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).)

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).)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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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:

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

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, exclusive of any return flows or process side streams.
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, 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 effluent, Westside Recycled Water Project concentrate, and the receiving water at Discharge Point No. 001.

Monitoring Location Type	Monitoring Location Name	Monitoring Location Description [1]
Commingled Oceanside Water Pollution Control Plant Effluent, Westside Transport Effluent, and Westside Recycled Water Project Concentrate	EFF-001C	Any point after plant effluent, Westside Transport effluent, and Westside Recycled Water Project concentrate commingle, prior to contact with the receiving water at Discharge Point No. 001.
Westside Transport Effluent	EFF-001D	Any point following the Westside Pump Station wet weather pumps, prior to contact with 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 effluent, and the receiving water at Discharge Point No. 001.
Combined Sewer Discharge Effluent	CSD-001	Any point where all waste tributary to Discharge Point No. CSD-001 is present.
Combined Sewer Discharge Effluent	CSD-002	Any point where all waste tributary to Discharge Point No. CSD-002 is present.
Combined Sewer Discharge Effluent	CSD-003	Any point where all waste tributary to Discharge Point No. CSD-003 is present.
Combined Sewer Discharge Effluent	CSD-004	Any point where all waste tributary to Discharge Point No. CSD-004 is present.
Combined Sewer Discharge Effluent	CSD-005	Any point where all waste tributary to Discharge Point No. CSD-005 is present.
Combined Sewer Discharge Effluent	CSD-006	Any point where all waste tributary to Discharge Point No. CSD-006 is present.
Combined Sewer Discharge Effluent	CSD-007	Any point where all waste tributary to Discharge Point No. CSD-007 is present.
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. 1 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.

Monitoring Location Type	Monitoring Location Name	Monitoring Location Description [1]
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 -122.575333°, Latitude 37.703333°*
Offshore Receiving Water	Station 2	Offshore monitoring program station location. *Longitude -122.575000°, Latitude 37.710500°*
Offshore Receiving Water	Station 4	Offshore monitoring program station location. *Longitude -122.590005°, Latitude 37.711667°*
Offshore Receiving Water	Station 6	Offshore monitoring program station location. *Longitude -122.537500°, Latitude 37.666667°*
Offshore Receiving Water	Station 25	Offshore monitoring program station location. *Longitude -122.575000°, Latitude 37.703833°*
Offshore Receiving Water	Station 28	Offshore monitoring program station location. *Longitude -122.574667°, Latitude 37.698333°*
Offshore Receiving Water	Station 31	Offshore monitoring program station location. *Longitude -122.567167°, Latitude 37.724667°*
Offshore Receiving Water	Station 32 (formerly R1)	Offshore monitoring program station location. *Longitude -122.641278°, Latitude 37.867992°*
Offshore Receiving Water	Station 33 (formerly R2)	Offshore monitoring program station location. *Longitude -122.600242°, Latitude 37.851706°*
Offshore Receiving Water	Station 34 (formerly R3)	Offshore monitoring program station location. *Longitude -122.647436°, Latitude 37.851292°*
Offshore Receiving Water	Station 35 (formerly R4)	Offshore monitoring program station location. *Longitude -122.679197°, Latitude 37.848322°*
Offshore Receiving Water	Station 36 (formerly R5)	Offshore monitoring program station location. *Longitude -122.620075°, Latitude 37.837733°*
Offshore Receiving Water	Station 37 (formerly R6)	Offshore monitoring program station location. *Longitude -122.594847°, Latitude 37.836558°*
Offshore Receiving Water	Station 38 (formerly R7)	Offshore monitoring program station location. *Longitude -122.655014°, Latitude 37.828017°*
Offshore Receiving Water	Station 39 (formerly R8)	Offshore monitoring program station location. *Longitude -122.690417°, Latitude 37.822000°*
Offshore Receiving Water	Station 40 (formerly R9)	Offshore monitoring program station location. *Longitude -122.624933°, Latitude 37.808800°*
Offshore Receiving Water	Station 41 (formerly R10)	Offshore monitoring program station location. *Longitude -122.499333°, Latitude 37.796833°*
Offshore Receiving Water	Station 42 (formerly R11)	Offshore monitoring program station location. *Longitude -122.546000°, Latitude 37.754000°*
Offshore Receiving Water	Station 43 (formerly R12)	Offshore monitoring program station location. *Longitude -122.616078°, Latitude 37.785522°*
Offshore Receiving Water	Station 44 (formerly R13)	Offshore monitoring program station location. *Longitude -122.572833°, Latitude 37.777667°*
Offshore Receiving Water	Station 45 (formerly R14)	Offshore monitoring program station location. *Longitude -122.643994°, Latitude 37.774825°*

Monitoring Location Type	Monitoring Location Name	Monitoring Location Description [1]
Offshore Receiving Water	Station 46 (formerly R15)	Offshore monitoring program station location. *Longitude -122.535667°, Latitude 37.773333°*
Offshore Receiving Water	Station 47 (formerly R16)	Offshore monitoring program station location. *Longitude -122.617922°, Latitude 37.761064°*
Offshore Receiving Water	Station 48 (formerly R17)	Offshore monitoring program station location. *Longitude -122.648883°, Latitude 37.759408°*
Offshore Receiving Water	Station 49 (formerly R18)	Offshore monitoring program station location. *Longitude -122.562333°, Latitude 37.756833°*
Offshore Receiving Water	Station 50 (formerly R19)	Offshore monitoring program station location. *Longitude -122.665558°, Latitude 37.750003°*
Offshore Receiving Water	Station 51 (formerly R20)	Offshore monitoring program station location. *Longitude -122.598753°, Latitude 37.746217°*
Offshore Receiving Water	Station 52 (formerly R21)	Offshore monitoring program station location. *Longitude -122.519892°, Latitude 37.728631°*
Offshore Receiving Water	Station 53 (formerly R22)	Offshore monitoring program station location. *Longitude -122.645142°, Latitude 37.717872°*
Offshore Receiving Water	Station 54 (formerly R23)	Offshore monitoring program station location. *Longitude -122.546503°, Latitude 37.716511°*
Offshore Receiving Water	Station 55 (formerly R24)	Offshore monitoring program station location. *Longitude -122.570856°, Latitude 37.715694°*
Offshore Receiving Water	Station 56 (formerly R25)	Offshore monitoring program station location. *Longitude -122.607858°, Latitude 37.711456°*
Offshore Receiving Water	Station 57 (formerly R26)	Offshore monitoring program station location. *Longitude -122.519117°, Latitude 37.709400°*
Offshore Receiving Water	Station 58 (formerly R27)	Offshore monitoring program station location. *Longitude -122.582011°, Latitude 37.704303°*
Offshore Receiving Water	Station 59 (formerly R28)	Offshore monitoring program station location. *Longitude -122.536617°, Latitude 37.693239°*
Offshore Receiving Water	Station 60 (formerly R29)	Offshore monitoring program station location. *Longitude -122.601797°, Latitude 37.689136°*
Offshore Receiving Water	Station 61 (formerly R30)	Offshore monitoring program station location. *Longitude -122.558069°, Latitude 37.682042°*
Offshore Receiving Water	Station 62 (formerly R31)	Offshore monitoring program station location. *Longitude -122.628653°, Latitude 37.682272°*
Offshore Receiving Water	Station 63 (formerly R32)	Offshore monitoring program station location. *Longitude -122.561503°, Latitude 37.658792°*
Offshore Receiving Water	Station 64 (formerly R33)	Offshore monitoring program station location. *Longitude -122.534653°, Latitude 37.654064°*
Offshore Receiving Water	Station 65 (formerly R34)	Offshore monitoring program station location. *Longitude -122.541108°, Latitude 37.634142°*
Offshore Receiving Water	Station 66 (formerly R35)	Offshore monitoring program station location. *Longitude -122.611133°, Latitude 37.628397°*
Offshore Receiving Water	Station 67 (formerly R36)	Offshore monitoring program station location. *Longitude -122.564864°, Latitude 37.626331°*
Offshore Receiving Water	Station 68 (formerly R37)	Offshore monitoring program station location. *Longitude -122.615486°, Latitude 37.616936°*

Monitoring Location Type	Monitoring Location Name	Monitoring Location Description [1]
Offshore Receiving Water	Station 69 (formerly R38)	Offshore monitoring program station location. *Longitude -122.591336°, Latitude 37.614486°*
Offshore Receiving Water	Station 70 (formerly R39)	Offshore monitoring program station location. *Longitude -122.533708°, Latitude 37.608933°*
Offshore Receiving Water	Station 71 (formerly R40)	Offshore monitoring program station location. *Longitude -122.550842°, Latitude 37.604647°*
Offshore Receiving Water	Station 72 (formerly R41)	Offshore monitoring program station location. *Longitude -122.655500°, Latitude 37.803667°*
Offshore Receiving Water	Station 80 (formerly R49)	Offshore monitoring program station location. *Longitude -122.515000°, Latitude 37.715000°*
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
Flow [1]	MG/MGD	Continuous	Continuous/D
Carbonaceous Biochemical Oxygen Demand (5-day @ 20°C)($CBOD_5$)	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

Footnote:

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

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

IV. EFFLUENT MONITORING REQUIREMENTS

A. Oceanside Water Pollution Control Plant

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

Table E-3. Dry Weather Plant Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow [1]	MG/MGD	Continuous	Continuous/D
$CBOD_5$	mg/L	C-24	1/Week
TSS	mg/L	C-24	5/Week
pH	standard units	Continuous or Grab	5/Week
Oil and Grease	mg/L	Grab	1/Quarter

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
1/Quarter = once per quarter

Footnote:

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

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

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

Table E-4. Wet Weather Plant Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow [1]	MG/MGD	Continuous	Continuous/D
$CBOD_5$	mg/L	C-24	1/Month
TSS	mg/L	C-24	1/Month
pH	standard units	Grab	1/Month
Duration of Blending Event	minutes	Calculated	1/Blending Event
Volume of Partially-treated Wastewater	MG [2]	Calculated	1/Blending Event

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/Month = once per month

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 report the amount of primary-treated wastewater blended in million gallons (MG) for each blending event.

B. Combined Sewer System

1. **Westside Transport Effluent.** During wet weather, the Discharger shall monitor Westside Transport effluent at Monitoring Location EFF-001D as follows:

Table E-5. Westside Transport Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow Volume [1]	MG	Continuous	Continuous/D
TSS	mg/L	C-24 [2]	1/Month

Abbreviations:

MG = million gallons
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/Month = once per month

Footnotes:

[1] The following information shall be reported in monthly self-monitoring reports:
- Total daily flow volume from the Westside Transport to Discharge Point No. 001
- Total monthly flow volume from the Westside Transport to Discharge Point No. 001

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

2. **Combined Sewer Discharges**

a. During each combined sewer discharge event, the Discharger shall monitor combined sewer discharge effluent at Monitoring Locations CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007 as follows:

Table E-6. Combined Sewer Discharge Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow Volume	MG	Continuous	Continuous/D
TSS	mg/L	C-24 [2]	1/Event [4]
Settleable solids	mL/L	Grab or C-24 [2]	1/Event [4]
pH	standard units	Grab	1/Event [4]
Ammonia, total	mg/L as N	C-24 [2]	1/Event [4]

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Parameter	Units	Sample Type	Minimum Sampling Frequency
Arsenic	µg/L	C-24 [2]	1/Event [4]
Cadmium	µg/L	C-24 [2]	1/Event [4]
Copper	µg/L	C-24 [2]	1/Event [4]
Lead	µg/L	C-24 [2]	1/Event [4]
Nickel	µg/L	C-24 [2]	1/Event [4]
Selenium	µg/L	C-24 [2]	1/Event [4]
Silver	µg/L	C-24 [2]	1/Event [4]
Zinc	µg/L	C-24 [2]	1/Event [4]
Ocean Plan Table 1 Pollutants [1]	µg/L	C-24 [2,3]	1/Year [4]

Abbreviations:

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

Sample Type and Frequency:

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

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

[3] For mercury, the Discharger may collect either grab or 24-hour composite samples.

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

Discharge Point	Monitoring Locations
CSD-001	CSD-001
CSD-002	CSD-002 or CSD-003
CSD-003	CSD-002 or CSD-003
CSD-005	CSD-005, CSD-006, or CSD-007
CSD-006	CSD-005, CSD-006, or CSD-007
CSD-007	CSD-005, CSD-006, or CSD-007

b. The Discharger shall record the following information for each discharge at Monitoring Locations 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);

iii. Rainfall intensity and amount (in inches per hour and inches per day) at representative location(s) 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.i 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-7. Westside Recycled Water Project Concentrate Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow [1]	MG/MGD	Continuous	Continuous/D
TSS	mg/L	C-24	5/Week
pH	standard units	Continuous or Grab	5/Week
Oil and Grease	mg/L	Grab	1/Month
Settleable Solids	mL/L	Grab or C-24	1/Month
Turbidity	NTU	C-24	1/Month

Abbreviations:

MG = million gallons
MGD = million gallons per day
mg/L = milligrams per liter
mL/L = milliliters 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
5/Week = five times per week
1/Month = once per month

Footnote:

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

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

D. Discharge Point No. 001

1. **Dry Weather.** During dry weather, the Discharger shall monitor discharges at Discharge Point No. 001 at Monitoring Location EFF-001C as specified in Table E-8, 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. Otherwise, the Discharger shall collect samples when the Recycled Water Project is operating, if possible.

