using the TST statistical approach at the discharge IWC. The Discharger shall determine "Pass" or "Fail" and "percent effect" from a toxicity test at the discharge IWC using the TST statistical approach in *National*

Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1. The TST null hypothesis shall be the following:

mean discharge IWC response ≤ 0.75 x mean control response

The Discharger shall report a test that rejects this null hypothesis as "Pass" and a test that does not reject this null hypothesis as "Fail." The relative "percent effect" at the discharge IWC shall be calculated and reported as:

[E-13] ([mean control response – mean discharge response] / mean control response) x 100%

C. Accelerated Monitoring

If a chronic bioassay test indicates a violation of the chronic toxicity effluent limitation, the Discharger shall retest within five days of receiving test results, or within seven days if the sample is contracted out to a commercial laboratory. Accelerated monitoring shall consist of four toxicity tests conducted at approximately two-week intervals. The Discharger shall return to routine monitoring if all four monitoring test results are "Pass."

If any accelerated monitoring test violates the chronic toxicity effluent limitation, the Discharger shall immediately initiate toxicity reduction evaluation (TRE) procedures in accordance with MRP section V.E. Accelerated monitoring is not required once the

Discharger has initiated a TRE; however, the Discharger shall continue to conduct routine effluent monitoring for compliance determination purposes during the TRE.

D. Reporting Requirements

For each chronic toxicity test, whether identified as valid or not, the Discharger shall report the following, at a minimum, in monthly self-monitoring reports:

1. Sample date;

2. Test initiation date;

3. Test species;

4. TST statistical results (i.e., "Pass" or "Fail," and "percent effect" at the IWC);

5. Other biological and statistical endpoint values as appropriate (e.g., number of young, growth rate, NOEC, EC_{25});

6. Summary of water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, and ammonia);

7. Statistical program output results for each toxicity test, including tabular data and graphical plots;

8. Tabular data and graphical plots showing the laboratory's performance for (1) the reference toxicant for the previous 20 tests; and (2) the control mean, control standard deviation, and control

coefficient of variation for the previous 12 months; and

9. Status of any ongoing TRE work, including completed and planned investigative activities.

E. Toxicity Reduction Evaluation (TRE)

1. Generic TRE Work Plan. The Discharger shall prepare and submit an initial investigation TRE work plan within 90 days of the effective date of this Order. The Discharger shall prepare the work plan based on *Toxicity Reduction Evaluation Guidance for Municipal* [E-14] *Wastewater Treatment Plants* (EPA/833/B-99/002, 1999), or the most current version. The work plan shall describe the steps the Discharger intends to follow if toxicity is detected. At a minimum, the work plan shall include a description of the following:

a. Investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;

b. Methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility; and

c. Staff responsible for conducting TIEs (e.g., in-house expert, outside contractor).

2. Specific TRE Work Plan. If an accelerated monitoring test violates the chronic toxicity effluent limitation, the Discharger shall immediately initiate a TRE and submit a specific TRE work plan within 15 days. The specific work plan shall be the generic work plan revised as appropriate for this toxicity event. The Discharger shall implement the TRE in accordance with the work plan, incorporating any comments received from the Regional Water Board Executive Officer or U.S. EPA. The specific TRE work plan shall include the following:

a. Actions to investigate, identify, and correct the causes of toxicity;

b. Actions to mitigate the effects of the discharge and prevent the recurrence of toxicity; and

c. Schedule for these actions, progress reports, and the final report.

3. Toxicity Identification Evaluation (TIE). The Discharger may initiate a TIE as part of a TRE to identify the cause of toxicity. The Discharger shall employ all reasonable efforts using currently available TIE methodologies *(Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* [EPA

600/6-91 005F, 1992]; *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* [EPA 600/R-92/080, 1993]; *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* [EPA 600/R-92/081, 1993]; and *Marine Toxicity Identification Evaluation [TIE]: Phase I Guidance Document* [EPA 600/R-96-054, 1996]).

