

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

320 West 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 • Fax (213) 576-6640
<http://www.waterboards.ca.gov/losangeles/>

ORDER R4-2024-XXXX

NPDES NUMBER CA0054372

**WASTE DISCHARGE REQUIREMENTS AND
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR THE CITY OF AVALON
AVALON WASTEWATER TREATMENT FACILITY**

The following Discharger is subject to waste discharge requirements (WDRs) set forth in this Order:

Table 1. Discharger Information

| | |
|-------------------|---|
| Discharger: | City of Avalon (Discharger or Permittee) |
| Name of Facility: | Avalon Wastewater Treatment Facility (Avalon WWTF or Facility) |
| Facility Address: | 123 Pebbly Beach Road Avalon, CA 90704 Los Angeles County |

Table 2. Discharge Location

| Discharge Point | Effluent Description | Discharge Point Latitude (North) | Discharge Point Longitude (West) | Receiving Water |
|-----------------|------------------------------|----------------------------------|----------------------------------|-----------------|
| 001 | Secondary Treated Wastewater | 33.3386°N | 118.3111°W | Pacific Ocean |

Table 3. Administrative Information

| | |
|---|--|
| This Order was adopted on: | May 23, 2024 |
| This Order shall become effective on: | July 1, 2024 |
| This Order shall expire on: | June 30, 2029 |
| The Discharger shall file a Report of Waste Discharge (ROWD) as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for the Order reissuance of a NPDES permit no later than: | 180 days prior to the Order expiration date |
| The United States Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board have classified this discharge as follows: | Major |

I, Susana Arredondo, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on the date indicated above.

Susana Arredondo, Executive Officer

TABLE OF CONTENTS

1. FACILITY INFORMATION 5

2. FINDINGS..... 5

3. DISCHARGE PROHIBITIONS 6

4. EFFLUENT LIMITATIONS, PERFORMANCE GOALS, AND DISCHARGE SPECIFICATIONS 6

 4.1. Effluent Limitations and Performance Goals – Discharge Point 001 6

 4.2. Land Discharge Specifications – Not Applicable..... 14

 4.3. Recycling Specifications 14

5. RECEIVING WATER LIMITATIONS 14

 5.1. Surface Water Limitations 14

 5.2. Groundwater Limitations – Not Applicable 16

6. PROVISIONS..... 16

 6.1. Standard Provisions 16

 6.2. Monitoring and Reporting Program (MRP) Requirements..... 20

 6.3. Special Provisions 20

7. COMPLIANCE DETERMINATION 30

 7.1. General 30

 7.2. Multiple Sample Data 30

 7.3. Average Monthly Effluent Limitation (AMEL) 30

 7.4. Average Weekly Effluent Limitation (AWEL)..... 31

 7.5. Maximum Daily Effluent Limitation (MDEL) 31

 7.6. Instantaneous Minimum Effluent Limitation 31

 7.7. Instantaneous Maximum Effluent Limitation 32

 7.8. Six-month Median Effluent Limitation 32

 7.9. Chronic Toxicity..... 32

 7.10. Percent Removal..... 33

 7.11. Mass and Concentration Limitations..... 33

 7.12. Compliance with Single Constituent Effluent Limitations 33

 7.13. Compliance with Effluent Limitations Expressed as a Sum of Several Constituents 34

 7.14. Compliance with TCDD Equivalents 34

 7.15. Mass Emission Rate..... 35

 7.16. Bacterial Standards and Analysis 35

 7.17. Single Operational Upset (SOU)..... 36

TABLE OF TABLES

Table 1. Discharger Information 1

Table 2. Discharge Location 1

Table 3. Administrative Information..... 1

Table 4. Effluent Limitations and Performance Goals at Discharge Point 001 8

TABLE OF ATTACHMENTS

ATTACHMENT A. DEFINITIONSA-1
ATTACHMENT B. 1. AVALON WWTF SITE MAPB-1
ATTACHMENT B. 2. AVALON WWTF LAYOUTB-1
ATTACHMENT C. AVALON WWTF PROCESS FLOW DIAGRAM.....C-2
ATTACHMENT D. STANDARD PROVISIONSD-1
ATTACHMENT E. MONITORING AND REPORTING PROGRAME-1
ATTACHMENT F. FACT SHEETF-1
ATTACHMENT G. TOXICITY REDUCTION EVALUATION (TRE) WORK PLANG-1
ATTACHMENT H. BIOSOLIDS AND SLUDGE MANAGEMENTH-1

1. FACILITY INFORMATION

Information describing the Avalon Wastewater Treatment Facility (Avalon WWTF or Facility) is summarized in Table 1 and in sections 1 and 2 of the Fact Sheet (Attachment F). Section 1 of the Fact Sheet also includes information regarding the Facility's permit application.

2. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board), finds:

2.1. Legal Authorities. This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (Water Code) (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the US EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

2.2. Background and Rationale for Requirements. The Los Angeles Water Board developed the requirements in this Order based on information submitted as part of the application, and monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E, G, and H are also incorporated into this Order.

2.3. Provisions and Requirements Implementing State Law. The provisions and requirements implementing state law are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

2.4. Notification of Interested Parties. The Los Angeles Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.

2.5. Consideration of Public Comment. The Los Angeles Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that Order Number R4-2019-0023 is terminated upon the effective date of this order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Los Angeles Water Board from taking enforcement action for past violations of the previous Order.

3. DISCHARGE PROHIBITIONS

- 3.1. The discharge of any radiological, chemical, or biological warfare agent or high-level radiological waste is prohibited.
- 3.2. Discharge to designated Areas of Special Biological Significance is prohibited.
- 3.3. Pipeline discharge of sludge to the ocean is prohibited by federal law. The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean is prohibited by the California Ocean Plan. The discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean without further treatment, is prohibited.
- 3.4. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision 1.7. of Attachment D, Standard Provisions.
- 3.5. Discharge of treated wastewater at a location different from that described in this Order is prohibited.
- 3.6. The monthly average effluent dry-weather discharge flow rate from the Facility shall not exceed the 1.2 million gallons per day (MGD) design capacity.
- 3.7. The discharge of trash to surface waters of the State or the deposition of trash where it may be discharged into surface waters of the State is prohibited.
- 3.8. The Discharger shall not cause degradation of any water body, except as consistent with State Water Resources Control Board (State Water Board) Resolution Number 68-16.
- 3.9. The treatment or disposal of wastes from the Facility shall not cause pollution or nuisance as defined in section 13050, subdivisions (l) and (m), of the Water Code.
- 3.10. The discharge of any substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, animal, plant, or aquatic life is prohibited.

4. EFFLUENT LIMITATIONS, PERFORMANCE GOALS, AND DISCHARGE SPECIFICATIONS

4.1. Effluent Limitations and Performance Goals – Discharge Point 001

Effluent limitations for Discharge Point 001 are specified below.

The performance goals for Discharge Point 001 are prescribed below in this Order. Performance goals are based upon actual performance data, test method minimum levels (MLs), Ocean Plan water quality objectives (WQOs), and effluent limits, and are specified only as an indication of the treatment efficiency of the Facility (Refer to Fact Sheet section 5). Performance goals are not enforceable values but are used to evaluate the Facility's treatment efficiency. The Discharger shall maintain, if not improve, the effluent quality at or below the performance goal concentrations. Any two consecutive exceedances of a single performance goal shall trigger an investigation into the cause of the exceedance. If the exceedance persists in three successive monitoring periods, the Discharger shall submit a written report to the Los Angeles Water Board on the nature of the exceedance, the results of the investigation including the cause of the

exceedance, the corrective actions taken, any proposed corrective measures, and a timetable for implementation, if necessary.

4.1.1. Final Effluent Limitations and Performance Goals – Discharge Point 001

The Discharger shall maintain compliance with the following effluent limitations in Table 4 at Discharge Point 001 into the Pacific Ocean, with compliance measured at Monitoring Location EFF-001, as described in the Monitoring and Reporting Program (MRP), Attachment E:

Table 4. Effluent Limitations and Performance Goals at Discharge Point 001

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Maximum | Performance Goals Average Monthly | Notes |
|--|---------|-----------------|----------------|---------------|-----------------------|-----------------------------------|---------|
| Biochemical Oxygen Demand 5-day @ 20°C | mg/L | 20 | 35 | -- | -- | -- | a |
| Biochemical Oxygen Demand 5-day @ 20°C | lbs/day | 200 | 350 | -- | -- | -- | b |
| Total Suspended Solids | mg/L | 30 | 45 | -- | -- | -- | a |
| Total Suspended Solids | lbs/day | 300 | 450 | -- | -- | -- | b |
| Oil and Grease | mg/L | 25 | 40 | -- | 75 | -- | a, c |
| Oil and Grease | lbs/day | 250 | 400 | -- | 750 | -- | b |
| Settleable Solids | mL/L | 1.0 | 1.5 | -- | 3.0 | -- | a, c |
| Turbidity | NTU | 75 | 100 | -- | 225 | -- | a, c |
| Arsenic | µg/L | -- | -- | -- | -- | 5 | d |
| Cadmium | µg/L | -- | -- | -- | -- | 1.0 | d |
| Chromium (VI) | µg/L | -- | -- | -- | -- | 25 | d |
| Copper | µg/L | -- | -- | -- | -- | 49 | d |
| Lead | µg/L | -- | -- | -- | -- | 1.5 | d |
| Mercury | µg/L | -- | -- | -- | -- | 0.17 | d |
| Nickel | µg/L | -- | -- | -- | -- | 21 | d |
| Selenium | µg/L | -- | -- | -- | -- | 150 | d |
| Silver | µg/L | -- | -- | -- | -- | 5.4 | d |
| Zinc | µg/L | -- | -- | -- | -- | 190 | d |
| Cyanide | µg/L | -- | -- | -- | -- | 5.6 | -- |
| Chlorine Residual | µg/L | 120 | -- | 490 | 3,700 | 46 | a, c, e |
| Chlorine Residual | lbs/day | 1.2 | -- | 4.9 | 37 | -- | b |

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Maximum | Performance Goals Average Monthly | Notes |
|---|--------------------|-----------------|----------------|---------------|-----------------------|-----------------------------------|------------|
| Ammonia as N | mg/L | -- | -- | -- | -- | 19 | -- |
| Phenolic compounds (non-chlorinated) | µg/L | -- | -- | -- | -- | 0.041 | f |
| Phenolic compounds (chlorinated) | µg/L | -- | -- | -- | -- | 0.053 | f |
| Endosulfan | µg/L | 0.55 | -- | 1.1 | 1.6 | -- | a, c, e, f |
| Endosulfan | lbs/day | 0.0055 | -- | 0.011 | 0.016 | -- | b |
| Endrin | µg/L | -- | -- | -- | -- | 0.05 | -- |
| HCH | µg/L | -- | -- | -- | -- | 0.025 | f |
| Chronic toxicity (Purple Sea Urchin, <i>Strongylocentrotus purpuratus</i>) | Pass or Fail (TST) | -- | -- | Pass | -- | -- | a, g |
| Radioactivity, Gross alpha | pCi/L | -- | -- | -- | -- | 15 | -- |
| Radioactivity, Gross beta | pCi/L | -- | -- | -- | -- | 50 | -- |
| Combined Radium-226 & Radium-228 | pCi/L | -- | -- | -- | -- | -- | -- |
| Tritium | pCi/L | -- | -- | -- | -- | -- | -- |
| Strontium-90 | pCi/L | -- | -- | -- | -- | -- | -- |
| Uranium | pCi/L | -- | -- | -- | -- | -- | -- |
| Acrolein | µg/L | -- | -- | -- | -- | 10 | -- |
| Antimony | µg/L | -- | -- | -- | -- | 2.5 | d |
| Bis(2-chloroethoxy) methane | µg/L | -- | -- | -- | -- | 25 | -- |
| Bis(2-chloroisopropyl) ether | µg/L | -- | -- | -- | -- | 10 | -- |
| Chlorobenzene | µg/L | -- | -- | -- | -- | 2.5 | -- |
| Chromium (III) | µg/L | -- | -- | -- | -- | 31 | d |
| Di-n-butyl-phthalate | µg/L | -- | -- | -- | -- | 44 | -- |

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Maximum | Performance Goals Average Monthly | Notes |
|-----------------------------|---------|----------------------|----------------|---------------|-----------------------|-----------------------------------|-------|
| Dichlorobenzenes | µg/L | -- | -- | -- | -- | 10 | f |
| Diethyl phthalate | µg/L | -- | -- | -- | -- | 0.19 | -- |
| Dimethyl phthalate | µg/L | -- | -- | -- | -- | 0.76 | -- |
| 2-Methyl-4,6-dinitrophenol | µg/L | -- | -- | -- | -- | 25 | -- |
| 2,4-Dinitrophenol | µg/L | -- | -- | -- | -- | 25 | -- |
| Ethylbenzene | µg/L | -- | -- | -- | -- | 2.5 | -- |
| Fluoranthene | µg/L | -- | -- | -- | -- | 5 | -- |
| Hexachlorocyclopentadiene | µg/L | -- | -- | -- | -- | 25 | -- |
| Nitrobenzene | µg/L | -- | -- | -- | -- | 0.092 | -- |
| Thallium | µg/L | -- | -- | -- | -- | 2.3 | d |
| Toluene | µg/L | -- | -- | -- | -- | 1.4 | -- |
| Tributyltin | µg/L | -- | -- | -- | -- | 0.0065 | -- |
| 1,1,1-Trichloroethane | µg/L | -- | -- | -- | -- | 2.5 | -- |
| Acrylonitrile | µg/L | -- | -- | -- | -- | 10 | -- |
| Aldrin | µg/L | 0.0013 | -- | -- | -- | -- | a, e |
| Aldrin | lbs/day | 1.3×10^{-5} | -- | -- | -- | -- | b |
| Benzene | µg/L | -- | -- | -- | -- | 0.16 | -- |
| Benzidine | µg/L | -- | -- | -- | -- | 25 | -- |
| Beryllium | µg/L | -- | -- | -- | -- | 2.5 | d |
| Bis(2-chloroethyl) ether | µg/L | -- | -- | -- | -- | 5 | -- |
| Bis(2-ethylhexyl) phthalate | µg/L | -- | -- | -- | -- | 5.3 | -- |
| Carbon tetrachloride | µg/L | -- | -- | -- | -- | 2.5 | -- |
| Chlordane | µg/L | -- | -- | -- | -- | 0.5 | f |

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Maximum | Performance Goals Average Monthly | Notes |
|---------------------------|-------|-----------------|----------------|---------------|-----------------------|-----------------------------------|-------|
| Chlorodibromomethane | µg/L | -- | -- | -- | -- | 10 | -- |
| Chloroform | µg/L | -- | -- | -- | -- | 0.31 | -- |
| DDT | µg/L | -- | -- | -- | -- | 0.05 | f |
| 1,4-Dichlorobenzene | µg/L | -- | -- | -- | -- | 2.5 | -- |
| 3,3'-Dichlorobenzidine | µg/L | -- | -- | -- | -- | 25 | -- |
| 1,2-Dichloroethane | µg/L | -- | -- | -- | -- | 2.5 | -- |
| 1,1-Dichloroethylene | µg/L | -- | -- | -- | -- | 2.5 | -- |
| Bromodichloromethane | µg/L | -- | -- | -- | -- | 2.5 | -- |
| Dichloromethane | µg/L | -- | -- | -- | -- | 2.5 | -- |
| 1,3-Dichloropropene | µg/L | -- | -- | -- | -- | 25 | -- |
| Dieldrin | µg/L | -- | -- | -- | -- | 0.05 | -- |
| 2,4-Dinitrotoluene | µg/L | -- | -- | -- | -- | 25 | -- |
| 1,2-Diphenylhydrazine | µg/L | -- | -- | -- | -- | 5 | -- |
| Halomethanes | µg/L | -- | -- | -- | -- | 5.2 | f |
| Heptachlor | µg/L | -- | -- | -- | -- | 0.05 | -- |
| Heptachlor epoxide | µg/L | -- | -- | -- | -- | 0.05 | -- |
| Hexachlorobenzene | µg/L | -- | -- | -- | -- | 5 | -- |
| Hexachlorobutadiene | µg/L | -- | -- | -- | -- | 5 | -- |
| Hexachloroethane | µg/L | -- | -- | -- | -- | 5 | -- |
| Isophorone | µg/L | -- | -- | -- | -- | 5 | -- |
| N-Nitrosodimethylamine | µg/L | -- | -- | -- | -- | 25 | -- |
| N-Nitrosodi-N-propylamine | µg/L | -- | -- | -- | -- | 25 | -- |
| N-Nitrosodiphenylamine | µg/L | -- | -- | -- | -- | 5 | -- |

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Maximum | Performance Goals Average Monthly | Notes |
|---------------------------|---------|----------------------|----------------|---------------|-----------------------|-----------------------------------|---------|
| PAHs | µg/L | -- | -- | -- | -- | 1.1 | f |
| PCBs as aroclors | µg/L | -- | -- | -- | -- | 2.5 | f |
| TCDD equivalents | pg/L | 0.24 | -- | -- | -- | -- | a, e, f |
| TCDD equivalents | lbs/day | 2.4×10^{-9} | -- | -- | -- | -- | b |
| 1,1,2,2-Tetrachloroethane | µg/L | -- | -- | -- | -- | 2.5 | -- |
| Tetrachloroethylene | µg/L | -- | -- | -- | -- | 10 | -- |
| Toxaphene | µg/L | -- | -- | -- | -- | 2.5 | -- |
| Trichloroethylene | µg/L | -- | -- | -- | -- | 2.5 | -- |
| 1,1,2-Trichloroethane | µg/L | -- | -- | -- | -- | 2.5 | -- |
| 2,4,6-Trichlorophenol | µg/L | -- | -- | -- | -- | 0.18 | -- |
| Vinyl chloride | µg/L | -- | -- | -- | -- | 2.5 | -- |

Footnotes for Table 4

- a. The maximum daily, average weekly, and average monthly effluent limitations shall apply to flow-weighted 24-hour composite samples. They may apply to grab samples if the collection of composite samples for those constituents is not appropriate because of the instability of the constituents.
- b. The mass emission rates are calculated using 1.2 MGD, consistent with the water-quality based effluent limits in the previous permit: $\text{lbs/day} = 0.00834 \times C_e$ (effluent concentration in $\mu\text{g/L}$) $\times Q$ (flow rate in MGD).
- c. The instantaneous maximum effluent limitations shall apply to grab samples.
- d. Values are expressed as total recoverable concentrations.
- e. The minimum dilution ratio used to calculate effluent limitations for all nonconventional and toxic pollutants for Discharge Points 001 is 60:1 (i.e., 60-parts seawater to one-part effluent).
- f. See section 8 of this Order and Attachment A for definitions of terms.
- g. The Chronic Toxicity effluent limitation is protective of both the numeric acute and chronic toxicity Ocean Plan water quality objectives. The effluent limitation will be implemented using *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), current USEPA guidance in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010) (http://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf) and *EPA Regions 8, 9, and 10, Toxicity Training Tool* (January 2010).

End of Footnotes for Table 4

4.1.2. Other Effluent Limitations at Discharge Point 001

- a. **Percent Removal:** The average monthly percent removal of BOD₅20°C and TSS shall not be less than 85 percent.
- b. **Temperature:** The temperature of wastes discharged shall not exceed 100°F.
- c. **pH:** pH shall be maintained in the effluent within the limits of 6.0 and 9.0 standard units.
- d. **Radioactivity:** Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.
- e. Waste discharged to the ocean must be essentially free of
 - i. Material that is floatable or will become floatable upon discharge.
 - ii. Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.
 - iii. Substances that will accumulate to toxic levels in marine waters, sediments or biota.

- iv. Substances that significantly decrease the natural light to benthic communities and other marine life.
- v. Materials that result in aesthetically undesirable discoloration of the ocean surface.

4.1.3. Interim Effluent Limitations – Not Applicable

4.2. Land Discharge Specifications – Not Applicable

4.3. Recycling Specifications

Currently, the secondary-treated effluent produced at the Facility is not permitted for recycled water applications outside the boundary of the Facility. However, the effluent from the secondary clarifiers is reused on-site to hose down the headworks and the clarifiers. To promote and track the use of recycled water, the Discharger shall do the following:

4.3.1. Recycled Water Feasibility Investigation

The Discharger shall continue to investigate the feasibility of recycling, conservation, and/or alternative disposal methods for wastewater, and/or capture and treatment of dry-weather urban runoff and stormwater on a permissive basis for beneficial reuse. The Discharger shall submit a detailed feasibility investigation as part of the submittal of the Report of Waste Discharge (ROWD) for the next permit renewal.

4.3.2. Volumetric Reporting

The Discharger shall monitor and report recycled water usage from the Avalon WWTF in accordance with section 9.3. of the MRP.

5. RECEIVING WATER LIMITATIONS

The Discharger shall not cause a violation of the following water quality objectives. Compliance with these water quality objectives shall be determined by samples collected at stations outside the zone of initial dilution as specified in the MRP.

5.1. Surface Water Limitations

5.1.1. Bacterial Characteristics

a. State/Regional Water Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Los Angeles Water Board (i.e., waters designated as REC-1), but including all kelp beds, the following bacterial objectives shall be maintained throughout the water column.

- i. **Fecal coliform:** A 30-day geometric mean (GM) of fecal coliform density not to exceed 200 per 100 milliliters (mL), calculated based on the five most recent samples from each site, and a single sample maximum (SSM) not to exceed 400 per 100 mL.

- ii. **Enterococci:** A six-week rolling GM of Enterococci not to exceed 30 colony forming units (cfu) or most probable number (MPN) per 100 mL, calculated weekly, and a statistical threshold value (STV) of 110 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner. USEPA recommends using USEPA Method 1600 or other equivalent method to measure culturable Enterococci.
- b. The Initial Dilution Zone for any wastewater outfall shall be excluded from designation as kelp beds for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards.
- c. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Los Angeles Water Board, the following bacterial objectives shall be maintained throughout the water column: The median total coliform density for any 6-month period shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL for any six-month period.

5.1.2. Physical Characteristics

The waste discharged shall not:

- a. result in floating particulates and oil and grease to be visible;
- b. cause aesthetically undesirable discoloration on the ocean surface;
- c. significantly reduce the transmittance of natural light at any point outside the initial dilution zone;
- d. change the rate of deposition of inert solids and the characteristics of inert solids in ocean sediments such that benthic communities are degraded; and
- e. cause trash to be present in ocean waters, along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance.

5.1.3. Chemical Characteristics

The waste discharged shall not:

- a. cause the dissolved oxygen concentration at any time to be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste;
- b. change the pH of the receiving waters at any time more than 0.2 units from that which occurs naturally;
- c. cause the dissolved sulfide concentration of waters in and near sediments to be significantly increased above that present under natural conditions;
- d. cause concentration of substances (as set forth in Chapter II, Table 3 of the 2019 Ocean Plan) in marine sediments to be increased to levels that would degrade indigenous biota;

- e. cause the concentration of organic materials in marine sediments to be increased to levels that would degrade marine life;
- f. contain nutrients at levels that will cause objectionable aquatic growths or degrade indigenous biota;
- g. cause total chlorine residual to persist in the receiving water at any concentration that causes impairment of beneficial uses;
- h. produce concentrations of substances in the receiving water that are toxic to or cause detrimental physiological responses, in human, animal, or aquatic life; and
- i. contain individual pesticides or combinations of pesticides in concentrations that adversely affect beneficial uses.

5.1.4. Biological Characteristics

The waste discharged shall not:

- a. degrade marine communities, including vertebrate, invertebrate, and plant species;
- b. alter the natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption;
- c. cause the concentration of organic materials in fish, shellfish or other marine resources used for human consumption to bioaccumulate to levels that are harmful to human health; and
- d. contain substances that result in biochemical oxygen demand that adversely affects the beneficial uses of the receiving water.

5.1.5. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

5.2. Groundwater Limitations – Not Applicable

6. PROVISIONS

6.1. Standard Provisions

- 6.1.1. The Permittee shall comply with all Standard Provisions included in Attachment D.
- 6.1.2. **Los Angeles Water Board Standard Provisions.** The Discharger shall comply with the following provisions. If there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
 - a. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by section 13050 of the Water Code.
 - b. Odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system due to improper operation of facilities and/or spills, bypass, or overflow of sewage or sludge, as determined by the Los Angeles Water Board, are prohibited.

- c. All facilities used for collection, transport, treatment, or disposal of wastes shall be adequately protected against damage resulting from overflow, washout, or inundation from a storm or flood having a 1-percent chance of occurring in a 24-hour period in a given year.
- d. Collection, treatment, and disposal systems shall be operated in a manner that precludes or impedes public contact with wastewater.
- e. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer of the Los Angeles Water Board.
- f. The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
- g. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the CWA.
- h. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by section 311 of the CWA, related to oil and hazardous substances liability.
- i. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of stormwater to storm drain systems or other water courses under their jurisdiction, including applicable requirements in municipal stormwater management programs developed to comply with the NPDES permit(s) issued by the Los Angeles Water Board to local agencies.
- j. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the federal CWA and amendments thereto.
- k. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility; and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
- l. The Discharger shall make diligent, proactive efforts to reduce Facility infrastructure vulnerability to current and future impacts resulting from climate change, including but not limited to extreme wet weather events, flooding, storm surges, and projected sea level rise when the facility is located near the ocean or discharges to the ocean.
- m. Oil or oily material, chemicals, refuse, or other polluting materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried

- off the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- n. A copy of these waste discharge specifications shall always be maintained and available to operating personnel at the discharge Facility.
 - o. If there is any storage of hazardous or toxic materials or hydrocarbons at this Facility and if the Facility is not always manned, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
 - p. The Discharger shall file with the Los Angeles Water Board a report of waste discharge at least 120 days before making any proposed change in the character, location, or volume of the discharge.
 - q. In the event of any change in name, ownership, or control of these waste disposal facilities, the Discharger shall notify the Los Angeles Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Los Angeles Water Board, 30 days prior to taking effect.
 - r. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this Order.
 - s. The Discharger shall notify the Los Angeles Water Board Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Los Angeles Water Board Executive Officer, which may be toxic to aquatic life. Such notification shall include:
 - i. Name and general composition of the chemical,
 - ii. Frequency of use,
 - iii. Quantities to be used,
 - iv. Proposed discharge concentrations, and
 - v. USEPA registration number, if applicable.
 - t. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this Facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
 - u. Water Code section 13385(h)(i) requires the Los Angeles Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each serious violation. Pursuant to Water Code section 13385(h)(2), a “serious violation” is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A in title 40 of the Code of Federal Regulations (40 CFR) section 123.45

specifies the Group I and II pollutants. Pursuant to Water Code section 13385.1(a)(1), a “serious violation” is also defined as “a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.”

- v. Water Code section 13385(i) requires the Los Angeles Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each non-serious violation whenever a person violates a waste discharge requirement effluent limitation four or more times in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three non-serious violations within that time period.
- w. The CWC provides that any person who violates a waste discharge requirement or a provision of the CWC is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation, or some combination thereof, depending on the violation, or upon the combination of violations. Violation of any of the provisions of the applicable statutes and regulations or any provisions of this Order may subject the violator to any of the penalties described herein, or any combinations thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.
- x. Pursuant to Water Code section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, “effluent limitation” means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.
- y. Water Code section 13387(e) provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this order, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained in this order shall be punished by a fine of not more than twenty-five thousand dollars (\$25,000), imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code for 16, 20, or 24 months, or by both that fine and imprisonment. For a subsequent conviction, such a person shall be punished by a fine of not more than twenty-five thousand dollars (\$25,000) per day of violation, by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code for two, three, or four years, or by both that fine and imprisonment.
- z. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this

Order, the Discharger shall notify the Manager of the Watershed Regulatory Section at the Los Angeles Water Board by telephone (213) 576-6616 or by fax at (213) 576-6660 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing to the Los Angeles Water Board within five days, unless the Los Angeles Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation. The written notification shall also be submitted via email with reference to CI-0066 to losangeles@waterboards.ca.gov. Other noncompliance requires written notification as above at the time of the normal monitoring report.

6.2. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E.

6.3. Special Provisions

6.3.1. Reopener Provisions

- a. This Order may be modified, revoked and reissued, or terminated for cause, including, but not limited to:
 - i. Violation of any term or condition contained in this Order.
 - ii. Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- b. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
- c. This Order may be modified, in accordance with the provisions set forth in 40 CFR parts 122 and 124 to include requirements for the implementation of a watershed protection management approach.
- d. The Los Angeles Water Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order have or will have a reasonable potential to cause or contribute to adverse impacts on water quality or beneficial uses of the receiving waters.
- e. This Order may also be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation and issuance, or termination, or

a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

- f. This Order may be modified, in accordance with the provisions set forth in 40 CFR parts 122 to 124, to include new minimum levels (MLs).
- g. This Order may be reopened and modified to the extent necessary, to be consistent with new or revised policies, new or revised state-wide plans, new laws, or new regulations.
- h. This Order may be reopened and modified to incorporate the requirement to develop a pretreatment program pursuant to 40 CFR 403.8(a) if the Los Angeles Water Board Executive Officer determines that a pretreatment program is necessary to address the introduction of any pollutants into the POTW or any substantial change in the volume or character of pollutants in the discharge.