Table E-8. Dry Weather Discharge Point No. 001 Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
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

Parameter	Units	Sample Type	Minimum Sampling Frequency
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
Chronic Toxicity [1]	Pass or Fail and Percent Effect	C-24	1/Quarter
Ocean Plan Table 1 Pollutants [2]	µg/L	C-24 [3]	1/Year

Abbreviations:

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

Sample Types and Frequencies:

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

Footnotes:

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

[2] The Discharger shall monitor for the pollutants listed in Ocean Plan Table 1, except chlorine, tributyltin, radioactivity, and acute toxicity.

[3] For mercury, the Discharger may collect either grab or 24-hour composite samples.

2. **Wet Weather.** During wet weather, the Discharger shall monitor discharges at Discharge Point No. 001 at Monitoring Location EFF-001C as specified in Table E-8, below. The Discharger shall collect samples when the Recycled Water Project is operating, if possible.

Table E-9. Wet 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/Year
Ocean Plan Table 1 Pollutants [2]	µg/L	C-24 [3]	1/Year

Abbreviation:

µg/L = micrograms per liter

Sample Type and Frequency:

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

Footnotes:

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

[2] The Discharger shall monitor for the pollutants listed in Ocean Plan Table 1, except chlorine, tributyltin, radioactivity, and acute toxicity.

[3] For mercury, the Discharger may collect either grab or 24-hour composite samples.

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 5.0 MGD, the IWC shall be 0.67 percent effluent. When the Westside Recycled Water Project produces at least 5.0 MGD of recycled water, the IWC shall be 0.37 percent effluent.

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 seven 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 reference toxicant tests at least once per month. 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 $\leq 0.75 \times$ 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:

([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 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 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, Strongylocentrotus franciscanus, or Dendraster excentricus*	Percent fertilization or larval development	1 hour (fertilization) or 72 hours (development)
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 conducted monthly 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 tests at 100, 50, 25, 12.5, and 6.25 percent effluent as discharged.

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:

Table E-11. Ambient Shoreline Monitoring

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

2. Following any combined sewer discharge at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, 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	MPN/100 mL [2]	Grab	1/Day [3]
Total coliform	MPN/100 mL [2]	Grab	1/Day [3]
Standard observations [4]	---	---	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-21
CSD-003	SRF-19
CSD-004	SRF-17 and SRF-18
CSD-005	SRF-17
CSD-006	SRF-15 east, SRF-15, and SRF-16

CSD-007	SRF-15 east, SRF-15, and SRF-16

[4] Standard observations are defined in Attachment G section III.B.1 and shall include any apparent fish kills.

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. **Bacteria Sampling.** The Discharger shall sample for *Enterococcus* in the receiving water to evaluate whether bacteria discharged through Discharge Point No. 001 could affect the territorial waters of the State or affect threatened or endangered ~~listed~~ species. At a minimum, the Discharger shall collect samples from Stations 01, 02, 25, 28, 55, 57, 58, and 59.

Commented [JW6]: EPA: please verify this is what you intended. We would like to be more specific than just saying "listed species".

Commented [MB7R6]: This is fine by me.

3. **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 42 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
   - Chlorpyrifos, demeton, guthion, malathion, parathion, and diazinon
   - Aldrin, dieldrin, chlordane, heptachlor, heptachlor epoxide, endosulfan I, endosulfan II, and endosulfan sulfate

4. **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.

5. **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 composite samples collected at Station 1, 2, 25, or 28, and a reference location outside the influence of the discharge. Three composite samples shall be collected of one macroinvertebrate species at each location. Each composite sample shall consist of ten or more organisms of each species, with the preferred species being Dungeness crab (*Metacarcinus magister*). Muscle and hepatopancreas tissues shall be analyzed for inorganic pollutants (i.e., arsenic, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc), DDT, PCBs, and PAHs.

6. **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 Monitoring

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-3 may be used to satisfy these pretreatment monitoring requirements.

[2] VOC: volatile organic compounds.

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

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[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.

[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 H-4. The Discharger shall also comply with the biosolids monitoring requirements in 40 C.F.R. part 503.

b. If an 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. 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 recordkeeping.

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 maximum and minimum results only [1]	Discharger may use this method for all results or keep records
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

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Sampling Frequency	Monitoring Period Begins On…	Monitoring Period
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
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 [1]	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31
1/Year	Closest January 1 before or after Order effective date [1]	January 1 through December 31
2/Year	Closest January 1 or July 1 before or after Order effective date [1]	January 1 through June 30 July 1 through December 31
1/Blending Event	Beginning of blending event	Beginning of blending event through end of blending event
1/Event	Beginning of combined sewer discharge event	Beginning of combined sewer discharge event through end of combined sewer discharge event

Footnote:

[1] Monitoring performed during the previous order term may be used to satisfy monitoring required by this Order.

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.

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.ca.gov/water_issues/programs/discharge_monitoring.

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ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order. As described in section II.B of this Order, the Regional Water Board and U.S. EPA incorporate this Fact Sheet as findings supporting the issuance of this Order.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	2 386009001
CIWQS Place ID	256498
Discharger	City and County of San Francisco
Name of Facility	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
Facility Contact, Title and Phone	Jeff Yee, Operations Superintendent, Wastewater Enterprise, (415) 242-2225
Authorized Person to Sign and Submit Reports	Brian Henderson, Interim Assistant General Manager, Wastewater Enterprise, (415) 920-4949
Mailing Address	San Francisco Public Utilities Commission/Wastewater Enterprise 525 Golden Gate Ave., 13th Floor, San Francisco, CA 94102
Billing Address	Same
Type of Facility	Publicly-Owned Treatment Works (POTW)
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A
Pretreatment Program	Yes
Reclamation Requirements	State Water Board Order WQ 2016-0068-DDW or Regional Water Board Order No. 96-011 (CIWQS Place Number 788352)
Facility Permitted Flow	43 million gallons per day (MGD), average dry weather flow
Facility Design Flow	Oceanside Water Pollution Control Plant 43 MGD maximum dry weather design flow (secondary treatment) 65 MGD maximum wet weather design flow (secondary treatment for 43 MGD and primary treatment for an additional 22 MGD) Westside Recycled Water Project 5 MGD maximum design flow (2 MGD annual average)
Watershed	San Mateo Coastal Basin
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

A. The City and County of San Francisco (Discharger) owns and operates the Oceanside Water Pollution Control Plant, wastewater collection system, and Westside Recycled Water Project (collectively, the Facility). The Facility discharges to the Pacific Ocean, a water of the United States.

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

B. The Discharger is regulated pursuant to National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037681. It was previously subject to Order No. R2-2009-0062 (previous order). The Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit on April 3, 2014, and the previous order was administratively extended by operation of law. Order No. R2-2010-0054 amended the previous order to update the Regional Standard Provisions (Attachment G); Order No. R2-2011-0009 amended the previous order to update the pretreatment program requirements (Attachment H).

The Discharger is authorized to discharge subject to the WDRs and NPDES permit requirements in this Order at the discharge locations described in Table 2 of this Order. Regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. Pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all requirements for continuation of expired permits. (See 40 C.F.R § 122.6[d].)

II. FACILITY DESCRIPTION

A. Wastewater and Biosolids Treatment

1. **Location and Service Area.** The Oceanside Water Pollution Control Plant is located at 3500 Great Highway, San Francisco. The plant provides wastewater treatment for western San Francisco and a small portion of Daly City owned and operated by the North San Mateo County Sanitation District. The service area population is approximately 250,000. The Discharger plans to construct a recycled water treatment project at the plant site during this Order's term. The wastewater collection system is located throughout the western side of San Francisco. Attachment B shows maps of the Facility area.

2. **Collection System.** The Discharger's collection system is predominantly a combined sewer system with some limited separate sanitary sewers. The combined sewer system consists of approximately 250 miles of pipe, one major pump station (Westside Pump Station), six minor pump stations (four all-weather pump stations: Westside, Sea Cliff No. 1, Sea Cliff No. 2, and Pine Lake; and two wet weather pump stations: Sea Cliff No. 3 and Zoo Wet Weather Lift Station), and three large transport/storage structures (Westside Transport, a 49.3-million-gallon box-like structure located beneath the Great Highway; Richmond Transport, a 12.0-million-gallon tunnel located to the north; and Lake Merced Transport, a 10.0-million-gallon tunnel located to the south). The separate sanitary sewer systems serve isolated areas surrounding Lake Merced, Golden Gate Park, and the Presidio, and are also regulated under State Water Board Order 2006-0003-DWQ as amended by State Water Board Order No. WQ 2013-0058-EXEC.

3. **Wastewater Treatment**

   a. **Oceanside Water Pollution Control Plant.** During dry weather, the plant provides secondary treatment. The treatment processes include coarse screening at the Westside Pump Station, fine screening and grit removal at the plant headworks, primary sedimentation, activated sludge treatment by a high-purity oxygen process, and secondary clarification. The effluent is not disinfected. The plant has a maximum secondary treatment design capacity of about 43 million gallons per day (MGD). During wet weather, the plant can provide primary treatment for about 22 MGD more, which is combined with the secondary-treated effluent prior to discharge for a total treatment capacity of 65 MGD. Plant effluent flows to Discharge Point No. 001 by gravity.

   b. **Combined Sewer System.** The combined storage capacity of the three transport/storage structures is about 71 million gallons. Collection system piping provides about 2 million gallons of additional storage. The transport/storage structures provide flow equalization and convey combined sewer system flows up to 65 MGD to the plant by way of the Westside Pump Station.

      Flows above the plant's 65-MGD treatment capacity receive equivalent-to-primary treatment through solids settling, skimming of floatable solids, and in some cases screening at pump stations. This treatment occurs either within the transport/storage structures or at pump stations. In addition to pumping up to 65 MGD to the plant, the Westside Pump Station can also pump "decant" flow from the Westside Transport to Discharge Point No. 001 during wet weather. The design capacity of the Westside Pump Station wet weather pumps is up to 130 MGD when all four pumps are operating and greater than 110 MGD when just three pumps are operating. Flows that exceed the capacities of the Oceanside Water Pollution Control Plant and Westside Pump Station wet weather pumps may discharge from Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007. Four of these discharge points are directly connected to transport/storage structures (Discharge Point Nos. CSD-001, CSD-002, CSD-003, and CSD-004), and three are associated with pump station sumps (Discharge Point Nos. CSD-005, CSD-006, and CSD-007). After wet weather events, stored combined sewer system flows and accumulated solids remaining in the transport/storage structures are conveyed to the plant for treatment.

4. **Sludge and Biosolids Management.** Sludge from the primary and secondary clarification operations is processed using temperature-phased anaerobic digestion. Primary sludge, waste activated sludge, and secondary scum are mixed and co-thickened using gravity belt thickeners prior to being fed to the anaerobic digestion system with the primary scum and imported grease trap waste. Digested biosolids are dewatered using screw presses and stored in hoppers prior to being loaded into covered trucks for transport. During the wet season, biosolids are hauled to a landfill for storage and eventual use as interim cover, final cover, or landfill building material. During the dry season, biosolids are hauled offsite for agricultural land application. The Discharger is currently optimizing its temperature-phased anaerobic digestion process to produce Class A biosolids.

5. **Water Recycling and Reclamation**. The Discharger plans to construct a recycled water treatment project at the Oceanside Water Pollution Control Plant site during this Order's term. Secondary-treated effluent will be treated further with membrane filtration, reverse osmosis, and ultraviolet (UV) light disinfection to produce recycled water. The concentrate from the reverse osmosis process will be commingled with plant effluent prior to discharge at Discharge Point No. 001. Filter backwash water generated at the Westside Recycled Water Project will be directed to the plant headworks for treatment. The project is expected to produce and deliver an annual average flow of 1.6 MGD of recycled water for distribution in the western portion of San Francisco, with peak deliveries of up to 5 MGD during summer. Water recycling operations will not increase the mass of pollutants discharged at Discharge Point No. 001, but will increase the concentration of pollutants discharged. The requirements of this Order account for this water recycling project. Reclamation requires waste discharge requirements beyond those specified here, such as those in Regional Water Board Order No. 96-011 (General Water Reuse Order) or State Water Board Order No. WQ 2016-0068-DDW (Water Reclamation Requirements for Recycled Water Use).

B. Discharge Points and Receiving Waters

1. **Discharge Point No. 001.** During dry weather, secondary-treated effluent is discharged at Discharge Point No. 001. During wet weather, the discharge at Discharge Point No. 001 comprises primary-treated and secondary-treated effluent from the Oceanside Water Pollution Control Plant and equivalent-to-primary-treated effluent from the Westside Transport. When the Westside Recycled Water Project becomes operational, reverse osmosis concentrate will also be discharged at Discharge Point No. 001.

   Discharge Point No. 001 is a 4.5-mile-long (3.9 nautical mile-long) deepwater outfall that terminates with a diffuser that begins approximately 3.8 miles (3.3 nautical miles) from shore at a depth of 78 feet below mean lower low water (MLLW). The diffuser has 85 risers spread along a 3,000-foot outfall pipe. Each riser has eight ports. Discharge Point No. 001 discharges to the Pacific Ocean beyond the territorial waters of the State, which end three nautical miles from MLLW at shore.

2. **Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007.** During wet weather, when the Westside Pump Station capacity is exceeded, equivalent-to-primary-treated wastewater is discharged to the Pacific Ocean at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007. These discharge points are located within the territorial waters of the State.