F. Species Screening

1. The Discharger shall conduct a chronic toxicity screening test as described below (or as described in applicable State Water Board plan provisions that become effective after adoption of this Order) following any significant change in the nature of the effluent, except a change that reduces pollutant concentrations or a change resulting from operation of the Westside Recycled Water Project. If there is no significant change in the nature of the effluent, the Discharger shall conduct a screening test prior to submitting an application for permit reissuance.

2. Prior to undertaking a screening test, the Discharger shall submit a screening test proposal. The proposal shall address the elements below. If within 30 days the Regional Water Board [E-15] Executive Officer and U.S. EPA do not comment on the

proposal, the Discharger shall commence the screening test.

3. The screening test shall use the protocols described in *Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA 600/R-95/136, 1995) and test species specified in the table below:

Table E-10. Critical Life Stage Toxicity Tests

Species	Scientific Name	Effect	Test Duration
Giant kelp	*Macrocystis pyrifera*	Percent germination; germ tube length	48 hours
Abalone	*Haliotis rufescens*	Abnormal shell development	48 hours
Oyster Mussel	*Crassostrea gigas* *Mytilus edulis*	Abnormal shell development; percent survival	48 hours
Echinoderms – Urchins Sand dollar	*Strongylocentrotus purpuratus, Strangylocentrotus franciscanus, or*	Percent fertilization or larval development	1 hour (fertilization) or 72 hours (development)

	Dendraster excentricus		
Shrimp	*Holmesimysis costata*	Percent survival; growth	7 days
Topsmelt	*Atherinops affinis*	Percent survival; growth	7 days

4. The Discharger shall conduct screening tests in two stages:

a. Stage 1 shall consist of a minimum of one battery of at least four tests conducted concurrently. Test species shall include at least one plant, one invertebrate, and one fish.

b. Stage 2 shall consist of a minimum of two test batteries initiated in different calendar months using the three most sensitive species determined based on the stage 1 test results.

5. The Discharger shall use appropriate controls and conduct concurrent reference toxicant tests.

6. The Discharger shall conduct screening tests at 75, 20, 0.67, 0.37, and 0.17 percent effluent.

VI. RECEIVING WATER MONITORING REQUIREMENTS

A. Shoreline Monitoring

1. The Discharger shall monitor shoreline receiving waters at Monitoring Locations SRF-15 east, SRF-15, SRF-17, SRF-18, SRF-19, and SRF-21.1 as follows:

[E-16] **Table E-11. Ambient Shoreline Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Enterococcus[1]	MPN/ 100 mL[2]	Grab	1/Week
Fecal coliform[3]	MPN/ 100 mL[2]	Grab	1/Week
Total coliform	MPN/ 100 mL[2]	Grab	1/Week

Abbreviation:

MPN/100 mL = most probable number per 100 milliliters

Sample Type and Frequency:

Grab = grab sample
1/Week = once per week

Footnotes:

[1] The Discharger shall monitor for enterococcus using U.S. EPA-approved methods, such as the IDEXX Enterolert method. When replicate analyses are made, the reported result shall be the geometric mean of the replicate results.

[2] Results may be reported as Colony Forming Units (CFU)/ 100 mL if the laboratory method used provides results in CFU/100 mL.

[3] The Discharger shall begin monitoring fecal coliform on October 1, 2020.

2. Following any combined sewer discharge at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-005, CSD-006, or CSD-007, the Discharger shall monitor shoreline receiving waters as indicated in the table below. Monitoring shall be conducted at each specified location for up to seven days or until the single-sample bacteriological standards of Cal. Code of Regs. tit. 17, section 7958(a)(1), are met (i.e., the enterococcus density is less than 104 most probable number (MPN)/100 mL, the fecal coliform density is less than 400 MPN/100 mL, and the total coliform density is less than 10,000 MPN/100 mL).