6.3.2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

The Discharger shall prepare and submit a copy of the Discharger's initial investigation Toxicity Reduction Evaluation (TRE) workplan in accordance with Monitoring and Reporting Program section 5.8.

b. Treatment Plant Capacity

The Discharger shall submit a written report to the Executive Officer of the Los Angeles Water Board within 90 days after the "30-day (monthly) average" daily dry-weather flow equals or exceeds 75 percent of the design capacity of waste treatment and/or disposal facilities. The Discharger's senior administrative officer shall sign a letter, which transmits that report and certifies that the Discharger's policy-making body is adequately informed of the report's contents. The report shall include the following:

- i. The average daily flow for the month, the date on which the peak flow occurred, the rate of that peak flow, and the total flow for the day.
- ii. The best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the facilities.
- iii. A schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

This requirement is applicable in the case where the facility has not reached 75 percent of capacity as of the effective date of this Order. If the facility has reached 75 percent of capacity by that date but has not previously submitted such a report, such a report shall be filed within 90 days of the issuance of this Order.

6.3.3. Best Management Practices and Pollution Prevention

a. Stormwater Pollution Prevention Plan (SWPPP)

The Avalon WWTF is regulated under the State Water Board Water Quality Order Number 2014-0057-DWQ amended by Order 2015-0122-DWQ and Order 2018-0028-DWQ, NPDES Number CAS000001, *General Permit for Storm Water Discharges Associated with Industrial Activities*.

b. Spill Clean-up Contingency Plan (SCCP)

Within 90 days of the effective date of this Order, the Discharger is required to update and submit an SCCP, which describes the activities and protocols to address cleanup of spills, overflows, and bypasses of untreated or partially treated wastewater from the Discharger's collection system or treatment facilities. At a minimum, the plan shall include sections on spill clean-up and containment measures, nuisance and odor control measures, public communication and notification, and monitoring plan and reporting of the monitoring results to the public and to regulatory agencies. The Discharger shall review and amend the plan as appropriate after each spill from the Facility or in the service area of the Facility. The Discharger shall include a discussion in the annual summary report of any modifications to the Plan and the application of the Plan to all spills during the year.

c. Pollutant Minimization Program (PMP)

Reporting protocols in MRP section 10.2.4 describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a reported Minimum Level (ML) and Method Detection Limit (MDL) are provided in Attachment A. These reporting protocols and definitions are used in determining the need to conduct a PMP as follows:

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

- i. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the reported ML; or,
- ii. The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in the MRP section 10.2.4.

The goal of the PMP shall be to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Los Angeles Water Board may consider

cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan (PPP), if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Los Angeles Water Board:

- i. An annual review and semi-annual monitoring of potential sources of the reportable pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling.
- ii. Quarterly monitoring for the reportable pollutant(s) in the influent to the wastewater treatment system.
- iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant(s) in the effluent at or below the effluent limitation.
- iv. Implementation of appropriate cost-effective control measures for the reportable pollutant(s), consistent with the control strategy, and
- v. An annual status report that shall be sent to the Los Angeles Water Board including:
 - All PMP monitoring results for the previous year.
 - A list of potential sources of the reportable pollutant(s).
 - A summary of all actions undertaken pursuant to the control strategy.
 - A description of actions to be taken in the following year.

6.3.4. Construction, Operation and Maintenance Specifications

- a. **Certified Wastewater Treatment Plant Operator:** Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to California Code of Regulations (CCR), title 23, division 3, chapter 26 (Water Code sections 13625 – 13633). All treatment plant operators shall also be trained in emergency response.
- b. **Climate Change Effects Vulnerability Assessment and Mitigation Plan:** The Discharger shall consider the impacts of climate change as they affect the operation of the treatment facility due to flooding, wildfires, or other climate-related changes. The Discharger shall develop a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan) to assess and manage climate change-related effects that may impact the wastewater treatment facility's operation, water supplies, its collection system, and water quality, including any projected changes to the influent water temperature and pollutant concentrations, and beneficial uses. The permittee shall also identify new or increased threats to the sewer system resulting from climate change that may impact desired levels of service in the next 50 years. The permittee shall project upgrades to existing assets or new infrastructure projects, and associated

costs, necessary to meet desired levels of service. Climate change research also indicates the overarching driver of climate change is increased atmospheric carbon dioxide from human activity. The increased carbon dioxide emissions trigger changes to climatic patterns, which increase the intensity of sea level rise and coastal storm surges, lead to more erratic rainfall and local weather patterns, trigger a gradual warming of freshwater and ocean temperatures, and trigger changes to ocean water chemistry. As such, the Climate Change Plan shall also identify steps being taken or planned to address greenhouse gas emissions attributable to wastewater treatment plants, solids handling, and effluent discharge processes. The Climate Change Plan is due 12 months after effective date of this Order.

- c. Alternate Power Source:** The Discharger shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located and secured to minimize failure due to moisture, liquid spray, flooding, wildfires, and other physical phenomena. The alternate power source shall be designed to allow inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the discharger shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power. The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur. If the existing alternate power source is insufficient to prevent the discharge of raw or inadequately treated sewage, the Permittee shall develop a plan to provide additional back-up power to the facility.
- d. Routine Maintenance and Operational Testing for Emergency Infrastructure/Equipment:** The Permittee shall perform monthly maintenance and operational testing for all emergency infrastructure and equipment at the facility, including but not limited to any bypass gate/weir in the headworks, alarm systems, backup pumps, standby power generators, and other critical emergency pump station components. The Permittee shall update the Operation and Maintenance Plan to include monthly maintenance and operational testing of emergency infrastructure and equipment, and shall keep the records of all operational testing for emergency systems, repairs, and modifications.
- e. Outfalls:** The Discharger shall properly operate and maintain the Outfall structure to ensure it (or its replacement, in whole or part) is in good working order and is consistent with or can achieve better mixing than 60:1 at Discharge Point 001.

6.3.5. Special Provisions for Municipal Facilities (POTWs Only)

- a. Biosolids Disposal Requirements – Refer to Attachment H**

 - i.** All sewage sludge (including biosolids) generated at the Avalon WWTF must be disposed of, treated, or applied to land in accordance with federal regulations contained in 40 CFR part 503. These requirements are enforceable by USEPA Region 9.

- ii. The Discharger is separately required to comply with the requirements in State Water Board Order No. 2004-0012-DWQ, *General WDRs for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities* for those sites receiving the Discharger's biosolids which a regional water board has placed under this general order, and with the requirements in individual WDRs issued by a regional water board for sites receiving the Discharger's biosolids.
 - iii. The Permittee shall separately comply, if applicable, with WDRs issued by other regional water boards to which jurisdiction the biosolids are transported and applied.
 - iv. The Permittee shall ensure that haulers transporting biosolids within the Permittee's jurisdiction for treatment, storage, use, or disposal take all necessary measures to keep the biosolids contained. The Permittee shall maintain and have haulers adhere to a spill clean-up plan. Any spills shall be reported to USEPA Region 9 and the Los Angeles Water Board or the state agency with jurisdiction over the location in which the spill occurred. All trucks hauling biosolids shall be thoroughly washed after unloading at the field or at the receiving facility.
- b. Pretreatment Requirements – Not Applicable
 - c. Collection System Requirements

The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (40 CFR section 122.41(e)). The Discharger must report any non-compliance (40 CFR section 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 CFR section 122.41(d)). On January 12, 2024, the Discharger submitted a check along with a Notice of Intent to enroll in the *Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems*, Water Quality Order Number 2022-0103-DWQ.

6.3.6. Spill Reporting Requirements

a. Initial Notification

For certain spills, overflows and bypasses, the Discharger shall make notifications as required below:

- i. In accordance with the requirements of Health and Safety Code section 5411.5, the Discharger shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the state or odors, vectors, and other nuisances of sewage sludge origin beyond the limits of the treatment plant site or the sewage collection system as soon as possible, but no later than two hours after becoming aware of the release.
- ii. In accordance with the requirements of California Water Code section 13271, the Discharger shall provide notification to the California Office of Emergency Services (Cal OES) of the release of reportable amounts of hazardous

substances or sewage that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but not later than two hours after becoming aware of the release. The CCR, Title 23, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting these releases to the Cal OES is (800) 852-7550. In addition, the Discharger shall notify other interested persons of any such sewage spill, including but not limited to the South Coast Air Quality Management District (AQMD), cities within the jurisdiction of the spill, and Heal the Bay, by maintaining an email list of those interested persons that have requested such notification. The Discharger shall also include public outreach in their emergency communications protocols, which may include media updates, social media postings, and community notices. The Permittee shall submit an emergency communications protocol to the Los Angeles Water Board within 30 days of the effective date of the Order including specific outreach elements, such as mass emails and telephone calls to residents in the communities surrounding the plant.

iii. The Discharger shall notify the Los Angeles Water Board of any unauthorized release of sewage from its POTW that causes, or probably will cause, a discharge to a water of the state or odors, vectors, and other nuisances of sewage sludge origin beyond the limits of the treatment plant site or the sewage collection system as soon as possible, but not later than two hours after becoming aware of the release. This initial notification does not need to be made if the Discharger has notified Cal OES and the local health officer or the director of environmental health with jurisdiction over the affected waterbody. The phone number for reporting these releases of sewage to the Los Angeles Water Board is (213) 576-6657. The phone numbers for after hours and weekend reporting of releases of sewage to the Los Angeles Water Board are (213) 305-2284 and (213) 305-2253. At a minimum, the following information shall be provided to the Los Angeles Water Board:

- The location, date, and time of the release.
- The water body that received or will receive the discharge.
- An estimate of the amount of sewage or other waste released and the amount that reached surface water at the time of notification.
- If ongoing, the estimated flow rate of the release at the time of the notification.
- The name, organization, phone number and email address of the reporting representative.

b. Monitoring

For spills, overflows and bypasses reported under section 6.3.6.a, the Discharger shall monitor as required below:

To define the geographical extent of the spill's impact, the Discharger shall obtain grab samples (if feasible, accessible, and safe) for all spills, overflows or bypasses of any volume that reach any waters of the state (including shoreline,

surface, groundwaters, etc.). If a grab sample cannot be obtained due to accessibility or safety concerns that cannot be addressed with the appropriate personal protective equipment or following proper sampling procedures, the sample shall be obtained as soon as it becomes safe to do so. The Discharger shall analyze the samples for total coliform, fecal coliform, *E. coli* (if fecal coliform tests positive), *Enterococcus*, and relevant pollutants of concern that are typically present in the Avalon WWTF's influent, upstream and downstream of the point of entry of the spill (if feasible, accessible, and safe). Rapid fecal monitoring is preferred in these situations, as long as a State Water Board's Environmental Laboratory Accreditation Program (ELAP)-certified lab is available to conduct the analyses. Daily monitoring shall be conducted from the time the spill is known until the results of two consecutive sets of bacteriological monitoring indicate the return to the background level or the Los Angeles County Department of Public Health authorizes cessation of monitoring.

c. Reporting

The initial notification required under section 6.3.6.a shall include the following:

- i. As soon as possible, but not later than twenty-four (24) hours after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, or a spill, bypass or upset that results in odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system, the Discharger shall submit a statement to the Los Angeles Water Board by email at augustine.anijelo@waterboards.ca.gov. If the discharge is 1,000 gallons or more, this statement shall certify that Cal OES has been notified of the discharge in accordance with Water Code section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:
 - Agency, NPDES Number, Order Number, and MRP CI Number, if applicable.
 - The location, date, and time of the discharge.
 - The water body that received the discharge.
 - A description of the level of treatment of the sewage or other waste discharged.
 - An initial estimate of the amount of sewage or other waste released and the amount that reached a surface water.
 - The Cal OES control number and the date and time that notification of the incident was provided to Cal OES.
 - The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).

- ii. A written preliminary report five business days after disclosure of the incident is required. Submission to the Los Angeles Water Board of the California Integrated Water Quality System (CIWQS) Sanitary Sewer Overflow (SSO) event number shall satisfy this requirement. Within 30 days after submitting the preliminary report, the Discharger shall submit the final written report to the Los Angeles Water Board. (A copy of the final written report for a given incident, already submitted pursuant to the *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* (SSS WDRs), may be submitted to the Los Angeles Water Board to satisfy this requirement.) The written report shall document the information required in paragraph 6.3.6.d below, monitoring results and any other information required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences. The Executive Officer for just cause can grant an extension for submittal of the final written report.
- iii. The Discharger shall include a certification in the annual summary report (due according to the schedule in the MRP) that states that the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components were maintained and tested in accordance with the Discharger's preventive maintenance plan. Any deviations from or modifications to the plan shall be discussed.

d. Records

The Discharger shall develop and maintain a record of all spills, overflows or bypasses of raw or partially treated sewage from its collection system or treatment plant. This record shall be made available to the Los Angeles Water Board upon request and a spill summary shall be included in the annual summary report. The records shall contain:

- i. The date and time of each spill, overflow, or bypass.
- ii. The location of each spill, overflow, or bypass.
- iii. The estimated volume of each spill, overflow, and bypass including gross volume, amount recovered and amount not recovered, monitoring results as required by section 6.3.6.b.
- iv. The cause of each spill, overflow, or bypass.
- v. Whether each spill, overflow, or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances.
- vi. Any mitigation measures implemented.
- vii. Any corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.

viii. The mandatory information included in SSO online reporting for finalizing and certifying the SSO report for each spill, overflow, or bypass under the SSS WDRs.

e. Activities Coordination

Although not required by this Order, the Los Angeles Water Board expects the POTW's owners/operators will coordinate their compliance activities for consistency and efficiency with other entities that have responsibilities to implement: (i) this NPDES permit, including the Pretreatment Program if applicable, (ii) a Municipal Separate Storm Sewer Systems (MS4) NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements and (iii) SSS WDRs or subsequent updates, and any other order issued to the Discharger regulating the discharge of waste to waters of the United States and waters of the state, including but not limited to Cease and Desist Order No. R4-2012-0077. The Los Angeles Water Board also expects the POTW's owners/operators to consider coordination with other agencies regarding the potential for the permissive integration of the MS4 with the wastewater collection system.

f. Consistency with SSS WDRs

The Permittee must separately comply with the SSS WDRs (State Water Board Order WQ 2022-0103-DWQ, *Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems*). These SSS WDRs require public agencies that own or operate sanitary sewer systems with greater than one mile of sewer lines to apply for coverage and comply with requirements, to develop and implement sewer system management plans, and to report all SSOs to the State Water Board's online SSO database. The Discharger submitted an NOI for enrollment in the SSS WDRs on January 12, 2024. The Discharger must properly operate and maintain its collection system (40 CFR § 122.41 (e)), report any non-compliance (40 CFR § 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR § 122.41(d)).

The requirements contained in this Order in sections 6.3.3.b (SCCP), 6.3.4. (Construction, Operation and Maintenance Specifications), and 6.3.6. (Spill Reporting Requirements) are intended to be consistent with the requirements of the SSS WDRs. The Los Angeles Water Board recognizes that there may be some overlap between these NPDES permit provisions and the SSS WDRs requirements, related to the collection systems. The requirements of the SSS WDRs are considered the minimum thresholds. To encourage efficiency, the Los Angeles Water Board will accept the documentation prepared by the Discharger under the SSS WDRs for compliance purposes as satisfying the requirements in sections 6.3.3.b, 6.3.4, and 6.3.6 provided the more stringent provisions contained in this NPDES permit are also addressed. Pursuant to SSS WDRs, section D, provision 2(iii) and (iv), the provisions of this NPDES permit supersede the SSS WDRs, for all purposes, including enforcement, to the extent the requirements may be deemed duplicative.

The requirements in CDO No. R4-2012-0077 are also intended to meet or exceed requirements contained in the SSS WDRs. To the extent that CDO No. R4-2012-0077 conflicts with the SSS WDRs, the requirements in CDO No. R4-2012-0077 supersedes and controls. CDO No. R4-2012-0077 does not, however relieve the Discharger of any of its obligations to comply with the SSS WDRs in situations where that requirement is not in conflict with or controlled by a more specific requirement in CDO No. R4-2012-0077.

6.3.7. Other Special Provisions – Not Applicable

6.3.8. Compliance Schedules – Not Applicable

7. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section 4 of this Order will be determined as specified below:

7.1. General

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

7.2. Multiple Sample Data

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

7.2.1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

7.2.2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

7.3. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by Section 7.2 above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation for the purpose of calculating mandatory minimum penalties, though the Discharger may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of

non-compliance in a 31-day month) in cases where discretionary administrative civil liabilities are appropriate. If only a single sample is collected during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger may be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is collected, no compliance determination can be made for that calendar month with respect to the AMEL.

If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for a given parameter, the Discharger will have demonstrated compliance with the AMEL for each day of that month for that parameter.

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Discharger may collect up to four additional samples within the same calendar month. All analytical results shall be reported in the monitoring report for that month. The concentration of pollutant (an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data Reduction" section above, will be used for compliance determination.

In the event of noncompliance with an AMEL, the sampling frequency for that parameter shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

7.4. Average Weekly Effluent Limitation (AWEL)

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is collected during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is collected, no compliance determination can be made for that calendar week with respect to the AWEL.

A calendar week will begin on Sunday and end on Saturday. Partial calendar weeks at the end of calendar month will be carried forward to the next month to calculate and report a consecutive seven-day average value on Saturday.

7.5. Maximum Daily Effluent Limitation (MDEL)

If a 24-hour composite sample exceeds the MDEL for a given parameter, an alleged violation will be flagged, and the Permittee will be considered out of compliance for that day for that parameter. If no sample (daily discharge) is collected over a calendar day, no compliance determination can be made for that day with respect to an effluent violation determination, but compliance determination can be made for that day with respect to a reporting violation determination.

7.6. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a potential violation will be flagged, and the

Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

7.7. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a potential violation will be flagged, and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

7.8. Six-month Median Effluent Limitation

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, a potential violation will be flagged, and the Discharger will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is collected. If only a single sample is collected during a given 180-day period and the analytical result for that sample exceeds the six-month median, the Discharger will be considered out of compliance for the 180-day period. For any 180-period during which no sample is collected, no compliance determination can be made for the six-month median effluent limitation.

7.9. Chronic Toxicity

The discharge is subject to determination of “Pass” or “Fail” and “Percent Effect” from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, Table A-1, and Appendix B, Table B-1. The null hypothesis (H_0) for the TST statistical approach is: Mean ambient water response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as “Pass.” A test result that does not reject this null hypothesis is reported as “Fail.” The relative “Percent Effect” at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$. This is a t-test, a statistical analysis comparing two sets of replicate observations - in the case of Whole Effluent Toxicity (WET), only two test concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is “Pass” or “Fail”). The Welch’s t-test employed by the TST statistical approach is an adaptation of Student’s t-test and is used with two samples having unequal variances.

The MDEL for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST statistical approach, results in “Fail.”

The chronic toxicity MDEL is set at the IWC for the discharge (1.6% effluent) and expressed in units of the TST statistical approach (“Pass” or “Fail”). All NPDES effluent

compliance monitoring for the chronic toxicity MDEL shall be reported using only the IWC (1.6% effluent) effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (Ho) (see above) is statistically analyzed using the IWC and a negative control. Effluent toxicity tests shall be run using *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). The Los Angeles Water Board's review of reported toxicity test results will not include review of concentration-response patterns as appropriate (see Fact Sheet discussion at 4.3.6). As described in the bioassay laboratory audit correspondence from the State Water Resources Control Board dated August 7, 2014, and from the USEPA dated December 24, 2013, the Percent Minimum Significant Difference (PMSD) criteria only apply to compliance reporting for the No Observable Effect Concentration (NOEC) and the sublethal statistical endpoints of the NOEC, and therefore are not used to interpret results using the TST statistical approach. Standard Operating Procedures used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent (and receiving water) toxicity test measurement results from the TST statistical approach, including those that incorporate a consideration of concentration-response patterns, must be submitted to the Los Angeles Water Board (40 CFR § 122.41(h)). The Los Angeles Water Board will make a final determination as to whether a toxicity test result is valid, and may consult with the Permittee, the USEPA, the State Water Board's Quality Assurance Officer, or the State Water Board's Environmental Laboratory Accreditation Program (ELAP) as needed. The Board may consider the results of any Toxicity Identification Evaluation (TIE)/TRE studies in an enforcement action.

7.10. Percent Removal

The average monthly percent removal is the removal efficiency expressed in percentage across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of pollutant concentrations (C in mg/L) of influent and effluent samples collected at about the same time using the following equation:

$$\text{Percent Removal (\%)} = [1 - (C_{\text{Effluent}}/C_{\text{Influent}})] \times 100\%$$

When preferred, the Permittee may substitute mass loadings and mass emissions for the concentrations.

7.11. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or DNQ, the corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

7.12. Compliance with Single Constituent Effluent Limitations

Permittees may be considered out of compliance with the effluent limitation if the concentration of the pollutant (see Section 6.2 "Multiple Sample Data Reduction" above)

in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

7.13. Compliance with Effluent Limitations Expressed as a Sum of Several Constituents

Permittees are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

7.14. Compliance with TCDD Equivalentents

TCDD equivalentents shall be monitored and calculated using the following formula, where the MLs and toxicity equivalency factors (TEFs) are as provided in the table below. The Permittee shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalentents, the Permittee shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

$$Dioxin\ Concentration = \sum_{i=1}^{17} (TEQi) = \sum_{i=1}^{17} (Ci)(TEFi)$$

where:

Ci = individual concentration of a dioxin or furan congener

TEFi = individual TEF for a congener

MLs and TEFs

| Congeners | MLs (pg/L) | TEFs |
|------------------------|------------|-------|
| 2,3,7,8-TetraCDD | 10 | 1.0 |
| 1,2,3,7,8-PentaCDD | 50 | 0.5 |
| 1,2,3,4,7,8-HexaCDD | 50 | 0.1 |
| 1,2,3,6,7,8-HexaCDD | 50 | 0.1 |
| 1,2,3,7,8,9-HexaCDD | 50 | 0.1 |
| 1,2,3,4,6,7,8-HeptaCDD | 50 | 0.01 |
| OctaCDD | 100 | 0.001 |
| 2,3,7,8-TetraCDF | 10 | 0.1 |
| 1,2,3,7,8-PentaCDF | 50 | 0.05 |
| 2,3,4,7,8-PentaCDF | 50 | 0.5 |
| 1,2,3,4,7,8-HexaCDF | 50 | 0.1 |
| 1,2,3,6,7,8-HexaCDF | 50 | 0.1 |
| 1,2,3,7,8,9-HexaCDF | 50 | 0.1 |
| 2,3,4,6,7,8-HexaCDF | 50 | 0.1 |
| 1,2,3,4,6,7,8-HeptaCDF | 50 | 0.01 |

| Congeners | MLs (pg/L) | TEFs |
|------------------------|------------|-------|
| 1,2,3,4,7,8,9-HeptaCDF | 50 | 0.01 |
| OctaCDF | 100 | 0.001 |

7.15. Mass Emission Rate

The mass emission rate shall be obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.34}{N} \sum_{i=1}^N Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.79}{N} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples, which may be collected during any calendar day. If a composite sample is collected, 'C_i' is the concentration measured in the composite sample and 'Q_i' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$\text{Daily concentration} = \frac{1}{Q_t} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of component waste streams. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Q_t' is the total flow rate of the combined waste streams.

7.16. Bacterial Standards and Analysis

7.16.1. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

$$GM = \sqrt[n]{(x_1)(x_2)(x_3) \cdots (x_n)}$$

where X is the sample value and n is the number of samples collected.

7.16.2. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 mL for total and fecal coliform, at a minimum, and 1 to 1,000 per 100 mL for *Enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.

7.16.3. Detection methods used for total coliforms shall be those presented in Table 1A of 40 CFR part 136, unless alternate methods have been approved by USEPA

pursuant to 40 CFR part 136, or improved methods have been determined by the Executive Officer and/or USEPA.

- 7.16.4. Detection methods used for *Escherichia coli* and *Enterococcus* shall be those presented in Table 1A of 40 CFR part 136 or in the USEPA publication EPA 600/4-85/076, "Test Methods for *Escherichia coli* and *Enterococci* in Water By Membrane Filter Procedure" or any improved method determined by the Executive Officer and/or USEPA to be appropriate.

7.17. Single Operational Upset (SOU)

A SOU that leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation and limits the Permittee's liability in accordance with the following conditions:

- 7.17.1. An SOU is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.
- 7.17.2. A Permittee may assert SOU to limit liability only for those violations which the Permittee submitted notice of the upset as required in Provision 5.5.2(b) of Attachment D – Standard Provisions.
- 7.17.3. For violations other than violations of Water Code section 13385 subdivisions (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Permittees to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA Memorandum "Issuance of Guidance Interpreting Single Operational Upset" (September 27, 1989).
- 7.17.4. For purpose of Water Code section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Permittees to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with Water Code section 13385 (f)(2).

ATTACHMENT A. DEFINITIONS

Areas of Special Biological Significance (ASBS)

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

Arithmetic Mean (μ)

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \mu = (\sum x)/n$$

where: $\sum x$ is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

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

Bioaccumulative

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

Biosolids

Sewage sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agricultural, silvicultural, horticultural, and land reclamation activities as specified under 40 CFR part 503.

Carcinogenic

Carcinogenic pollutants are substances that are known to cause cancer in living organisms.

Chlordane

The sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Coefficient of Variation (CV)

A measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Composite Sample, 24-hour

For flow rate measurements, the arithmetic mean of no fewer than eight individual measurements taken at equal intervals for 24 hours or for the duration of discharge, whichever is shorter.

Composite sample, for other than flow rate measurements:

- a. No fewer than eight individual sample portions collected at equal time intervals for 24 hours. The volume of each individual sample portion shall be directly proportional to the discharge flow rate at the time of sampling; or,
- b. No fewer than eight individual sample portions collected of equal volume collected over a 24-hour period. The time interval between each individual sample portion shall vary such that the volume of the discharge between each individual sample portion remains constant.

The compositing period shall equal the specified sampling period, or 24 hours, if no period is specified.

The composite sample result shall be reported for the calendar day during which composite sampling ends.

Daily Discharge

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

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

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

DDT

The sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD, and 2,4'-DDD.

Degrade

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

Detected, but Not Quantified (DNQ)

Those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dichlorobenzenes

The sum of 1,2- and 1,3-dichlorobenzene.

Dilution Credit

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

Downstream Ocean Waters

Waters downstream with respect to ocean currents.

Dredged Material

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

Enclosed Bays

Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Endosulfan

The sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estimated Chemical Concentration

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries and Coastal Lagoons

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

Grab Sample

An individual sample collected during a period not to exceed 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not occur during hydraulic peaks.

Halomethanes

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

Hexachlorocyclohexane (HCH)

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

Indirect Discharge

The introduction of pollutants into a POTW from any non-domestic source regulated under section 307(b), (c), or (d) of the CWA.

Initial Dilution

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

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

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

Inland Surface Waters

All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

In-stream Waste Concentration (IWC)

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

Kelp Beds

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

Mariculture

The culture of plants and animals in marine waters independent of any pollution source.

Material

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

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant.

Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the n/2 and n/2+1).

Method Detection Limit (MDL)

The minimum measured concentration of a substance that can be reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR part 136, Attachment B.

Minimum Level (ML)

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

Mixing Zone

A limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Natural Light

Reduction of natural light may be determined by the Los Angeles Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Los Angeles Water Board.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

Ocean Waters

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

PAHs (polycyclic aromatic hydrocarbons)

The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls) as Aroclors

The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

PCBs as Congeners

The sum of the following 41 individually quantified PCB congeners or mixtures of isomers of single congeners in a co-elution: PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

Persistent Pollutants

Substances for which degradation or decomposition in the environment is nonexistent or very slow.

Phenolic Compounds (chlorinated)

The sum of 2-chlorophenol, 2,4-dichlorophenol, 4-chloro-3-methylphenol, 2,4,6-trichlorophenol, and pentachlorophenol.

Phenolic Compounds (non-chlorinated)

The sum of 2,4-dimethylphenol, 2-nitrophenol, 4-nitrophenol, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, and phenol.

Pollutant Minimization Program (PMP)

Waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Los Angeles Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention

Any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Resources Control Board (State Water Board) or Los Angeles Water Board.

Publicly Owned Treatment Works

A treatment works as defined by section 212 of the CWA, which is owned by a State or municipality (as defined by section 502(4) of the CWA). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant. The term also means the municipality which has jurisdiction over the indirect discharges to and the discharges from such treatment works. (40 CFR § 403.3(q).)

Reporting Minimum Level

The reported ML (also known as the Reporting Level or RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Los Angeles Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML. (See Ocean Plan section III.C.6.).

Satellite Collection System

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

Shellfish

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

Significant Difference

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

Six-Month Median Effluent Limitation

The highest allowable moving median of all “daily discharges” for any 180-day period.

Standard Deviation (σ)

Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = \sqrt{\frac{\sum(x - \mu)^2}{n - 1}}$$

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

State Water Quality Protection Areas (SWQPAs)

Non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolutions 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

Statistical Threshold Value (STV)

The STV for the bacteria water quality objectives is a set value that approximates the 90th percentile of the water quality distribution of a bacterial population.