C. Summary of Previous Requirements and Self-Monitoring Data

1. **Dry Weather.** Dry weather effluent limitations and representative monitoring data from the previous order term are presented below for discharges from the Oceanside Water Pollution Control Plant at Discharge Point No. 001:

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Table F-2. Previous Dry Weather Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitations				Monitoring Data (1/2011 – 12/2017)				
		6-Month Median	Monthly Average	Weekly Average	Daily Max.	Median	Highest 6-Month Median	Highest Monthly Average	Highest Weekly Average	Highest Daily Max.
Biochemical Oxygen Demand, 5-day @ 20°C (BOD_5)	mg/L	---	30	45	---	15	---	29	51 [1]	---
Total Suspended Solids (TSS)	mg/L	---	30	45	---	10	---	18	26	---
BOD_5 percent removal	%	---	85 (min.)	---	---	95	---	87 [2]	---	---
TSS percent removal	%	---	85 (min.)	---	---	96	---	92 [2]	---	---
pH	s.u.	Within a range of 6.0 – 9.0				Within a range of 6.0 – 8.3				
Chronic Toxicity	TU_c	---	---	---	150	50	---	---	---	149
Mercury	µg/L	5.9	---	---	24	0.0068	0.0093	---	---	0.071

Abbreviations:

Max. = maximum
min. = minimum
mg/L = milligrams per liter
µg/L = micrograms per liter
s.u. = standard units
TU_c = chronic toxicity units

Footnotes:

[1] The Discharger exceeded the weekly average effluent limitation three times during the previous order term, in October 2013, July 2014, and June 2017. The Discharger attributes these exceedances to the presence of nitrifying bacteria since carbonaceous biochemical oxygen demand ($CBOD_5$) concentrations were within the expected range. This Order allows $CBOD_5$ effluent limitations to be substituted for BOD_5 effluent limitations to address this concern, as described in Fact Sheet section IV.B.2, below.

[2] Lowest monthly average.

2. **Wet Weather.** Wet weather requirements from the previous order term included implementation of the nine minimum controls and the long-term control plan. The combined sewer system was designed to achieve a long-term average of eight combined sewer discharges per year. The following tables summarize combined sewer discharges over a 20-year period and average combined sewer discharge durations for wet season 2012-2013, a year with a typical number of discrete combined sewer discharges.

Table F-3. Combined Sewer Discharge Frequency

Year	Rain (inches)	Number of Combined Sewer Discharges						
		Lake Merced CSD-001	Vicente CSD-002	Lincoln CSD-003	Mile Rock CSD-004	Sea Cliff No. 1 CSD-005	Sea Cliff Sewer CSD-006	Sea Cliff No. 2 CSD-007
1997-1998	41.1	10	13	13	[1]	2	[2]	10
1998-1999	18.9	6	7	7	[1]	0	[2]	0
1999-2000	23.2	5	6	6	[1]	1	[2]	1
2000-2001	13.8	2	0	0	[1]	2	[2]	2
2001-2002	24.4	6	6	6	[1]	1	[2]	1
2002-2003	22.3	5	6	6	[1]	1	[2]	7

Year	Rain (inches)	Number of Combined Sewer Discharges						
		Lake Merced CSD-001	Vicente CSD-002	Lincoln CSD-003	Mile Rock CSD-004	Sea Cliff No. 1 CSD-005	Sea Cliff Sewer CSD-006	Sea Cliff No. 2 CSD-007
2003-2004	18.8	4	4	4	[1]	2	[2]	8
2004-2005	26.2	7	7	6	[1]	5	[2]	8
2005-2006	31.8	11	9	9	[1]	3	[2]	9
2006-2007	14.8	2	1	1	[1]	0	[2]	2
2007-2008	18.4	4	4	4	[1]	0	[2]	1
2008-2009	18.3	4	4	4	[1]	0	[2]	1
2009-2010	25.8	4	3	3	[1]	6	[2]	7
2010-2011	30.1	5	4	4	[1]	0	0	3
2011-2012	17.6	3	3	2	[1]	2	0	3
2012-2013	19.7	6	6	6	[1]	3	1	3
2013-2014	12.0	3	2	2	[1]	0	1	3
2014-2015	18.1	6	6	5	[1]	5	4	9
2015-2016	18.6	8	7	6	[1]	1	4	9
2016-2017	32.4	12	12	11	[1]	0	14	18
Average								

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Footnotes:

[1] The previous order did not require monitoring at Discharge Point No. CSD-004.

[2] The Discharger did not monitor CSD frequency at Discharge Point No. CSD-006 until it installed telemetry in 2010.

Table F-4. Combined Sewer Discharge Duration (July 1, 2012, through June 30, 2013)

	Lake Merced CSD-001	Vicente CSD-002	Lincoln CSD-003	Mile Rock CSD-004	Sea Cliff No. 1 CSD-005	Sea Cliff Sewer CSD-006	Sea Cliff No. 2 CSD-007
Days with Rainfall	53	53	53	[1]	53	53	53
Discharge Events	6	6	6 [2]	[1]	3	1	3
Average Duration (hours)	2.39	3.28	3 [2]	[1]	0.08	0.58	0.28
Average Volume/Event (million gallons)	2.75	3.16	[2]	[1]	0.002	0.08	0.01

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Footnotes:

[1] The previous order did not require monitoring at Discharge Point No. CSD-004.

[2] Telemetry equipment for Discharge Point No. CSD-003 was not operational in December 2012. Due to similar weir heights and positions within the system, discharges likely occur simultaneously at Discharge Point Nos. CSD-002 and CSD-003. As such, about six discharges likely occurred from Discharge Point No. CSD-003 between July 1, 2012, and June 30, 2013, lasting an average duration of about 3 hours.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

A. Legal Authorities

This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260) for discharges to waters of the State. 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 serves as an NPDES permit for point source discharges from the Facility to surface waters.

B. California Environmental Quality Act

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act, Public Resources Code division 13, chapter 3 (commencing with § 21100). On September 3, 2015, the San Francisco Planning Commission certified the Final Environmental Impact Report for the Westside Recycled Water Project, finding that the Discharger, acting through the San Francisco Planning Department, fulfilled all California Environmental Quality Act procedural requirements.

C. State and Federal Laws, Regulations, Policies, and Plans

1. **Water Quality Control Plan.** The Regional Water Board adopted the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan incorporates by reference the provisions of the Ocean Plan, described below. Requirements of this Order implement the Basin Plan. The table below lists the beneficial uses applicable to the Pacific Ocean:

Table F-5. Basin Plan Beneficial Uses

Receiving Water	Beneficial Uses
Pacific Ocean	• Industrial Service Supply (IND) • Commercial and Sport Fishing (COMM) • Shellfish Harvesting (SHELL) • Marine Habitat (MAR) • Fish Migration (MIGR) • Preservation of Rare and Endangered Species (RARE) • Fish Spawning (SPWN) • Wildlife Habitat (WILD) • Water Contact Recreation (REC1) • Noncontact Water Recreation (REC2) • Navigation (NAV)

Basin Plan Table 4-1, Discharge Prohibition 1, prohibits wastewater discharges with particular characteristics of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of at least 10:1. Basin Plan section 4.2 provides for exceptions under certain circumstances:

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- An inordinate burden would be placed on the Discharger relative to the beneficial uses protected, and an equivalent level of environmental protection can be achieved by alternate means;
- A discharge is approved as part of a reclamation project;
- Net environmental benefits will be derived as a result of the discharge; or
- A discharge is approved as part of a groundwater cleanup project.

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The Basin Plan further states:

> Significant factors to be considered by the Regional Water Board in reviewing requests for exceptions will be the reliability of the discharger's system in preventing inadequately treated wastewater from being discharged to the receiving water and the environmental consequence of such discharges.

During wet weather, this Order grants an exception to Basin Plan Discharge Prohibition 1 for discharges at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007 for the following reasons:

- Eliminating all wet weather combined sewer discharges or ensuring that these discharges receive a minimum initial dilution of 10:1 would be an inordinate burden disproportionate to the beneficial uses protected. The Discharger has invested heavily in infrastructure designed to capture and treat all combined wastewater and stormwater. Providing additional deepwater discharge capacity is unwarranted for the relatively small portion of the combined wastewater not discharged to deep water

2. **California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and has amended it several times, including in 1978 and most recently in 2015. The most recent changes became effective January 28, 2016. It establishes water quality objectives and a program of implementation to protect beneficial uses of the Pacific Ocean within the territorial waters of the State.

   The territorial waters of the State end 3 nautical miles from shore. Discharge Point No. 001 is approximately 3.8 miles (3.3 nautical miles) offshore in federal waters. The Ocean Plan (Appendix 1, Ocean Waters) states, "If a discharge outside the territorial waters of the State could affect the quality of the waters of the State, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters." This Order contains discharge prohibitions, effluent limitations, receiving water limitations, and other provisions to ensure that discharges from Discharge Point No. 001 do not affect State waters. This Order's requirements related to Discharge Point No. 001 are based on U.S. EPA's federal authorities pursuant to the Clean Water Act.

   a. **Beneficial Uses.** The table below lists the beneficial uses the Ocean Plan assigns to the Pacific Ocean:

Table F-6. Ocean Plan Beneficial Uses

Receiving Water	Beneficial Uses
Pacific Ocean	• Industrial Water Supply • Water Contact and Non-Contact Recreation, including Aesthetic Enjoyment • Navigation • Commercial and Sport Fishing • Mariculture • Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS)

Receiving Water	Beneficial Uses
	• Rare and Endangered Species • Marine Habitat • Fish Migration • Fish Spawning • Shellfish Harvesting

b. **State Water Board Order No. WQ 79-16.** During wet weather, State Water Board Order No. WQ 79-16 sets forth water quality standards for discharges from Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007. Ocean Plan chapter III.J allows the State Water Board to grant exceptions to Ocean Plan requirements on a case-by-case basis if the public interest is served and the exception does not compromise beneficial uses (exceptions are listed in Ocean Plan Table VII-1). In 1979, the State Water Board granted the Discharger an exception from Ocean Plan requirements and imposed conditions, including but not limited to the following:

- Except for the bacteriological standards, to the greatest extent practical, the Discharger is to design, construct, and operate facilities to conform to the remaining standards set forth in chapter II of the 1978 Ocean Plan. These standards relate to physical characteristics (i.e., floating particulates, discoloration, natural light, and inert solids deposition), chemical characteristics (i.e., dissolved oxygen, pH, dissolved sulfide, toxic and organic chemicals in marine sediments, and nutrients), biological characteristics (i.e., marine communities and taste, odor, and color of marine resources used for human consumption), and radioactivity. Provisions V.A and VI.C.5 of this Order and Attachments D and G sections I.C and I.D require the Discharger to design, construct, and operate its facilities to conform to these standards to the greatest extent practical.

- To the greatest extent practical, the Discharger is to design, construct, and operate facilities to comply with the conditions controlled by the requirements set forth in chapter III, sections A and B, of the 1978 Ocean Plan. These requirements call for waste management systems to be designed and operated in a manner that will maintain indigenous marine life and a healthy and diverse marine community. They also call for waste discharges to be essentially free of floatable and settleable material, substances toxic to marine life due to increases in concentrations in water or sediments, substances that significantly decrease natural light, and materials that result in esthetically undesirable discoloration of the ocean surface. Provisions V.A and VI.C.5 of this Order and Attachments D and G sections I.C and I.D require the Discharger to design, construct, and operate its facilities to conform to these requirements to the greatest extent practical.

- The Discharger is to design and construct facilities to contain all stormwater runoff beyond that associated with an average of eight combined sewer discharges per year. The discharge prohibitions in section III and Provision VI.C.5.c of this Order implements this condition.

- Beaches affected by combined sewer discharges are to be posted with warning signs beginning when the discharge commences until analysis indicates that water quality meets Ocean Plan bacteriological standards for recreation. Provision VI.C.5.a.viii of this Order implements this condition.

- Shellfish areas harvested for human consumption that may be affected by combined sewer discharges are to be posted with warning signs beginning when the discharge commences until the City and County Health Department indicates that no further posting is required. Provision VI.C.5.a.viii of this Order implements this condition.

- The Discharger is to comply with federal and State source control programs to minimize the entry of toxic substances into the waste collection system from industrial sources. Provisions VI.C.4.b and VI.C.5.a.iii of this Order and Attachment H implement this condition.

- The Discharger is to implement a self-monitoring program in accordance with Regional Water Board specifications. Provision VI.B of this Order and Attachment E implement this condition.

State Water Board Order No. WQ 79-16 explains the rationale for this exception and its conditions. It also states that the Regional Water Board or U.S. EPA may require construction of additional facilities or modification of existing Facility operations if it finds (1) changes in the location, intensity, or importance of affected beneficial uses, or (2) demonstrated unacceptable adverse impacts result from Facility operations as currently constructed.

3. **Combined Sewer Overflow (CSO) Control Policy.** On April 11, 1994, U.S. EPA adopted the *Combined Sewer Overflow (CSO) Control Policy* to establish a national approach for controlling combined sewer discharges and overflows (59 Fed. Reg. 18688-18698, April 19, 1994). The Wet Weather Water Quality Act of 2000 amended the CWA to require that permits issued after December 21, 2000, for discharges from combined sewer systems conform to the *Combined Sewer Overflow (CSO) Control Policy* (33 U.S.C. § 1342[q][1]). Requirements of this Order implement the *Combined Sewer Overflow (CSO) Control Policy*, including the implementation of the nine minimum controls, a Long-Term Control Plan, and a post-construction monitoring program. (See Fact Sheet section VI.C.5.)

4. **Antidegradation Policy.** Federal regulations at 40 C.F.R. section 131.12 require that state water quality standards include an antidegradation policy consistent with stated requirements. The State Water Board established California's antidegradation policy through State Water Board Resolution No. 68-16, *"Statement of Policy with Respect to Maintaining High Quality of Waters in California,"* which meets the federal antidegradation policy requirements. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, the antidegradation policy. Permitted discharges must be consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and Resolution No. 68-16. (See Fact Sheet section IV.D.2.)

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5. **Anti-Backsliding Requirements.** CWA sections 402(o) and 303(d)(4) and 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. (See Fact Sheet section IV.D.1.)

6. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other provisions to protect beneficial uses, including protecting rare and endangered species. The Discharger is responsible for meeting all Endangered Species Act requirements.

   U.S. EPA's reissuance of this NPDES permit is subject to certain requirements of the federal Endangered Species Act of 1973 and the Magnuson-Stevens Fishery Conservation and Management Act. In October 2017, U.S. EPA requested updated information from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (collectively, the Services) related to (1) essential fish habitat and managed and associated species, and (2) threatened and endangered species and their designated critical habitats near Discharge Point No. 001. U.S. EPA made a "may affect, not likely to adversely affect" determination for the southern California steelhead, Central California Coho salmon, Central Valley, spring-run chinook salmon, Sacramental River winter-run chinook salmon, humpback whale, leatherback turtle, green sea turtle, loggerhead turtle, white abalone, and olive ridley sea turtle; and a "no effect" determination for the remaining listed species under the Services' jurisdictions (*U.S. EPA Biological Evaluation*, September 2018). U.S. EPA may decide that changes to this Order are warranted based on the results of the completed consultation, and may modify or reopen it prior to the expiration date as described in Provision VI.C.1 of this Order.

7. **Sludge and Biosolids.** U.S. EPA administers 40 C.F.R. part 503, "Standards for the Use or Disposal of Sewage Sludge," which regulates the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a municipal wastewater treatment facility. This Order does not authorize any act that violates those requirements. The Discharger is responsible for meeting all applicable requirements of 40 C.F.R. part 503.

8. **Ocean Discharge Criteria Evaluation.** CWA section 403(c) and implementing regulations at 40 C.F.R. part 125, subpart M, establish ocean discharge criteria for preventing unreasonable degradation of the marine environment of the territorial seas, contiguous zones, and oceans. The regulations at 40 C.F.R. section 125.122(b) allow a permitting authority to presume that a discharge will not cause unreasonable degradation for specific pollutants or conditions if the discharge complies with state water quality standards. This Order implements State water quality standards for discharges from Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007. This Order also implements State water quality standards for discharges from Discharge Point No. 001, with the modifications described below.

This Order's requirements for Discharge Point No. 001 are consistent with the Ocean Plan, except with respect to chronic toxicity and TCDD equivalents. In all other respects, therefore, U.S. EPA presumes that the discharge will not cause unreasonable degradation. With respect to chronic toxicity and TCDD equivalents, U.S. EPA is required to consider the site-specific factors listed in 40 C.F.R. section 125.122(a). U.S. EPA prepared an evaluation under CWA section 403(c) for chronic toxicity and TCDD equivalents and concluded that no unreasonable degradation of ocean waters will occur.

9. **Coastal Zone Management Act.** The California Coastal Commission has indicated that it is unnecessary to obtain a consistency certification pursuant to the Coastal Zone Management Act (16 U.S.C. § 1451 et seq.).

D. Impaired Waters on CWA 303(d) List

On April 6, 2018, U.S. EPA approved a revised list of California's impaired waters pursuant to CWA section 303(d), which requires identification of specific waters where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources. Where it has not done so already, the Regional Water Board plans to adopt total maximum daily loads (TMDLs) for waters on the 303(d) list. TMDLs establish wasteload allocations for point sources and load allocations for non-point sources, and are established to achieve the water quality standards for the impaired waters. This Order does not authorize any discharge to receiving waters on California's list of impaired waters. The Pacific Ocean at Baker Beach is no longer listed as impaired for indicator bacteria because the sixteen available lines of evidence show applicable water quality standards are not being exceeded.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

1. **Prohibition III.A (Discharge different than described).** This prohibition is based on 40 C.F.R. section 122.21(a) and Water Code section 13260, which require filing an application and Report of Waste Discharge before a discharge can occur. Discharges not described in the application and Report of Waste Discharge, and subsequently in this Order, are prohibited.

2. **Prohibition III.B (Bypass of untreated or partially-treated wastewater).** This prohibition is based on the *Combined Sewer Overflow (CSO) Control Policy* and 40 C.F.R. section 122.41(m) (see Attachment D section I.G). Pursuant to 40 C.F.R. section

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122.41(m)(4)(ii), the Regional Water Board and U.S. EPA approve bypass of the biological treatment units (i.e., blending primary-treated effluent with biologically-treated effluent) during wet weather, when treatment plant influent flow exceeds 43 MGD (the hydraulic capacity of the biological treatment units), because such bypass meets the criteria for approval set forth in 40 C.F.R. sections 122.41(m)(4)(i)(A)-(C):

- When influent flow exceeds 43 MGD, bypass of biological treatment is unavoidable to prevent loss of life, personal injury, or severe property damage. Such bypass prevents the washout of solids and the microbial population from the biological treatment system and thus ensures treatment reliability. Moreover, such bypass prevents backups and flooding in the community that could cause personal injury or severe property damage.

- There are no feasible alternatives to bypass when influent flow exceeds 43 MGD. Provisions VI.C.5.c and VI.C.5.d require the Discharger to implement all feasible measures to maximize treatment. As long as the Discharger complies with these provisions, it is implementing all feasible alternatives to avoid bypass during wet weather.

- The Discharger provided notice at least ten days before any wet weather bypass in its *Report of Waste Discharge, Oceanside Water Pollution Control Plant and Westside Wet Weather Facilities* (April 3, 2014) and *Wastewater Enterprise Westside Operations Summary Baseline Report* (March 2014).

Combined sewer discharges authorized in accordance with the *Combined Sewer Overflow (CSO) Control Policy* are not considered bypasses.

3. **Prohibition III.C (Discharge at Discharge Point No. 001 without minimum initial dilution of at least 148:1).** This prohibition is necessary to ensure that the assumptions used to derive the dilution credits established through this Order for Discharge Point No. 001 remain substantially the same so the effluent limitations at Discharge Point No. 001 remain protective of water quality. This Order considered a dilution credit of 148:1, as modeled assuming no currents, based on the Discharger's *Southwest Ocean Outfall Dilution Modeling Report, Final Report* (April 2014) to conduct the reasonable potential analysis described in Fact Sheet section IV.C.4. Moreover, the in-stream waste concentration (IWC) to be used to evaluate compliance with this Order's chronic toxicity effluent limitation is based on this dilution credit. When the Discharger produces 5 MGD of recycled water and discharges reverse osmosis concentrate, the IWC for chronic toxicity testing reflects a dilution credit of 266:1, as modeled assuming currents. Both dilution credits correspond to the same outfall configuration, which this prohibition seeks to maintain.

4. **Prohibition III.D (Discharge from location other than Discharge Point No. 001, except during wet weather).** This prohibition clarifies that any discharges other than those to Discharge Point No. 001 are unauthorized, except those to Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007 as explicitly authorized during wet weather in accordance with the *Combined Sewer Overflow (CSO) Control Policy*.

5. **Prohibition III.E (Discharge in excess of permitted flow).** This Order prohibits an average dry weather effluent flow greater than 43 MGD based on the plant's secondary treatment

design capacity. Exceeding the secondary treatment design capacity could result in lowering the reliability of achieving this Order's treatment requirements.

B. Technology-Based Effluent Limitations

1. **Scope and Authority.** CWA section 301(b) and 40 C.F.R. section 122.44 require that permits include conditions meeting applicable technology-based requirements, at a minimum, and any more stringent effluent limitations necessary to meet water quality standards.

2. **Oceanside Water Pollution Control Plant.** During dry weather, the technology-based requirements for the Oceanside Water Pollution Control Plant are based on the Secondary Treatment Standards at 40 C.F.R. section 133.102, listed in the following table:

Table F-7. Secondary Treatment Requirements

Parameter	Monthly Average	Weekly Average
BOD_5 [1,2]	30 mg/L	45 mg/L
$CBOD_5$ [1,2]	25 mg/L	40 mg/L
TSS [2]	30 mg/L	45 mg/L
pH	6.0 – 9.0 standard units	

Abbreviation:
mg/L = milligrams per liter
Footnotes:
[1] $CBOD_5$ effluent limitations may be substituted for BOD_5 effluent limitations.
[2] The monthly average percent removal, by concentration, is not to be less than 85 percent.

This Order does not include the additional technology-based effluent limitations established in Ocean Plan chapter III.B.1 (i.e., oil and grease, turbidity, settleable solids) because the plant provides secondary treatment.

During wet weather, the *Combined Sewer Overflow (CSO) Control Policy* establishes the minimum technology-based requirements for combined sewer systems as the implementation of the nine minimum controls based on 40 C.F.R. section 125.3. Provision VI.C.5.a of this Order contains these requirements.

3. **Westside Recycled Water Project.** Ocean Plan chapter III.B.1 establishes technology-based effluent limitations for industrial discharges for which effluent limitation guidelines have not been established pursuant to CWA sections 301, 302, 304, or 306. This Order requires Westside Recycled Water Project discharges to meet the minimum technology-based effluent limitations established in Ocean Plan Table 2, listed in the following table:

Table F-8. Ocean Plan Table 2 Effluent Limitations

Parameter	Units	Monthly Average	Weekly Average	Instantaneous
Oil and Grease	mg/L	25	40	75
TSS	mg/L	60 [1]	---	---
Settleable Solids	mL/L	1.0	1.5	3.0
Turbidity	NTU	75	100	225

Parameter	Units	Monthly Average	Weekly Average	Instantaneous
pH	standard units	within 6.0 to 9.0 range (all times)		

Abbreviations:

mg/L = milligrams per liter
mL/L = milliliters per liter
NTU = nephelometric turbidity units

Footnote:

[1] Ocean Plan Table 2 notes state, "Suspended Solids: Dischargers shall, as a 30-day average, remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/L." Because the monthly average effluent limitation for suspended solids has been established as 60 mg/L, the Discharger is not required to remove 75% of influent suspended solids.

4. **Combined Sewer System.** The Westside Transport and combined sewer discharge points discharge only during wet weather. As such, the *Combined Sewer Overflow (CSO) Control Policy* establishes the minimum technology-based requirements for combined sewer systems as the implementation of nine minimum controls based on 40 C.F.R. section 125.3. Provision VI.C.5.a of this Order contains these requirements.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

CWA section 301(b) and 40 C.F.R. section 122.44(d) require that permits include limitations more stringent than federal technology-based requirements where necessary to achieve applicable water quality standards. According to 40 C.F.R. section 122.44(d)(1)(i), permits must include effluent limitations for all pollutants that are or may be discharged at levels that have a reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective, WQBELs must be established using (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, which may be derived using a proposed state criterion or policy interpreting a state narrative water quality criterion, supplemented with other relevant information (40 C.F.R. § 122.44[d][1][vi]). The process for determining reasonable potential and calculating WQBELs is intended to achieve applicable water quality objectives and criteria, protect the designated uses of receiving waters as specified in the Basin Plan and Ocean Plan, and ensure no unreasonable degradation under CWA section 403(c) and 40 C.F.R. part 125, subpart M.

During dry weather, this Order imposes numeric effluent limitations at Discharge Point No. 001 for pollutants with reasonable potential to cause or contribute to exceedances of water quality standards.

During wet weather, this Order imposes narrative effluent limitations, not numeric limitations. In accordance with the *Combined Sewer Overflow (CSO) Control Policy*, this Order requires the Discharger to implement and update its Long-Term Control Plan to control combined sewer discharges and excursions. The plan calls for meeting CWA water quality-based requirements by capturing 100 percent of combined wastewater and

stormwater flows and providing a minimum level of treatment. The *Combined Sewer Overflow (CSO) Control Policy* presumes that CWA water quality-based requirements will be met if the Discharger treats at least 85 percent of collected wastewater during wet weather (unless data indicate otherwise). U.S. EPA describes this "presumption approach" as follows:

> A program that meets any of the criteria listed below would be presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA, provided the permitting authority determines that such presumption is reasonable in light of the data and analysis conducted in the characterization, monitoring, and modeling of the system and the consideration of sensitive areas described above. These criteria are provided because data and modeling of wet weather events often do not give a clear picture of the level of [combined sewer overflow] controls necessary to protect [water quality standards].
>
> i. No more than an average of four overflow events per year, provided that the permitting authority may allow up to two additional overflow events per year. For the purpose of this criterion, an overflow event is one or more overflows from a CSS (Combined Sewer System) as the result of a precipitation event that does not receive the minimum treatment specified below; or
>
> ii. The elimination or the capture for treatment of no less than 85% by volume of the combined sewage collected in the Combined Sewer System during precipitation events on a system-wide annual average basis; or
>
> iii. The elimination or removal of no less than the mass of the pollutants, identified as causing water quality impairment through the sewer system characterization, monitoring, and modeling effort, for the volumes that would be eliminated or captured for treatment under paragraph ii above.
>
> Combined sewer overflows remaining after implementation of the nine minimum controls and within the criteria specified at [i or ii], should receive a minimum of:
>
> - Primary clarification (Removal of floatables and settleable solids may be achieved by any combination of treatment technologies or methods that are shown to be equivalent to primary clarification.);
> - Solids and floatables disposal; and
> - Disinfection of effluent, if necessary, to meet [water quality standards], protect designated uses and protect human health, including removal of harmful disinfection chemical residuals, where necessary.

The Discharger's Long-Term Control Plan must demonstrate that the system meets the specifications for the presumption approach, and Provisions VI.C.5.c and VI.C.5.d of this Order require the Discharger to continue implementing and improving its Long-Term

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Control Plan. The Discharger's system is designed to capture 100 percent of combined wastewater and stormwater and provide equivalent-to-primary treatment consisting of floatables and settleable solids removal. Provision VI.C.5.d.i(a) of the Order requires the Discharger to assess the feasibility and necessity of disinfecting combined sewer discharges.