Table E-12. Post-CSD Event Shoreline Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Enterococcus[1]	MPN/ 100 mL[2]	Grab	1/Day[3]
Fecal coliform[4]	MPN/ 100 mL[2]	Grab	1/Day[3]
Total coliform	MPN/ 100 mL[2]	Grab	1/Day[3]
Standard observations[5]	– – –	– – –	1/Day[3]

Abbreviation:

MPN/100 mL = most probable number per 100 milliliters

Sample Type and Frequency:

Grab	= grab sample
1/Day	= once per day

Footnotes:

[1] The Discharger shall monitor for enterococcus using U.S. EPA-approved methods, such as the IDEXX Enterolert method. When replicate analyses are made, the reported result shall be the geometric mean of the replicate results.

[2] Results may be reported as Colony Forming Units (CFU)/100 mL if the laboratory method used provides results in CFU/100 mL.

[3] Sampling is only required at the monitoring locations indicated below when there is a combined sewer discharge at the discharge points indicated below:

Discharge Point	Monitoring Locations
CSD-001	SRF-22
CSD-002	SRF-20, SRF-21, and SRF-21.1
CSD-003	SRF-18. SR.F-19, and SRF-20
CSD-005	SRF-17
[E-17] CSD-006	SRF-15 east, SRF-15, and SRF-16
CSD-007	SRF-15 east, SRF-15. and SRF-16

[4] The Discharger shall begin monitoring fecal coliform on October 1, 2020.

[5] Standard observations are defined in Attachment G section III.B.3 and shall include any apparent fish kills. The estimated size of the affected area is not required.

B. Offshore Monitoring

The Discharger shall continue the Southwest Ocean Outfall Regional Monitoring Program, monitoring the area outside San Francisco Bay between Rocky Point in Marin County and Point San Pedro in San Mateo County, to identify any environmental effects of the

discharge on receiving waters, sediment, or aquatic life.

1. **Sampling Frequency.** The Discharger shall sample annually in the fall when sediments are least disturbed and benthic infauna are most abundant.

2. **Sediment Chemistry Sampling.** The Discharger shall collect benthic samples from the seven historical monitoring locations (Stations 1, 2, 4, 6, 25, 28, and 31) to maintain time series data, and a minimum of 23 out of the 37 other monitoring locations (Stations 32 through 80). Samples shall be collected using a 0.1-square meter Smith-McIntyre grab sampler. The Discharger shall collect two grab samples at each station and composite the top 5 centimeters of sediment from each grab prior to analysis. The Discharger shall analyze the sediment samples for the following:

    - Total volatile solids
    - Total organic carbon
    - Kjeldahl nitrogen
    - Grain size
    - Inorganic toxic pollutants: aluminum, arsenic, cadmium, chromium, chromium (VI), copper, iron, lead, manganese, mercury, nickel, selenium, silver, and zinc. The Discharger may

elect to report total chromium in lieu of chromium (VI).

- DDT, PCBs, and PAHs

3. **Infaunal Sampling.** The Discharger shall analyze one benthic grab sample collected from each of the locations identified in the paragraph above for infaunal organisms. This sample shall be passed through 1.0- and 0.5-millimeter sieves. The Discharger shall relax organisms retained on each sieve and preserve them for later enumeration and taxonomic determination to the lowest taxon.

4. **Bioaccumulation Monitoring.** The Discharger shall conduct bioaccumulation monitoring to assess whether the concentrations of priority pollutants in marine life bioaccumulate to levels harmful to human health or the marine community. Tissue samples to assess bioaccumulation shall be collected at two locations: one at Station 1, 2, 25, or 28, and one at a reference location outside the influence of the discharge. At each location, three composite samples shall be collected of one macroinvertebrate species. Each composite sample shall consist of ten or more organisms of each species, with the preferred species being Dungeness crab *(Metacarcinus inagisler).* Muscle and hepatopancreas tissues shall be analyzed for inorganic [E-18] pollutants (i.e., arsenic, cadmium, chromium, copper,

lead, mercury, selenium, silver, and zinc), DDT, PCBs, and PAHs.