TCDD Equivalents

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

| Congeners | MLs (pg/L) | TEFs |
|------------------------|------------|-------|
| 2,3,7,8-TetraCDD | 10 | 1.0 |
| 1,2,3,7,8-PentaCDD | 50 | 0.5 |
| 1,2,3,4,7,8-HexaCDD | 50 | 0.1 |
| 1,2,3,6,7,8-HexaCDD | 50 | 0.1 |
| 1,2,3,7,8,9-HexaCDD | 50 | 0.1 |
| 1,2,3,4,6,7,8-HeptaCDD | 50 | 0.01 |
| OctaCDD | 100 | 0.001 |
| 2,3,7,8-TetraCDF | 10 | 0.1 |
| 1,2,3,7,8-PentaCDF | 50 | 0.05 |
| 2,3,4,7,8-PentaCDF | 50 | 0.5 |
| 1,2,3,4,7,8-HexaCDF | 50 | 0.1 |
| 1,2,3,6,7,8-HexaCDF | 50 | 0.1 |
| 1,2,3,7,8,9-HexaCDF | 50 | 0.1 |
| 2,3,4,6,7,8-HexaCDF | 50 | 0.1 |
| 1,2,3,4,6,7,8-HeptaCDF | 50 | 0.01 |
| 1,2,3,4,7,8,9-HeptaCDF | 50 | 0.01 |
| OctaCDF | 100 | 0.001 |

Test of Significant Toxicity (TST)

A statistical approach used to analyze toxicity test data. The TST incorporates a restated null hypothesis, Welch’s t-test, and the biological effect thresholds for chronic and acute toxicity.

Total Nitrogen

The sum of nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, and total organic nitrogen.

Toxicity Identification Evaluation (TIE)

Set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

Toxicity Reduction Evaluation (TRE)

A study conducted in a stepwise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate.

Trash

All improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or synthetic natural materials. (As defined in the “Water Quality Control Plan, Ocean Waters of California” [California Ocean Plan]).

Waste

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

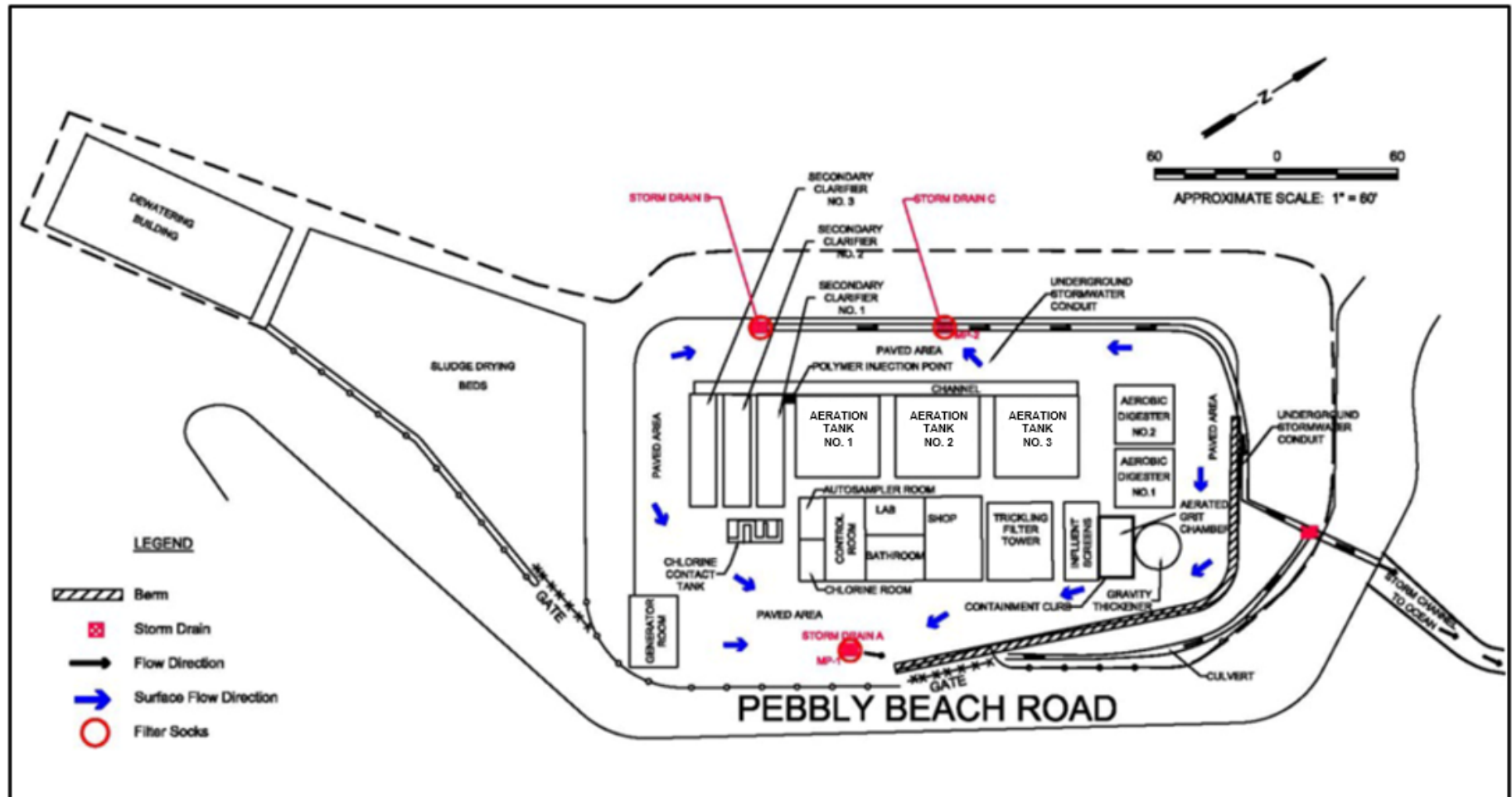
Water Recycling

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

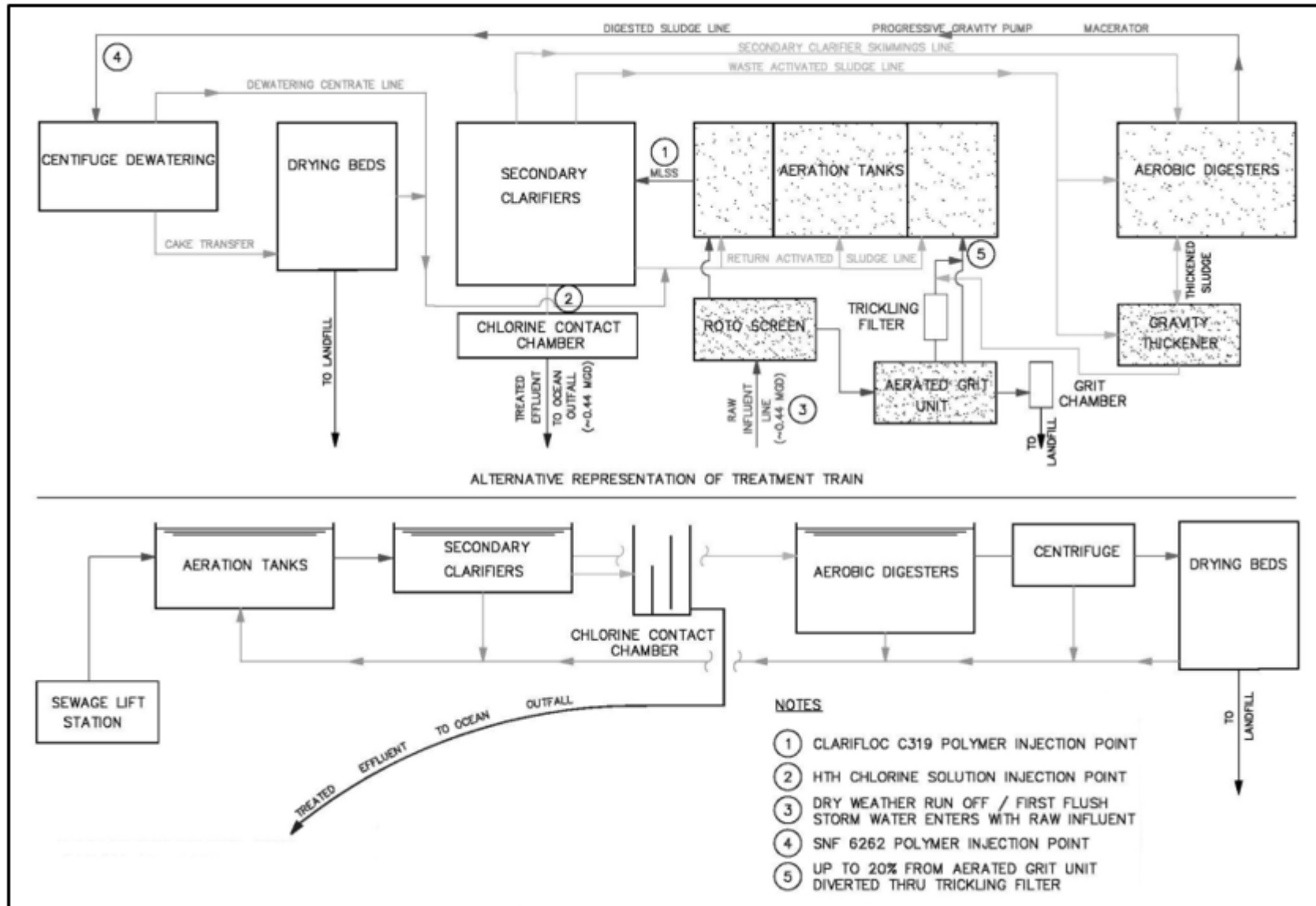
ATTACHMENT B. 1. AVALON WWTF SITE MAP



ATTACHMENT B. 2. AVALON WWTF LAYOUT



ATTACHMENT C. AVALON WWTF PROCESS FLOW DIAGRAM



ATTACHMENT D. STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

1.1.1. The Permittee must comply with all the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA), its regulations, and the California Water Code (Water Code) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (Title 40 of the Code of Federal Regulations (40 CFR) section 122.41(a); California Water Code (Water Code) sections 13261, 13263, 13264, 13265, 13268, 13000, 13001, 13304, 13350, 13385).

1.1.2. The Permittee shall comply with effluent standards or prohibitions established under Part 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR section 122.41(a)(1).)

1.2. Need to Halt or Reduce Activity Not a Defense

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

1.3. Duty to Mitigate

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

1.4. Proper Operation and Maintenance

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

1.5. Property Rights

1.5.1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR section 122.41(g).)

1.5.2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR section 122.5(c).)

1.6. Inspection and Entry

The Permittee shall allow the Los Angeles Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as

their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. section 1318(a)(B); 40 CFR section 122.41(i); Water Code section 13267 and 13383):

- 1.6.1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. section 1318(a)(B)(i); 40 CFR section 122.41(i)(1); Water Code sections 13267 and 13383);
- 1.6.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. section 1318(a)(B)(ii); 40 CFR section 122.41(i)(2); Water Code sections 13267 and 13383);
- 1.6.3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. section 1318(a)(B)(ii); 40 CFR section 122.41(i)(3); Water Code sections 13267 and 13383); and
- 1.6.4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. section 1318(a)(B); 40 CFR section 122.41(i)(4); Water Code sections 13267 and 13383)

1.7. Bypass

1.7.1. Definitions

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR section 122.41(m)(1)(i).)
- b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR section 122.41(m)(1)(ii).)

1.7.2. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance 1.7.3, 1.7.4, and 1.7.5 below. (40 CFR section 122.41(m)(2).)

1.7.3. Prohibition of bypass. Bypass is prohibited, and the Los Angeles Water Board may take enforcement action against a Permittee for bypass, unless (40 CFR section 122.41(m)(4)(i)):

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR section 122.41(m)(4)(i)(A));
- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable

engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR section 122.41(m)(4)(i)(B)); and

- c. The Permittee submitted notice to the Los Angeles Water Board as required under Standard Provisions – Permit Compliance 1.7.5 below. (40 CFR section 122.41(m)(4)(i)(C).)

1.7.4. The Los Angeles Water Board may approve an anticipated bypass, after considering its adverse effects, if the Los Angeles Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance 1.7.3 above. (40 CFR section 122.41(m)(4)(ii).)

1.7.5. Notice

- a. **Anticipated bypass.** If the Permittee knows in advance of the need for a bypass, it shall submit a notice, if possible, at least 10 days before the date of the bypass. As of December 21, 2025, all notices submitted in compliance with this section must be submitted electronically by the Discharger to the Los Angeles Water Board or initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 122.22 and part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by a particular Order or if required to do so by State law. (40 CFR § 122.41(m)(3)(i).)
- b. **Unanticipated bypass.** The Permittee shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting 5.5 below (24-hour notice). As of December 21, 2025, all notices submitted in compliance with this section must be submitted electronically by the Discharger to the Los Angeles Water Board or initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 122.22 and part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by a particular Order or if required to do so by State law. (40 CFR § 122.41(m)(3)(ii).)

1.8. Upset

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

- 1.8.1. Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance 1.8.2 below are met. No determination made during administrative review of claims that noncompliance

was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR section 122.41(n)(2).)

1.8.2. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR section 122.41(n)(3)):

- a. An upset occurred and that the Permittee can identify the cause(s) of the upset (40 CFR section 122.41(n)(3)(i));
- b. The permitted facility was, at the time, being properly operated (40 CFR section 122.41(n)(3)(ii));
- c. The Permittee submitted notice of the upset as required in Standard Provisions – Reporting 5.5.2.b below (24-hour notice) (40 CFR section 122.41(n)(3)(iii)); and
- d. The Permittee complied with any remedial measures required under Standard Provisions – Permit Compliance 1.3 above. (40 CFR section 122.41(n)(3)(iv).)

1.8.3. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof. (40 CFR section 122.41(n)(4).)

2. STANDARD PROVISIONS – PERMIT ACTION

2.1. General

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

2.2. Duty to Reapply

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

2.3. Transfers

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

3. STANDARD PROVISIONS – MONITORING

3.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR section 122.41(j)(1).)

3.2. Monitoring must be conducted according to test procedures approved under 40 CFR part 136 for the analyses of pollutants unless another method is required under 40 CFR

chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 CFR part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

- 3.2.1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
- 3.2.2. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 when approved by the Los Angeles Water Board and the State Water Board, or required under 40 CFR chapter 1, subchapter N for the measured pollutant or pollutant parameter. In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 CFR §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

4. STANDARD PROVISIONS – RECORDS

- 4.1. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Los Angeles Water Board Executive Officer at any time. (40 CFR section 122.41(j)(2).)
- 4.2. Records of monitoring information shall include:
 - 4.2.1. The date, exact place, and time of sampling or measurements (40 CFR section 122.41(j)(3)(i));
 - 4.2.2. The individual(s) who performed the sampling or measurements (40 CFR section 122.41(j)(3)(ii));
 - 4.2.3. The date(s) analyses were performed (40 CFR section 122.41(j)(3)(iii));
 - 4.2.4. The individual(s) who performed the analyses (40 CFR section 122.41(j)(3)(iv));
 - 4.2.5. The analytical techniques or methods used (40 CFR section 122.41(j)(3)(v)); and
 - 4.2.6. The results of such analyses. (40 CFR section 122.41(j)(3)(vi).)
- 4.3. Claims of confidentiality for the following information will be denied (40 CFR section 122.7(b)):
 - 4.3.1. The name and address of any permit applicant or Permittee (40 CFR section 122.7(b)(1)); and

4.3.2. Permit applications and attachments, permits and effluent data. (40 CFR section 122.7(b)(2).)

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information

The Permittee shall furnish to the Los Angeles Water Board, State Water Board, or USEPA within a reasonable time, any information which the Los Angeles Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Permittee shall also furnish to the Los Angeles Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR section 122.41(h); Water Code sections 13267 and 13383.)

5.2. Signatory and Certification Requirements

5.2.1. All applications, reports, or information submitted to the Los Angeles Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 CFR section 122.41(k).)

5.2.2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR section 122.22(a)(3).)

5.2.3. All reports required by this Order and other information requested by the Los Angeles Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described in Standard Provisions – Reporting 5.2.2 above (40 CFR section 122.22(b)(1));
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR section 122.22(b)(2)); and
- c. The written authorization is submitted to the Los Angeles Water Board and State Water Board. (40 CFR section 122.22(b)(3).)

5.2.4. If an authorization under Standard Provisions – Reporting 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting 5.2.3 above must be submitted to the Los Angeles Water Board and State Water Board prior to or together with any reports,

information, or applications, to be signed by an authorized representative. (40 CFR section 122.22(c).)

5.2.5. Any person signing a document under Standard Provisions – Reporting 5.2.2 or 5.2.3 above shall make the following certification:

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

5.2.6. Any person providing the electronic signature for documents described in Standard Provisions – 5.2.1, 5.2.2, or 5.2.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting 5.2, and shall ensure that all relevant requirements of 40 CFR part 3 (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 CFR section 122.22(e).)

5.3. Monitoring Reports

5.3.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR section 122.41(l)(4).)

5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Los Angeles Water Board or State Water Board. All reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 and comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR section 122.41(l)(4)(i).)

5.3.3. If the Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Los Angeles Water Board or State Water Board. (40 CFR section 122.41(l)(4)(ii).)

5.4.4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR section 122.41(l)(4)(iii).)

5.4. Compliance Schedules

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

5.5. Twenty-Four Hour Reporting

5.5.1. The Discharger shall report any noncompliance which may endanger health or the environment to the Manager of the Watershed Regulatory Section of the Los Angeles Water Board at (213) 576-6616 and jeong-hee.lim@waterboards.ca.gov. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

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

As of December 21, 2025, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10. The reports shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. The Los Angeles 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 CFR section 122.41(l)(6)(i).)

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

- a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR section 122.41(l)(6)(ii)(A).)
- b. Any upset that exceeds any effluent limitation in this Order. (40 CFR section 122.41(l)(6)(ii)(B).)

5.5.3. The Los Angeles Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR section 122.41(l)(6)(iii).)

5.6. Planned Changes

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

5.6.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR section 122.41(l)(1)(i)); or

5.6.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR section 122.41(l)(1)(ii).)

5.6.3. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR section 122.41(l)(1)(iii).)

5.7. Anticipated Noncompliance

The Permittee shall give advance notice to the Los Angeles Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 CFR section 122.41(l)(2).)

5.8. Other Noncompliance

The Permittee shall report all instances of noncompliance not reported under Standard Provisions – Reporting 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting 5.5 above. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting 5.5 and the applicable required data in appendix A to 40 CFR part 127. As of December 21, 2025, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Discharger to the Los Angeles Water Board/USEPA Region 9 or initial recipient, as defined in 40 CFR section 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to 3), 122.22, and 40 CFR § 127. (40 CFR § 122.41(l)(7).)

5.9. Other Information

When the Permittee 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 Los Angeles Water Board, State Water Board, or USEPA, the Permittee shall promptly submit such facts or information. (40 CFR section 122.41(l)(8).)

5.10. Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 CFR part 127 to the initial recipient defined in 40 CFR section 127.2(b). USEPA 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 CFR section 127.2(c)]. USEPA will update and maintain this listing. (40 CFR section 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

6.1. The Los Angeles 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, 13385, 13386, and 13387.

- 6.2. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two years, or both. Any person who *knowingly* violates such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions (40 CFR section 122.41(a)(2); Water Code sections 13385 and 13387).
- 6.3. Any person may be assessed an administrative penalty by the Administrator of USEPA, the Los Angeles Water Board, or State Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000. (40 CFR section 122.41(a)(3))
- 6.4. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both. (40 CFR section 122.41(j)(5)).

6.5. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both. (40 CFR section 122.41(k)(2)).

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

7.1. Publicly Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Los Angeles Water Board of the following (40 CFR section 122.42(b)):

- 7.1.1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR section 122.42(b)(1)); and
- 7.1.2. 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 the Order. (40 CFR section 122.42(b)(2).)
- 7.1.3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 CFR section 122.42(b)(3).)

ATTACHMENT E. MONITORING AND REPORTING PROGRAM

TABLE OF CONTENTS

| | | |
|-------|--|------|
| 1. | GENERAL MONITORING PROVISIONS | E-3 |
| 2. | MONITORING LOCATIONS | E-7 |
| 3. | INFLUENT MONITORING REQUIREMENTS | E-10 |
| 3.1. | Monitoring Location INF-001 | E-10 |
| 4. | EFFLUENT MONITORING REQUIREMENTS | E-12 |
| 4.1. | Monitoring Location EFF-001 | E-12 |
| 5. | CHRONIC WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS | E-16 |
| 5.1. | Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity | E-16 |
| 5.2. | Sample Volume and Holding Time | E-16 |
| 5.3. | Chronic Freshwater Species and Test Methods | E-16 |
| 5.4. | Species Sensitivity Screening | E-17 |
| 5.5. | Quality Assurance and Additional Requirements | E-18 |
| 5.6. | Preparation of an Initial Investigation TRE Work Plan | E-20 |
| 5.7. | Accelerated Monitoring Schedule for Maximum Daily Single Result: "Fail." | E-20 |
| 5.8. | Toxicity Reduction Evaluation (TRE) Process | E-20 |
| 5.9. | Reporting | E-22 |
| 5.10. | Ammonia Removal | E-22 |
| 5.11. | Chlorine Removal | E-23 |
| 6. | LAND DISCHARGE MONITORING REQUIREMENTS (NOT APPLICABLE) | E-23 |
| 7. | RECYCLING MONITORING REQUIREMENTS (NOT APPLICABLE) | E-23 |
| 8. | RECEIVING WATER MONITORING REQUIREMENTS | E-23 |
| 8.2. | Microbiological Monitoring | E-24 |
| 8.3. | Benthic Infauna and Chemistry Monitoring | E-25 |
| 9. | OTHER MONITORING REQUIREMENTS | E-29 |
| 9.1. | Outfall and Diffuser Inspection | E-29 |
| 9.2. | Biosolids and Sludge Management | E-29 |
| 9.3. | Monitoring of Volumetric Data for Wastewater and Recycled Water | E-29 |
| 10. | REPORTING REQUIREMENTS | E-30 |
| 10.1. | General Monitoring and Reporting Requirements | E-30 |
| 10.2. | Self-Monitoring Reports (SMRs) | E-31 |
| 10.3. | Discharge Monitoring Reports (DMRs) | E-34 |
| 10.4. | Other Reports | E-34 |

LIST OF TABLES

| | | |
|-------------|---|------|
| Table E-1. | Influent and Effluent Monitoring stations | E-7 |
| Table E-2. | Receiving Water Monitoring Stations | E-7 |
| Table E-3. | Bottom Sediment Monitoring Stations | E-8 |
| Table E-4. | Influent Monitoring | E-10 |
| Table E-5. | Effluent Monitoring | E-12 |
| Table E-6. | U.S. EPA Test Methods and Test Acceptability Criteria | E-19 |
| Table E-7. | Receiving Water Monitoring Requirements | E-24 |
| Table E-8. | Microbiological Monitoring Requirements | E-24 |
| Table E-9. | Benthic Infauna and Chemistry Monitoring Requirements | E-25 |
| Table E-10. | Monitoring Periods and Reporting Schedule | E-32 |

LIST OF FIGURES

Figure E-1. Locations of Bottom Sediment Monitoring Stations.....E-9
Figure E-2. Locations of Receiving Water Monitoring Stations.....E-9

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP), (CI-0066)

Section 308(a) of the federal Clean Water Act and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Federal Regulations (40 CFR) requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code (Water Code) section 13383 also authorizes the Los Angeles Water Board to establish monitoring, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and California laws and/or regulations.

1. GENERAL MONITORING PROVISIONS

- 1.1. All samples shall be representative of the waste discharge under conditions of peak load. Results of monthly, quarterly, semiannual, and annual analyses shall be reported by the due date specified in Table E-10 of the MRP. The Discharger shall make every effort to schedule monitoring so that the different seasons are represented in the quarterly and semiannual monitoring throughout the year.
- 1.2. Pollutants, except those analyzed in the field, shall be analyzed using the analytical methods described in 40 CFR parts 136.3, 136.4, and 136.5; or where no methods are specified for a given pollutant, by methods approved by the Los Angeles Water Board or the State Water Resources Control Board (State Water Board).
- 1.3. **Laboratory Certification.** Laboratories analyzing samples shall be certified by the State Water Board, Division of Drinking Water (DDW) Environmental Laboratory Accreditation Program (ELAP) in accordance with Water Code 13176, or approved by the Los Angeles Water Board Executive Officer, and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided in the Annual Report due to the Los Angeles Water Board each time a new certification and/or renewal of the certification is obtained from ELAP.
- 1.4. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR section 136.3. All QA/QC analyses must be run on the same dates that samples are analyzed. The Permittee shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Los Angeles Water Board. Proper chain of custody procedures must be followed, and a copy of that documentation shall be submitted with the monthly report.
- 1.5. The Discharger shall ensure all instruments are calibrated and maintained to ensure accuracy of measurements.
- 1.6. For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (USEPA) guidelines, or in the MRP, the constituent or parameter analyzed, and the method or procedure used must be specified in the monitoring report.
- 1.7. Each monitoring report must affirm in writing that “with the exception of field tests, all analyses were conducted at a laboratory certified for such analyses under the ELAP or approved by the Executive Officer in accordance with current USEPA guideline procedures or as specified in this Monitoring and Reporting Program.”

- 1.8. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), and the Reporting Level (RL) [the applicable minimum level (ML) or reported Minimum Level (RML)] for each pollutant. The MLs are those published by the State Water Board in Appendix II of the Ocean Plan. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the RML.
- 1.9. The Discharger shall select the analytical method that provides an ML lower than the effluent limitation or performance goal established for a given parameter or where no such requirement exists, the lowest applicable water quality objective in the Ocean Plan. If the effluent limitation, performance goal, or the lowest applicable water quality objective is lower than all the MLs in Appendix II of the Ocean Plan, the Discharger must select the method with the lowest ML for compliance purposes. The Discharger shall include in the Annual Summary Report a list of the analytical methods employed for each test.
- 1.10. The Discharger shall instruct its laboratories to establish calibration standards so that the ML (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.
- 1.11. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this MRP using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with limitations set forth in this Order.
- 1.12. The Discharger shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the WDR section of this Order. This record shall be made available to the Los Angeles Water Board upon request and a spill summary shall be included in the annual summary report.
- 1.13. For all bacteriological analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 mL for total and fecal coliform, at a minimum, and 1 to 1,000 per 100 mL for *Enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.
 - 1.13.1. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR part 136 unless alternate methods have been approved in advance by the USEPA pursuant to 40 CFR part 136.

- 1.13.2. Detection methods used for *E. coli* and *Enterococcus* shall be those presented in Table 1A of 40 CFR part 136 or in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure*, or any improved method determined by the Los Angeles Water Board to be appropriate.
- 1.14. All receiving and ambient water monitoring conducted in compliance with the MRP must be comparable with the Quality Assurance requirements of the Surface Water Ambient Monitoring Program (SWAMP).
- 1.15. NPDES compliance monitoring focuses on the effects of a specific point source discharge. Generally, it is not designed to assess impacts from other sources of pollution (e.g., nonpoint source runoff, aerial fallout) or to evaluate the current status of important ecological resources in the water body. The scale of existing compliance monitoring programs does not match the spatial and, to some extent, temporal boundaries of the important physical and biological processes in the ocean. In addition, the spatial coverage provided by compliance monitoring programs is less than ten percent of the nearshore ocean environment. Better technical information is needed about status and trends in ocean waters to guide management and regulatory decisions, to verify the effectiveness of existing programs, and to shape policy on marine environmental protection.
- 1.16. The Los Angeles Water Board and USEPA Region 9, working with other groups, have developed a comprehensive basis for effluent and receiving water monitoring appropriate to large publicly owned treatment works (POTWs) discharging to waters of the Southern California Bight. This effort culminated in the publication by the Southern California Coastal Water Research Project (SCCWRP) of the Model Monitoring Program guidance document (Schiff, K.C., J.S. Brown and S.B. Weisberg. 2001. *Model Monitoring Program for Large Ocean Dischargers in Southern California*. SCCWRP Tech. Rep. #357. Southern California Coastal Water Research Project, Westminster, CA. 101 pp.). This guidance provides the principles, framework and recommended design for effluent and receiving water monitoring elements that have guided development of the monitoring program described below.
- 1.17. The conceptual framework for the Model Monitoring Program has three components that comprise a range of spatial and temporal scales: (1) core monitoring; (2) regional monitoring; and (3) special studies.
- 1.17.1. Core monitoring is local in nature and focused on monitoring trends in quality and effects of the point source discharge. This includes effluent monitoring as well as some aspects of receiving water monitoring. In the monitoring program described below, these core components are typically referred to as local monitoring.
- 1.17.2. Regional monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass

emission estimations, public health concerns, monitoring of trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial uses. The final design of regional monitoring programs is developed by means of steering committees and technical committees comprised of participating agencies and organizations and is not specified in this Order. Instead, for each regional component, the degree and nature of participation of the Permittee is specified. For this Order, these levels of effort are based upon past participation of the Permittee in regional monitoring programs.

The Discharger shall participate in regional monitoring activities coordinated by the SCCWRP or any other appropriate agency approved by the Los Angeles Water Board. The procedures and timelines for the Los Angeles Water Board approval shall be the same as detailed for special studies, below.

- 1.17.3. Special studies are focused on refined questions regarding specific effects or development of monitoring techniques and are anticipated to be of short duration and/or small scale, although multiyear studies also may be needed. Questions regarding effluent or receiving water quality, discharge impacts, ocean processes around the discharge, or development of techniques for monitoring the same, arising out of the results of core or regional monitoring, may be pursued through special studies. These studies are by nature ad hoc and cannot be typically anticipated in advance of the five-year permit cycle.

POTW ocean dischargers in the Los Angeles region are normally required to consult annually to determine the need for special studies but the City of Avalon is exempt from this requirement due to the Avalon WWTF's low design flow rate.

- 1.18. Every five years SCCWRP coordinates regional monitoring within the Southern California Bight and compiles monitoring data collected by the dischargers and other participating entities. The seventh regional monitoring program (Bight '23) was conducted during 2023. Participation in regional monitoring programs may require revisions to the Discharger's monitoring program, at the direction of the Los Angeles Water Board, to accomplish the goals of regional monitoring or to allow the performance of special studies to investigate regional or site-specific water issues of concern. These revisions may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples to be collected, except for effluent monitoring. Such changes may be authorized by the Los Angeles Water Board Executive Officer upon written notification to the Discharger. Proposed changes to the effluent monitoring frequency shall not be considered with respect to these regional monitoring requirements.