2. Beneficial Uses and Water Quality Objectives

Fact Sheet sections III.C.1 and III.C.2, above, identify the beneficial uses of the Pacific Ocean. Ocean Plan chapter II (including Table 1) lists water quality objectives for the Pacific Ocean. The Basin Plan incorporates these objectives by reference.

3. Minimum Initial Dilution

In accordance with Ocean Plan chapter III.C, the minimum initial dilution at Discharge Point No. 001 can be estimated by experimental observation or computer simulation. The Discharger submitted an updated dilution study in April 2014, *Southwest Ocean Outfall (Discharge Point No. 001) Dilution Modeling Report – Final*, which estimated dilution based on NRFIELD and UM3 models and ambient water data measured from April 2012 through October 2013. Based on the more conservative UM3 model estimate assuming no currents, the minimum initial dilution ratio is 148:1 (148 parts seawater per 1 part wastewater). This represents the minimum 30-day average dilution during the period of maximum stratification, observed from November 2012 through January 2013. The Discharger's dilution study also estimated dilution based on existing current velocity data measured at mid-depth of the water column. Accounting for ocean currents, the more conservative NRFIELD model estimate of the minimum 30-day average dilution during the period of maximum stratification is 266:1.

A minimum initial dilution of 148:1 is used in the reasonable potential analysis described in Fact Sheet section III.C.4, below. The IWC to be used in chronic toxicity testing is also based on this minimum initial dilution, except when the Westside Recycled Water Project operates at full capacity to produce 5 MGD of recycled water, in which case the IWC is to be based on a minimum initial dilution of 266:1 as described in MRP section V.A.2. This increase in minimum initial dilution accounts for ocean currents, which move parallel to the coast, not toward State waters (*Assessment of Effects on California State Waters from the Oceanside Southeast Ocean Outfall*, September 26, 2008).

4. Need for Water Quality-Based Effluent Limitations (Reasonable Potential Analysis)

a. Methodology

i. **Dry Weather.** Ocean Plan Appendix VI sets forth a procedure for reasonable potential analyses applicable to dry weather discharges from Discharge Point No. 001. The procedure assumes a lognormal distribution for the effluent data and compares the 95th percentile concentration at 95 percent confidence for each parameter listed in Ocean Plan Table 1, accounting for dilution, to the applicable water quality objective listed in Ocean Plan Table 1. The analysis results in one of three endpoints for each pollutant based on four triggers:

- Endpoint 1 – There is reasonable potential. WQBELs and monitoring are required.
- Endpoint 2 – There is no reasonable potential. WQBELs are not required, but monitoring may be required.
- Endpoint 3 – The analysis is inconclusive. Any existing WQBELs are retained and monitoring is required.

The four triggers are as follows:

(a) Trigger 1. If any detected value after adjustment for dilution (X) is greater than the applicable water quality objective (Co), then Endpoint 1 applies.

For Table 1 pollutants:	$X = (Ce + Dm\ Cs) / (Dm + 1)$
For acute toxicity:	$X = Ce / (0.1\ Dm + 1)$
Where:	Ce is the effluent concentration
	Dm is the minimum initial dilution expressed as parts seawater per part wastewater (148:1)
	Cs is the background seawater concentration from Ocean Plan Table 3.

(b) Trigger 2. If there are three or more detected values and the number of non-detected (ND) or detected but not quantified (DNQ) values (c) is less than or equal to 80 percent of the number of data points (n) (i.e., if $c/n \leq 80\%$), a parametric reasonable potential analysis is performed. If the calculated upper confidence bound is greater than Co, then Endpoint 1 is concluded; otherwise Endpoint 2 is concluded.

(c) Trigger 3. If there are less than three detected values or if there are more than three detected values but the percentage of non-detected (ND) or detected but not quantified (DNQ) values is more than 80 percent (i.e., if $c/n > 80\%$), a non-parametric reasonable potential analysis is performed. Depending on the results, either Endpoint 2 or Endpoint 3 is concluded.

(d) Trigger 4. If any other information about the receiving water or the discharge supports a finding of reasonable potential, then the reasonable potential analysis may be based on best professional judgment. If data or other information is unavailable or insufficient to determine if a WQBEL is required, Endpoint 3 is concluded. Otherwise, either Endpoint 1 or Endpoint 2 is concluded.

ii. Wet Weather. For wet weather discharges from Discharge Point No. 001 and the combined sewer discharge points, the Long-Term Control Plan required pursuant to the *Combined Sewer Overflow (CSO) Control Policy* and described in Provision VI.C.5.c of the Order serves as narrative WQBELs.

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b. **Effluent Data.** Since the Westside Recycled Water Project is expected to become operational during this permit term, two reasonable potential analyses were performed based on the Ocean Plan methodology: one based on current effluent quality and one based on potential future Westside Recycled Water Project effluent quality. In both cases, the analyses were based on dry weather effluent monitoring data the Discharger collected for Discharge Point No. 001 from January 2011 through December 2017. However, with full operation of the Westside Recycled Water Project, the Discharger anticipates that the discharge could potentially consist entirely of reverse osmosis concentrate approximately 1.4 percent of the time. Under these rare circumstances, the effluent could be as much as four times more concentrated when compared to existing conditions. For purposes of the Westside Recycled Water Project reasonable potential analysis, however, existing effluent data were multiplied by a concentration factor of 1.5, which reflects the foreseeable increase based on a 30-day averaging period. This concentration factor is sufficient to evaluate reasonable potential when the most stringent objectives (those with six-month averaging periods) apply.

c. **Reasonable Potential Analysis Results.** The following tables present the results of the two reasonable potential analyses performed (i.e., existing conditions and potential future Westside Recycled Water Project conditions). The analyses show reasonable potential for chronic toxicity based on Trigger 4. Chronic toxicity tests are intended to detect toxicity from a wide range of pollutants, and since the Facility has a municipal combined sewer system, there is a reasonable potential that unanticipated pollutants could be discharged into the system. Moreover, effluent monitoring data collected during the previous order term showed chronic toxicity at levels close to the previous order's effluent limit (see Table F-2) and similar toxicity could occur in the future.

Table F-9. Reasonable Potential Analysis No. 1 - Existing Conditions

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Concentration (µg/L)	Max Effluent Concentration After Mixing (µg/L)	Projected 95th Percentile (µg/L)	Result
Objectives for Protection of Marine Aquatic Life							
Ammonia (as nitrogen)	600	30	0	54,000	360	400	Endpoint 2
Arsenic	8	83	83	<2.0	<3.0	---	Endpoint 2
Cadmium	1	83	76	1.2	0.0082	---	Endpoint 2
Chlorinated Phenolics	1	7	7	<6.0	<0.040	---	Endpoint 3
Chromium (VI)	2	81	76	8.1	0.055	---	Endpoint 2
Acute Toxicity [1]	Not applicable						
Chronic Toxicity	**1 TUc**	**28**	**0**	**149 TUc**	**1.0 TUc**	**1.1 TUc**	**Endpoint 1**
Copper	3	83	0	26	2.2	2.1	Endpoint 2
Cyanide	1	28	25	8.2	0.055	---	Endpoint 2
Endosulfan (total)	0.009	7	7	<0.0062	<4.2E-5	---	Endpoint 3
Endrin	0.002	7	7	<0.0028	<1.9E-5	---	Endpoint 3
HCH	0.004	7	7	<0.0026	<1.7E-5	---	Endpoint 3
Lead	2	83	26	1.6	0.011	0.0090	Endpoint 2
Mercury	0.04	83	1	0.071	0.00097	0.000070	Endpoint 2
Nickel	5	83	0	27	0.18	0.033	Endpoint 2
Non-chlorinated Phenolics	30	7	6	1.2	0.0081	---	Endpoint 3
Radioactivity [2]	Not applicable						

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Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Concentration (µg/L)	Max Effluent Concentration After Mixing (µg/L)	Projected 95th Percentile (µg/L)	Result
Selenium	15	83	83	<2.0	<0.013	---	Endpoint 2
Silver	0.7	83	82	0.40	0.16	---	Endpoint 2
Total Chlorine Residual [3]	Not applicable						
Zinc	20	83	0	97	8.6	8.3	Endpoint 2
Objectives for Protection of Human Health – Noncarcinogens							
1,1,1-Trichloroethane	540,000	7	7	<0.24	<0.0016	---	Endpoint 3
2,4-Dinitrophenol	4.0	7	7	<0.90	<0.0060	---	Endpoint 3
2-Methyl-4,6-Dinitrophenol	220	7	7	<1.6	<0.010	---	Endpoint 3
Acrolein	220	7	7	<2.0	<0.013	---	Endpoint 3
Antimony	1,200	82	74	2.8	0.018	---	Endpoint 2
Bis(2-Chloroethoxy)Methane	4.4	7	7	<0.93	<0.0062	---	Endpoint 3
Bis(2-Chloroisopropyl)Ether	1,200	7	7	<0.81	<0.0054	---	Endpoint 3
Chlorobenzene	570	7	7	<0.25	<0.0017	---	Endpoint 3
Chromium (III) [4]	Not applicable						
Dichlorobenzenes	5,100	7	7	<3.0	<0.020	---	Endpoint 3
Diethyl Phthalate	33,000	7	7	<0.86	<0.0058	---	Endpoint 3
Dimethyl Phthalate	820,000	7	7	<0.97	<0.0065	---	Endpoint 3
Di-n-Butyl Phthalate	3,500	7	7	<0.91	<0.0061	---	Endpoint 3
Ethylbenzene	4,100	7	7	<1.0	<0.0067	---	Endpoint 3
Fluoranthene	15	8	8	<0.55	<0.0037	---	Endpoint 3
Hexachlorocyclopentadiene	58	7	7	<0.91	<0.0061	---	Endpoint 3
Nitrobenzene	4.9	7	7	<0.95	<0.0064	---	Endpoint 3
Thallium	2	82	82	<1.0	<0.0067	---	Endpoint 2
Toluene	85,000	7	7	<0.50	<0.0034	---	Endpoint 3
Tributyltin	0.0014	7	7	<0.0026	<1.7E-5	---	Endpoint 3
Objectives for Protection of Human Health – Carcinogens							
1,1,2,2-Tetrachloroethane	2.3	7	7	<0.68	<0.0045	---	Endpoint 3
1,1,2-Trichloroethane	9.4	7	7	<0.14	<0.00094	---	Endpoint 3
1,1-Dichloroethylene	0.9	7	7	<0.089	<0.00060	---	Endpoint 3
1,2-Dichloroethane	28	7	7	<0.15	<0.0010	---	Endpoint 3
1,2-Diphenylhydrazine	0.16	7	7	<0.90	<0.0060	---	Endpoint 3
1,3-Dichloropropylene	8.9	7	7	<0.24	<0.0016	---	Endpoint 3
1,4-Dichlorobenzene	18	7	7	<1.0	<0.0067	---	Endpoint 3
TCDD Equivalents	3.9E-9	7	7	<2.6E-8	<1.7E-10	---	Endpoint 3
2,4,6-Trichlorophenol	0.29	7	7	<1.0	<0.0067	---	Endpoint 3
2,4-Dinitrotoluene	2.6	7	7	<0.96	<0.0064	---	Endpoint 3
3,3'-Dichlorobenzidine	0.0081	7	7	<5.0	<0.034	---	Endpoint 3
Acrylonitrile	0.10	7	7	<0.80	<0.0054	---	Endpoint 3
Aldrin	2.2E-5	7	7	<0.00075	<5.0E-6	---	Endpoint 3
Benzene	5.9	7	7	<0.20	<0.0013	---	Endpoint 3
Benzidine	6.9E-5	7	7	<5.0	<0.034	---	Endpoint 3
Beryllium	0.033	82	82	<0.50	<0.0034	---	Endpoint 2
Bis(2-Chloroethyl)Ether	0.045	7	7	<0.95	<0.0064	---	Endpoint 3
Bis(2-Ethylhexyl)Phthalate	3.5	7	2	3.3	0.022	---	Endpoint 3
Carbon Tetrachloride	0.90	7	7	<0.19	<0.0013	---	Endpoint 3
Chlordane	2.3E-5	7	7	<0.018	<0.00012	---	Endpoint 3
Chlorodibromomethane	8.6	7	7	<0.13	<0.00089	---	Endpoint 3

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Concentration (µg/L)	Max Effluent Concentration After Mixing (µg/L)	Projected 95th Percentile (µg/L)	Result
Chloroform	130	7	3	3.7	0.025	---	Endpoint 2
DDT (total)	0.00017	7	7	<2.1	<0.014	---	Endpoint 3
Dichlorobromomethane	6.2	7	7	<0.50	<0.0034	---	Endpoint 3
Dichloromethane	450	7	7	<0.50	<0.0034	---	Endpoint 3
Dieldrin	4.0E-5	7	7	<0.0013	<8.9E-6	---	Endpoint 3
Halomethanes	130	7	7	<0.69	<0.0046	---	Endpoint 3
Heptachlor	5E-5	7	7	<0.0013	<9.0E-6	---	Endpoint 3
Heptachlor Epoxide	2E-5	7	7	<0.00056	<3.8E-6	---	Endpoint 3
Hexachlorobenzene	0.00021	7	7	<0.91	<0.0061	---	Endpoint 3
Hexachlorobutadiene	14	7	7	<0.92	<0.0062	---	Endpoint 3
Hexachloroethane	2.5	7	7	<0.94	<0.0063	---	Endpoint 3
Isophorone	730	7	7	<0.93	<0.0062	---	Endpoint 3
N-Nitrosodimethylamine	7.3	7	7	<0.88	<0.0059	---	Endpoint 3
N-Nitrosodi-n-Propylamine	0.38	7	7	<0.97	<0.0065	---	Endpoint 3
N-Nitrosodiphenylamine	2.5	7	7	<0.83	<0.0056	---	Endpoint 3
PAHs (total)	0.0088	6	6	<1.2	<0.0081	---	Endpoint 3
PCBs	1.9E-5	7	7	<0.40	<0.0027	---	Endpoint 3
Tetrachloroethylene	2.0	7	7	<0.14	<0.0010	---	Endpoint 3
Toxaphene	0.00021	7	7	<0.058	<0.00039	---	Endpoint 3
Trichloroethylene	27	7	7	<0.38	<0.0025	---	Endpoint 3
Vinyl Chloride	36	7	7	<0.66	<0.0044	---	Endpoint 3

Abbreviations:

WQO = water quality objective
µg/L = micrograms per liter
TUc = chronic toxicity units

Footnotes:

[1] The previous order did not require acute toxicity monitoring.