5. **Reporting.** All offshore monitoring data shall be reported to the Regional Water Board and U.S. EPA in an Annual Report submitted by August 30 of the year following sampling. The report shall include raw data tables and summaries for each monitoring component. In addition to the annual reporting requirements, a comprehensive cumulative summary report shall be submitted with the application for permit reissuance.

VII. PRETREATMENT AND BIOSOLIDS MONITORING REQUIREMENTS

The Discharger shall comply with the following pretreatment monitoring requirements for influent at Monitoring Location INF-001A, effluent at Monitoring Location EFF-001A, and biosolids at Monitoring Location BIO-001. The Discharger shall report summaries of analytical results in pretreatment reports in accordance with Attachment H. If instructed to do so, the Discharger shall report biosolids analytical results with its electronic self-monitoring reports by manual entry, by EDF/CDF, or as an attached file.

Table E-13.
Pretreatment and Biosolids Monitorin

Constituents	Influent INF-001A	Effluent EFF-001A[1]	Biosolids BIO-001	Sample Type	
				Influent and Effluent	Biosolids[7a]
VOC[2]	2/ Year	2/ Year	2/ Year	Grab	Grab
BNA[3]	2/ Year	2/ Year	2/ Year	Grab	Grab
Metals and Other Elements[4]	1/ Month	1/ Month	2/ Year	C-24[7b]	Grab
Hexavalent Chromium[5]	1/ Month	1/ Month	2/ Year	Grab	Grab
Mercury	1/ Month	1/ Month[6]	2/ Year	Grab	Grab
Cyanide	1/ Month	1/ Month	–	Grab	–
Molybdenum	–	–	2/ Year	–	Grab
Organic Nitrogen	–	–	2/ Year	–	Grab
Ammonia Nitrogen	–	–	2/ Year	–	Grab
Total Solids	–	–	2/ Year	–	Grab

Sample Types and Frequencies:

C-24	= 24-hour composite
Grab	= grab sample
1/Month	= once per month
2/Year	= twice per year

Footnotes:

[1] Effluent monitoring conducted in accordance with Table E-4 may be used to satisfy these pretreatment monitoring requirements.

[2] VOC: volatile organic compounds.

[3] BNA: base/neutrals and acid extractable organic compounds.

[4] The metals and other elements are arsenic, cadmium, copper, lead, nickel, selenium, silver, and zinc.

[5] The Discharger may elect to monitor total chromium instead of hexavalent chromium and may elect to collect 24-hour composite samples instead of grab samples for total chromium.

[6] The Discharger shall use ultra-clean sampling (U.S. EPA Method 1669) and ultra-clean analytical methods (U.S. EPA Method 1631) for mercury monitoring, except when concentrations are expected to exceed 10 µg/L, in which case use of ultra-clean sampling and analysis methods is optional.

[E-19] [7] Sample types:

a. The biosolids sample shall be a composite of the biosolids to be disposed. Biosolids sample collection and monitoring shall comply with the requirements in Attachment H, Appendix 1-1-4. The Discharger shall also comply with the biosolids monitoring requirements in 40 C.F.R. part 503.

b. lien automatic compositor is used, the Discharger shall obtain 24-hour composite samples through flow-proportioned composite sampling. Alternatively, 24-hour composite samples may consist of discrete grab samples combined (volumetrically flow-weighted) prior to analysis or analyzed separately with the results mathematically flow-weighted.

VIII. RECYCLED WATER MONITORING REQUIREMENTS

A. Influent Monitoring

The Discharger shall monitor the monthly volume of influent to the Oceanside Water Pollution Control Plant.