Currently, the Central Bight Water Quality Cooperative Program does not include monitoring around Santa Catalina Island. If such a component is added to the regional monitoring program, the City of Avalon shall join the program and work cooperatively with other participants to conduct integrated water quality monitoring.

- 1.19. This monitoring program for Avalon WWTF includes requirements to demonstrate compliance with the conditions of the NPDES permit, ensure compliance with State

water quality standards, and mandate participation in regional monitoring and/or area-wide studies.

1.20. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the 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

2. 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. The North latitude and West longitude information in Tables E-1 to E-3 are approximate for administrative purposes.

Table E-1. Influent and Effluent Monitoring stations

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|-----------------------------|---------------------------------|--|
| -- | INF-001 | The influent monitoring station shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and/or where representative samples of the influent can be obtained. Latitude: 33.3322°N; Longitude: 118.3103°W |
| 001 | EFF-001 | The effluent monitoring station for all constituents shall be located downstream of any in-plant return flows and downstream of the disinfection process, where representative samples can be obtained. Latitude: 33.3386°N; Longitude: 118.3111°W |

Table E-2. Receiving Water Monitoring Stations

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|-----------------------------|---------------------------------|--|
| --- | RSW-001 | Abalone Point within 100 feet of the mean lower low water line. Latitude: 33.3437°N Longitude: 118.3169°W |
| --- | RSW-002 | At a point directly over the terminus of the ocean outfall. Latitude: 33.3386°N Longitude: 118.3111°W |

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|-----------------------------|---------------------------------|---|
| --- | RSW-003 | Pebbly Beach at a point in the surf approximately 800 feet southeasterly of the ocean outfall, as measured along the shore, and within 50 feet of the mean lower low water line. Latitude: 33.3369°N Longitude: 118.3105°W |
| --- | RSW-004 | Pebbly Beach at a point near the desalination plant infiltration well and within 50 feet of the mean lower low water line. Latitude: 33.3339°N Longitude: 118.3096°W |
| | RSW-005 | Control Station at a point 1,000 feet southeast of the outfall terminus, 400 feet offshore on the 125-foot depth contour. Latitude: 33.3320°N Longitude: 118.3072°W |
| | RSW-006 | Pebbly Beach at a point approximately halfway between RSW-001 and RSW-002, and within 200 feet of the mean lower low water line. Latitude: 33.3413°N Longitude: 118.3140°W |

Table E-3. Bottom Sediment Monitoring Stations

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|-----------------------------|---------------------------------|--|
| -- | BOT-001 | Adjacent to the outfall terminus. Latitude: 33.3386°N Longitude: 118.3111°W |
| -- | BOT-002 | 50 feet up-current of the discharge along the isobath which intersects the outfall terminus. Latitude: 33.3387°N Longitude: 118.3112°W |
| -- | BOT-003 | 50 feet down-current of the discharge along the isobath which intersects the outfall terminus. Latitude: 33.3385°N Longitude: 118.3110°W |
| -- | BOT-004 | 100 feet up-current of the discharge along the isobath which intersects the outfall terminus. Latitude: 33.3384°N Longitude: 118.3109°W |
| -- | BOT-005 | 1,000 feet down-current of the discharge along the isobath which intersects the outfall terminus (Station BOT-005 may be collected at a point 500 feet down-current of the discharge, if necessary to remain on soft bottom habitat). Latitude: 33.3365°N Longitude: 118.3092°W |
| -- | BOT-006 | 1,000 feet up-current of the discharge along the isobath which intersects the outfall terminus. Latitude: 33.3408°N Longitude: 118.3127°W |



Figure E-1. Locations of Bottom Sediment Monitoring Stations



Figure E-2. Locations of Receiving Water Monitoring Stations

3. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to determine compliance with NPDES permit conditions and to assess treatment plant performance.

3.1. Monitoring Location INF-001

The Permittee shall monitor influent to the facility at INF-001 as follows:

Table E-4. Influent Monitoring

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|---|----------|--------------------|----------------------------|-------|
| Flow | MGD | recorder/totalizer | continuous | a |
| Biochemical Oxygen Demand (BOD ₅ 20°C) | mg/L | 24-hr composite | weekly | -- |
| Total Suspended Solids (TSS) | mg/L | 24-hr composite | weekly | -- |
| pH | pH units | grab | weekly | -- |
| Oil and Grease | mg/L | grab | monthly | b |
| Total Organic Carbon | mg/L | 24-hour composite | monthly | -- |
| Total Nitrogen (as N) | mg/L | calculated | quarterly | -- |
| Nitrate Nitrogen | mg/L | 24-hour composite | quarterly | -- |
| Nitrite Nitrogen | mg/L | 24-hour composite | quarterly | -- |
| Organic Nitrogen | mg/L | calculated | quarterly | -- |
| Total Kjeldahl Nitrogen | mg/L | 24-hour composite | quarterly | -- |
| Total phosphorus (as P) | mg/L | 24-hr composite | quarterly | -- |
| Total chromium | µg/L | grab | semiannually | c |
| Mercury | µg/L | 24-hr composite | semiannually | c, d |
| Phenolic Compounds (non-chlorinated) | µg/L | 24-hr composite | semiannually | e |
| Phenolic Compounds (chlorinated) | µg/L | 24-hr composite | semiannually | e |
| Endosulfan | µg/L | 24-hr composite | semiannually | e |
| Hexachlorocyclohexane (HCH) | µg/L | 24-hr composite | semiannually | e |
| Radioactivity (including gross alpha, gross, beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium) | pCi/L | 24-hr composite | semiannually | f |
| Dichlorobenzenes | µg/L | grab | semiannually | e |
| Bis(2-ethylhexyl) phthalate | µg/L | 24-hr composite | semiannually | g |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|--|-------|--|----------------------------|---------|
| Chlordane | µg/L | 24-hr composite | semiannually | e, h |
| DDT | µg/L | 24-hr composite | semiannually | e |
| Halomethanes | µg/L | grab | semiannually | e |
| Polycyclic Aromatic Hydrocarbons (PAHs) | µg/L | 24-hr composite | semiannually | e |
| Polychlorinated Biphenyls (PCBs) as aroclors | µg/L | 24-hr composite | semiannually | e, i |
| TCDD Equivalents | pg/L | 24-hr composite | quarterly | e, g, j |
| Remaining pollutants in Ocean Plan Table 3, except total residual chlorine, acute toxicity, and chronic toxicity | µg/L | 24-hour composite; grab for chromium VI, VOCs, and cyanide | Semiannually | c |

Footnotes for Table E-2

- a. Total daily flow, monthly average flow, and instantaneous peak daily flow (24-hr basis) shall be reported. The actual monitored flow shall also be reported (not the maximum flow, i.e., design capacity).
- b. Oil and grease monitoring shall consist of a single grab sample at peak flow over a 24-hour period.
- c. Concentrations of metals shall be expressed as total recoverable.
- d. USEPA Method 1631E, with a quantification level of 0.5 ng/L, shall be used to analyze total mercury, unless another 40 CFR 136 method is sufficiently sensitive (ex. influent concentrations exceed the quantification level in the approved method).
- e. See section 8 of this Order and Attachment A for definition of terms.
- f. Analyze these radiochemicals by the following USEPA methods: method 900.0 or 7110 (if TDS sample concentration exceeds 500 mg/L) for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined radium-226 & 228 shall be conducted only if gross alpha and gross beta results for the same sample exceed 15 pCi/L or 50 pCi/L, respectively. If radium-226 & 228 exceeds 5 pCi/L, then analyze for tritium, strontium-90, and uranium. Although there is currently no ELAP accreditation available for some of the radiochemical methods described above using wastewater, the Discharger shall use an ELAP-accredited laboratory once ELAP accreditation becomes available for the method. The Discharger is required to monitor for those radiochemicals with test methods that can be performed by any commercially available laboratory. The lab report shall state whether naturally occurring potassium-40 was excluded from the reported gross beta analysis.
- g. The 40 CFR Part 136 method for phthalate esters, including bis (2-ethylhexyl) phthalate and TCDD equivalents, requires samples to be collected in glass sample containers to

avoid interference, which can lead to artifacts and/or elevated baselines in gas chromatograms. Sample collection must be performed using glass sample containers for all phthalate esters, including bis (2-ethylhexyl) phthalate and TCDD equivalents, unless analytical methods for these pollutants in 40 CFR Part 136 specify that other means of sample collection are approved. Grab samples are recommended, but an automatic sampler (composite sample) can be used to collect samples for all phthalate esters, including bis (2-ethylhexyl) phthalate and TCDD equivalents, as long as the sample bottles are glass.

- h. The standards required to analyze chlordene-alpha and chlordene-gamma may not always be readily available; therefore, if the Discharger provides documentation in the self-monitoring report to the Los Angeles Water Board that the standards for these pollutants were not available during the monitoring period, monitoring results for chlordene-alpha and/or chlordene-gamma are waived for that monitoring period only. If monitoring for chlordene-alpha and/or chlordene-gamma is waived for a monitoring period, all other components included in the definition of chlordane must still be analyzed.
- i. PCBs as aroclors shall be analyzed using USEPA method 608.3.
- j. USEPA Method 1613 shall be used to analyze TCDD equivalents.

End of Footnotes for Table E-2

4. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

- Determine compliance with NPDES permit conditions and water quality standards.
- Assess plant performance and identify operational problems.
- Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.
- Determine reasonable potential analysis for toxic pollutants.

4.1. Monitoring Location EFF-001

The Discharger shall monitor the discharge of secondary-treated effluent at EFF-001 as shown in Table E-5. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

Table E-5. Effluent Monitoring

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|------------------------------|--------------|---------------------|-----------------------------------|--------------|
| Total flow | MGD | Recorder/ totalizer | continuous | a |
| BOD ₅ 20°C | mg/L | 24-hour composite | 5 days/week | -- |
| Total Suspended Solids (TSS) | mg/L | 24-hour composite | 5 days/week | -- |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|--------------------------|------------------------------|-------------------|----------------------------|-------|
| Settleable Solids | mL/L | grab | monthly | b |
| Turbidity | NTU | 24-hour composite | weekly | -- |
| Temperature | °F | grab | monthly | -- |
| pH | pH units | grab | monthly | -- |
| Oil and grease | mg/L | grab | monthly | b |
| Total coliform | MPN/100mL or CFU/100ml | grab | weekly | -- |
| Fecal coliform | MPN/100mL or CFU/100ml | grab | weekly | -- |
| <i>Enterococcus</i> | MPN/100mL or CFU/100ml | grab | weekly | -- |
| Total Organic Carbon | mg/L | 24-hour composite | monthly | -- |
| Dissolved oxygen | mg/L | grab | monthly | -- |
| Total Dissolved Solids | mg/L | 24-hour composite | monthly | -- |
| Ammonia Nitrogen | mg/L | 24-hour composite | quarterly | -- |
| Nitrite nitrogen (as N) | mg/L | 24-hour composite | quarterly | -- |
| Nitrate nitrogen (as N) | mg/L | 24-hour composite | quarterly | -- |
| Nitrate + Nitrite (as N) | mg/L | calculated | quarterly | -- |
| Organic nitrogen | mg/L | calculated | quarterly | -- |
| Total Kjeldahl Nitrogen | mg/L | 24-hour composite | quarterly | -- |
| Total nitrogen | mg/L | calculated | quarterly | -- |
| Total phosphorus | mg/L | 24-hour composite | quarterly | -- |
| Arsenic | µg/L | 24-hour composite | quarterly | c |
| Chromium (VI) | µg/L | grab | quarterly | c |
| Copper | µg/L | 24-hour composite | quarterly | c |
| Lead | µg/L | 24-hour composite | quarterly | c |
| Mercury | µg/L | 24-hour composite | quarterly | c, d |
| Nickel | µg/L | 24-hour composite | quarterly | c |
| Selenium | µg/L | 24-hour composite | quarterly | c |
| Silver | µg/L | 24-hour composite | quarterly | c |
| Zinc | µg/L | 24-hour composite | quarterly | c |
| Cyanide | µg/L | grab | quarterly | -- |
| Total chlorine residual | µg/L | Grab | 5 days/week | -- |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|--|------------------------------|--|----------------------------|---------|
| Chronic Toxicity (Purple Sea Urchin, <i>Strongylocentrotus purpuratus</i>) | Pass or Fail, % Effect (TST) | 24-hour composite | quarterly | e |
| Endosulfan | µg/L | 24-hour composite | monthly | f |
| Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium) | pCi/L | 24-hour composite | semiannually | g |
| Antimony | µg/L | 24-hour composite | quarterly | c |
| Chromium (III) | µg/L | calculation | quarterly | c |
| Di-n-butyl-phthalate | µg/L | 24-hour composite | quarterly | -- |
| Diethyl phthalate | µg/L | 24-hour composite | quarterly | -- |
| Dimethyl phthalate | µg/L | 24-hour composite | quarterly | -- |
| Nitrobenzene | µg/L | 24-hour composite | quarterly | -- |
| Thallium | µg/L | 24-hour composite | quarterly | c |
| Toluene | µg/L | Grab | quarterly | -- |
| Aldrin | µg/L | 24-hour composite | monthly | -- |
| Benzene | µg/L | Grab | quarterly | -- |
| Bis(2-ethylhexyl) phthalate | µg/L | 24-hour composite | quarterly | h |
| Chlordane | µg/L | 24-hour composite | Semiannually | f, i |
| Chloroform | µg/L | 24-hour composite | quarterly | -- |
| Halomethanes | µg/L | Grab | quarterly | f |
| PAHs | µg/L | 24-hour composite | quarterly | f |
| PCBs as Aroclors | µg/L | 24-hour composite | Semiannually | f, j |
| PCBs as Congeners | pg/L | 24-hour composite | annually | f, k |
| TCDD Equivalents | pg/L | 24-hour composite | monthly | f, h, l |
| 2,4,6-Trichlorophenol | µg/L | 24-hour composite | quarterly | -- |
| Methyl tert-butyl-ether | µg/L | grab | semiannually | -- |
| PFAS | ng/L | 24-hr composite | quarterly | m |
| Remaining pollutants in Ocean Plan Table 3, except acute toxicity | µg/L | 24-hour composite; grab for chromium VI, VOCs, and cyanide | Semiannually | c |

Footnotes for Table E-5

- a. When continuous monitoring of flow is required, total daily flow, monthly average flow, and instantaneous peak daily flow (24-hour basis) shall be reported. Actual monitored flow shall be reported (not design capacity).
- b. Oil and grease, and settleable solids monitoring shall consist of a single grab sample at peak flow over a 24-hour period.
- c. Concentrations of metals shall be reported as total recoverable.
- d. USEPA Method 1631E, with a quantification level of 0.5 ng/L, shall be used to analyze total mercury, unless another 40 CFR 136 method is sufficiently sensitive (ex. the quantification limit is less than or equal to the most stringent water quality objective).
- e. Whole effluent toxicity monitoring is required for Discharge Point 001 using the most sensitive species as the test species, as outlined in section 5 of the MRP.
- f. See section 8 of this Order and Attachment A for definition of terms.
- g. Analyze these radiochemicals by the following USEPA methods: method 900.0 or 7110 (if TDS sample concentration exceeds 500 mg/L) for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined radium-226 & 228 shall be conducted only if gross alpha and gross beta results for the same sample exceed 15 pCi/L or 50 pCi/L, respectively. If radium-226 & 228 exceeds 5 pCi/L, then analyze for tritium, strontium-90, and uranium. Although there is currently no ELAP accreditation available for some of the radiochemical methods described above using wastewater, the Discharger shall use an ELAP-accredited laboratory once ELAP accreditation becomes available for the method. The Discharger is required to monitor those radiochemicals with test methods that can be performed by any commercially available laboratory. The lab report shall state whether naturally occurring potassium-40 was excluded from the reported gross beta results.
- h. The 40 CFR Part 136 method for phthalate esters, including bis (2-ethylhexyl) phthalate and for TCDD equivalents, requires samples to be collected in glass sample containers to avoid interference, which can lead to artifacts and/or elevated baselines in gas chromatograms. Sample collection must be performed using glass sample containers for all phthalate esters, including bis (2-ethylhexyl) phthalate and TCDD equivalents, unless analytical methods for these pollutants in 40 CFR Part 136 specify that other means of sample collection are approved. Grab samples are recommended, but an automatic sampler (composite sample) can be used to collect samples for all phthalate esters, including bis (2-ethylhexyl) phthalate and TCDD equivalents, as long as the sample bottles are glass.
- i. The standards required to analyze chlordene-alpha and chlordene-gamma may not always be readily available; therefore, if the Discharger provides documentation in the self-monitoring report to the Los Angeles Water Board that the standards for these pollutants were not available during the monitoring period, monitoring results for chlordene-alpha and/or chlordene-gamma are waived for that monitoring period only. If monitoring for chlordene-alpha and/or chlordene-gamma is waived for a monitoring period, all other components included in the definition of chlordane must still be analyzed.

- j. PCBs as aroclors shall be analyzed using USEPA method 608.3.
- k. PCBs as congeners shall be individually quantified (or quantified as mixtures of isomers of a single congener in co-elutions as appropriate) using USEPA proposed method 1668c. PCBs as congeners shall be analyzed using method EPA 1668c for three years and an alternate method may be used if none of the PCB congeners are detected for three years using method EPA 1668c. USEPA recommends that until USEPA proposed method 1668c for PCBs is incorporated into 40 CFR § 136, permittees should use for discharge monitoring reports/State monitoring reports: (1) USEPA method 608.3 for monitoring data, reported as aroclor results, that will be used for assessing compliance with WQBELs (if applicable) and (2) USEPA proposed method 1668c for monitoring data, reported as 41 congener results, that will be used for informational purposes to help assess concentrations in the receiving water.
- l. USEPA Method 1613 shall be used to analyze TCDD equivalents.
- m. Department of Defense's Quality System Manual (DOD QSM version 5.1 or higher) or other ELAP-accredited methodologies for the analysis of PFAS in wastewaters shall be used to meet the required reporting limit of 50 ng/L. The ELAP accredited method for each group of compounds will specify which specific analytes can be measured. All analytes that can be measured using the selected ELAP-accredited method shall be analyzed.

End of Footnotes for Table E-5

5. CHRONIC WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

5.1. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity

The chronic IWC is the concentration of a pollutant or the parameter toxicity in the receiving water after mixing. The chronic toxicity IWC for Discharge Point 001 is 1.64% effluent.

5.2. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

5.3. Chronic Freshwater Species and Test Methods

If effluent samples are collected from outfalls discharging to receiving waters with salinity >1 ppt, the Permittee shall conduct the following chronic toxicity tests on effluent samples, at the in-stream waste concentration for the discharge, in accordance with species and test methods in *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). Artificial sea salts or hypersaline brine shall be used to increase sample salinity if needed. In no case shall these species be substituted with another test species unless written authorization from the Los Angeles Water Board Executive Officer is received.

- 5.3.1. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.0).
- 5.3.2. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, and the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0), or a static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method).
- 5.3.3. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

5.4. Species Sensitivity Screening

The Permittee may begin a species sensitivity screening for chronic aquatic toxicity at least 18 months prior to the expiration date of this Order. For continuous dischargers, species sensitivity screening includes four sets of valid tests completed in the span of one year, with one set collected in each of the four quarters. In each of the four sets, the Permittee shall collect a single effluent sample to initiate and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required on a monthly frequency for the discharge, during that given month. As required in the test method for *Atherinops affinis* for off-site tests, a minimum of three samples shall be collected preferably on days one, three, and five with a maximum holding time of 36 hours before the first use. Since the Permittee has conducted a species sensitivity screening prior to the effective date of this Order, the most sensitive species selected during that screening process shall be used for the toxicity testing until a new species sensitivity screening is conducted. Toxicity testing for red abalone should be conducted when red abalone is more likely to spawn (January to June). If four successful tests cannot be conducted with red abalone, an alternative invertebrate species, purple sea urchin (*Strongylocentrotus purpuratus*) or the sand dollar (*Dendraster excentricus*), may be used.

If the results of all 12 valid tests conducted during the species sensitivity screening is "Pass," then the species that exhibited the highest percent effect in any single test shall be used for routine monitoring during the following Order cycle. Likewise, if the results of all 12 valid tests conducted during the species sensitivity screening is "Fail," then the species that exhibited the highest percent effect in any single test shall be used for routine monitoring during the following Order cycle. If the result of only one of the 12 valid tests conducted during the species sensitivity screening is "Fail," then the species used in that test shall be used for routine monitoring during the following Order cycle. If there are multiple valid tests conducted during the species sensitivity screening that result in "Fail," the species that resulted in a "Fail" the most often during the species sensitivity screening shall be used in routine monitoring during the following Order cycle. If two species had the same number of tests that result in "Fail," the species that exhibited the highest percent effect in any single test that resulted in a "Fail" shall be used during routine monitoring during the following Order cycle.

During the calendar month, toxicity tests used to determine the most sensitive test species shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

5.5. Quality Assurance and Additional Requirements

Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.

5.5.1. The discharge is subject to determination of “Pass” or “Fail” from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, Table A-1 and Appendix B, Table B-1. The null hypothesis (H_0) for the TST statistical approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as “Pass.” A test result that does not reject this null hypothesis is reported as “Fail.” The relative “Percent Effect” at the discharge IWC is defined and reported as: $[(\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}] \times 100$. This is a t-test (formally Student’s t-Test), a statistical analysis comparing two sets of replicate observations - in the case of WET, only two test concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is “Pass” or “Fail”). The Welch’s t-test employed by the TST statistical approach is an adaptation of Student’s t-test and is used with two samples having unequal variances.

5.5.2. If the effluent toxicity test does not meet all test acceptability criteria (TAC) and all required test conditions specified in the referenced *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (See Table E-11 for TAC below), the Permittee must re-sample and re-test within 14 days. Deviations from recommended test conditions, specified in the referenced *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, must be evaluated on a case-by-case basis to determine the validity of test results. The Discharger shall consider the degree of the deviation and the potential or observed impact of the deviation on the test results in consultation with Los Angeles Water Board staff before rejecting or accepting a test result as valid, and shall report the results of the validity determination with supporting evidence for that decision in their monthly report.

Table E-6. U.S. EPA Test Methods and Test Acceptability Criteria

| Species & U.S. EPA Test Method Number | Test Acceptability Criteria (TAC) |
|--|---|
| Topsmelt, <i>Atherinops affinis</i> , Larval Survival and Growth Test Method 1006.01. (Table 3 of test method) | 80% or greater survival in controls; average dry weight per surviving organism in control chambers equals or exceeds 0.85 mg. LC50 with copper must be $\leq 205 \mu\text{g/L}$, <25% MSD for survival and <50% MSD for growth. If the test starts with 9-day old larvae, the mean weight per larva must exceed 0.85 milligrams in the reference and brine controls; the mean weight of preserved larvae must exceed 0.72 milligrams. (required) |
| Purple Sea Urchin, <i>Strongylocentrotus purpuratus</i> , and the Sand Dollar, <i>Dendraster excentricus</i> , Fertilization Test Method 1008.0 (Table 7 of test method) | 70% or greater egg fertilization in controls, must achieve an MSD of <25%, and appropriate sperm counts. (required) |
| Red Abalone, <i>Haliotis rufescens</i> , Larval Shell Development Test Method (Table 3 of test method) | 80% or greater normal shell development in the controls; must have statistically significant effect at $56 \mu\text{g/L}$ zinc and achieve an MSD of <20%. (required) |
| Giant Kelp, <i>Macrocystis pyrifera</i> , Germination and Growth Test Method 1009.0 (Table 3 of test method) | 70% or greater germination in controls, $\geq 10 \mu\text{m}$ germ-tube length in controls, No Observed Effect Concentration (NOEC) must be below $35 \mu\text{g/L}$ in the reference toxicant test, and must achieve an MSD of <20% for both germination and germ-tube length in the reference toxicant. (required) |

5.5.3. Dilution water 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 is different from test organism culture water, then a second control using culture water shall also be used.

5.5.4. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported using EC25. EC25 is a point estimate of the toxicant concentration that would cause an observable adverse effect (e.g., death, immobilization, or serious incapacitation) in 25 percent of the test organisms.

5.5.5. The Permittee shall perform toxicity tests on effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing,

unless explicitly authorized under this section of the Monitoring and Reporting Program and the rationale is explained in the Fact Sheet (Attachment F).

5.6. Preparation of an Initial Investigation TRE Work Plan

The Permittee shall update and submit a copy of the Permittee's initial investigation TRE work plan to the Los Angeles Water Board Executive Officer for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the work plan within 60 days of being submitted, the work plan shall become effective. The Permittee shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version, or USEPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, April 1989). At a minimum, the TRE Work Plan must contain the provisions in Attachment G. This work plan shall describe the steps that the Permittee intends to follow if toxicity is detected. At minimum, the work plan shall include:

- 5.6.1. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;
- 5.6.2. A description of the Facility's 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
- 5.6.3. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

5.7. Accelerated Monitoring Schedule for Maximum Daily Single Result: "Fail."

The Maximum Daily single result shall be used to determine if accelerated testing needs to be conducted.

Once the Permittee becomes aware of this result, the Permittee shall implement an accelerated monitoring schedule within 5 calendar days of the receipt of the result. However, if the sample is contracted out to a commercial laboratory, the Permittee shall ensure that the first of six accelerated monitoring tests is initiated within seven calendar days of the Permittee becoming aware of the result. The accelerated monitoring schedule shall consist of six toxicity tests (including the discharge IWC), conducted at approximately two-week intervals, over a twelve-week period; in preparation for the TRE process and associated reporting, these results shall also be reported using the EC25. If each of the accelerated toxicity tests results in "Pass," the Permittee shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail," the Permittee shall immediately implement the TRE Process conditions set forth below. During accelerated monitoring schedules, only TST results ("Pass" or "Fail") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

5.8. Toxicity Reduction Evaluation (TRE) Process

The Discharger shall conduct a TRE in accordance with a TRE Work Plan as approved by the Los Angeles Water Board. Routine monitoring shall continue during the TRE

process and TST results (“Pass” or “Fail”) for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

5.8.1. Preparation and Implementation of Detailed TRE Work Plan. The Discharger shall immediately initiate a TRE using, according to the type of treatment facility, USEPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) or USEPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, April 1989) and, within 30 days of a toxicity event, submit to the Los Angeles Water Board Executive Officer a Detailed TRE Work Plan, which shall follow the initial investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Los Angeles Water Board Executive Officer:

- a. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity;
- b. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and
- c. A schedule for these actions, progress reports, and the final report.

5.8.2. TIE Implementation. The Discharger may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, USEPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Chronic TIE Manual: 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). The TIE shall be conducted on the species demonstrating the most sensitive toxicity response.

5.8.3. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and stormwater control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

5.8.4. The Discharger shall continue to conduct routine effluent monitoring while the TIE and/or TRE process is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.

5.8.5. The Los Angeles Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in

all cases. However, TREs shall be carried out in accordance with the Executive Officer-approved TRE Work Plan.

5.8.6. The Los Angeles Water Board may consider the results of any TIE/TRE studies in an enforcement action.

5.9. Reporting

The Self-Monitoring Report (SMR) shall include a full laboratory report for each toxicity test. This report shall be prepared using the format and content of the test methods manual chapter called Report Preparation, including:

- 5.9.1. The valid toxicity test results for the TST statistical approach, reported as “Pass” or “Fail” and “Percent Effect” at the chronic toxicity IWC for the discharge, using the most sensitive species. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported on the SMR due date specified in Table E-10.
- 5.9.2. A summary of water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, total hardness, salinity, chlorine, and ammonia).
- 5.9.3. The statistical analysis used in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010) Appendix A, Figure A-1, Table A-1, and Appendix B, Table B-1.
- 5.9.4. TRE/TIE results. The Los Angeles Water Board Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses. Prior to the completion of the final TIE/TRE report, the Permittee shall provide status updates in the monthly monitoring reports, indicating which TIE/TRE steps are underway and which steps have been completed.
- 5.9.5. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.
- 5.9.6. Tabular data and graphical plots clearly showing the laboratory’s performance for the reference toxicant, for each solution, for the previous 20 tests and the laboratory’s performance for the control mean, control standard deviation, and control coefficient of variation, for each solution, for the previous 12-month period.
- 5.9.7. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon request from the Los Angeles Water Board Chief Deputy Executive Officer or the Executive Officer.

5.10. Ammonia Removal

5.10.1. Except with prior approval from the Executive Officer of the Los Angeles Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following indicators and actions may be used to

demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

- a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.
- b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.
- c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.
- d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

5.10.2. When it has been demonstrated to the satisfaction of the Los Angeles Water Board Executive Officer that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent.

5.11. Chlorine Removal

Except with prior approval from the Executive Office of the Los Angeles Water Board, chlorine shall not be removed from bioassay samples.

6. LAND DISCHARGE MONITORING REQUIREMENTS (NOT APPLICABLE)

7. RECYCLING MONITORING REQUIREMENTS (NOT APPLICABLE)

8. RECEIVING WATER MONITORING REQUIREMENTS

All receiving water stations shall be located by state-of-the-art navigational methods (e.g. Global Positioning System (GPS); other means (e.g. visual triangulation, fathometer readings) may be used to improve the accuracy of locating stations. Water quality measurements are made with a Conductivity, Temperature and Depth (CTD) instrument, which also measures other parameters such as pH and light transmissivity.