[2] The previous order did not require monitoring for radioactivity.

[3] Chlorine is not added for disinfection, and the previous order did not require monitoring for residual chlorine.

[4] The previous order did not require monitoring for chromium (III); however, the maximum detected concentration of total chromium (8.1 µg/L) is less than the water quality objective for chromium (III) of 190,000 µg/L.

Table F-10. Reasonable Potential Analysis No. 2 - Westside Recycled Water Project Conditions

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Concentration (µg/L)	Max Effluent Concentration After Mixing (µg/L)	Projected 95th Percentile (µg/L)	Result
Objectives for Protection of Marine Aquatic Life							
Ammonia (as nitrogen)	600	9	0	81,000	550	600	Endpoint 2
Arsenic	8	83	83	<3.0	<3.0	---	Endpoint 2
Cadmium	1	83	76	1.8	0.012	---	Endpoint 2
Chlorinated Phenolics	1	7	7	<9.0	<0.060	---	Endpoint 3
Chromium (VI)	2	81	76	12	0.082	---	Endpoint 2
Acute Toxicity [1]	Not applicable						
Chronic Toxicity [2]	**1 TUc**	28	**0**	**220 TUc**	**1.5 TUc**	**1.6 TUc**	**Endpoint 1**
Copper	3	83	0	39	2.2	2.2	Endpoint 2
Cyanide	1	28	25	12	0.082	---	Endpoint 3
Endosulfan (total)	0.009	7	7	<0.0093	<6.2E-5	---	Endpoint 3

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Concentration (µg/L)	Max Effluent Concentration After Mixing (µg/L)	Projected 95th Percentile (µg/L)	Result
Endrin	0.002	7	7	<0.0042	<2.8E-5	---	Endpoint 3
HCH	0.004	7	7	<0.0039	<2.6E-5	---	Endpoint 3
Lead	2	83	26	2.4	0.016	0.012	Endpoint 2
Mercury	0.04	83	1	0.11	0.0012	0.000074	Endpoint 2
Nickel	5	83	0	41	0.27	0.050	Endpoint 2
Non-chlorinated Phenolics	30	7	6	1.8	0.012	---	Endpoint 3
Radioactivity [3]	Not applicable						
Selenium	15	83	83	<3.0	<0.020	---	Endpoint 2
Silver	0.7	83	82	0.60	0.16	---	Endpoint 2
Total Chlorine Residual [4]	Not applicable						
Zinc	20	83	0	150	8.9	8.5	Endpoint 2
Objectives for Protection of Human Health – Noncarcinogens							
1,1,1-Trichloroethane	540,000	7	7	<0.35	<0.0024	---	Endpoint 3
2,4-Dinitrophenol	4.0	7	7	<1.4	<0.0091	---	Endpoint 3
2-Methyl-4,6-Dinitrophenol	220	7	7	<2.3	<0.016	---	Endpoint 3
Acrolein	220	7	7	<3.0	<0.020	---	Endpoint 3
Antimony	1,200	82	74	4.1	0.028	---	Endpoint 2
Bis(2-Chloroethoxy)Methane	4.4	7	7	<1.4	<0.0094	---	Endpoint 3
Bis(2-Chloroisopropyl)Ether	1,200	7	7	<1.2	<0.0082	---	Endpoint 3
Chlorobenzene	570	7	7	<0.37	<0.0025	---	Endpoint 3
Chromium (III) [5]	Not applicable						
Dichlorobenzenes	5,100	7	7	<4.5	<0.030	---	Endpoint 3
Diethyl Phthalate	33,000	7	7	<1.3	<0.087	---	Endpoint 3
Dimethyl Phthalate	820,000	7	7	<1.5	<0.0098	---	Endpoint 3
Di-n-Butyl Phthalate	3,500	7	7	<1.4	<0.0092	---	Endpoint 3
Ethylbenzene	4,100	7	7	<1.5	<0.010	---	Endpoint 3
Fluoranthene	15	8	8	<0.82	<0.0055	---	Endpoint 3
Hexachlorocyclopentadiene	58	7	7	<1.4	<0.0092	---	Endpoint 3
Nitrobenzene	4.9	7	7	<1.4	<0.0096	---	Endpoint 3
Thallium	2	82	82	<1.5	<0.010	---	Endpoint 2
Toluene	85,000	7	7	<0.42	<0.0028	---	Endpoint 3
Tributyltin	0.0014	7	7	<0.0039	<2.6E-5	---	Endpoint 3
Objectives for Protection of Human Health – Carcinogens							
1,1,2,2-Tetrachloroethane	2.3	7	7	<1.0	<0.0068	---	Endpoint 3
1,1,2-Trichloroethane	9.4	7	7	<0.21	<0.00014	---	Endpoint 3
1,1-Dichloroethylene	0.9	7	7	<0.13	<0.00090	---	Endpoint 3
1,2-Dichloroethane	28	7	7	<0.22	<0.0015	---	Endpoint 3
1,2-Diphenylhydrazine	0.16	7	7	<1.4	<0.0091	---	Endpoint 3
1,3-Dichloropropylene	8.9	7	7	<0.36	<0.0024	---	Endpoint 3
1,4-Dichlorobenzene	18	7	7	<1.5	<0.010	---	Endpoint 3
TCDD Equivalents	3.9E-9	7	7	<0.95E-8	<6.4E-11	---	Endpoint 2
2,4,6-Trichlorophenol	0.29	7	7	<1.5	<0.010	---	Endpoint 3
2,4-Dinitrotoluene	2.6	7	7	<1.4	<0.0097	---	Endpoint 3
3,3'-Dichlorobenzidine	0.0081	7	7	<7.5	<0.050	---	Endpoint 3
Acrylonitrile	0.10	7	7	<1.2	<0.0081	---	Endpoint 3
Aldrin	2.2E-5	7	7	<0.0011	<7.6E-6	---	Endpoint 3
Benzene	5.9	7	7	<0.30	<0.0020	---	Endpoint 3
Benzidine	6.9E-5	7	7	<7.5	<0.050	---	Endpoint 3
Beryllium	0.033	82	82	<0.75	<0.0050	---	Endpoint 2

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Concentration (µg/L)	Max Effluent Concentration After Mixing (µg/L)	Projected 95th Percentile (µg/L)	Result
Bis(2-Chloroethyl)Ether	0.045	7	7	<1.4	<0.0096	---	Endpoint 3
Bis(2-Ethylhexyl)Phthalate	3.5	7	2	5.0	0.034	---	Endpoint 3
Carbon Tetrachloride	0.90	7	7	<0.29	<0.0020	---	Endpoint 3
Chlordane [13]	2.3E-5	7	7	<0.027	<0.00018	---	Endpoint 3
Chlorodibromomethane	8.6	7	7	<0.20	<0.0013	---	Endpoint 3
Chloroform	130	7	3	5.6	0.038	---	Endpoint 2
DDT (total)	0.00017	7	7	<3.12	<0.021	---	Endpoint 3
Dichlorobromomethane	6.2	7	7	<0.26	<0.0018	---	Endpoint 3
Dichloromethane	450	7	7	<0.75	<0.0050	---	Endpoint 3
Dieldrin	0.00004	7	7	<0.0020	<1.3E-5	---	Endpoint 3
Halomethanes	130	7	7	<1.0	<0.0070	---	Endpoint 3
Heptachlor	0.00005	7	7	<0.0013	<1.3E-5	---	Endpoint 3
Heptachlor Epoxide	0.00002	7	7	<0.00084	<5.6E-6	---	Endpoint 3
Hexachlorobenzene	0.00021	7	7	<1.4	<0.0092	---	Endpoint 3
Hexachlorobutadiene	14	7	7	<1.4	<0.0093	---	Endpoint 3
Hexachloroethane	2.5	7	7	<1.4	<0.0095	---	Endpoint 3
Isophorone	730	7	7	<1.4	<0.0094	---	Endpoint 3
N-Nitrosodimethylamine	7.3	7	7	<1.3	<0.0089	---	Endpoint 3
N-Nitrosodi-n-Propylamine	0.38	7	7	<1.5	<0.0098	---	Endpoint 3
N-Nitrosodiphenylamine	2.5	7	7	<1.2	<0.0084	---	Endpoint 3
PAHs (total)	0.0088	6	6	<1.8	<0.012	---	Endpoint 3
PCBs	1.9E-5	7	7	<0.59	<0.0040	---	Endpoint 3
Tetrachloroethylene	2.0	7	7	<0.21	<0.0014	---	Endpoint 3
Toxaphene	0.00021	7	7	<0.087	<0.00058	---	Endpoint 3
Trichloroethylene	27	7	7	<0.57	<0.0038	---	Endpoint 3
Vinyl Chloride	36	7	7	<0.98	<0.0066	---	Endpoint 3

Abbreviations:

WQO = water quality objective
µg/L = micrograms per liter

Footnotes:

[1] The previous order did not require monitoring for acute toxicity.

[2] The projection is particularly uncertain because chronic toxicity may occur as a result of various pollutants within the effluent and their toxic effects may not be linearly related to discharge concentrations.

[3] The previous order did not require monitoring for radioactivity.

[4] The previous order did not require monitoring for total residual chlorine.

[5] The previous order did not require monitoring for chromium (III); however, the maximum projected concentration of total chromium (12 µg/L) is less than the water quality objective for chromium (III) of 190,000 µg/L.

5. WQBELs

a. **Dry Weather.** For dry weather discharges from Discharge Point No. 001, the Ocean Plan calls for chronic toxicity WQBELs based on "toxic units" derived from multi-concentration toxicity tests. This Order introduces an updated approach. In 2010, U.S. EPA published the Test of Significant Toxicity (TST) statistical approach in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010). The TST statistical approach relies on the same U.S. EPA toxicity test methods. For example, section 9.4.1.2 of *Short-*

term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/0136, 1995) states, "the statistical methods recommended in this manual are not the only possible methods of statistical analysis."

To comply with the chronic toxicity WQBEL, effluent must "Pass" a single chronic toxicity test conducted at the IWC as defined in MRP section V.A.2 using the Test of Significant Toxicity (TST) statistical approach (Welch's t-test). The test result must reject the following null hypothesis:

H_0: mean discharge IWC response $\leq 0.75 \times$ mean control response.

In other words, the mean chronic toxicity response for a test sample must be statistically determined to be less than or equal to 75 percent of the response for a control sample. The 75 percent response level reflects a regulatory management decision intended to ensure that differences observed between test sample responses and control sample responses are meaningful. A test result that fails to reject the null hypothesis would not comply with the chronic toxicity WQBEL.

The chronic toxicity WQBEL is expressed as a single-sample maximum. For publicly-owned treatment works, 40 C.F.R. section 122.45(d) requires monthly and weekly effluent limitations unless impracticable. In this case, the single-sample WQBEL is necessary to protect against short-term effects. Limits expressed with monthly or weekly averaging periods could allow chronic toxicity to occur over shorter periods. This approach is comparable to that of the Ocean Plan, which calls for a daily maximum chronic toxicity limit. Single-sample and maximum daily chronic toxicity limits are comparable because chronic toxicity tests can take several days to complete, depending on the test species used. U.S. EPA recommends this approach in *EPA Regions 8, 9 and 10 Toxicity Training Tool* (January 2010).

b. **Wet Weather.** For wet weather discharges from Discharge Point No. 001 and the combined sewer discharge points, the Long-Term Control Plan required pursuant to the *Combined Sewer Overflow (CSO) Control Policy* and described in Provision VI.C.5.c of the Order serves as narrative WQBELs.

D. Discharge Requirement Considerations

1. **Anti-Backsliding.** This Order complies with the anti-backsliding provisions of CWA sections 402(o) and 303(d)(4) and 40 C.F.R. section 122.44(l), which generally require effluent limitations in a reissued permit to be as stringent as those in the previous permit. The requirements of this Order are at least as stringent as those in the previous order, with the exception of mercury. This Order does not contain dry weather mercury effluent limitations because there is no longer reasonable potential to exceed water quality objectives based on mercury effluent data. Removing the mercury WQBELs is consistent with State Water Board Order No. WQ 2001-16. Consistent with State Water Board Order No. WQ 2001-06, reliance on the TST statistical approach to evaluate chronic toxicity for dry weather discharges from

the Oceanside Water Pollution Control Plant is not backsliding because this Order's effluent limitation is not comparable to the effluent limitation in the previous order.

2. **Antidegradation.** This Order complies with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16. It continues the status quo with respect to the level of discharge authorized in the previous order, which was adopted in accordance with antidegradation policies, and thus serves as the baseline by which to measure whether degradation will occur. This Order does not allow for a flow increase or a reduced level of treatment. The only potentially less stringent effluent limitation is the chronic toxicity WQBEL after Westside Recycled Water Project operations commence. The Westside Recycled Water Project is expected to concentrate, but not increase, existing pollutant loads; therefore, it will not degrade Pacific Ocean water quality.

3. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations. This Order's technology-based requirements implement minimum, applicable federal technology-based requirements. This Order also contains more stringent effluent limitations as necessary to meet water quality standards. These limitations are no more stringent than the CWA requires.

   This Order's WQBELs have been derived to implement water quality objectives that protect beneficial uses. The beneficial uses and water quality objectives set forth in the Ocean Plan and Basin Plan have been approved pursuant to federal law and are federal water quality standards. U.S. EPA approved the Ocean Plan on February 14, 2006, and also approved subsequent amendments. Most Basin Plan beneficial uses and water quality objectives were approved under State law and submitted to and approved by U.S. EPA prior to May 30, 2000. Beneficial uses and water quality objectives submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. section 131.21(c)(1). U.S. EPA approved the remaining beneficial uses and water quality objectives implemented by this Order so they are applicable water quality standards pursuant to 40 C.F.R. section 131.21(c)(2).

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

This Order's receiving water limitations are based on Ocean Plan chapters II.C, II.D, and II.E, and State Water Board Order No. WQ 79-16. These limits are necessary to ensure compliance with applicable water quality standards in accordance with the CWA and regulations adopted thereunder.

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

Attachment D contains standard provisions that apply to all NPDES permits in accordance with 40 C.F.R. section 122.41 and additional conditions applicable to specific categories of permits in accordance with 40 C.F.R. section 122.42. The Discharger must comply with these provisions.

In accordance with 40 C.F.R. section 123.25(a)(12), permits may impose more stringent requirements. Attachment G contains standard provisions that supplement the federal standard provisions in Attachment D.

In addition to federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(a)(2), 122.41(j)(5), and (k)(2), this Order incorporates Water Code section 13387(e) by reference.

B. Monitoring and Reporting Program (MRP) Requirements

CWA section 308 and 40 C.F.R. sections 122.41(h), 122.41(j)-(l), 122.44(i), and 122.48 require that 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. The Monitoring and Reporting Program (Attachment E) of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and State requirements. For more background regarding these requirements, see Fact Sheet section VII.

C. Special Provisions

1. Reopener Provisions

These provisions are based on 40 C.F.R. sections 122.62 and 122.63 and allow modification of this Order and its effluent limitations as necessary in response to updated water quality objectives, regulations, or other new and relevant information that may become available in the future, and other circumstances as allowed by law. Provision VI.C.1.f is based on *Combined Sewer Overflow (CSO) Control Policy* section IV.B.2.g.

2. Effluent Characterization Study and Report

This Order does not include effluent limitations for Ocean Plan Table 1 pollutants that do not demonstrate reasonable potential, but this provision requires the Discharger to evaluate monitoring data to verify that the reasonable potential analysis conclusions of this Order remain valid. This requirement is authorized pursuant to 40 C.F.R. section 122.41(h) and Water Code section 13267, and is necessary to inform the next permit reissuance and to ensure that the Discharger takes timely steps in response to any unanticipated change in effluent quality during the term of this Order.

3. Pollutant Minimization Program

This provision is based on *Combined Sewer Overflow (CSO) Control Policy* section II.B.7, Basin Plan section 4.13.2, Ocean Plan chapter III.C.9, State Water Board Order No. WQ 79-16, and Water Code section 13263. The provision requires the Discharger to include fats, oil, and grease (FOG) as a pollutant of concern because FOG buildup within the combined sewer collection system can cause or exacerbate combined sewer system excursions. The provision also requires the Discharger to consider whether copper and zinc should be pollutants of concern because concentrations are often elevated in combined sewer discharges.

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

a. **Sludge and Biosolids Management.** This provision is based on Basin Plan section 4.17. "Sludge" refers to the solid, semisolid, and liquid residue removed during primary, secondary, and advanced wastewater treatment processes. "Biosolids" refers to sludge that has been treated and may be beneficially reused.

b. **Pretreatment Program.** This provision is based on 40 C.F.R. part 403. The Discharger implements a pretreatment program due to the nature and volume of its industrial influent. This provision lists the Discharger's responsibilities regarding its pretreatment program and requires compliance with the provisions in Attachment H.

c. **Anaerobically Digestible Material.** Standard Operating Procedures are required for dischargers that accept hauled waste food, fats, oil, and grease for injection into anaerobic digesters. The development and implementation of Standard Operating Procedures for management of these materials is intended to allow the California Department of Resources Recycling and Recovery to exempt operations from separate and redundant permitting programs. If the Discharger does not accept fats, oil, and grease for resource recovery purposes, it is not required to develop and implement Standard Operating Procedures.

   Some publicly-owned treatment works choose to accept organic material, such as waste food, fats, oils, and grease, into their anaerobic digesters to increase production of methane and other biogases for energy production and to prevent such materials from being discharged into the collection system and potentially causing sanitary sewer overflows. The California Department of Resources Recycling and Recovery has proposed to exclude publicly-owned treatment works from Process Facility/Transfer Station permit requirements when the same activities are regulated under waste discharge requirements or NPDES permits. The proposed exclusion is restricted to anaerobically digestible materials that have been prescreened, slurried, processed, and conveyed in a closed system for co-digestion with regular sewage sludge. The exclusion assumes that the facility has developed Standard Operating Procedures for proper handling, processing, tracking, and management.

d. **Separate Sanitary Sewer System.** This provision requires compliance with Attachments D and G and states that these requirements may be satisfied by complying with 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 and any subsequent order updating these requirements. These statewide WDRs require public agencies that own or operate sanitary sewer systems with one or more miles of sewer lines to enroll for coverage and comply with requirements to develop sanitary sewer management plans and report sanitary sewer overflows, among other provisions and prohibitions. The statewide WDRs contain requirements for operation and maintenance of collection systems, and for reporting and mitigating sanitary sewer overflows, that are more extensive and, therefore, more stringent than the standard provisions in Attachments D and G.

5. Combined Sewer System Controls

a. Nine Minimum Controls

The *Combined Sewer Overflow (CSO) Control Policy* establishes nine minimum controls as the minimum technology-based requirements during wet weather for combined sewer systems based on 40 C.F.R. section 125.3:

- Conduct Proper Operations and Maintenance Program
- Maximize Use of Collection System for Storage
- Review and Modify Pretreatment Program
- Maximize Flow to Treatment Plant
- Prohibit Dry Weather Combined Sewer Overflows
- Control Solid and Floatable Materials in Combined Sewer Discharges
- Develop and Implement Pollution Prevention Program
- Notify Public of Combined Sewer Discharges and Excursions
- Monitor to Characterize Combined Sewer Discharge Impacts and Efficacy of Controls

These nine minimum controls are the best conventional pollutant control technology (BCT) and the best available technology economically achievable (BAT). Provision VI.C.5.a of this Order requires implementation of these nine minimum controls and is consistent with U.S. EPA's guidance document, *Combined Sewer Overflows, Guidance for Nine Minimum Controls* (EPA 832-B-95-003, May 1995).

Provision VI.C.5.a.viii(a) contains specific signage requirements to inform the public of the location, occurrence, and possible health impacts of combined sewer discharges. Proper signage reduces public exposure and health risks. The required signage language includes a telephone number so the public can report dry weather discharges to help ensure that corrective actions are taken. This provision is consistent with U.S. EPA's *NPDES Compendium of Next Generation Compliance Examples* (September 2016) and the proposed rule (considered here as guidance) *Public Notification Requirements for Combined Sewer Overflows to the Great Lakes Basin* (82 Fed. Reg. 4233-4255, January 13, 2017).

For combined sewer system excursions, Provision VI.C.5.a.viii(a) requires the Discharger to notify and report consistent with the sanitary sewer overflow reporting requirements of 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 and any subsequent order updating these requirements. Water Code sections 13267 and 13383, 40 C.F.R. section 122.41(h), and the *Combined Sewer Overflow (CSO) Control Policy* authorize the Regional Water Board and U.S. EPA to require information about releases of untreated or partially-treated wastewater. This information is necessary to evaluate combined sewer system performance, and operations and maintenance practices; to determine whether any diversions of untreated or partially-treated wastewater result in a discharge to surface waters; to satisfy public notification requirements; to identify whether the public could be affected; and to establish whether

combined sewer system excursions result in a nuisance as defined by Water Code section 13050.

b. Documentation of Nine Minimum Controls

This provision is based on section II.B of the *Combined Sewer Overflow (CSO) Control Policy*, which states that Dischargers should submit appropriate documentation demonstrating implementation of the nine minimum controls.

c. Long-Term Control Plan (LTCP)

The *Combined Sewer Overflow (CSO) Control Policy* requires implementation of a Long-Term Control Plan (LTCP) with the following nine elements to satisfy water quality-based requirements during wet weather:

- Characterization, Monitoring, and Modeling of the Combined Sewer System
- Public Participation
- Consideration of Sensitive Areas
- Evaluation of Alternatives
- Cost/Performance Considerations
- Operational Plan
- Maximizing Treatment at the Oceanside Water Pollution Control Plant
- Implementation Schedule
- Post-Construction Compliance Monitoring Program

Combined Sewer Overflow (CSO) Control Policy section IV.B.2.f specifies that permits should contain requirements for maximizing the treatment of wet weather flows, as appropriate. The Discharger's report *San Francisco Wastewater Long Term Control Plan Synthesis* (March 30, 2018) summarizes the various documents that comprise the Discharger's historical planning process and LTCP. The operational requirements in Provision VI.C.5.c.ii of this Order are unchanged from the previous order, except that (1) the maximum pumping capacities of the Sea Cliff pump stations are included to ensure that maximum flow is routed to the Oceanside Water Pollution Control Plant, and (2) the required influent flow rate to the Oceanside Water Pollution Control Plant prior to initiating decant from the Westside Transport to Discharge Point No. 001 is increased to 65 MGD to reflect the correct treatment capacity of the Oceanside Water Pollution Control Plant. This provision allows the Discharger to request changes these operational parameters to ensure the Discharger's LTCP continues to minimize combined sewer discharges and maximize pollutant removal during wet weather. Provision VI.C.5.d (Task 6) of this Order requires the Discharger to re-evaluate each operational requirement and propose additional performance measures within 12 months of this Order's effective date to ensure wet weather operations are optimized based on current information.

d. LTCP Update. This provision requires the Discharger to update its LTCP with respect to the nine elements listed in *Combined Sewer Overflow (CSO) Control Policy* section II.C. *Combined Sewer Overflow (CSO) Control Policy* section IV.B describes the major elements that should be included in NPDES permits to implement the policy and ensure

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protection of water quality. This provision is consistent with U.S. EPA's guidance document *Combined Sewer Overflows, Guidance for Long-Term Control Plan* (EPA 832-B-95-002, September 1995). This provision also implements State Water Board Order No. WQ 79-16, which sets forth specific conditions to be implemented during wet weather (see Fact Sheet section III.C.2.b).

This provision requires the Discharger to update its LTCP for the following reasons:

- *Combined Sewer Overflow (CSO) Control Policy* section IV.B.2.b specifies that the permit should contain narrative requirements to ensure that selected controls are implemented, operated, and maintained as described in the Discharger's LTCP.

- *Combined Sewer Overflow (CSO) Control Policy* section IV.B.2.d specifies that the permit should contain a requirement to monitor and collect sufficient information to demonstrate compliance with water quality standards and protect designated uses, as well as to determine the effectiveness of combined sewer system controls.

- *Combined Sewer Overflow (CSO) Control Policy* section IV.B.2.e specifies that the permit should contain a requirement to reassess combined sewer discharges to sensitive areas in those cases where elimination or relocation was previously found to be not physically possible and economically achievable.

- *Combined Sewer Overflow (CSO) Control Policy* section IV.B.2.f specifies that the permit should contain requirements for maximizing the treatment of wet weather flows at the treatment plant, as appropriate.

- State Water Board Order No. WQ 79-16 requires the Discharger to design, construct, and operate facilities to the greatest extent practical to conform to the standards set forth in chapter II of the 1978 Ocean Plan, except for the bacteriological standards (see Fact Sheet section III.C.2.b).

- State Water Board Order No. WQ 79-16 requires the Discharger to design, construct, and operate facilities to the greatest extent practical to comply with the conditions controlled by the requirements set forth in chapter III, sections A and B, of the 1978 Ocean Plan (see Fact Sheet section III.C.2.b).

- An updated LTCP is necessary to document that the Discharger's LTCP is based on the most current information to assess whether water quality standards are being met. The Discharger summarized its historical planning process and the various documents that comprise its LTCP in *San Francisco Wastewater Long Term Control Plan Synthesis* (March 30, 2018); however, as indicated in Appendix A of that report, the report only covers activities through March 1994 and, thus, needs to be updated to reflect current circumstances, including but not limited to circumstances the Discharger reported in *Westside Operations Summary, Baseline Report* (October 2013; revised March 2014) and *Characterization of Westside Wet Weather Discharges and the Efficacy of Combined Sewer Discharge Controls* (2014).

6. Westside Recycled Water Project Operations Notification

The effluent limitations and specifications in this Order are based on information available during the permit reissuance process. Assumptions regarding how effluent quality could change after commencement of Westside Recycled Water Project operations were based on information the Discharger provided prior to completion of project planning and construction. This provision is necessary to evaluate whether the assumptions made during the permitting process remain valid and to ensure that the permit continues to be protective of water quality standards. Moreover, because some requirements of this Order are contingent upon Westside Recycled Water Project operations, notification is necessary for the Regional Water Board and U.S. EPA to know when such requirements apply.

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA 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. The *Combined Sewer Overflow (CSO) Control Policy* requires monitoring to ascertain the effectiveness of controls and to verify compliance with water quality standards and protection of beneficial uses. The Monitoring and Reporting Program (MRP) in Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and State requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP.