B. Production Monitoring

The Discharger shall monitor the monthly volumes of effluent from the Oceanside Water Pollution Control Plant and Westside Recycled Water Project for each level of treatment.

C. Discharge Monitoring

The Discharger shall monitor the monthly volumes of effluent from the Oceanside Water Pollution Control Plant and Westside Recycled Water Project discharged to each of the following, for each level of treatment:

1. Inland surface waters, specifying volume required to maintain minimum instream flow;

2. Enclosed bays, estuaries and coastal lagoons, and ocean waters;

3. Natural systems, such as wetlands, wildlife habitats, and duck clubs, where augmentation or restoration has occurred, 'and that are not part of a wastewater treatment plant or water recycling treatment plant;

4. Underground injection wells, such as those classified by U.S. EPA's Underground Injection Control Program, excluding groundwater recharge via subsurface application intended to reduce seawater intrusion into a coastal aquifer with a seawater interface; and

5. Land, where beneficial use is not taking place, including evaporation or percolation ponds, overland flow, or spray irrigation disposal, excluding pasture or fields with harvested crops.

D. Reuse Monitoring

The Discharger shall monitor the following:

1. Monthly volume of recycled water distributed; and

[E-20] **2.** Annual volumes of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, title 22, in each of the use categories listed below:

a. Agricultural irrigation: pasture or crop irrigation;

b. Landscape irrigation: irrigation of parks, greenbelts, and playgrounds; school yards; athletic fields; cemeteries; residential landscaping, common areas; commercial landscaping; industrial landscaping; and freeway, highway, and street landscaping;

c. Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses;

d. Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered;

e. Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered;

f. Geothermal energy production: augmentation of geothermal fields;

g. Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments;

h. Groundwater recharge: the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system. Includes surface or subsurface application, except for seawater intrusion barrier use;

i. Seawater intrusion barrier: groundwater recharge via subsurface application intended to reduce seawater

intrusion into a coastal aquifer with a seawater interface;

j. Reservoir water augmentation: the planned placement of recycled water into a raw surface water reservoir used as a source of domestic drinking water supply for a public water system, as defined in Health and Safety Code section 116275, or into a constructed system conveying water to such a reservoir (Wat. Code § 13561);

k. Raw water augmentation: the planned placement of recycled water into a system of pipelines or aqueducts that delivers raw water to a drinking water treatment plant that provides water to a public water system as defined in Health and Safety Code section 116275 (Wat. Code § 13561); and

[E-21] **l.** Other potable uses: both indirect and direct potable reuse other than for groundwater recharge, seawater intrusion barrier, reservoir water augmentation, or raw water augmentation.

IX. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachments D, G, and H)

related to monitoring, reporting, and record-keeping.

B. Self-Monitoring Reports (SMRs)

1. **SMR Format.** The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/water_issues/programs/ciwqs). The CIWQS website will provide additional information for SMR submittal in the event of a service interruption for electronic submittal.

2. **SMR Due Dates and Contents.** The Discharger shall submit SMRs by the due dates, and with the contents, specified below:

   a. **Monthly SMRs.** Monthly SMRs shall be due 30 days after the end of each calendar month, covering that calendar month. The monthly SMR shall contain the applicable items described in sections V.B and V.C of both Attachments D and G of this Order.

      Monthly SMRs shall include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the Discharger shall include the

results of such monitoring in the calculations and reporting for the SMR.

b. Annual SMR. Annual SMRs shall be due February 1 each year, covering the previous calendar year. The annual SMR shall contain the items described in Attachment G section V.C.1.f. See also Provision VI.C.2 (Effluent Characterization Study and Report) of the Order for requirements to submit reports with the annual SMR.

c. Specifications for Submitting SMRs to CIWQS. The Discharger shall submit analytical results and other information using one of the following methods:

Table E-14. CIWQS Reporting

Parameter	Method of Reporting	
	EDF/CDF data upload or manual entry	**Attached File**
All parameters identified in influent, effluent, and receiving water monitoring tables (except Dissolved Oxygen and Temperature)	Required for all results	
Dissolved Oxygen Temperature	Required for monthly	Discharger may use

	maximum and minimum results only[1]	this method for all results or keep records
[E-22] Antimony Arsenic Beryllium Cadmium Chromium Copper Cyanide Lead Mercury Nickel Selenium Silver Thallium Zinc Dioxins &Furans (by U.S. EPA Method 1613) Other Pollutants (by U.S. EPA Methods 601, 602,608, 610, 614, 624, and 625)	Required for all results[2]	
Volume and Duration of Blended Discharge[3]	Required for all blended effluent discharges	
Analytical Method	Not required (Discharger may select "data unavailable")[1]	
Collection Time Analysis Time	Not required (Discharger may select "0:00")[1]	

Footnotes:

[1] The Discharger shall continue to monitor at the minimum frequency specified in this MRP, keep records of the measurements, and make the records available upon request.

[2] These parameters require EDF/CDF data upload or manual entry regardless of whether monitoring is required by this MRP or other provisions of this Order (except for biosolids, sludge, or ash provisions).

[3] The requirement for volume and duration of blended discharge applies only if this Order authorizes the Discharger to discharge blended effluent.

The Discharger shall arrange all reported data in a tabular format and summarize the data to clearly illustrate whether the Facility is operating in compliance with effluent limitations. The Discharger is not required to duplicate the submittal of data 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, the Discharger shall electronically submit the data in a tabular format as an attachment.

3. **Monitoring Periods.** Monitoring periods for all required monitoring shall be as set forth below unless otherwise specified:

Table E-15. Monitoring Periods

Sampling Frequency	Monitoring Period Begins On . . .	Monitoring Period
Continuous	Order effective date	All times
1/Day	Order effective date	Every 24-hour period, beginning at midnight and continuing through 11:59 p.m. (or any 24-hour period that reasonably represents a calendar day for purposes of sampling)
1/Week 5/Week	First Sunday following or on Order effective date	Sunday through Saturday
[E-23] 1/Month	First day of calendar month following or on Order effective date	First day of calendar month through last day of calendar month
1/Quarter	Closest of January 1, April 1, July 1, or October 1 following or on Order effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31

1/Year 3/Year	Closest January 1 following or on Order effective date	January 1 through December 31
2/Year	Closest January 1 or July 1 following or on Order effective date	January 1 through June 30 July 1 through December 31
1/Event	As soon as possible after combined sewer discharge event begins	Duration of the combined sewer discharge event

4. **RL and MDL Reporting.** The Discharger shall report with each sample result the Reporting Level (RL) and Method Detection Limit (MDL) as determined by the procedure in 40 C.F.R. 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 RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the RL, 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 purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. 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 the laboratory considers appropriate.

c. Sample results less than the laboratory's MDL shall be reported as "Not Detected", or ND.

d. The Discharger shall instruct laboratories to establish calibration standards so that the minimum level (ML) value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. Compliance Determination. Compliance with effluent limitations shall be determined using sample reporting protocols defined above and in the Fact Sheet and Attachments A, D, and G. For purposes of reporting and administrative enforcement by the Regional Water Board,

State Water Board, or U.S. EPA, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

[E-24] **C. Discharge Monitoring Reports (DMRs)**

DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using the Electronic Self-Monitoring Reports module eSMR 2.5 or the latest upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at http://www.waterboards.cav/water_issues/programs/discharge_monitoring.

D. Annual Recycled Water Reports

The Discharger shall electronically submit annual reports to the State Water Board by April 30 each year covering the previous calendar year using the State Water Board's GeoTracker website (http://geotracker.waterboards.ca.gov) under a site-specific global identification number. For the 2019 calendar year, the Discharger shall submit a report by April 30, 2020, covering January through December 2019. The annual report shall include the elements specified in Attachment E section VIII.