8.1. Nearshore/Offshore Water Quality Monitoring

8.1.1. This monitoring is designed to determine if the Ocean Plan and Basin Plan receiving water objectives are being met. Data collected provide the information necessary to demonstrate compliance with the standards.

8.1.2. The Discharger shall monitor receiving water quality at RSW-001, RSW-002, RSW-003, RSW-004, RSW-005, and RSW-006, as follows:

Table E-7. Receiving Water Monitoring Requirements

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|---------------------|----------|--|----------------------------|-------|
| Dissolved Oxygen | mg/L | continuous profile | Quarterly | a |
| Temperature | °C | continuous profile | Quarterly | a |
| Salinity | ppt | continuous profile | Quarterly | a |
| pH | pH Units | continuous profile | Quarterly | a |
| Residual Chlorine | µg/L | Grab at 0.5 meters below surface at RSW-002 only | Monthly | -- |
| Visual Observations | --- | --- | Monthly | b |

Footnotes for Table E-7

- a. Depth profile measurements shall be obtained using multiple sensors to measure parameters through the entire water column (from the surface to as close to the bottom as practicable).
- b. Receiving water observations shall include a description of any discoloration, turbidity, odor, and unusual or abnormal amounts of floating or suspended matter in the water or on the beach, rocks, jetties, or beach structures, shall be made and recorded at stations. The dates, times, and depths of sampling and these observations shall also be reported. Recreational uses (ex. swimming, wading, water skiing, skin diving, surfing, fishing, etc.) at time of sampling and within a 100-meter radius of each sample location, shall also be recorded and submitted with results.

End of Footnotes for Table E-7

8.1.3. Water quality methods and protocols shall follow those described in the most current edition of the *Field Operations Manual for Marine Water Column, Benthic, and Trawl Monitoring in Southern California*. Data shall be analyzed to approximate the typical wastewater plume movement and data under different seasonal and weather conditions.

8.2. Microbiological Monitoring

8.2.1. The Discharger shall monitor bacteria at RSW-001, RSW-002, RSW-004, and RSW-006 as follows:

Table E-8. Microbiological Monitoring Requirements

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|----------------|-------------------|--------------------------------------|----------------------------|-------|
| Total Coliform | MPN or CFU/100 mL | Grab at 0.5 meters below the surface | Monthly | a |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|---------------------|-------------------|--------------------------------------|----------------------------|-------|
| Fecal Coliform | MPN or CFU/100 mL | Grab at 0.5 meters below the surface | Monthly | a |
| <i>Enterococcus</i> | MPN or CFU/100 mL | Grab at 0.5 meters below the surface | Monthly | a |

Footnotes for Table E-8

- a. In addition to reporting the actual concentration, the running median of the last 6-month period shall be reported each month.

End of Footnotes for Table E-8

8.2.1. If the results for total coliform, fecal coliform, or *Enterococcus*, exceed the receiving water bacterial standards in a given month, the Discharger shall collect an additional four weekly samples to demonstrate compliance with the receiving water limits in the Order.

8.3. Benthic Infauna and Chemistry Monitoring

8.3.1. Local Benthic Trends Survey

This survey is designed to determine if benthic conditions under the influence of the discharge are changing over time. The data collected are used for regular assessment of trends in sediment contamination and biological response within the influence of the discharge.

Sampling Design - The Discharger shall monitor the six bottom sediment stations (BOT-001, BOT-002, BOT-003, BOT-004, BOT-005, and BOT-006) in July, as summarized in Table E-9. Separate samples shall be collected for benthic infauna and sediment chemistry. Sampling methods and protocols shall follow those described in the most current edition of the *Field Operations Manual for Marine Water-Column, Benthic, and Trawl Monitoring in Southern California* developed by the Southern California Bight Field Methods Committee.

Table E-9. Benthic Infauna and Chemistry Monitoring Requirements

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|---------------------------|----------|------------------------|----------------------------|-------|
| Benthic Infauna community | -- | Diver-operated sampler | Annually | a |
| Grain Size | Phi Size | Diver-operated sampler | Annually | a |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|--------------------------------------|--------------|------------------------|-----------------------------------|--------------|
| Total Organic Carbon | mg/kg | Diver-operated sampler | Annually | a |
| Organic Nitrogen | mg/kg | Diver-operated sampler | Annually | a |
| Total Kjeldahl Nitrogen | mg/kg | Diver-operated sampler | Biennially | a |
| Dissolved sulfides | mg/kg | Diver-operated sampler | Biennially | a |
| Arsenic | mg/kg | Diver-operated sampler | Biennially | a |
| Cadmium | mg/kg | Diver-operated sampler | Biennially | a |
| Total Chromium | mg/kg | Diver-operated sampler | Biennially | a |
| Copper | mg/kg | Diver-operated sampler | Biennially | a |
| Lead | mg/kg | Diver-operated sampler | Biennially | a |
| Mercury | mg/kg | Diver-operated sampler | Biennially | a |
| Nickel | mg/kg | Diver-operated sampler | Biennially | a |
| Silver | mg/kg | Diver-operated sampler | Biennially | a |
| Zinc | mg/kg | Diver-operated sampler | Biennially | a |
| Cyanide | mg/kg | Diver-operated sampler | Biennially | a |
| Phenolic Compounds (non-chlorinated) | µg/kg | Diver-operated sampler | Biennially | a, b |
| Phenolic Compounds (chlorinated) | µg/kg | Diver-operated sampler | Biennially | a, b |
| Total Halogenated Organic Compounds | µg/kg | Diver-operated sampler | Biennially | a |
| Aldrin | µg/kg | Diver-operated sampler | Biennially | a |
| Dieldrin | µg/kg | Diver-operated sampler | Biennially | a |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Notes |
|-------------------|-------|------------------------|----------------------------|-------|
| Endrin | µg/kg | Diver-operated sampler | Biennially | a |
| HCH | µg/kg | Diver-operated sampler | Biennially | a, b |
| Chlordane | µg/kg | Diver-operated sampler | Biennially | a, b |
| DDT | µg/kg | Diver-operated sampler | Biennially | a, b |
| PCBs as Aroclors | µg/kg | Diver-operated sampler | Biennially | a, b |
| PCBs as Congeners | µg/kg | Diver-operated sampler | Biennially | a, b |
| PAH | µg/kg | Diver-operated sampler | Biennially | a, b |
| Toxaphene | µg/kg | Diver-operated sampler | Biennially | a |

Footnotes for Table E-9

- a. Pollutants shall be analyzed using the analytical methods appropriate for solid matrices such as ELAP-accredited methods from USEPA SW-846 or other methods approved by the Los Angeles Water Board, State Water Board, or USEPA Region 9. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.
- b. See Attachment A for definitions of terms.

End of Footnotes for Table E-9

- a. Infaunal Community Survey - Benthic infauna monitoring shall be conducted annually in July. One sample shall be collected at each bottom station for benthic infaunal community analysis. Community analysis of benthic infauna shall include the number of species, the number of individuals per species, the total numerical abundance per station, the benthic response index (BRI) and biological indices, plus the analysis shall utilize appropriate regression analyses, parametric and nonparametric statistics, and multivariate techniques or other appropriate analytical techniques. Bottom samples for benthic infaunal analyses shall be collected at each benthic station prior to trawl sampling. Bottom samples shall be collected using a diver-operated sampler. The entire contents of each sample shall be passed through a 1.0-millimeter (0.039-inch) mesh screen to retrieve the benthic organisms. These organisms shall be fixed in 10% buffered formalin and transferred to 70% ethanol within two to seven days for storage. Organisms may be strained with Rose Bengal to facilitate sorting. All specimens received shall be archived.

For benthic infauna community analysis, the following determinations shall be made at each station, where appropriate: Identification of all organisms to the lowest possible taxon based on morphological taxonomy, community analysis, mean, range, standard deviation, and 95% confidence limits, if appropriate, for value determined in the community analysis. The Discharger shall conduct additional statistical analyses to determine temporal and spatial trends in the marine environment.

- b. Sediment Chemistry Analysis – Sediment chemistry monitoring shall be conducted every two years in July. A separate grab sample for sediment chemistry analyses shall be collected at each station when a biological sample is collected. Subsamples (upper two centimeters) shall be collected from the grab for the sediment chemistry analyses. Bottom samples for sediment chemistry analyses shall be collected at each bottom station (BOT-001, BOT-002, BOT-003, BOT-004, BOT-005, and BOT-006) along the isobath which intersects the outfall terminus using a diver operated sampler. Subsamples (upper two centimeters) of sediment from each sample shall be collected and analyzed separately as summarized in Table E-9.

8.3.2. Regional Benthic Survey

This regional survey is designed to determine 1) the extent, distribution, magnitude, and trend of ecological change in soft-bottom benthic habitats within the Southern California Bight and 2) the relationship between biological response and contaminant exposure. The data collected will be used to assess the condition of the seafloor environment and the health of biological communities.

Sampling Design – A regional survey of benthic conditions within the Southern California Bight took place in 2023 (Bight '23). The final survey design was determined cooperatively by participants represented on the Regional Steering Committee and includes the following activities:

- a. Participation on the Steering Committee;
- b. Participation on relevant Technical Committees (e.g. Information management, Field Methods & Logistics, Benthos, and Chemistry);
- c. Field sampling at sea;
- d. Infaunal sample analysis
- e. Sediment chemistry analysis; and,
- f. Data management.

Regular regional monitoring for the Southern California Bight has been established, occurring every four to five years, and coordinated through SCCWRP with dischargers and numerous other entities.

The Discharger has not historically participated in the Southern California Bight regional monitoring, but may voluntarily participate in the future. While participation in regional programs is not required under this Order, the Discharger may submit a request to the Los Angeles Water Board to make temporary

revisions to the Discharger's monitoring program to accomplish the goals of regional monitoring programs. These revisions may include a reduction or increase in the number of parameters being monitored, the frequency of monitoring, or the number and size of samples being collected. Any temporary modifications to the Discharger's monitoring program to support regional monitoring efforts are subject to Executive Officer approval.

9. OTHER MONITORING REQUIREMENTS

9.1. Outfall and Diffuser Inspection

This survey is designed to ensure that the outfall structure is in serviceable condition and can continue to be operated safely. The data collected will be used for a periodic assessment of the integrity of the outfall pipes and ballasting system.

The entire ocean outfall shall be externally inspected annually during July or August. Inspections shall include general observations and photographic/videographic records of the exterior outfall pipes and the adjacent ocean bottom. The pipes shall be visually inspected by a diver, manned submarine, or remotely operated vehicle. A summary report of the inspection findings shall be provided by August 1st following the year of inspection. This written report, augmented with videographic and/or photographic images, will provide a description of the observed condition of the discharge pipe from shallow water to its respective terminus.

9.2. Biosolids and Sludge Management

The Discharger shall comply with all Clean Water Act and regulatory requirements of 40 CFR § 257, 258, 501, and 503, including all applicable monitoring, recordkeeping, and reporting requirements. The Discharger must comply with the requirements in Attachment H of this Order.

9.3. Monitoring of Volumetric Data for Wastewater and Recycled Water

The Permittee shall monitor the following:

9.3.1. Influent: The monthly total volume of wastewater collected and treated by the wastewater treatment plant.

9.3.2. Production: The monthly volume of wastewater treated, specifying the level of treatment.

9.3.3. Discharge: The monthly volume of treated wastewater discharged to specific water bodies as categorized in Section 3.2.3 of the Recycled Water Policy. The level of treatment shall also be specified.

9.3.4. Reuse: The monthly volume of recycled water distributed, and annual volume of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, Title 22 in each of the use categories specified in Section 3.2.4 of the Recycled Water Policy. There is currently no permitted recycled water program at the Avalon WWTP. The Discharger shall report no uses of recycled water to the [State Water Board's GeoTracker website](https://geotracker.waterboards.ca.gov) (geotracker.waterboards.ca.gov) under a site-specific global identification number NPD100051640.

10. REPORTING REQUIREMENTS

10.1. General Monitoring and Reporting Requirements

- 10.1.1. The Permittee shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
- 10.1.2. If there is no discharge during any reporting period, the report shall so state.
- 10.1.3. Each monitoring report shall contain a separate section titled Summary of Non-Compliance which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements, all excursions of effluent limitations, and other noncompliance issues, including, but not limited to a report of any odor complaints that demonstrate noncompliance with odor prohibitions (section 6.1.2.b), a report of any power outage or use or failure of alternate power source (section 6.3.4.c), and the resolution of any non-compliance.
- 10.1.4. The Permittee shall inform the Los Angeles Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
- 10.1.5. The date and time of sampling (as appropriate) shall be reported with the analytical values determined.
- 10.1.6. The pollutant mass discharged shall be reported in addition to the reported concentration for those pollutants with mass-based final effluent limitations.
- 10.1.7. The laboratory conducting analyses shall be certified by the State Water Resources Control Board, Division of Drinking Water, Environmental Laboratory Accreditation Program (ELAP), in accordance with CWC section 13176, or approved by the Los Angeles Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program, and USEPA for that particular parameter and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new/renewal certification is obtained from ELAP and must be submitted with the annual summary report. Each monitoring report must affirm in writing that: "All analyses were conducted at a laboratory certified for such analyses by the State Water Resources Control Board's Environmental Laboratory Accreditation Program (ELAP) or approved by the Los Angeles Water Board Executive Officer (in consultation with the State Water Board's Quality Assurance Program) and USEPA, and in accordance with current USEPA guideline procedures or as specified in this MRP."
- 10.1.8. Upon request by the Discharger, the Los Angeles Water Board, in consultation with the State Water Board's Quality Assurance Program and/or USEPA, may establish an ML that is not contained in Appendix II of the Ocean Plan, to be included in the Discharger's NPDES permit, in any of the following situations:
 - a. When the pollutant under consideration is not included in Appendix II;

- b. When the Discharger agrees to use a test method that is more sensitive than those specified in 40 CFR § 136 (most recent revision);
 - c. When the Discharger agrees to use an ML lower than those listed in Appendix II;
 - d. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix II and proposes an appropriate ML for their matrix; or
 - e. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, Los Angeles Water Board, State Water Board and USEPA shall agree on a lowest quantifiable limit, and that limit will substitute for the ML for reporting and compliance determination purposes.
- 10.1.9. Records and reports of marine monitoring surveys conducted to meet receiving water monitoring requirements shall include, at a minimum, the following information:
- a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, unusual or abnormal amounts of floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling or measurements, tidal stage and height, etc.).
 - b. The date, exact place and description of sampling stations, including differences unique to each station (e.g., date, time, station location, depth, and sample type).
 - c. A list of the individuals participating in field collection of samples or data and description of the sample collection and preservation procedures used in the various surveys.
 - d. A description of the specific method used for laboratory analysis, the date(s) the analyses were performed and the individuals participating in these analyses.
 - e. An in-depth discussion of the results of the survey. All tabulations and computations shall be explained.
- 10.1.10. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with this Order.
- 10.1.11. The Discharger shall attach a cover letter to the monitoring reports. The information contained in the cover letter shall clearly identify violations of the Order; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

10.2. Self-Monitoring Reports (SMRs)

- 10.2.1. The Permittee shall electronically submit SMRs using the State Water Board's [California Integrated Water Quality System \(CIWQS\) Program website](#)

(<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS website will provide additional information for SMR submittal when there are planned service interruptions for electronic submittals.

10.2.2. The Permittee shall report in the SMR the results for all monitoring specified in this MRP under sections 3 through 9. The Permittee shall submit monthly, quarterly, semiannual, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Permittee samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this MRP using approved analytical methods, the results of this monitoring shall be included in the SMR.

10.2.3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-10. Monitoring Periods and Reporting Schedule

| Sampling Frequency | Monitoring Period Begins On | Monitoring Period | SMR Due Date |
|---------------------------|--|---|--|
| Continuous | Order effective date | All | Submit with monthly SMR |
| Hourly | Order effective date | Hourly | Submit with monthly SMR |
| Daily | Order effective date | (Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling. | Submit with monthly SMR |
| Weekly | Sunday following Order effective date or on Order effective date if on a Sunday | Sunday through Saturday | Submit with monthly SMR |
| Monthly | First day of calendar month following Order effective date or on Order effective date if that date is first day of the month | 1 st day of calendar month through last day of calendar month | By the 15 th day of the third month after the month of sampling |
| Quarterly | Closest of January 1, April 1, July 1, or October 1 following (or on) Order effective date | January 1 to March 31 April 1 to June 30 July 1 to September 30 October 1 to December 31 | June 15 September 15 December 15 March 15 |

| Sampling Frequency | Monitoring Period Begins On | Monitoring Period | SMR Due Date |
|---------------------------------|---|--|--------------------------|
| Semiannually | Closest of January 1 or July 1 following (or on) Order effective date | January 1 to June 30 July 1 to December 31 | September 15 March 15 |
| Annually | January 1 following (or on) Order effective date | January 1 to December 31 | April 30 |
| Annually (Volumetric Reporting) | Order effective date | January 1 to December 31 | April 30 |
| Receiving Water Summary Report | Order effective date | January 1 to December 31 | August 15 |
| Receiving Water Biennial Report | Order effective date | January 1 to December 31 of the following year | August 15 |
| Outfall Inspection Report | Order effective date | January 1 to December 31 | August 15 |

10.2.4. **Reporting Protocols.** The Permittee shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR part 136. The Permittee 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 the 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 (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- c. Sample results less than the laboratory’s MDL shall be reported as “Not Detected,” or “ND”.
- d. Permittees are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

10.2.5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Section 7 of this Order. For purposes of reporting and administrative enforcement by the Los Angeles Water Board and State Water Board, the Permittee shall be

deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

10.2.6. Multiple Sample Data. When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses the data set contains one or more reported determinations of “DNQ” or “ND,” the Permittee shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

10.2.7. The Permittee shall submit SMRs in accordance with the following requirements:

- a. The Permittee shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Permittee is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Permittee shall electronically submit the data in a tabular format as an attachment.
- b. The Permittee shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

10.3. Discharge Monitoring Reports (DMRs)

DMRs are USEPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any 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.

10.4. Other Reports

10.4.1. The Permittee shall report the results of any special studies, chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – section 6.3 of the Order. The Permittee shall submit reports in compliance with SMR reporting requirements described in subsection 10.2. above.

10.4.2. Hauling Reports

- a. If wastes are transported to a different disposal site during the reporting period, the following shall be reported:
 - i. Types of wastes and quantity of each type;
 - ii. Name and either the address or the State registration number for each hauler of wastes (or the method of transport if other than by hauling); and
 - iii. Location of the final point(s) of disposal for each type of wastes.
- b. If no wastes are transported off site during the reporting period, a statement to that effect shall be submitted.

10.4.3. Annual Summary Report

By April 30 of each year, the Permittee shall submit an annual report containing a discussion of the previous year's influent/effluent analytical results and receiving water monitoring data. The annual report shall contain an overview of any plans for upgrades to the treatment plant's collection system, the treatment processes, the outfall system, or any changes that may affect the quality of the effluent. The Permittee shall submit annual reports to the Los Angeles Water Board in accordance with the requirements described in subsection 10.2.7 above.

Each annual monitoring report shall contain a separate section titled *Reasonable Potential Analysis* which discusses whether reasonable potential was triggered for pollutants which do not have a final effluent limitation in the NPDES permit. This section shall contain the following statement: "The analytical results for this sampling period did/ did not trigger reasonable potential." If reasonable potential was triggered, then the following information shall also be provided:

- a. A list of the pollutant(s) that triggered reasonable potential.
- b. The Ocean Plan criteria that was exceeded for each given pollutant.
- c. The concentration of the pollutant(s).
- d. The test method used to analyze the sample.
- e. The date and time of sample collection.

10.4.4. Receiving Water Monitoring Report

An annual summary of the receiving water monitoring data collected during each sampling year (January-December) shall be prepared and submitted to the Los Angeles Water Board by August 15th of the following year. This annual summary shall include a compliance summary and discussion of plant performance over the year as well as a brief discussion of the monitoring results.

A detailed Receiving Water Monitoring Biennial Assessment Report of the data collected during the two previous calendar sampling years (January-December) shall be prepared and submitted so that it is received by the Los Angeles Water Board by August 15th of every other year. Any effluent compliance issues during that period shall also be discussed. This report shall include a description of the nearfield zone

and an in-depth analysis of the biological and chemical data following recommendations in the *Design of 301(h) Monitoring Programs for Municipal Wastewater Discharges to Marine Water* (USEPA, November 1982; 430/982-010; pages 74-91) and the Model Monitoring Program Guidance Document (Schiff, K.C., J.S. Brown and S.B. Weisberg, 2001. *Model Monitoring Program for Large Ocean Dischargers in Southern California*. SCCWRP Tech. Rep #357. Southern California Coastal Water Research Project, Westminster, CA. 101 pp.). Data shall be tabulated, summarized, graphed where appropriate, analyzed, interpreted, and generally presented in such a way as to facilitate ready understanding of its significance. Spatial and temporal trends shall be examined and compared. The relationship of physical and chemical parameters shall be evaluated. See also Section 8 of this MRP. All receiving water monitoring data (including bioassessment/taxonomic data, continuous data, etc.) shall be submitted in a format compatible with the California Environmental Data Exchange Network (CEDEN) when feasible.

The first assessment report shall be due August 15th, 2026, and cover the sampling periods of January-December 2024 and January-December 2025. Subsequent reports shall be due August 15, 2028, and August 15, 2030, to cover sampling periods from January 2026 to December 2027, and January 2028 to December 2029, respectively.

10.4.5. The Permittee shall submit to the Los Angeles Water Board, together with the first monitoring report required by this Order, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

10.4.6. Outfall Inspection Report

By August 15th of each year, a summary report of the outfall inspection findings for the previous calendar year shall be prepared and submitted to the Los Angeles Water Board. This written report, augmented with videographic and/or photographic images, shall provide a description of the observed external condition of the discharge pipe from shallow water to its respective terminus.

The first summary report shall be due August 15, 2025, covering the monitoring period from January 2024 – December 2024.

10.4.7. Technical Report on Preventive and Contingency Plans

The Permittee is required to file with the Los Angeles Water Board a technical report on preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events within 90 days after the effective date of this Order. The technical report shall:

- a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks, and pipes should be considered.

- b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.
- c. Describe facilities and procedures needed for effective preventive and contingency plans.
- d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

10.4.8. Climate Change Effects Vulnerability Assessment and Mitigation Plan:

The Permittee shall develop and submit a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan), as specified in section 6.3.4.b. of the Order.

10.4.9. Annual Volumetric Reporting of Wastewater and Recycled Water

The Discharger shall electronically submit annual volumetric reports to the State Water Board by April 30th each year covering data collected during the previous calendar year using the [State Water Board's GeoTracker website](https://geotracker.waterboards.ca.gov) (geotracker.waterboards.ca.gov) under the site-specific global identification number NPD100051640. The annual volumetric report shall include information specified in section 9.3, above. A report upload confirmation from the GeoTracker data system, or other indication of completed submittals, shall be included in the annual summary report and submitted to CIWQS.

10.4.10. Initial Investigation TRE Work Plan

The Permittee shall update and submit an initial investigation TRE work plan consistent with section 5.6 of the MRP to the Executive Officer of the Los Angeles Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the work plan within 60 days, the work plan shall become effective. The Permittee shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or the most current version, or the USEPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, April 1989). At a minimum, the TRE Work Plan must contain the provisions in Attachment G. This work plan shall describe the steps that the Permittee intends to follow if toxicity is detected. Refer to MRP section 5.6 for detailed requirements.

10.4.11. State Water Board Resolution 2009-0011, Adoption of a Policy for Water Quality Control for Recycled Water (Revised January 22, 2013, effective April 25, 2013.), directs the Los Angeles Water Board to encourage recycling. Consistent with the Policy, the Permittee shall submit a feasibility investigation consistent with section 4.3 of the Order as part of the submittal of the Report of Waste Discharge (ROWD) for the next order cycle.

ATTACHMENT F. FACT SHEET

TABLE OF CONTENTS

| | | |
|-----|--|------|
| 1. | DSICHARGER INFORMATION | F-3 |
| 2. | FACILITY DESCRIPTION | F-4 |
| | 2.1. Description of Wastewater and Biosolids Treatment and Controls..... | F-4 |
| | 2.2. Discharge Points and Receiving Waters..... | F-5 |
| | 2.3. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data..... | F-5 |
| | 2.4. Compliance Summary | F-12 |
| | 2.5 Planned Changes..... | F-13 |
| 3. | APPLICABLE PLANS, POLICIES, AND REGULATIONS..... | F-13 |
| | 3.1. Legal Authorities | F-13 |
| | 3.2. California Environmental Quality Act (CEQA)..... | F-14 |
| | 3.3. State and Federal Laws, Regulations, Policies, and Plans | F-14 |
| | 3.4. Impaired Water Bodies on CWA Section 303(d) List | F-18 |
| | 3.5. Other Plans, Policies and Regulations..... | F-18 |
| 4. | RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS | F-22 |
| | 4.1. Discharge Prohibitions | F-22 |
| | 4.2. Technology-Based Effluent Limitations (TBELs)..... | F-22 |
| | 4.3. Water Quality-Based Effluent Limitations (WQBELs)..... | F-24 |
| | 4.4. Final Effluent Limitation Considerations..... | F-31 |
| | 4.5. Interim Effluent Limitations – Not Applicable | F-36 |
| | 4.6. Land Discharge Specifications – Not Applicable..... | F-36 |
| | 4.7. Recycling Specifications..... | F-36 |
| 5. | PERFORMANCE GOALS | F-37 |
| 6. | RATIONALE FOR RECEIVING WATER LIMITATIONS | F-42 |
| | 6.1. Surface Water | F-42 |
| | 6.2. Groundwater – Not Applicable..... | F-42 |
| 7. | RATIONALE FOR PROVISIONS | F-42 |
| | 7.1. Standard Provisions | F-42 |
| | 7.2. Special Provisions | F-43 |
| 8. | RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS..... | F-45 |
| | 8.1. Influent Monitoring..... | F-45 |
| | 8.2. Effluent Monitoring | F-45 |
| | 8.3. Whole Effluent Toxicity Requirements | F-48 |
| | 8.4. Receiving Water Monitoring | F-48 |
| | 8.5. Other Monitoring Requirements..... | F-48 |
| 9. | CONSIDERATION OF NEED TO PREVENT NUISANCE AND WATER CODE SECTION 13241 FACTORS..... | F-49 |
| 10. | PUBLIC PARTICIPATION | F-51 |
| | 10.1. Notification of Interested Parties..... | F-51 |
| | 10.2. Written Comments..... | F-51 |
| | 10.3. Public Hearing..... | F-52 |
| | 10.4. Review of Waste Discharge Requirements | F-52 |
| | 10.5. Information and Copying | F-52 |
| | 10.6. Register of Interested Persons | F-53 |
| | 10.7. Additional Information..... | F-53 |

LIST OF TABLES

| | |
|--|------|
| Table F-1. Facility Information..... | F-3 |
| Table F-2. Effluent Limitations in Order No. R4-2019-0023 and Historic Monitoring Data at EFF-001. | F-8 |
| Table F-3. Summary of Violations..... | F-12 |
| Table F-4. Basin Plan Beneficial Uses – Receiving Surface Waters | F-14 |
| Table F-5. Ocean Plan Beneficial Uses | F-15 |
| Table F-6. Summary of TBELs in 40 CFR §133.102 | F-23 |
| Table F-7. Summary of TBELs for POTWs Established by the 2019 Ocean Plan | F-23 |
| Table F-8. Summary of TBELs for Discharge Point 001..... | F-23 |
| Table F-9. Background Seawater Concentrations (Cs)..... | F-28 |
| Table F-10. 2019 Ocean Plan WQOs (C _o) | F-28 |
| Table F-11. Summary of Final Effluent Limitations for Discharge Point 001 | F-34 |
| Table F-12. Summary of Performance Goals for Discharge Point 001 (Detected Data with Equal to or Greater Than 20%) | F-39 |
| Table F-13. Summary of Performance Goals for Discharge Point 001 (Non-detected Data Greater Than 80%) | F-40 |
| Table F-14. Monitoring Frequency Comparison | F-46 |

ATTACHMENT F – FACT SHEET

As described in section 2.2 of this Order, the Los Angeles Water Board incorporates this Fact Sheet as findings of the Los Angeles Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

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

1. DSICARGER INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

| | |
|--|---|
| WDID | 4 B190100001 |
| Discharger | City of Avalon |
| Name of Facility | Avalon Wastewater Treatment Facility |
| Facility Address | 123 Pebbly Beach Road Avalon, CA 90704 Los Angeles County |
| Facility Contact, Title and Phone | Dave West, Chief Plant Operator, (505) 388-8837 |
| Authorized Person to Sign and Submit Reports | Denise Radde, City Manager, (310) 510-0220 |
| Mailing Address | PO Box 707, Avalon, CA, 90704 |
| Billing Address | PO Box 1810, Avalon, CA, 90704 |
| Type of Facility | Publicly-Owned Treatment Works |
| Major or Minor Facility | Major |
| Threat to Water Quality | 1 |
| Complexity | A |
| Pretreatment Program | No |
| Recycling Requirements | Not Applicable |
| Facility Permitted Flow | 1.2 million gallons per day (MGD) |
| Facility Design Flow | 1.2 MGD |
| Watershed | Santa Catalina Island Subwatershed |
| Receiving Water | Pacific Ocean |
| Receiving Water Type | Ocean waters |

1.1. The City of Avalon (hereafter City, Discharger, or Permittee) owns a publicly-owned treatment works (POTW) comprised of the Avalon Wastewater Treatment Facility

(Avalon WWTF or Facility) and its associated wastewater collection system and outfall. For the purposes of this Order, references to the “Permittee” or “Discharger” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Permittee herein.