A. Influent Monitoring. Influent flow monitoring is necessary to understand Facility operations and to evaluate compliance with Discharge Prohibition III.D. Influent $CBOD_5$ and TSS monitoring is necessary to evaluate compliance with this Order's 85 percent removal requirement. Influent monitoring is also necessary to identify wet weather days, as defined in Attachment A.

B. Effluent Monitoring. Effluent flow monitoring is necessary to understand Facility operations. Dry weather monitoring for the other parameters is necessary to evaluate compliance with this Order's effluent limitations and to provide data for future reasonable potential analyses. Wet weather monitoring is necessary to characterize the efficacy of combined sewer system controls and assess receiving water impacts.

C. Toxicity Testing. Dry weather effluent chronic toxicity monitoring is necessary to evaluate compliance with this Order's chronic toxicity effluent limitation and to provide data for future reasonable potential analyses. Wet weather effluent chronic toxicity monitoring is necessary to characterize wet weather discharges. Routine and accelerated chronic toxicity monitoring frequencies and Toxicity Reduction Evaluation requirements are based on the implementation provisions in Ocean Plan chapter III.C and the standard monitoring procedures guidance in section 7.1 of Ocean Plan Appendix III.

A tiered approach to determine the required effluent concentration in test samples removes impediments for the Discharger to construct and operate the Westside Recycled Water Project. At maximum recycled water production, toxicity test samples are to contain an effluent

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concentration based on the dilution at Discharge Point No. 001 as modeled using observed ocean currents. This flexibility accounts for potential increases in pollutant concentrations as recycled water is removed from the discharge.

D. Receiving Water Monitoring. Receiving water monitoring requirements are based on the monitoring guidance in Appendix III of the Ocean Plan. The MRP requires the Discharger to continue its Southwest Ocean Outfall Regional Monitoring Program to collect data on receiving water bacteria concentrations, chemical and physical sediment quality, benthic infauna community structure, and physical anomalies and bioaccumulation of contaminants in organism tissues. This monitoring is necessary to characterize the effects of the discharges authorized in this Order on the receiving water and to confirm whether discharges from Discharge Point No. 001 could affect the territorial waters of the State.

The MRP requires shoreline monitoring following combined sewer discharge events at beach locations where water contact recreation takes place. This monitoring is necessary to assess the possible effects of combined sewer discharges on the water contact recreation beneficial use and to establish when public notification is required pursuant to Provision VI.C.5.a.viii of this Order.

The MRP no longer requires the Discharger to collect data on demersal fish and epibenthic invertebrate community structure because trawl sampling does not provide data that are useful in determining discharge effects (*Southwest Ocean Outfall Regional Monitoring Program 1997-2012 Summary Report,* April 2014). The MRP also no longer includes seven offshore receiving water monitoring locations (Stations 73, 74, 75, 76, 77, 78, and 79) that were part of a special study conducted from 2002 through 2016; the Discharger demonstrated that these locations are not significantly different from other reference monitoring locations (*A Review of Benthic Macrofaunal Assemblage and Sediment Conditions in the Reef-Effect Region of the SWOO-RMP*, August 2018).

E. Pretreatment and Biosolids Monitoring. The pretreatment and biosolids monitoring requirements for influent, effluent, and biosolids are necessary to evaluate compliance with the Discharger's U.S. EPA-approved pretreatment program. Biosolids monitoring is also required pursuant to 40 C.F.R. part 503.

F. Other Monitoring Requirements. Pursuant to CWA section 308, U.S. EPA requires major and selected minor dischargers to participate in a Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program. The program annually evaluates the analytical abilities of laboratories that perform or support NPDES permit-required monitoring. The program applies to discharger laboratories and contract laboratories. There are two options to comply: (1) dischargers can obtain and analyze DMR-QA samples, or (2) pursuant to a waiver U.S. EPA issued to the State Water Board, dischargers can submit results from the most recent Water Pollution Performance Evaluation Study. Dischargers must submit results annually to the State Water Board, which then forwards the results to U.S. EPA.

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VIII. PUBLIC PARTICIPATION

The Regional Water Board and U.S. EPA considered the issuance of WDRs and an NPDES permit for the Facility. As a step this process, U.S. EPA and Regional Water Board staff developed a tentative order and encouraged public participation in the reissuance process.

A. Notification of Interested Parties. The Regional Water Board and U.S. EPA notified the Discharger and interested agencies and persons of their intent to adopt an order reissuing the NPDES permit for the Discharger's discharges and provided an opportunity to submit written comments and recommendations. Notification was provided through the *San Francisco Chronicle* and http://www.epa.gov/region9/water/npdes/pubnotices.html. The public had access to the Regional Water Board agenda and any changes in dates and locations through the Regional Water Board's website at http://www.waterboards.ca.gov/sanfranciscobay and U.S. EPA's website at http://www.epa.gov/region9/water/npdes/pubnotices.html.

B. Written Comments. Interested persons were invited to submit written comments concerning the tentative order as explained through the notification process. Comments to the Regional Water Board and U.S. EPA were to be submitted either in person or by mail to the U.S. EPA NPDES Permits Office (WTR 2-3) at 75 Hawthorne Street, San Francisco, California 94105, to the attention of Becky Mitschele, and to the Regional Water Board office at 1515 Clay Street, Suite 1400, Oakland, California 94612, to the attention of Jessica Watkins.

For full staff response and Regional Water Board and U.S. EPA consideration, the written comments were due by 5:00 p.m. on <date>.

C. Public Hearing. The Regional Water Board held a public hearing on the tentative order during its regular meeting at the following date and time, and at the following location:

Date:	Wednesday, <hearing date>
Time:	9:00 a.m.
Location:	Elihu Harris State Office Building 1515 Clay Street, 1st Floor Auditorium Oakland, CA 94612
Contact:	Jessica Watkins, (510) 622-2349, jessica.watkins@waterboards.ca.gov

Interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested to be in writing.

Dates and venues change. The Regional Water Board web address is http://www.waterboards.ca.gov/sanfranciscobay, where one could access the current agenda for changes in dates and locations.

D. Reconsideration of Waste Discharge Requirements. Any aggrieved person may petition the State Water Board to review the Regional Water Board decision regarding the final WDRs. The State Water Board must receive the petition at the following address within 30 calendar days of the Regional Water Board's action:

State Water Resources Control Board

Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

For instructions on how to file a petition for review, see http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml.

E. Federal NPDES Permit Appeals. When U.S. EPA issues a final NPDES permit, it becomes effective on its effective date unless a request for review is filed. If a request for review is filed, only those permit conditions that are uncontested go into effect pending disposition of the request for review. Requests for review must be filed within 33 days following the date the final permit is mailed and must meet the requirements of 40 C.F.R. section 124.19. Requests for review should be addressed to the Environmental Appeals Board and sent through the U.S. Postal Service addressed to the Environmental Appeals Board's mailing address:

U.S. Environmental Protection Agency
Clerk of the Board
Environmental Appeals Board (MC 1103B)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001

Alternatively, filings delivered by hand or courier, including Federal Express, UPS, and U.S. Postal Express Mail, should be directed to the following address:

Environmental Appeals Board
U.S. Environmental Protection Agency
Colorado Building
1341 G Street, N.W., Suite 600
Washington, D.C. 20460

Persons filing a request for review must have filed written comments on the draft permit. Otherwise, any such request for review may be filed only to the extent that the request pertains to changes from the draft to the final permit decision.

F. Information and Copying. The Report of Waste Discharge, related supporting documents, and comments received are on file and may be inspected at the Regional Water Board office at 1515 Clay Street, Suite 1400, Oakland, California at any time between 8:00 a.m. and 5:00 p.m. (except noon to 1:00 p.m.), Monday through Friday, and at the U.S. EPA Region 9 office at 75 Hawthorne Street, San Francisco, California at any time between 9:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged by calling the Regional Water Board at (510) 622-2300 or U.S. EPA at (415) 972-3524.

G. Register of Interested Persons. Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board and U.S. EPA, reference this Facility, and provide a name, address, and phone number.

H. Additional Information. Requests for additional information or questions regarding this Order should be directed to Jessica Watkins at (510) 622-2349 or jessica.watkins@waterboards.ca.gov, or Becky Mitschele at (415) 972-3492 or mitschele.becky@epa.gov.

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ATTACHMENT G

REGIONAL STANDARD PROVISIONS, AND MONITORING AND REPORTING REQUIREMENTS (SUPPLEMENT TO ATTACHMENT D)

November 2017

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REGIONAL STANDARD PROVISIONS, AND MONITORING AND REPORTING REQUIREMENTS

APPLICABILITY

This document supplements the requirements of Federal Standard Provisions (Attachment D). For clarity, these provisions are arranged using to the same headings as those used in Attachment D.

I. STANDARD PROVISIONS - PERMIT COMPLIANCE

A. Duty to Comply – Not Supplemented

B. Need to Halt or Reduce Activity Not a Defense – Not Supplemented

C. Duty to Mitigate – Supplement to Attachment D, Provision I.C.

1. **Contingency Plan**. The Discharger shall maintain a Contingency Plan as prudent in accordance with current facility emergency planning. The Contingency Plan shall describe procedures to ensure that existing facilities remain in, or are rapidly returned to, operation in the event of a process failure or emergency incident, such as employee strike, strike by suppliers of chemicals or maintenance services, power outage, vandalism, earthquake, or fire. The Discharger may combine the Contingency Plan and Spill Prevention Plan (see Provision I.C.2, below) into one document. In accordance with Regional Water Board Resolution No. 74-10, discharge in violation of the permit where the Discharger has failed to develop and implement a Contingency Plan as described below may be the basis for considering the discharge a willful and negligent violation of the permit pursuant to California Water Code section 13387. The Contingency Plan shall, at a minimum, provide for the following:

   a. Sufficient personnel for continued facility operation and maintenance during employee strikes or strikes against contractors providing services;

   b. Maintenance of adequate chemicals or other supplies, and spare parts necessary for continued facility operations;

   c. Emergency standby power;

   d. Protection against vandalism;

   e. Expeditious action to repair failures of, or damage to, equipment, including any sewer lines;

   f. Reporting of spills and discharges of untreated or inadequately treated wastes, including measures taken to clean up the effects of such discharges; and

   g. Maintenance, replacement, and surveillance of physical condition of equipment and facilities, including any sewer lines.

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2. **Spill Prevention Plan.** The Discharger shall maintain a Spill Prevention Plan to prevent accidental discharges and to minimize the effects of any such discharges. The Spill Prevention Plan shall do the following:

   a. Identify the possible sources of accidental discharge, untreated or partially-treated waste bypass, and polluted drainage;

   b. State when current facilities and procedures became operational and evaluate their effectiveness; and

   c. Predict the effectiveness of any proposed facilities and procedures and provide an implementation schedule with interim and final dates when the proposed facilities and procedures will be constructed, implemented, or operational.

D. Proper Operation and Maintenance – Supplement to Attachment D, Provision I.D

1. **Operation and Maintenance Manual.** The Discharger shall maintain an Operation and Maintenance Manual to provide the plant and regulatory personnel with a source of information describing all equipment, recommended operational strategies, process control monitoring, and maintenance activities. To remain a useful and relevant document, the Operation and Maintenance Manual shall be kept updated to reflect significant changes in treatment facility equipment and operational practices. The Operation and Maintenance Manual shall be maintained in usable condition and be available for reference and use by all relevant personnel and Regional Water Board staff.

2. **Wastewater Facilities Status Report.** The Discharger shall maintain a Wastewater Facilities Status Report and regularly review, revise, or update it, as necessary. This report shall document how the Discharger operates and maintains its wastewater collection, treatment, and disposal facilities to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities.

3. **Proper Supervision and Operation of Publicly-Owned Treatment Works (POTWs).** POTWs shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23, section 3680, of the California Code of Regulations.

E. Property Rights – Not Supplemented

F. Inspection and Entry – Not Supplemented

G. Bypass – Not Supplemented

H. Upset – Not Supplemented

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I. **Other** – Addition to Attachment D

1. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 13050.

2. Collection, treatment, storage, and disposal systems shall be operated in a manner that precludes public contact with wastewater. If public contact with wastewater could reasonably occur on public property, warning signs shall be posted.

3. If the Discharger submits a timely and complete Report of Waste Discharge for permit reissuance, this permit shall continue in force and effect until the permit is reissued or the Regional Water Board rescinds the permit.

II. STANDARD PROVISIONS – PERMIT ACTION – Not Supplemented

III. STANDARD PROVISIONS – MONITORING

A. **Sampling and Analyses** – Supplement to Attachment D, Provisions III.A and III.B

1. **Certified Laboratories.** Water and waste analyses shall be performed by a laboratory certified for these analyses in accordance with California Water Code section 13176.

2. **Minimum Levels.** For the 126 priority pollutants, the Discharger should use the analytical methods listed in Table B unless the Monitoring and Reporting Program (MRP, Attachment E) requires a particular method or minimum level (ML). All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

3. **Monitoring Frequency.** The MRP specifies the minimum sampling and analysis schedule.

   a. **Sample Collection Timing**

      i. The Discharger shall collect influent samples on varying days selected at random and shall not include any plant recirculation or other sidestream wastes, unless otherwise stipulated in the MRP. The Executive Officer may approve an alternative influent sampling plan if it is representative of plant influent and complies with all other permit requirements.

      ii. The Discharger shall collect effluent samples on days coincident with influent sampling, unless otherwise stipulated by the MRP. If influent sampling is not required, the Discharger shall collect effluent samples on varying days selected at random, unless otherwise stipulated in the MRP. The Executive Officer may approve an alternative effluent sampling plan if it is representative of plant discharge and in compliance with all other permit requirements.

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