- 1.2. The Facility discharges wastewater to the Pacific Ocean, a water of the United States. The Permittee was previously regulated by Order R4-2019-0023 and National Pollutant Discharge Elimination System (NPDES) Order Number CA0054372, which became effective on April 1, 2019, and expired on March 31, 2024.
- 1.3. Regulations at Title 40 of the Code of Federal Regulations (40 CFR) section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. However, pursuant to 40 CFR 122.6(d) and 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 federal NPDES requirements for continuation of expired permits. The Discharger filed a report of waste discharge (ROWD) and applied for reissuance of its Waste Discharge Requirements (WDRs) and NPDES permit on October 2, 2023. Supplemental information was requested by the Los Angeles Water Board on October 6, 2023, and received on October 9, 2023. The application was deemed complete on October 10, 2023. A site visit was conducted on February 28, 2024, to observe operations and to collect additional data to develop permit limitations and conditions. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

2. FACILITY DESCRIPTION

2.1. Description of Wastewater and Biosolids Treatment and Controls

- 2.1.1. The Avalon WWTP is a secondary wastewater treatment plant with a dry weather design capacity of 1.2 MGD. The Facility serves an estimated population of 4,000 people and receives untreated domestic and commercial wastewater from the City of Avalon. The wastewater is a mix of fresh and seawater. The influent to the Avalon WWTF is approximately 40% to 50% seawater that is used for toilet flushing in the City of Avalon.
- 2.1.2. In addition, to protect water quality in Avalon Bay, the Facility also treats a portion of the dry weather surface runoff and the first flush of storm water (first half hour of rainfall), via low-flow diversions into the sewer collection system. This is an intermittent system and only activates during dry weather and the first half hour of rainfall events; it is not a combined sewer system. After the first half hour of rainfall, the system is designed to redirect runoff to the storm drains, which convey stormwater to the ocean.
- 2.1.3. Wastewater treatment at the Facility consists of a rotating screen for removal of large particles, an aerated grit unit, a trickling filter and activated sludge reactors for removal of organics, clarifiers for separation of solids, and a chlorination system for disinfection. The trickling filter is typically only used during the summer. When the trickling filter is online, approximately twenty percent of the influent flow is diverted from the aerated grit unit to remove additional BOD and suspended solids from the

wastewater before combining with the remaining influent flow from the aerated grit unit and entering the aeration tanks. The effluent is partially chlorinated with the addition of sodium hypochlorite solution to maintain consistent compliance with the receiving water bacterial standards. The final treated wastewater is discharged to the Pacific Ocean, a water of the United States, through an ocean outfall off Pebbly Beach. Solids separated at the rotating screen are sent to the Pebbly Beach Landfill, regulated separately under Order No. R4-2016-0140. Waste sludge from activated sludge reactors is aerobically digested, dewatered in a centrifuge, and dried in sludge drying beds before being hauled to the Pebbly Beach Landfill.

2.2. Discharge Points and Receiving Waters

- 2.2.1. The secondary-treated wastewater is discharged to Discharge Point 001 to the Pacific Ocean off Pebbly Beach, approximately halfway between the Avalon WWTF and Avalon Bay. The discharge pipe is one foot in diameter and extends 400 feet offshore and 130 feet below the ocean surface (Latitude: 33.338611°N, Longitude: 118.311111°W).
- 2.2.2. The State Water Board has designated the area from Binnacle Rock to Jewfish Point on Santa Catalina Island as an Area of Special Biological Significance (ASBS). The discharge point is about 1.5 miles north, outside the ASBS.

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

Effluent limitations contained in the previous Order Number R4-2019-0023 for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from the term of the previous Order collected from April 1, 2019, to July 31, 2023, are presented in Table F-2.

Table F-2. Effluent Limitations in Order No. R4-2019-0023 and Historic Monitoring Data at EFF-001

| Constituent Name | Units | Average Monthly Effluent Limit | Average Weekly Effluent Limit | Maximum Daily Effluent Limit | Instantaneous Minimum & Maximum Effluent Limit | Maximum Monthly Average Reported | Maximum Weekly Average Reported | Maximum Daily Reported | Instantaneous Minimum & Maximum Reported |
|--|---------|--------------------------------|-------------------------------|------------------------------|--|----------------------------------|---------------------------------|------------------------|--|
| Biochemical Oxygen Demand (BOD) | mg/L | 20 | 35 | -- | -- | 12 | 16 | -- | -- |
| BOD ₅ 20°C Removal Percentage | % | ≥85 | -- | -- | -- | 99.5 | -- | -- | -- |
| Total Suspended Solids (TSS) | mg/L | 30 | 45 | -- | -- | 51 | 90 | -- | -- |
| TSS Removal Percentage | % | ≥85 | -- | -- | -- | 97.6 | -- | -- | -- |
| Oil & Grease | mg/L | 25 | 40 | -- | 75 | 5.2 | 5.2 | -- | 5.2 |
| Settleable Solids | mL/L | 1.0 | 1.5 | -- | 3.0 | 0.4 | 0.4 | -- | 0.4 |
| pH | pH Unit | -- | -- | -- | 6.0 - 9.0 | -- | -- | -- | 6.4 -7.7 |
| Temperature | °F | -- | -- | -- | 100 | -- | -- | -- | 79 |
| Turbidity | NTU | 75 | 100 | -- | 225 | 13 | 14 | -- | 38 |
| Total Chlorine Residual | µg/L | 120 | -- | 490 | 3,700 | 45 | -- | 300 | 300 |
| Chronic Toxicity | TUc | -- | -- | Pass | -- | -- | -- | Pass | -- |
| TCDD equivalents | pg/L | 0.24 | -- | -- | -- | 1.2 | -- | -- | -- |

2.4. Compliance Summary

Based on the monitoring data collected from April 1, 2019 to July 31, 2023, the Discharger was able to meet all effluent limitations except for the effluent limitation for total suspended solids and 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) equivalents as summarized in Table F-3.

Table F-3. Summary of Violations

| Violation Date | Description |
|-----------------------|--|
| 07/16/2021 | Total Suspended Solids (TSS) Weekly Average (Mean) limit is 45 mg/L and reported value was 90 mg/L at EFF-001. |
| 07/31/2021 | Total Suspended Solids (TSS), Percent Removal Monthly Average (Mean) limit is 85.0 % and reported value was 56.6 % at EFF-001. |
| 07/31/2021 | Total Suspended Solids (TSS) Monthly Average (Mean) limit is 30 mg/L and reported value was 40.05 mg/L at EFF-001. |
| 11/30/2021 | TCDD Equivalents Monthly Average (Mean) limit is 0.24 pg/L and reported value was 0.501 pg/L at EFF-001. |
| 04/06/2023 | TCDD Equivalents Monthly Average limit is 0.24 pg/L and reported value was 1.23 pg/L at EFF-001. |
| 07/07/2023 | Total Suspended Solids (TSS) Weekly Average limit is 45 mg/L and reported value was 46.4 mg/L at EFF-001. |
| 07/14/2023 | Total Suspended Solids (TSS) Weekly Average limit is 45 mg/L and reported value was 60.2 mg/L at EFF-001. |
| 07/21/2023 | Total Suspended Solids (TSS) Weekly Average limit is 45 mg/L and reported value was 67.1 mg/L at EFF-001. |
| 07/31/2023 | Total Suspended Solids (TSS) Monthly Average limit is 30 mg/L and reported value was 51.1 mg/L at EFF-00. |

TSS: On May 17, 2023, the Los Angeles Water Board issued Settlement Offer No. R4-2023-0034 with a \$3,000 mandatory minimum penalty for the July 16, 2021 TSS effluent limitation exceedance. This Settlement Offer invited the City of Avalon to participate in the Los Angeles Water Board’s Expedited Payment Program for Effluent and/or Reporting Violations (Expedited Payment Program). On August 23, 2023, the Los Angeles Water Board received the City of Avalon’s signed Acceptance of Conditional Resolution and Waiver of Right to Hearing; (proposed) Order (“Acceptance and Waiver”). On December 4, 2023, the Los Angeles Water Board received payment of \$3,000 from the City of Avalon through the Expedited Payment Program.

The deficient TSS percent removal rate recorded in the effluent on July 31, 2021 was a single non-serious violation within 180 days that was not subject to a mandatory minimum penalty under California Water Code section 13385(i). Therefore, the Los Angeles Water Board did not assess a mandatory minimum penalty for the TSS removal rate deficiency.

TCDD: On May 17, 2023, the Los Angeles Water Board issued Settlement Offer No. R4-2023-0034 identifying a \$3,000 mandatory minimum penalty for the November 30, 2021 TSS violation. This Settlement Offer invited the City of Avalon to participate in the Expedited Payment Program. On August 23, 2023, the Los Angeles Water Board received the City of Avalon's signed Acceptance and Waiver. On December 4, 2023, the Los Angeles Water Board received payment of \$3,000 from the City of Avalon through the Expedited Payment Program.

Los Angeles Water Board staff are currently evaluating all the possible violations recorded since April 2023 and will take appropriate actions when the evaluations are determined.

Deficient Reports: Deficient reports are ranked as Class B violation and are not subject to mandatory minimum penalties. Deficient reports for bacteria, dissolved oxygen, organic nitrogen, total phosphorus, mercury and cyanide have not occurred since July 2019.

2.5 Planned Changes

The Avalon WWTF's chlorine contact basin deteriorated over the years and was in danger of collapsing, creating a safety hazard to staff working at the Avalon WWTF when doing routine cleaning and potentially causing water quality issues. For the duration of the rehabilitation project for the chlorine contact basin (rehabilitation project), the Discharger moved the sodium hypochlorite injection point from the chlorine contact basin to the clarifier effluent common channel at the beginning of the bypass line and collected routine grab samples 0.5 miles downstream of the Avalon WWTF at a street manhole. The wastewater continued receiving the required chlorine contact time because the chlorine contact basin provided approximately 25 minutes of contact time, and the time it took the wastewater to travel to the manhole where grab samples were collected was approximately 45 minutes. Wastewater was not dechlorinated prior to discharge. The Discharger also collected composite samples for routine monitoring along the entry point to the bypass line instead of at the end of the chlorine contact basin. The bypass line was rated to convey up to 2.3 million gallons per day and the daily average flow at the Avalon WWTF was approximately 0.5 MGD, so overloading of the bypass line was not anticipated.

The rehabilitation project began on November 27, 2023, and was completed on January 10, 2024.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

3.1. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with

section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge locations described in Table 2 subject to the WDRs in this Order.

3.2. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit for an existing facility is exempt from CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code. Additionally, this Facility is exempt from CEQA pursuant to 14 Cal. Code Reg. § 15301, Existing Facilities.

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

3.3.1. Water Quality Control Plan

The Water Quality Control Plan: *Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan.

Beneficial uses applicable to the receiving water are as follows:

Table F-4. Basin Plan Beneficial Uses – Receiving Surface Waters

| Water Body Designation | Receiving Water Name | Beneficial Use(s) |
|------------------------------|--|---|
| 180701070002 180701070003 | Pacific Ocean, Santa Catalina Island nearshore zones Nearshore zone is defined as the zone 1,000 feet from the shoreline or the 30-foot contours, whichever is further from the shoreline | <u>Existing:</u> Navigation; Commercial and Sport Fishing; Water Contact Recreation; Non-contact Water Recreation; Marine Habitat; Wildlife Habitat; Preservation of Biological Habitats (Note a); Rare, Threatened or Endangered Species; and Shellfish Harvesting <u>Potential:</u> Spawning, Reproduction, and/or Early Development |

Footnotes for Table F-4

- a. Areas of Special Biological Significance or ecological reserves.

End of Footnotes for Table F-4

3.3.2. California Thermal Plan

The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (Thermal Plan) on January 7, 1971 and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal and inland surface waters. Requirements of this Order implement the Thermal Plan.

3.3.3. California Ocean Plan

The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan) in 1972. The State Water Board adopted the latest amendment on August 7, 2018, and it became effective on February 4, 2019. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean waters of the State. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

Table F-5. Ocean Plan Beneficial Uses

| Discharge Point | Receiving Water | Beneficial Uses |
|-----------------|-----------------|--|
| 001 | Pacific Ocean | Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting |

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

3.3.4. Alaska Rule

On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes (40 CFR section 131.21, 65 Federal Register 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA. This Order implements this rule by implementing standards developed after May 30, 2000 that have been approved by USEPA and/or implementing standards were in effect and submitted to USEPA by May 30, 2000.

3.3.5. Stringency of Requirements for Individual Pollutants.

This Order contains both technology-based effluent limitations (TBELs) and water quality-based effluent limitations (WQBELs) for individual pollutants. The TBELs consist of restrictions on BOD, TSS, and percent removal of BOD and TSS, which implement the minimum applicable federal technology-based requirements for POTWs. In addition, effluent limitations more stringent than federal technology-based requirements consisting of restrictions on oil and grease, settleable solids, turbidity, and pH are necessary to implement State treatment standards in Table 4 of the Ocean Plan. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs for chlorine residual, endosulfan, aldrin, and TCDD equivalents have been scientifically derived to protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law and are the applicable federal water quality standards. All beneficial uses and WQOs contained in the Basin Plan and statewide water quality control plans were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any WQOs and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to 40 CFR section 131.21(c)(1). The final effluent limitations for these pollutants are described in additional detail in section 4.3.2 of the Fact Sheet.

3.3.6. Antidegradation Policy

Federal regulations at 40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Los Angeles Water Board’s Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge and this Order are consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16, as discussed in section 4.4.2 of the Fact Sheet.

3.3.7. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR 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. This Order complies with the anti-backsliding provisions by ensuring the effluent limitations are as stringent as those in the previous Order, unless one of the exceptions applies. The applicability of these requirements to this Order is discussed in detail in section 4.4.1 of this Fact Sheet.

3.3.8. Endangered Species Act Requirements

This Order prohibits 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 (ESA) (Fish and Game Code, sections 2050 to 2097) or the Federal Endangered Species Act (16 USC sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable ESA.

3.3.9. Water Recycling

In accordance with statewide policies concerning water reclamation (See, e.g., CWC sections 13000 and 13550-13557, State Water Board Resolution Number 77-1 (*Policy with Respect to Water Reclamation in California*), and State Water Board Resolution Numbers 2009-0011, 2013-0003, and 2018-0057 (*Water Quality Control Policy for Recycled Water (Recycled Water Policy)*)), the Los Angeles Water Board strongly encourages, wherever practicable, water recycling, water conservation, and use of stormwater and dry-weather urban runoff. Additionally, this Order implements the Recycled Water Policy by requiring annual reports of influent, wastewater produced, and effluent volumes, including treatment level, discharge type, and categories of reuse. These requirements are described in section 4.7.1 of this Fact Sheet.

This permit also requires the Permittee to investigate the feasibility of recycling, conservation, and/or alternative disposal methods for wastewater (such as groundwater injection), and/or capture and treatment of dry-weather urban runoff and stormwater. This requirement is described in section 4.7.2. of this Fact Sheet.

3.3.10. Monitoring and Reporting

40 CFR section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code section 13383 authorizes the Los Angeles Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and state requirements. This MRP is provided in Attachment E.

3.3.11. Sewage Sludge/Biosolids Requirements

Section 405 of the CWA and implementing regulations at 40 CFR part 503 require that producers of sewage sludge/biosolids meet certain reporting, handling, and use or disposal requirements. The state has not been delegated the authority by USEPA to implement this program. The Permittee is responsible for meeting all applicable requirements of 40 CFR part 503 that are under USEPA's regulatory authority.

3.3.12. Domestic Water Quality

In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

3.3.13. Pretreatment Requirements

There are currently no industrial users in the Facility's service area; therefore, no pretreatment requirements are included in this Order.

3.3.14. Standard and Special Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR § 122.41, and additional conditions applicable to POTWs in accordance with 40 CFR § 122.42, are provided in Attachment D. The Los Angeles Water Board also included

in this Order Special Provisions applicable to the Discharger. The rationale for the Special Provisions contained in this Order is provided in section 8 of this Fact Sheet.

3.4. Impaired Water Bodies on CWA Section 303(d) List

On January 19, 2022, the State Water Board approved the CWA Section 303(d) List of the State's 2020-2022 California Integrated Report (State Water Board Resolution Number 2022-0006) based on a compilation of the regional water boards' Integrated Reports. These Integrated Reports contain both the CWA section 305(b) water quality assessment and section 303(d) list of impaired waters. In developing the Integrated Reports, the Water Boards solicit data, information, and comments from the public and other interested persons. On May 11, 2022, USEPA approved the 2020-2022 California Integrated Report. The CWA section [303\(d\)](#) list can be found at the following link:

http://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html

Avalon Beach has been listed as impaired for indicator bacteria since 2002 and remains on the 2020-2022 303(d) list. This listing is being addressed by the Avalon Beach bacteria TMDL.

The Discharger conducted an effluent dispersion study under its 2002 NPDES permit, Order No. R4-2002-0094 to determine the extent of the wastewater plume. The effluent dispersion study, conducted in the summer of 2002, concluded that the wastewater plume from the Facility did not appear to encroach toward the shoreline during strongly stratified conditions, which occur in the summer through early fall, and the wastewater plume is unlikely to be the cause of the high bacteria results at Avalon Beach.

In 2012, in response to the CWA section 303(d) listing and spills from the City of Avalon's sewer system, the Los Angeles Water Board adopted a Cease and Desist Order (CDO) and a bacteria TMDL for Avalon Beach on April 05, 2012. Order No. R4-2012-0077 established and implemented the Avalon Beach Bacteria TMDL and required the City to cease and desist discharging waste in violation of requirements in the NPDES permit issued by the Los Angeles Water Board, Order No. R4-2008-0028, and the *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*, State Water Board Order No. 2006-0003-DWQ. On November 20, 2019, the Los Angeles Water Board issued a partial satisfaction of the CDO letter to the Discharger. Los Angeles Water Board staff reviewed and verified that the Discharger had completed actions in compliance with Provisions I through VII contained in the CDO. However, the Discharger has an ongoing obligation to comply with the Avalon Beach Bacteria TMDL specified in Provision IX of the CDO, including water quality sampling to ensure compliance with the wasteload allocations assigned to MS4 discharges, nonpoint source discharges, and discharges from the Avalon WWTF and its collection system.

3.5. Other Plans, Policies and Regulations

3.5.1. Climate Change Adaptation and Mitigation

On March 7, 2017, the State Water Board adopted a resolution responding to the challenges posed by climate change and requiring a proactive approach to climate

change in all State Water Board actions, including drinking water regulation, water quality protection, and financial assistance (State Water Board Resolution Number 2017-0012). The resolution lays the foundation for response to climate change that is integrated into all State Water Board actions, by giving direction to the State Water Board divisions and encouraging coordination with the Los Angeles Water Board. The Los Angeles Water Board also adopted “A Resolution to Prioritize Actions to Adapt to and Mitigate the Impacts of Climate Change on the Los Angeles Region’s Water Resources and Associated Beneficial Uses” (Resolution Number R18-004) on May 10, 2018. The Los Angeles Water Board resolution summarizes the steps taken so far to address the impacts of climate change within the Los Angeles Water Board’s programs and lists a series of additional steps, including the identification of potential regulatory adaptation and mitigation measures that could be implemented on a short-term and long-term basis by each of the Los Angeles Water Board’s programs to mitigate the effects of climate change on water resources and associated beneficial uses where possible. This kind of study and management is an important part of planning for the future, as “[m]unicipalities across the country are facing the challenging obligation to manage their aging sewer and stormwater systems at a time of urban population growth, more stringent water quality protection requirements, and increased exposure to climate change-related risks.” USEPA, *Asset Management: Incorporating Asset Management Planning Provisions into NPDES Permits* (December 2014). This Order contains provisions to require planning and actions to address climate change impacts in accordance with both the State and Los Angeles Water Boards’ resolutions, including a requirement to submit a Climate Change Effects Vulnerability Assessment and Management plan (Climate Change Plan).

These requirements are consistent with 40 CFR section 122.41(e), requiring permittees to ensure compliance through proper operation and maintenance of facilities, including installation and operation of appropriate auxiliary and backup facilities; and they are authorized pursuant to Water Code section 13383. (*In re the City of Oceanside, Fallbrook Public Utilities Dist. And the Southern California Alliance of Publicly Owned Treatment Works*, State Water Board Order WQ 2021-0005, February 12, 2021 at p. 26.) The Los Angeles Water Board understands that the cost of preparing such a plan could be significant (estimated cost range of \$25,000-\$60,000), but “the costs of ensuring resilient infrastructure to protect water quality against the effects of climate change is warranted.” (*Fallbrook*, at p. 27.).

3.5.2. Secondary Treatment Regulations

40 CFR part 133 establishes the minimum levels of effluent quality to be achieved by secondary treatment. These limitations, established by USEPA, are implemented in this Order, except where more stringent limitations are required by other applicable plans, policies, or regulations or to prevent backsliding.

3.5.3. Stormwater

CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for stormwater discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR section 122.26 that established requirements for

stormwater discharges under an NPDES program. To facilitate compliance with federal regulations, in November 1991, the State Water Board issued a statewide general permit, *General Permit for Storm Water Discharges Associated with Industrial Activities* (Order Number 2014-0057-DWQ amended by Order 2015-0122-DWQ and Order 2018-0028-DWQ, NPDES No. CAS000001). General NPDES Permit Number CAS000001 has been amended and reissued several times since 1991, and most recently on November 6, 2018. The latest amendment became effective on July 1, 2020.

General NPDES Permit No. CAS000001 is applicable to stormwater discharges from the Facility. On June 23, 2015, the Discharger filed a Notice of Intent to comply with the requirements of the *General Permit for Storm Water Discharges Associated with Industrial Activities* Order No. 2014-0057-DWQ. The Discharger developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP) to comply with Order No. 2014-0057-DWQ.

3.5.4. Sanitary Sewer Overflows (SSOs)

On December 6, 2022, the State Water Board issued the Statewide *General Waste Discharge Requirements for Sanitary Sewer Systems* (SSS WDRs, State Water Board Order No. WQ 2022-0103-DWQ). Order No. WQ 2022-0103-DWQ supersedes the previous SSS WDRs (Order 2006-0003-DWQ and its subsequent amendments). The SSS WDRs require public agencies that own or operate sanitary sewer systems with greater than one mile of sewer lines to enroll for coverage, comply with requirements to develop and implement sewer system management plans, and report all SSOs to the State Water Board's online SSO database. The Permittee enrolled in the SSS WDRs in October 2006.

Regardless of the coverage obtained under the SSS WDRs, the Permittee's collection system is part of the POTW that is subject to this NPDES permit. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR section 122.41 (e)), report any noncompliance (40 CFR section 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR section 122.41(d)).

The requirements contained in this Order in sections 7.3.3.b (Spill Cleanup Contingency Plan section), 7.3.4 (Construction, Operation and Maintenance Specifications section), and 7.3.6 (Spill Reporting Requirements section) are consistent with the requirements of the SSS WDRs. The Los Angeles Water Board recognizes that there may be some overlap between these NPDES permit provisions and SSS WDRs requirements, related to the collection systems. The requirements of the SSS WDRs are considered the minimum thresholds. To encourage efficiency, the Los Angeles Water Board will accept the documentation prepared by the permittees under the SSS WDRs for compliance purposes as satisfying the requirements in sections 7.3.3.b, 7.3.4, and 7.3.6, provided the more stringent provisions contained in this NPDES permit are also addressed in the SSS WDRs submission. Pursuant to the SSS WDRs, Order No. WQ 2022-0103-DWQ section 6.2, the provisions of this NPDES permit supersede the SSS WDRs, for all purposes, including enforcement, to the extent the requirements may be deemed

duplicative. The requirements of this Order are more stringent than the SSS WDRs because in addition to the SSS WDRs requirements, this NPDES permit requires water quality monitoring of the receiving water when a spill reaches the surface water.

3.5.7. Watershed Management

The Los Angeles Water Board has been implementing a Watershed Management Approach (WMA) to address water quality protection in the Los Angeles Region, as detailed in the Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and groundwater regulatory programs while promoting cooperative, collaborative efforts within the watershed. It is designed to focus limited resources on key issues and use sound science. Information about watersheds in the region can be obtained at the [Los Angeles Water Board's website](http://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/watershed/index.shtml) at http://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/watershed/index.shtml. The WMA emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with the resources available.

This Order fosters implementation of the WMA by protecting beneficial uses in the watershed and encouraging the discharger to participate with other stakeholders in the development and implementation of a watershed-wide monitoring program.

3.5.8. Environmental Justice and Advancing Racial Equity

The Los Angeles Water Board must make findings when issuing or reissuing individual waste discharge requirements that regulate activity or a facility that may have water quality impacts on a disadvantaged or tribal community, and that includes a time schedule in accordance with Water Code section 13263, subdivision (c), for achieving an applicable water quality objective, an alternative compliance path that allows time to come into compliance with water quality objectives, or a water quality variance. Under Water Code section 13149.2, subdivision (c), for permit reissuances, "the finding may be limited to considerations related to any changes to the requirements of the prior waste discharge requirements. . . ." Water Code section 189.7 requires the Los Angeles Water Board to conduct outreach in disadvantaged and/or tribal communities when considering proposed discharges of waste that may have disproportionate impacts on water quality in those communities.

This Order does not include a time schedule and will not have disproportionate impacts on water quality in disadvantaged or tribal communities, and therefore, the requirements in Water Code sections 189.7 and 13149.2 do not apply. Nevertheless, in accordance with the Water Boards' efforts to advance racial equity and environmental justice, this Order requires all Permittees to meet water quality standards that protect public health and the environment, thereby benefitting all persons and communities within the Region. The Los Angeles Water Board is committed to developing and implementing policies and programs to advance racial

equity and environmental justice so that race can no longer be used to predict life outcomes, and outcomes for all groups are improved.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source Permittees to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 CFR section 122.44(a) requires that NPDES permits include applicable TBELs and standards; and 40 CFR section 122.44(d) requires that NPDES permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR § 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or an indicator parameter may be established.

4.1. Discharge Prohibitions

This permit implements discharge prohibitions that are applicable under section III.I of the Ocean Plan.

4.2. Technology-Based Effluent Limitations (TBELs)

4.2.1. Scope and Authority

Technology-based effluent limits require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the Permittee to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level (referred to as “secondary treatment”), which all POTWs were required to meet by July 1, 1977. More specifically, section 301(b)(1)(B) of the CWA required that the USEPA develop secondary treatment standards for POTWs as defined in section 304(d)(1). Based on this statutory requirement, USEPA developed national secondary treatment regulations which are specified in 40 CFR part 133. These technology-based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of BOD₅20°C, TSS, and pH.

4.2.2. Applicable TBELs

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR § 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and more stringent effluent limitations necessary to meet minimum federal technology-based requirements based on Secondary Standards at 40 CFR § 133 and Best Professional Judgment (BPJ) in accordance with 40 CFR § 125.3. Secondary treatment is defined in terms of three parameters – BOD₅20°C, TSS, and pH. The removal efficiency for BOD₅20°C and TSS is set at the minimum level attainable by secondary treatment technology. The following table

summarizes the technology-based requirements for secondary treatment, which are applicable to the Facility:

Table F-6. Summary of TBELs in 40 CFR §133.102

| Parameter | Units | 30-Day Average | 7-Day Average | Instan. Min. | Instan. Max. |
|------------------------------------|---------|----------------|---------------|--------------|--------------|
| BOD ₅ 20°C | mg/L | 30 | 45 | -- | -- |
| TSS | mg/L | 30 | 45 | -- | -- |
| Removal Efficiency for BOD and TSS | % | ≥85 | -- | -- | -- |
| pH | pH Unit | -- | -- | 6.0 | 9.0 |

Also, Table 4 of the Ocean Plan establishes the following TBELs, which are applicable to the Avalon WWTF.

Table F-7. Summary of TBELs for POTWs Established by the Ocean Plan

| Parameter | Units | AMEL | AWEL | Instan. Min. | Instan. Max. | Note |
|----------------------------|---------|------|------|--------------|--------------|------|
| Oil & Grease | mg/L | 25 | 40 | -- | 75 | -- |
| Settleable Solids | mL/L | 1.0 | 1.5 | -- | 3.0 | -- |
| Turbidity | NTU | 75 | 100 | -- | 225 | -- |
| Removal Efficiency for TSS | % | 75 | -- | -- | -- | a |
| pH | pH Unit | -- | -- | 6.0 | 9.0 | -- |

Footnotes for Table F-7

- a. 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.

End of Footnotes for Table F-7

The previous permit included concentration and mass-based effluent limitations for BOD₅20°C based on BPJ. For TSS and Oil & Grease, the previous permit contained mass-based effluent limitations as well as concentration-based limits.

The following table summarizes the TBELs for discharges from the Avalon WWTF and are the same as the TBELs in the previous permit. All TBELs are independent of the dilution ratio for the discharge outfall.

Table F-8. Summary of TBELs for Discharge Point 001

| Parameter | Units | AMEL | AWEL | MDEL | Instan. Min. | Instan. Max. | Note |
|-----------------------|-------|------|------|------|--------------|--------------|------|
| BOD ₅ 20°C | mg/L | 20 | 35 | -- | -- | -- | -- |

| Parameter | Units | AMEL | AWEL | MDEL | Instan. Min. | Instan. Max. | Note |
|-----------------------|-----------|------|------|------|--------------|--------------|------|
| BOD ₅ 20°C | lbs/day | 200 | 350 | -- | -- | -- | a |
| BOD ₅ 20°C | % removal | 85 | -- | -- | -- | -- | -- |
| TSS | mg/L | 30 | 45 | -- | -- | -- | -- |
| TSS | lbs/day | 300 | 450 | -- | -- | -- | a |
| TSS | % removal | 85 | -- | -- | -- | -- | -- |
| Oil and Grease | mg/L | 25 | 40 | -- | -- | 75 | -- |
| Oil and Grease | lbs/day | 250 | 400 | -- | -- | 750 | a |
| Settleable Solids | mL/L | 1.0 | 1.5 | -- | -- | 3.0 | -- |
| Turbidity | NTU | 75 | 100 | -- | -- | 225 | -- |
| pH | pH unit | -- | -- | -- | 6.0 | 9.0 | -- |

Footnotes for Table F-8

- a. The mass emission rates are calculated using 1.2 MGD, consistent with the technology-based effluent limits in the previous permit: lbs/day = 0.00834 x C_e (effluent concentration, ug/L) x Q (flow rate, MGD).

End of Footnotes for Table F-8

4.3. Water Quality-Based Effluent Limitations (WQBELs)

4.3.1. Scope and Authority

CWA Section 301(b) and 40 CFR section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains more stringent requirements than technology-based requirements, including secondary-treatment requirements, which are necessary to meet applicable water quality standards. The rationale for these requirements is discussed beginning in section 4.3.2. of this Fact Sheet.

40 CFR section 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state’s narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi). WQBELs must also be consistent with the assumptions and requirements of TMDL WLAs approved by USEPA.

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan and achieve applicable WQOs and criteria that are contained in other state plans and policies, or any applicable water quality criterion contained in the Ocean Plan.

4.3.2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Basin Plan and Ocean Plan establish the beneficial uses and WQOs for ocean waters of the State. The beneficial uses of the receiving waters affected by the discharge have been described previously in this Fact Sheet. The Basin Plan contains WQOs for bacteria for water bodies designated for water contact recreation and the Ocean Plan contains WQOs for bacterial, physical, chemical, and biological characteristics, and radioactivity. The WQOs from the Ocean Plan and Basin Plan are implemented in this Order as either final effluent limitations (based on reasonable potential) or receiving water limitations.

As discussed in section 3.3.2. of this Fact Sheet, this Order implements the Thermal Plan. The Thermal Plan states that for existing discharges into coastal waters, “Elevated temperature wastes shall comply with limitations necessary to assure protection of the beneficial uses and areas of special biological significance.” The temperature effluent limitation has been carried over from the previous permit and there has been no indication that the temperature of the wastes discharged from this facility has impacted the beneficial uses of the receiving water or areas of special biological significance.

4.3.3. Expression of WQBELs

Pursuant to 40 CFR § 122.45(d)(2) for POTW continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. It is impracticable to include only average weekly and average monthly effluent limitations in the Order because a single daily discharge of certain pollutants, in excess amounts, can cause violations of WQOs. The effects of pollutants on aquatic organisms are often rapid. For many pollutants, an average weekly or average monthly effluent limitation alone is not sufficiently protective of beneficial uses. As a result, maximum daily effluent limitations, as referenced in 40 CFR § 122.45(d), are included in the Order for certain constituents.

The WQBELs for marine aquatic life toxics contained in this Order are based on Table 3 WQOs contained in the Ocean Plan that are expressed as six-month median, daily maximum, and instantaneous maximum WQOs. However, in the existing Order (Order Number R4-2019-0023), many of the calculated effluent limitations based on 6-month median objectives for marine aquatic life toxics in the Ocean Plan were prescribed as monthly average limitations. Applying the anti-backsliding regulations, this Order retains the same approach and sets effluent limitations derived from six-month median water quality objectives for marine aquatic life toxics in the Ocean Plan as average monthly limitations and continue to have RP

to cause or contribute to exceedances of the WQOs. In addition, the Ocean Plan specifies that for the six-month median for intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. To be consistent with the Ocean Plan, maximum daily and instantaneous maximum limitations are also prescribed in this Order.

4.3.4. Determining the Need for WQBELs

Order Number R4-2019-0023 contains effluent limitations for non-conventional and toxic pollutant parameters based on Table 3 of the Ocean Plan. For this Order, the need for effluent limitations based on water quality objectives in Table 3 of the Ocean Plan was reevaluated in accordance with the Reasonable Potential Analysis (RPA) procedures contained in Appendix VI of the Ocean Plan. This statistical RPA method (using RPcalc version 2.2) accounts for the averaging period of the water quality objective, accounts for and captures the long-term variability of the pollutant in the effluent, accounts for limitations associated with sparse data sets, accounts for uncertainty associated with censored data sets, and assumes a lognormal distribution of the facility-specific effluent data. RPcalc calculates the upper confidence bound (UCB) of an effluent population percentile after complete mixing. The UCB is calculated as the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent distribution after complete mixing. The calculated UCB95/95 is then compared to the appropriate objective to determine the potential for an exceedance of that objective and the need for an effluent limitation. For constituents that have an insufficient number of monitoring data or a substantial number of non-detected data with a reporting limit higher than the respective water quality objective, the RPA result is likely to be inconclusive. The Ocean Plan requires that the existing effluent limitations for these constituents be retained in the new Order, otherwise the permit shall include a reopener clause to allow for subsequent modification of the permit to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above a WQO.

For Discharge Point 001, data showing inconclusive results were reported for arsenic, cadmium, chromium (VI), non-chlorinated phenols, chlorinated phenols, endrin, HCH, acrolein, chlorobenzene, dichlorobenzenes, ethylbenzene, thallium, toluene, tributyltin, 1,1,1-trichloroethane, acrylonitrile, benzene, benzidine, beryllium, carbon tetrachloride, chlordanes, chlorodibromomethane, chloroform, DDT, 3,3'-dichlorobenzidine, 1,2-dichloroethane, 1,1-dichloroethylene, dichlorobromomethane, dichloromethane, 1,3-dichloropropene, dieldrin, heptachlor, heptachlor epoxide, hexachlorobenzene, PCBs, 1,1,2,2-tetrachloroethane, tetrachloroethylene, toxaphene, trichloroethylene, 1,1,2-trichloroethane, and vinyl chloride. Since the previous permit did not include effluent limits for these pollutants and this Order includes a reopener clause, no effluent limits were included in this Order for these pollutants. This is consistent with the Ocean Plan, Appendix VI. The pollutants have not been detected in the final effluent, and the Discharger has made, and continues to make, an effort to achieve lower detection limits than are required in the Ocean Plan or 40 CFR part 136.

Los Angeles Water Board staff used RPCalc to calculate reasonable potential using the procedure described above. The analysis included effluent data provided by the Discharger from April 2019 to July 2023 for Outfall 001 with a minimum initial dilution ratio of 60:1. Los Angeles Water Board staff determined that the following constituents have reasonable potential to exceed Ocean Plan Water Quality Objectives and therefore require effluent limitations for the following pollutants at the discharge point: total residual chlorine, endosulfan, aldrin, and TCDD equivalents.

In general, for those constituents that have no reasonable potential to cause, or contribute to excursions of water quality objectives including narrative objectives, no numeric effluent limits are prescribed. The Discharger is required to monitor for these constituents to gather data for use in RPAs for future Order renewals and/or updates.

4.3.5. WQBEL Calculations

From the Table 3 water quality objectives in the Ocean Plan, effluent limitations are calculated according to the following equation for all pollutants, except for acute toxicity (if applicable) and radioactivity:

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

Where

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

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

C_s is the background seawater concentration ($\mu\text{g/L}$) (see Table F-10 below); and

D_m is the minimum probable initial dilution expressed as parts seawater per part wastewater.

The D_m is based on observed waste flow characteristics, receiving water density structure, and the assumption that there are no currents of sufficient strength to influence the initial dilution process flow across the discharge structure. In this Order, dilution ratio of 60:1 has been applied to Outfall 001.

Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally. As site-specific water quality data is not available for pollutants without TMDLs, in accordance with Ocean Plan Table 3 implementing procedures, C_s equals zero for all pollutants, except the following:

Table F-9. Background Seawater Concentrations (Cs)

| Waste Constituent | Background Seawater Concentrations (Cs) |
|-------------------|---|
| Arsenic | 3 |
| Copper | 2 |
| Mercury | 0.0005 |
| Silver | 0.16 |
| Zinc | 8 |

The effluent data collected between April 2019 and July 2023 used for RPcalc indicated that chlorine residual, endosulfan, aldrin, and TCDD equivalents have reasonable potential to cause or contribute to an exceedance of the ocean water quality objectives. Therefore, effluent limitations must be developed for chlorine residual, aldrin, endosulfan, aldrin, and TCDD equivalents as provided below for Discharge Point 001.

Table F-10. Ocean Plan WQOs (Co)

| Constituent | Unit | 6-Month Median | 30-Day Average | Daily Maximum | Instan. Maximum |
|-------------------------|------|----------------|----------------|---------------|-----------------|
| Total residual chlorine | µg/L | 2 | -- | 8 | 60 |
| Endosulfan | µg/L | 0.009 | -- | 0.018 | 0.027 |
| Aldrin | µg/L | -- | 0.000022 | -- | -- |
| TCDD Equivalents | pg/L | -- | 0.0039 | -- | -- |

Using the equation, **Ce = Co + Dm (Co-Cs)**, effluent limitations are calculated as follows for discharge through Discharge Point 001 with a dilution ratio (Dm) of 60:1.

Total Residual Chlorine

$Ce = 2 + 60 \times (2 - 0) = 122 \text{ µg/L} \approx 120 \text{ µg/L}$ (6 Month Median as Monthly Average)

$Ce = 8 + 60 \times (8 - 0) = 488 \text{ µg/L} \approx 490 \text{ µg/L}$ (Daily Maximum)

$Ce = 60 + 60 \times (60 - 0) = 3,660 \text{ µg/L} \approx 3,700 \text{ µg/L}$ (Instantaneous Maximum)

Endosulfan

$Ce = 0.009 + 60 \times (0.009 - 0) = 0.549 \text{ µg/L} \approx 0.55 \text{ µg/L}$ (6 Month Median as Monthly Average)

$Ce = 0.018 + 60 \times (0.018 - 0) = 1.098 \text{ µg/L} \approx 1.1 \text{ µg/L}$ (Daily Maximum)

$Ce = 0.027 + 60 \times (0.027 - 0) = 1.647 \text{ µg/L} \approx 1.6 \text{ µg/L}$ (Instantaneous Maximum)

Aldrin

$Ce = 0.000022 + 60 \times (0.000022 - 0) = 0.001342 \text{ µg/L} \approx 0.0013 \text{ µg/L}$ (Monthly Average)

TCDD Equivalents

$$Ce = 0.0039 + 60 \times (0.0039 - 0) = 0.2379 \text{ pg/L} \approx 0.24 \text{ pg/L (Monthly Average)}$$

Based on the implementing procedures described above, effluent limitations have been calculated for all Table 3 pollutants (excluding radioactivity and chronic toxicity) from the Ocean Plan that have reasonable potential to cause, or contribute to an excursion above the WQOs, and the calculated effluent limitations are incorporated into this Order when applicable.

4.3.6. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) testing protects receiving waters from the aggregate toxic effect of a mixture of pollutants in the effluent or pollutants that are not typically monitored. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer time period and may measure mortality, reproduction, and growth. Chronic toxicity is a more stringent requirement than acute toxicity. A constituent present at low concentrations may exhibit a chronic effect; however, a higher concentration of the same constituent may be required to produce an acute effect. Therefore, chronic toxicity is considered a pollutant of concern for the protection and evaluation of the narrative Basin Plan Water Quality Objectives for toxicity.

A total of 17 quarterly chronic WET tests were conducted on Avalon WWTF effluent between April 2019 and July 2023. No exceedances of the MDEL were reported for chronic toxicity. However, because of the nature of commercial discharges into the POTW sewershed, it is possible that toxic constituents could be present in the Avalon WWTF influent or could have synergistic or additive effects. Los Angeles Water Board staff determined that, pursuant to Step 13 of the RPA procedures in the Ocean Plan (i.e., best professional judgement), reasonable potential exists for chronic toxicity. Thus, this Order carries over the chronic toxicity MDEL for Discharge Point 001 from the existing permit. No acute toxicity final effluent limitations have been assigned to Discharge Point 001 consistent with 40 CFR § 122.44(d)(1)(v), and because the chronic toxicity final effluent limitation is protective of both chronic and acute toxicity.

The Ocean Plan addresses the application of chronic and acute toxicity requirements based on minimum probable dilutions (D_m) for ocean discharges. Following the Ocean Plan, dischargers are required to conduct chronic toxicity monitoring for ocean discharges with D_m factors ranging from 99 to 349 and the Los Angeles Water Board may require acute toxicity monitoring in addition to chronic toxicity monitoring. Dischargers with D_m factors below 99 are required to conduct only chronic toxicity testing. The D_m for Discharge Point 001 is 60. Since D_m is below 99, only chronic toxicity monitoring is required.

The Ocean Plan establishes a daily maximum chronic toxicity objective of 1.0 TU_c ($\text{TU}_c = 100 / (\text{No Observed Effect Concentration (NOEC)})$), using a 5-concentration hypothesis test, and a daily maximum acute toxicity objective of 0.3 TU_a ($\text{TU}_a = 100 / \text{LC50}$), using a point estimate model. This Order includes effluent limitations using the Test of Significant Toxicity (TST) hypothesis testing approach. This

statistical approach is consistent with the Ocean Plan in that it provides maximum protection to the environment since it more reliably identifies acute and chronic toxicity than the NOEC hypothesis-testing approach (See California Ocean Plan, Section III.F and Appendix I).

Compliance with the chronic toxicity requirements contained in this Order shall be determined in accordance with section 7.9 of this Order. Nevertheless, this Order contains a reopener to allow the Los Angeles Water Board to modify the permit in the future, if necessary, to make it consistent with any new policy, plan, law, or regulation.

For this Order, chronic toxicity in the discharge is evaluated using a maximum daily effluent limitation that utilizes USEPA's 2010 TST hypothesis testing approach. The chronic toxicity effluent limitations are expressed as "Pass" for each maximum daily individual result.

In January 2010, USEPA published a guidance document titled *EPA Regions 8, 9 and 10 Toxicity Training Tool*, which among other things discusses permit limit expression for chronic toxicity. The document acknowledges that NPDES regulations at 40 CFR § 122.45(d) require that all permit limits be expressed, unless impracticable, as an Average Weekly Effluent Limitation (AWEL) and an Average Monthly Effluent Limitation (AMEL) for POTWs. For an ocean discharge, this is appropriate because the 2019 Ocean Plan only requires a MDEL and does not include AMELs or AWELs for chronic toxicity (See 2019 California Ocean Plan, section II.D.7.).

The MDEL is the highest allowable value for the discharge measured during a calendar day or 24-hour period representing a calendar day. The AMEL is the highest allowable value for the average of daily discharges obtained over a calendar month. For WET, this is the average of individual WET test results for that calendar month. In June 2010, USEPA published another guidance document titled *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010), in which they recommend the following: "Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program." The TST approach is another statistical option for analyzing valid WET test data. Use of the TST approach does not result in any changes to USEPA's WET test methods. Section 9.4.1.2 of *USEPA's 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), recognizes that, "the statistical methods recommended in this manual are not the only possible methods of statistical analysis." The TST approach can be applied to acute (survival) and chronic (sublethal) endpoints and is appropriate to use for both freshwater and marine USEPA WET test methods.

The interpretation of the measurement result from USEPA's TST statistical approach (Pass/Fail) for effluent and receiving water samples is, by design, independent from the concentration-response patterns of the toxicity tests for samples when it is required. Therefore, when using the TST statistical approach, application of

USEPA's 2000 guidance on effluent and receiving waters concentration-response patterns will not improve the appropriate interpretation of TST results as long as all Test Acceptability Criteria and other test review procedures – including those related to Quality Assurance for effluent and receiving water toxicity tests, reference toxicant tests, and control performance (mean, standard deviation, and coefficient of variation) – described by the WET test methods manual and TST guidance, are followed. The 2000 guidance may be used to identify reliable, anomalous, or inconclusive concentration-response patterns and associated statistical results to the extent that the guidance recommends review of test procedures and laboratory performance already recommended in the WET test methods manual. The guidance does not apply to single concentration (IWC) and control statistical t-tests and does not apply to the statistical assumptions on which the TST is based. The Los Angeles Water Board and USEPA will not consider a concentration-response pattern as sufficient basis to determine that a TST t-test result for a toxicity test is anything other than valid, absent other evidence. In a toxicity laboratory, unexpected concentration-response patterns should not occur with any regular frequency and consistent reports of anomalous or inconclusive concentration-response patterns or test results that are not valid will require an investigation of laboratory practices.

Any Data Quality Objectives or Standard Operating Procedure used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent or receiving water toxicity test measurement results from the TST statistical approach which include a consideration of concentration-response patterns and/or Percent Minimum Significant Differences (PMSDs) must be submitted for review by the Los Angeles Water Board, in consultation with USEPA and the State Water Board's Quality Assurance Officer and Environmental Laboratory Accreditations Program (40 CFR § 122.44(h)). The PMSD criteria only apply to compliance for NOEC and the sublethal endpoints of the NOEC, and therefore are not used to interpret TST results.

4.4. Final Effluent Limitation Considerations

4.4.1. Anti-Backsliding Requirements

Section 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These antibacksliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations in the prior permit are all retained in this Order, and therefore, this Order's effluent limitations are all are at least as stringent as the effluent limitations in the previous Order.

4.4.2. Antidegradation Policies

40 CFR § 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. On October 28, 1968, the State Water Board established California's antidegradation policy when it adopted Resolution No. 68-16, *Statement of Policy with Respect to Maintaining the Quality of the Waters of the State*. Resolution No. 68-16 requires

that existing water quality be maintained unless degradation is justified based on specific findings. The State Water Board has, in State Water Board Order No. 86-17 and an October 7, 1987 guidance memorandum, interpreted Resolution No. 68-16 to be fully consistent with the federal antidegradation policy contained in 40 CFR section 131.12. Similarly, CWA section 303(d)(4)(B) and 40 CFR section 131.12 require that all permitting actions be consistent with the federal antidegradation policy. Together, the state and federal antidegradation policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. The Los Angeles Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies.

The renewal of this Order is consistent with the anti-degradation policy because it is not expected to allow degradation of the receiving water quality. No reduction in the existing level of wastewater treatment is anticipated. In addition, the renewal of the Order is not expected to lower the surface water quality because the conditions in this Order are at least as stringent as the previous Order.

This Order includes both narrative and numeric final effluent limitations, receiving water limitations, and performance goals to maintain the chemical, physical, and biological characteristics, and to protect the beneficial uses of the receiving water. These requirements ensure that all water quality objectives are being met outside the zone of initial dilution, thereby maintaining the beneficial uses. The Ocean Plan allows for minimal degradation within the zone of initial dilution if the water quality objectives are maintained just outside the zone of initial dilution. The State Water Board has already determined that the minimal degradation permitted by the Ocean Plan is consistent with the antidegradation policy because it maintains maximum benefit to the people of the State, it will not unreasonably affect the present and anticipated beneficial uses, and it will not result in water quality less than that prescribed in the policies.

This Order includes a reopener provision that permits the Los Angeles Water Board to reopen the Order if the effluent exhibits reasonable potential to exceed the objectives during the Order cycle. The Los Angeles Water Board may modify the terms of this Order to prevent degradation of high-quality waters based on any change in the concentration of these constituents in the effluent or receiving water that indicates that a degradation of receiving water quality may occur. The treatment required by this Order is the best practicable treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the State will be maintained.

The mass-based final effluent limitations are based on the average dry weather design flow rate of 1.2 MGD. No degradation is expected based on the limits in this Order.

4.4.3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist

of restrictions on BOD₅20°C, TSS, and pH. Restrictions on BOD₅20°C, TSS, and pH are discussed in section 4.2.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating individual water quality-based effluent limitations for priority pollutants are based on the Ocean Plan. All beneficial uses and water quality objectives contained in the Basin Plan and Ocean Plan were approved under State law and approved by USEPA. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA and applicable water quality standards.

Table F-11. Summary of Final Effluent Limitations for Discharge Point 001

| Parameter | Units | AMEL | AWEL | MDEL | Instan. Min. | Instan. Max. | Performance Goal | Basis | Notes |
|------------------------|--------------|----------------------|------|-------|--------------|--------------|------------------|--|------------|
| BOD ₅ 20°C | mg/L | 20 | 35 | -- | -- | -- | -- | BPJ, Existing, antibacksliding | a |
| BOD ₅ 20°C | lbs/day | 200 | 350 | -- | -- | -- | -- | BPJ, Existing, antibacksliding | b |
| BOD ₅ 20°C | % removal | ≥85 | -- | -- | -- | -- | -- | Existing, Secondary treatment standard | -- |
| TSS | mg/L | 30 | 45 | -- | -- | -- | -- | Existing, Secondary treatment standard | a |
| TSS | lbs/day | 300 | 450 | -- | -- | -- | -- | Existing, Secondary treatment standard | b |
| TSS | % removal | ≥85 | -- | -- | -- | -- | -- | Existing, Secondary treatment standard | -- |
| Oil and Grease | mg/L | 25 | 40 | -- | -- | 75 | -- | Existing, Ocean Plan | a, c |
| Oil and Grease | lbs/day | 250 | 400 | -- | -- | 750 | -- | Existing, Ocean Plan | b |
| Settleable Solids | ml/L | 1.0 | 1.5 | -- | -- | 3.0 | -- | Existing, Ocean Plan | a, c |
| Turbidity | NTU | 75 | 100 | -- | -- | 225 | -- | Existing, Ocean Plan | a, c |
| Chlorine Residual | µg/L | 120 | -- | 490 | -- | 3,700 | 46 | RP, Existing, Ocean Plan | a, c, d |
| Chlorine Residual | lbs/day | 1.2 | -- | 4.9 | -- | 37 | -- | RP, Existing, Ocean Plan | b |
| Endosulfan | µg/L | 0.55 | -- | 1.1 | -- | 1.6 | -- | RP, Ocean Plan | a, c, d, e |
| Endosulfan | lbs/day | 0.0055 | -- | 0.011 | -- | 0.016 | -- | RP, Ocean Plan | b |
| Chronic toxicity (TST) | Pass or Fail | -- | -- | Pass | -- | -- | -- | RP, Existing, Ocean Plan | f |
| Aldrin | µg/L | 0.0013 | -- | -- | -- | -- | -- | RP, Ocean Plan | a, d |
| Aldrin | lbs/day | 1.3×10 ⁻⁵ | -- | -- | -- | -- | -- | RP, Ocean Plan | b |
| TCDD equivalents | pg/L | 0.24 | -- | -- | -- | -- | -- | RP, Existing, Ocean Plan | a, d, e |
| TCDD equivalents | lbs/day | 2.4×10 ⁻⁹ | -- | -- | -- | -- | -- | RP, Existing, Ocean Plan | b |

Footnotes for Tables F-11

- a. The maximum daily, average weekly and average monthly effluent limitations shall apply to flow weighted 24-hour composite samples. They may apply to grab samples if the collection of composite samples for those constituents is not appropriate because of the instability of the constituents.
- b. The mass emission rates are calculated using 1.2 MGD, consistent with the water-quality based limits in the previous permit: $\text{lbs/day} = 0.00834 \times C_e$ (effluent concentration in $\mu\text{g/L}$) $\times Q$ (flow rate in MGD).
- c. The instantaneous effluent limitations shall apply to grab samples.
- d. The minimum dilution ratios used to calculate effluent limitations for nonconventional and toxic pollutants for Discharge Point 001 are 60:1 (i.e., 60 parts seawater to one-part effluent) for all pollutants.
- e. See Attachment A for definitions of terms.
- f. The Chronic Toxicity final effluent limitation is protective of both the numeric acute and chronic toxicity 2019 Ocean Plan water quality objectives. The final effluent limitation will be implemented using *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), current USEPA guidance in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010) (http://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf) and *EPA Regions 8, 9, and 10, Toxicity Training Tool* (January 2010).

End of Footnotes for Tables F-11

- a. **Temperature:** The temperature of wastes discharged shall not exceed 100°F. As discussed in section 3.3.2. of this Fact Sheet, this Order implements the Thermal Plan. The Thermal Plan states that for existing discharges into coastal waters, "Elevated temperature wastes shall comply with limitations necessary to assure protection of the beneficial uses and areas of special biological significance." This effluent limitation has been carried over from the previous permit since there has been no indication that the temperature of the wastes discharged from the facility has impacted the beneficial uses of the receiving water or areas of special biological significance.
- b. **pH:** The effluent values for pH shall be maintained within the limits of 6.0 standard units and 9.0 standard units at all times. This effluent limitation is based on Table 4 of the Ocean Plan.
- c. **Radioactivity:** Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 1, Section 30253 of the California Code of Regulations. Reference to section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect. This narrative effluent limitation is based on Table 3 of the Ocean Plan.

4.5. Interim Effluent Limitations – Not Applicable

4.6. Land Discharge Specifications – Not Applicable

4.7. Recycling Specifications

There is currently no recycled water program for the Avalon WWTF. The Facility generates approximately 0.42 MGD (average from April 2019 through July 2023 of discharge volumes) of secondary-treated effluent. 100% of that effluent is discharged to the Pacific Ocean. City of Avalon residents use ocean water to flush toilets, resulting in an effluent salinity from the Avalon WWTF between 12 and 27 parts per thousand, based on the 2023 Avalon WWTF effluent data. Due to this high salinity, the effluent would need to receive additional treatment before it can be used for title 22 recycled water applications.

4.7.1. Recycled Water Feasibility Investigation

In accordance with statewide statutes and policies concerning water reclamation, (e.g., CWC sections 13000 and 13550-13557, State Water Board Resolution Number 77-1 (*Policy with Respect to Water Reclamation in California*), and State Water Board Resolution Nos. 2009-0011, 2013-0003, and 2018-0057 (*Water Quality Control Policy for Recycled Water* (Recycled Water Policy)), the Los Angeles Water Board strongly encourages, wherever practicable, water recycling, water conservation, and use of stormwater and dry-weather urban runoff. This Order requires the Discharger to investigate the feasibility of recycling, conservation, and/or alternative disposal methods of wastewater (such as groundwater injection), and /or the use of stormwater and dry weather runoff. The permit also requires the Permittee to submit an update to this feasibility study as part of the submittal of the Report of Waste Discharge (ROWD) for the next permit renewal.

4.7.2. Volumetric Reporting

The State Water Board adopted the Recycled Water Policy on February 3, 2009 and amended it most recently on December 11, 2018. The most recent amendments became effective on April 8, 2019. The Recycled Water Policy requires wastewater and recycled water dischargers to annually report monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. As applicable, dischargers are additionally required to annually report recycled water use by volume and the category of reuse. This requirement became effective for this Discharger when the State Water Board issued a Water Code section 13267 and 13383 Order, Order WQ 2019-0037-EXEC, on July 24, 2019, to amend MRPs for all permits of NPDES, WDRs, WRRs, Master Recycling, and General WDRs. As such, this is not a new requirement. Annual reports are due by April 30 of each year, and the report must be submitted to GeoTracker. This Order implements the Recycled Water Policy by incorporating the volumetric monitoring and reporting requirements in accordance with section 3 of the [Recycled Water Policy](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2) (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2

[018/121118 7 final amendment oal.pdf](#)) in Section 9.2 of the MRP in this Order.

5. PERFORMANCE GOALS

Section III.F.1, of the Ocean Plan allows the Los Angeles Water Board to establish more restrictive water quality objectives and effluent limitations than those set forth in the Ocean Plan as necessary for the protection of the beneficial uses of ocean waters.

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (*Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September 30, 1993*) that was adopted by the Los Angeles Water Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order. This approach is consistent with the antidegradation policy in that it requires the Discharger to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques. However, this approach does not address substantial changes in treatment plant operations that could significantly affect the quality of the treated effluent.

While performance goals were previously placed in many POTW permits in the Region, they have been discontinued for inland surface water discharges. For inland surface waters, the California Toxics Rule (40 CFR § 131.38) has resulted in effluent limitations as stringent as many performance goals. However, the Ocean Plan allows for significant dilution, and the continued use of performance goals serves to maintain existing treatment levels and effluent quality and supports State and federal antidegradation policies.

The performance goals are based upon the actual performance of the Facility and are specified only as an indication of the treatment efficiency of the Facility. Performance goals are intended to minimize pollutant loading (primarily for toxics), while maintaining the incentive for future voluntary improvement of water quality whenever feasible, without the imposition of more stringent limits based on improved performance. Performance goals for Discharge Point 001 are prescribed in this Order and are not enforceable effluent limitations or standards. The Discharger shall maintain, if not improve, its treatment efficiency. Any two exceedances of the performance goals shall trigger an investigation into the cause of the exceedance. If the exceedance persists in three successive monitoring periods, the Discharger shall submit a written report to the Los Angeles Water Board on the nature of the exceedance, the results of the investigation as to the cause of the exceedance, and the corrective actions taken or proposed corrective measures with timetable for implementation, if necessary.

5.1. Determination of Performance Goals (Detectable Rate $\geq 20\%$)

For constituents that have been routinely detected in the effluent (at least 20 percent detectable data), performance goals are based on the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent performance data ($UCB_{95/95}$) from April 1, 2019 through July 31, 2023 using the RPA protocol contained in the Ocean Plan. Effluent data are assumed log normally distributed. Performance goals are calculated according to the equation $C_{PG} = C_o + D_m (C_o - C_s)$ and setting $C_o = UCB_{95/95}$.

- 5.1.1. If the maximum detected effluent concentration (MEC) is greater than the calculated performance goal, then the calculated performance goal is used as the performance goal;
- 5.1.2. If the maximum detected effluent concentration is less than the calculated performance goal, then the MEC is used as the performance goal;
- 5.1.3. If the performance goal determined in section 5.1.1 or 5.1.2 is greater than the WQO in the Ocean Plan after considering dilution, then the WQO is used as the performance goal, and
- 5.1.4. For constituents with effluent limitations, if the performance goal determined in section 5.1.1, 5.1.2, or 5.1.3 is equal to or above the respective effluent limitation, the performance goal is not prescribed for that constituent.

Table F-12 summarizes the performance goal determinations for Discharge Point 001, based on criteria section 5.1.1 to 5.1.3. specified above.

For example, the performance goals for copper and zinc for Discharge Point 001 are calculated as follows:

Copper

$C_o = UCB_{95/95} = 2.9008 \mu\text{g/L}$; $D_m = 60$; $C_s = \text{background seawater concentration} = 2 \mu\text{g/L}$; $\text{MEC} = 49.3 \mu\text{g/L}$; $\text{Calculated } C_{PG} = (2.9008 \mu\text{g/L}) + 60 \times (2.9008 \mu\text{g/L} - 2 \mu\text{g/L}) = 59.9488 \mu\text{g/L}$. $\text{WQO with } D_m \text{ of copper} = (3 \mu\text{g/L}) + 60 \times (3 \mu\text{g/L} - 2 \mu\text{g/L}) = 63 \mu\text{g/L}$. Since the MEC of $49.3 \mu\text{g/L}$ is the lowest value among MEC of $49.3 \mu\text{g/L}$, WQO with D_m of $63 \mu\text{g/L}$, and calculated C_{PG} of $5.3567 \mu\text{g/L}$, the prescribed performance goal for copper is $49.3 \mu\text{g/L} \cong 49 \mu\text{g/L}$.

Zinc

$C_o = UCB_{95/95} = 10.9365 \mu\text{g/L}$; $D_m = 60$; $C_s = \text{background seawater concentration} = 8 \mu\text{g/L}$; $\text{MEC} = 214 \mu\text{g/L}$; $\text{Calculated } C_{PG} = (10.9365 \mu\text{g/L}) + 60 \times (10.9365 \mu\text{g/L} - 8 \mu\text{g/L}) = 187.1265 \mu\text{g/L}$. $\text{WQO with } D_m \text{ of zinc} = (20 \mu\text{g/L}) + 60 \times (20 \mu\text{g/L} - 8 \mu\text{g/L}) = 740 \mu\text{g/L}$. Since the Calculated C_{PG} of $187.1265 \mu\text{g/L}$ is the lowest value among MEC of $214 \mu\text{g/L}$, WQO with D_m of $740 \mu\text{g/L}$, and calculated C_{PG} of $187.1265 \mu\text{g/L}$, the prescribed performance goal for zinc is $187.1265 \mu\text{g/L} \cong 190 \mu\text{g/L}$.

Table F-12. Summary of Performance Goals for Discharge Point 001 (Detected Data with Equal to or Greater Than 20%)

| Pollutant | Detected Rate | UCB _{95/95} | C _s | WQO (µg/L) | Dilution Credits (DM) | Calculated PG (µg/L) | MEC (µg/L) | WQO with DM (µg/L) | Final PG (µg/L) | Notes |
|----------------------------|---------------|----------------------|----------------|----------------------|-----------------------|----------------------|-----------------------|-----------------------|-----------------|-------|
| Copper | 53% | 2.9008 | 2 | 3 | 60 | 56.9 | 49.3 | 63 | 49 | -- |
| Lead | 20% | 0.0563 | 0 | 2 | 60 | 3.4 | 1.54 | 122 | 1.5 | -- |
| Mercury | 23% | 0.0061 | 0.0005 | 0.04 | 60 | 0.34 | 0.169 | 2.41 | 0.17 | -- |
| Nickel | 28% | 0.4202 | 0 | 5 | 60 | 25.6 | 21.1 | 305 | 21 | -- |
| Selenium | 67% | 4.5442 | 0 | 15 | 60 | 277 | 152 | 915 | 150 | -- |
| Silver | 27% | 0.2823 | 0.16 | 0.7 | 60 | 7.6 | 5.35 | 33.1 | 5.4 | -- |
| Zinc | 71% | 10.9365 | 8 | 20 | 60 | 187 | 214 | 740 | 190 | -- |
| Total Chlorine Residual | 100% | 0.7512 | 0 | 2 | 60 | 45.82 | 300 | 122 | 46 | -- |
| Ammonia | 94% | 476.05104 | 0 | 600 | 60 | 29,039 | 18,700 | 36,600 | 19,000 | -- |
| Endosulfan | 60% | 0.9420 | 0 | 0.009 | 60 | 57.46 | 21 | 0.549 | -- | a |
| Radioactivity, Gross alpha | 100% | 997.3686 | 0 | 15 pCi/L | -- | 997.3686 | 68.4 | -- | 15 pCi/L | -- |
| Radioactivity, Gross beta | 100% | 2185.5649 | 0 | 50 pCi/L | -- | 2185.5649 | 91.6 | -- | 50 pCi/L | -- |
| Chromium III | 30% | 1.2147 | 0 | 190,000 | 60 | 74.1 | 31.1 | 11,590,000 | 31 | -- |
| Di-n-Butyl Phthalate | 25% | 0.7135 | 0 | 3500 | 60 | 43.5 | 57 | 213,500 | 44 | -- |
| Halomethanes | 50% | 0.2987 | 0 | 130 | 60 | 18.2 | 5.2 | 7,930 | 5.2 | -- |
| TCDD | 53% | 0.0029 | 0 | 3.9X10 ⁻⁹ | 60 | 0.177 | 1.23X10 ⁻⁶ | 2.38X10 ⁻⁷ | -- | a |

Footnotes for Tables F-12

a. There is no PG proposed because the PG is greater than the effluent limitation.

End of Footnotes for Tables F-12

5.2. Determination of Performance Goal (Detectable Rate <20%)

For constituents where monitoring data have consistently shown nondetectable levels (less than 20 percent detectable data), performance goals are set at five times the Minimum Levels (MLs) listed in the Ocean Plan (or MLs or MDLs listed in the laboratory report for those pollutants without MLs listed in the Ocean Plan) for the specific method. If the MEC is less than the calculated value based on the ML, then the MEC is used as the performance goal.

Table F-13 summarizes the performance goal determinations for Discharge Point 001, based on criteria section 5.2. specified above.

Table F-13. Summary of Performance Goals for Discharge Point 001 (Non-detected Data Greater Than 80%)

| Pollutant | Non-Detected Rate | MEC (µg/L) | ML (µg/L) | MDL (µg/L) | 5 X ML/MDL (µg/L) | Final PG (µg/L) | Notes |
|------------------------------|-------------------|------------|-----------|------------|-------------------|-----------------|-------|
| Arsenic | 86% | 13 | 1 | -- | 5 | 5 | -- |
| Cadmium | 100% | -- | 0.2 | -- | 1.0 | 1.0 | -- |
| Chromium (VI) | 100% | -- | 5 | -- | 25 | 25 | -- |
| Cyanide | 81% | 5.57 | 5 | -- | 25 | 5.6 | -- |
| Phenols, Chlorinated | 83% | 0.041 | 0.5 | -- | 2.5 | 0.041 | -- |
| Phenols, Non-Chlorinated | 83% | 0.0534 | 0.5 | -- | 2.5 | 0.053 | -- |
| Endrin | 100% | -- | 0.01 | -- | 0.05 | 0.05 | -- |
| HCH | 100% | -- | 0.005 | -- | 0.025 | 0.025 | -- |
| Acrolein | 100% | -- | 2 | -- | 10 | 10 | -- |
| Antimony | 85% | 8.92 | 0.5 | -- | 2.5 | 2.5 | -- |
| Bis(2-Chloroethoxy) methane | 100% | -- | 5 | -- | 25 | 25 | -- |
| Bis(2-Chloroisopropyl) ether | 100% | -- | 2 | -- | 10 | 10 | -- |
| Chlorobenzene | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| Dichlorobenzene | 100% | -- | 2 | -- | 10 | 10 | -- |
| Diethyl Phthalate | 80% | 0.19 | 2 | -- | 10 | 0.19 | -- |
| Dimethyl Phthalate | 95% | 0.76 | 2 | -- | 10 | 0.76 | -- |
| 4,6-Dinitro-2-methylphenol | 100% | -- | 5 | -- | 25 | 25 | -- |
| 2,4-Dinitrophenol | 100% | -- | 5 | -- | 25 | 25 | -- |
| Ethylbenzene | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| Fluoranthene | 100% | -- | 1 | -- | 5 | 5 | -- |
| Hexachlorocyclopentadiene | 100% | -- | 5 | -- | 25 | 25 | -- |
| Nitrobenzene | 95% | 0.092 | 1 | -- | 5 | 0.092 | -- |
| Thallium, Total Recoverable | 92% | 2.34 | 1 | -- | 5 | 2.3 | -- |
| Toluene | 88% | 1.4 | 2 | -- | 10 | 1.4 | -- |

| Pollutant | Non-Detected Rate | MEC (µg/L) | ML (µg/L) | MDL (µg/L) | 5 X ML/MDL (µg/L) | Final PG (µg/L) | Notes |
|-----------------------------|-------------------|------------|-----------|------------|-------------------|-----------------|-------|
| Tributyltin (TBT) | 100% | -- | -- | 0.0013 | 0.0065 | 0.0065 | -- |
| 1,1,1-Trichloroethane | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| Acrylonitrile | 100% | -- | 2 | -- | 10 | 10 | -- |
| Aldrin | 88% | 0.004 | 0.005 | -- | 0.025 | -- | a |
| Benzene | 88% | 0.16 | 0.5 | -- | 2.5 | 0.16 | -- |
| Benzidine | 100% | -- | 5 | -- | 25 | 25 | -- |
| Beryllium | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| Bis(2-Chloroethyl) ether | 100% | -- | 1 | -- | 5 | 5 | -- |
| Bis(2-Ethylhexyl) phthalate | 94% | 5.3 | 5 | -- | 25 | 5.3 | -- |
| Carbon Tetrachloride | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| Chlordane | 100% | -- | 0.1 | -- | 0.5 | 0.5 | -- |
| Chlorodibromomethane | 100% | -- | 2 | -- | 10 | 10 | -- |
| Chloroform | 75% | 0.31 | 0.5 | -- | 2.5 | 0.31 | -- |
| DDT | 100% | -- | 0.01 | -- | 0.05 | 0.05 | -- |
| 1,4-Dichlorobenze | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| 3,3-Dichlorobenzidine | 100% | -- | 5 | -- | 25 | 25 | -- |
| 1,2-Dichloroethane | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| 1,1-Dichloroethylene | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| Dichlorobromomethane | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| Dichloromethane | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| 1,3-Dichloropropene | 100% | -- | 5 | -- | 25 | 25 | -- |
| Dieldrin | 100% | -- | 0.01 | -- | 0.05 | 0.05 | -- |
| 2,4-Dinitrotoluene | 100% | -- | 5 | -- | 25 | 25 | -- |
| 1,2-Diphenylhydrazine | 100% | -- | 1 | -- | 5 | 5 | -- |
| Heptachlor | 100% | -- | 0.01 | -- | 0.05 | 0.05 | -- |
| Heptachlor Epoxide | 100% | -- | 0.01 | -- | 0.05 | 0.05 | -- |
| Hexachlorobenzene | 100% | -- | 1 | -- | 5 | 5 | -- |
| Hexachlorobutadiene | 100% | -- | 1 | -- | 5 | 5 | -- |
| Hexachloroethane | 100% | -- | 1 | -- | 5 | 5 | -- |
| Isophorone | 100% | -- | 1 | -- | 5 | 5 | -- |
| N-Nitrosodimethylamine | 100% | -- | 5 | -- | 25 | 25 | -- |
| N-Nitrosodi-n-Propylamine | 100% | -- | 5 | -- | 25 | 25 | -- |
| N-Nitrosodiphenylamine | 100% | -- | 1 | -- | 5 | 5 | -- |
| PAHs | 100% | -- | -- | 0.22 | 1.1 | 1.1 | -- |

| Pollutant | Non-Detected Rate | MEC (µg/L) | ML (µg/L) | MDL (µg/L) | 5 X ML/MDL (µg/L) | Final PG (µg/L) | Notes |
|---------------------------|-------------------|------------|-----------|------------|-------------------|-----------------|-------|
| PCBs as aroclors | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| 1,1,2,2-Tetrachloroethane | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| Tetrachloroethene | 100% | -- | 2 | -- | 10 | 10 | -- |
| Toxaphene | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| Trichloroethene | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| 1,1,2-Trichloroethane | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |
| 2,4,6-Trichlorophenol | 85% | 0.18 | 10 | -- | 50 | 0.18 | -- |
| Vinyl Chloride | 100% | -- | 0.5 | -- | 2.5 | 2.5 | -- |

Footnotes for Tables F-13

- a. There is no PG proposed because the PG is greater than monthly average effluent limitation.

End of Footnotes for Tables F-13

6. RATIONALE FOR RECEIVING WATER LIMITATIONS

6.1. Surface Water

The Ocean Plan and Basin Plan contain numeric and narrative water quality standards applicable to surface waters within the Los Angeles Region. Water quality objectives include a policy to maintain high-quality waters pursuant to federal regulations (40 CFR § 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in section 6 of the Order are included to ensure protection of beneficial uses of the receiving water.

6.2. Groundwater – Not Applicable

7. RATIONALE FOR PROVISIONS

7.1. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D of the Order. Sections 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) of 40 CFR allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR section 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

7.2. Special Provisions

7.2.1. Reopener Provisions

These provisions are based on 40 CFR part 123.25. The Los Angeles Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge/biosolids use or disposal practices, or adoption of new regulations by the State Water Board or Los Angeles Water Board, including revisions to the Ocean Plan and Basin Plan.

7.2.2. Special Studies and Additional Monitoring Requirements

- a. **Antidegradation Analysis and Engineering Report for Any Proposed Plant Expansion.** This provision is based on the State Water Board Resolution Number 68-16, which requires the Los Angeles Water Board, in regulating the discharge of waste, to maintain high quality waters of the state. The Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. If the Discharger increases plant capacity, this provision requires the Discharger to demonstrate that treatment systems are effective in preventing violations of effluent limitations. This provision requires the Discharger to report specific time schedules for the Facility's projects and to submit a report to the Los Angeles Water Board for approval.
- b. **Operations Plan for Proposed Expansion.** This provision is based on section 13385(j)(1)(D) of the Water Code and allows a period not to exceed 90 days in which the Discharger may adjust and test the treatment system(s). This provision requires the Permittee to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting and testing to prevent violations.
- c. **Treatment Plant Capacity.** The treatment plant capacity study required by this Order shall serve as an indicator for the Los Angeles Water Board regarding the Facility's increasing hydraulic capacity and growth in the service area.
- d. **Toxicity Reduction Evaluation (TRE) Requirements.** If the discharge consistently exceeds an effluent limitation for toxicity as specified in this Order, the Permittee shall conduct a TRE as detailed in section 5 of the MRP (Attachment E). The TRE will help the Permittee identify the possible source(s) of toxicity. The Permittee shall take all reasonable steps to reduce toxicity to the required level.

7.2.3. Best Management Practices and Pollution Prevention

- a. **Spill Clean-Up Contingency Plan (SCCP):** Since spills or overflows are a common event at the POTW, this Order requires the Discharger to review and update, if necessary, its SCCP after each incident. The Discharger shall ensure that the updated SCCP is always readily available to the sewage system personnel and that the sewage system personnel are familiar with it.
- b. **Pollutant Minimization Program (PMP).** This provision is based on the requirements of section III.C.9 of the Ocean Plan.

7.2.4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR section 122.41(e) and the previous Order. 40 CFR section 122.41(e) also requires the operation of back-up or auxiliary facilities or similar systems when the operation is necessary to achieve compliance with the conditions of the Order. For proper and effective operation of such facilities or systems, routine maintenance and operational testing of emergency infrastructure/equipment is necessary. Major sewage spills can cause harm to residents of the Los Angeles Region, such as the closure of beaches, and harm to wildlife and benthic life. The impact of any such incident to the receiving waters can be minimized or prevented if the operation of emergency infrastructure occurs unimpeded by operational challenges and in a timely fashion. Thus, this Order contains requirements for routine maintenance and operational testing of emergency infrastructure/equipment in section 6.3.4.d.

7.2.5. Special Provisions for Municipal Facilities (POTWs Only)

- a. **Biosolids Requirements.** To implement CWA section 405(d), on February 19, 1993, USEPA promulgated 40 CFR part 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the Discharger to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program. The Discharger is also responsible for compliance with WDRs and NPDES permits for the generation, transport and application of biosolids issued by the State Water Board, other Regional Water Boards, or USEPA, to whose jurisdiction the Facility's biosolids will be transported and applied.
- b. **Spill Reporting Requirements.** This Order establishes a reporting protocol for how different types of spills, overflow or bypasses of raw or partially treated sewage from its collection system or treatment plant covered by this Order shall be reported to regulatory agencies. Although State and Los Angeles Water Board staff do not have duties as first responders, the Initial Notification requirement in section 6.3.6.a of this Order is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner to protect public health and beneficial uses.

As discussed in section 3.5.4. of the Fact Sheet, the Permittee is required to comply with the SSS WDRs. The SSS WDRs require public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the SSS WDRs. The SSS WDRs require agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Furthermore, the SSS WDRs contain requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. Since the Discharger's collection system is part of the system that is subject to this Order, certain standard provisions are applicable as specified in Provisions, section 6.3.5. For instance, the 24-hour reporting

requirements in this Order are not included in the SSS WDRs. The Discharger must comply with both the SSS WDRs and this Order. The Discharger and public agencies that are discharging wastewater into the Facility were required to obtain enrollment for regulation under the SSS WDRs by December 1, 2006.

In the past, the Los Angeles Water Board has experienced loss of recreational use in coastal beaches and in recreational areas because of major sewage spills. The SSS WDRs requirements are intended to prevent or minimize impacts to receiving waters because of spills.

The requirements of this Order are more stringent than the SSS WDRs because in addition to the SSS WDRs requirements, this NPDES permit requires receiving water monitoring when the spill reaches the surface water.

8. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308(a) and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Los Angeles Water Board to establish monitoring, reporting, and recordkeeping requirements. The MRP 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 for this Facility.

8.1. Influent Monitoring

Influent monitoring is required to determine compliance with the permit conditions and to assess treatment plant performance. Influent monitoring in this Order follows the influent monitoring requirements in the previous Order with changes. The monitoring frequencies for some parameters have been increased due to RP for those parameters and monitoring frequencies for metals and organic compounds have been increased to semiannually.

8.2. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges to evaluate compliance with permit conditions. Monitoring requirements are given in the MRP Attachment E. This provision requires compliance with the MRP, and is based on 40 CFR sections 122.44(i), 122.62, 122.63, and 124.5. The MRP is a standard requirement in almost all NPDES permits (including this Order) issued by the Los Angeles Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements for reporting spills, violations, and routine monitoring data in accordance with NPDES regulations, the Water Code, and Los Angeles Water Board policies. The MRP also contains a sampling program specific for the Permittee's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

Monitoring for those pollutants expected to be present in the discharge from the Facility, will be required as set forth in the MRP and as required in the Ocean Plan.

Monitoring frequency for the constituents is based on historic monitoring frequency, Best Professional Judgment, and the following criteria:

Criterion 1: Monthly monitoring will be considered for those pollutants with reasonable potential to exceed water quality objectives (monitoring has shown an exceedance of the objectives);

Criterion 2: Quarterly monitoring will be considered for those pollutants in which some or all the historic effluent monitoring data detected the pollutants, but without reasonable potential to exceed water quality objectives; and

Criterion 3: Semiannual monitoring will be considered for those pollutants in which all the historic effluent monitoring data have had non-detected concentrations of the pollutants and without current reasonable potential to exceed water quality objectives.

The proposed monitoring requirements for PFAS compounds are consistent with EPA's PFAS Action Plan (dated June 15, 2022), PFAS Strategic Roadmap (October 2021) that describe that EPA's goals of reducing PFAS discharges to waterways, and USEPA's memo dated December 5, 2022 updating guidance for addressing PFAS discharges in NPDES permits and/or in pretreatment programs.

Table F-14. Monitoring Frequency Comparison

| Parameter | Monitoring Frequency (2019 Permit) | Monitoring Frequency (2024 Permit) | Notes |
|-------------------------|------------------------------------|------------------------------------|-------|
| Flow | continuous | no change | -- |
| BOD ₅ 20°C | 5 days/week | no change | -- |
| Total Suspended Solids | 5 days/week | no change | -- |
| pH | monthly | no change | -- |
| Oil and Grease | monthly | no change | -- |
| Temperature | monthly | no change | -- |
| Settleable Solids | monthly | no change | -- |
| Dissolved Oxygen | monthly | no change | -- |
| Total Residual Chlorine | 5 days/week | no change | -- |
| Turbidity | weekly | no change | -- |
| Total Dissolved Solids | monthly | no change | -- |
| Total coliform | weekly | no change | -- |
| <i>Enterococcus</i> | weekly | no change | -- |
| Fecal coliform | weekly | no change | -- |
| Total Organic Carbon | monthly | no change | -- |
| Ammonia Nitrogen | quarterly | no change | -- |
| Toxicity, Chronic | quarterly | no change | -- |
| Nitrate Nitrogen | quarterly | no change | -- |
| Nitrite Nitrogen | -- | quarterly | a |
| Organic nitrogen | quarterly | no change | -- |

| Parameter | Monitoring Frequency (2019 Permit) | Monitoring Frequency (2024 Permit) | Notes |
|--|------------------------------------|------------------------------------|-------|
| Total Kjeldahl Nitrogen | -- | quarterly | a |
| Total Nitrogen | -- | quarterly | a |
| Total Phosphorus (as P) | quarterly | no change | -- |
| Arsenic | quarterly | no change | -- |
| Cadmium | quarterly | semiannually | b |
| Chromium (VI) | semiannually | quarterly | c |
| Copper | quarterly | no change | -- |
| Lead | quarterly | no change | -- |
| Mercury | quarterly | no change | -- |
| Nickel | quarterly | no change | -- |
| Selenium | quarterly | no change | -- |
| Silver | quarterly | no change | -- |
| Zinc | quarterly | no change | -- |
| Cyanide | quarterly | no change | -- |
| Endosulfan | semiannually | monthly | d |
| Antimony | semiannually | quarterly | c |
| Chromium (III) | semiannually | quarterly | c |
| Di-n-butyl-phthalate | semiannually | quarterly | c |
| Diethyl phthalate | semiannually | quarterly | c |
| Dimethyl phthalate | semiannually | quarterly | c |
| Nitrobenzene | semiannually | quarterly | c |
| Thallium | semiannually | quarterly | c |
| Toluene | semiannually | quarterly | c |
| Aldrin | semiannually | monthly | d |
| Benzene | semiannually | quarterly | c |
| Bis(2-ethylhexyl) phthalate | quarterly | no change | -- |
| Chloroform | semiannually | quarterly | c |
| Halomethanes | semiannually | quarterly | c |
| PAHs | semiannually | quarterly | c |
| PCBs as Congeners | -- | annually | a |
| TCDD Equivalents | monthly | no change | -- |
| 2,4,6-Trichlorophenol | semiannually | quarterly | c |
| PFAS | -- | quarterly | a |
| Remaining Pollutants in Ocean Plan Table 3 except acute toxicity | Semiannually | No change | -- |

Footnotes for Tables F-14

a. New monitoring requirement.

- b. Based on Criterion 3 specified in section 8.2 above
- c. Based on Criterion 2 specified in section 8.2 above.
- d. Based on Criterion 1 specified in section 8.2 above

End of Footnotes for Tables F-14

8.3. Whole Effluent Toxicity Requirements

The rationale for WET monitoring has been discussed extensively in section 4.3.6 of this Fact Sheet.

8.4. Receiving Water Monitoring

8.4.1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Ocean Plan and the Basin Plan. The conceptual framework for the receiving water program has three components that comprise a range of spatial and temporal scales: (a) core monitoring; (b) regional monitoring; and (c) special studies. Detailed information can be found in Section 7 of attachment E.

The receiving water monitoring program contains the following core and regional components: shoreline and offshore water quality monitoring; and benthic infauna and sediment chemistry monitoring. Local and regional survey questions, sampling designs, monitoring locations, and other specific monitoring requirements are detailed in the MRP.

8.4.2. Groundwater – (Not Applicable)

8.5. Other Monitoring Requirements

8.5.1. Outfall and Diffuser Inspection

This survey investigates the condition of the outfall structures to determine if the structures are in serviceable condition to ensure their continued safe operation. The data collected will be used for a periodic assessment of the integrity of the outfall pipes and ballasting system.

8.5.2. Biosolids and Sludge Management

Attachment H establishes monitoring and reporting requirements for the storage, handling and disposal practices of biosolids/sludge generated from the operation of this POTW.

8.5.3. Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program

Under the authority of section 308 of the CWA (33 U.S.C. § 1318), USEPA requires major and selected minor dischargers under the NPDES Program to participate in the annual DMR-QA Study Program. The DMR-QA Study evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits. There are two options to satisfy the requirements of the DMR-QA Study Program: (1) The Discharger can obtain and analyze a DMR-QA sample as part of the DMR-QA Study; or (2) Per the waiver issued by USEPA to the

State Water Board, the Discharger can submit the results of the most recent Water Pollution Performance Evaluation Study from its own laboratories or its contract laboratories. A Water Pollution Performance Evaluation Study is similar to the DMR-QA Study. Thus, it also evaluates a laboratory's ability to analyze wastewater samples to produce quality data that ensure the integrity of the NPDES Program. The Discharger shall ensure that the results of the DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board. The State Water Board's Quality Assurance Program Officer will send the DMR-QA Study results or the results of the most recent Water Pollution Performance Evaluation Study to USEPA's DMR-QA Coordinator and Quality Assurance Manager.

8.5.4. Monitoring of Volumetric Data for Wastewater and Recycled Water

The volumetric wastewater and recycled water monitoring and reporting requirements are based on the Recycled Water Policy, as described in Section 4.7.2. of this Fact Sheet.

9. CONSIDERATION OF NEED TO PREVENT NUISANCE AND WATER CODE SECTION 13241 FACTORS.

One of the provisions/requirements in this Order (subsection 4.3 of the Order) is included to implement state law only. This provision/requirement is not required or authorized under the federal CWA; consequently, violations of this provision/requirement is not subject to the enforcement remedies that are available for NPDES violations. As required by Water Code section 13263, the Los Angeles Water Board has considered the need to prevent nuisance and the factors listed in Water Code section 13241 in establishing the state law provision/requirement. The Los Angeles Water Board finds, on balance, that the state law requirement in this Order is reasonably necessary to prevent nuisance and to protect beneficial uses identified in the Basin Plan, and the section 13241 factors are not sufficient to justify failing to protect those beneficial uses.

9.1. Need to prevent pollution or nuisance: In establishing effluent limitations in this Order, the Los Angeles Water Board has considered state law requirements to prevent pollution or nuisance as defined in section 13050, subdivisions (l) and (m), of the Water Code. The only requirement in this Order that is based on state law is an investigation of the feasibility of recycling, conservation, an/or alternative disposal methods for wastewater (such as groundwater injection), and/or capture and treatment of dry-weather urban runoff and stormwater on a permissive basis for the beneficial reuse. This investigation will allow the Los Angeles Water Board to determine if and how to prevent pollution from any recycling or conservation program that might be implemented in the future.

9.2. Past, present, and probable future beneficial uses of water: Chapter 2 of the Basin Plan identifies designated beneficial uses for water bodies in the Los Angeles Region. Beneficial uses of water relevant to this Order are also identified above in Section 3.3.1 of this Fact Sheet. The Los Angeles Water Board has taken this factor into account in establishing effluent limitations in the Order, including the requirement set forth in section 4.3. The feasibility investigation will not affect the past or present beneficial uses of water, but it could affect the future beneficial uses of water. Should the Discharger

be required to implement actions based on the feasibility investigation, any recycled water that may be produced will have to meet all legal requirements, including those set forth in Title 22 to protect future beneficial uses. The requirements herein protect the past, present and probable future beneficial uses of the water.

9.3. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto: The environmental characteristics of this watershed are discussed in Chapter 3 of the Basin Plan, as well as available in State of the Watershed reports and the State's CWA Section 303(d) List of impaired waters. The environmental characteristics of the hydrographic unit, including the quality of available recycled water that may be produced as a result of the feasibility investigation, will be improved by compliance with the requirements of this Order. Additional information on the [Channel Islands Watershed Management Area](https://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/ws_channelislands.shtml) is available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/ws_channelislands.shtml.

9.4. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area: The water quality standards necessary to protect beneficial uses of the waterbodies in the Channel Islands Watershed Management Area can reasonably be achieved through the coordinated control of all factors that affect water quality in the area, including the conservation of water and/or the production of recycled water contemplated in the feasibility investigation. For example, the water quality in the watershed could be improved through the addition of recycled water which meets Title 22 standards. The Los Angeles Water Board has taken this factor into account in establishing effluent limitations in the Order.

9.5. Economic considerations: The Permittee did not present any evidence regarding economic considerations related to this Order. However, the Los Angeles Water Board has considered the economic impact of requiring certain provisions pursuant to state law, and in conjunction with the applicable TMDLs incorporated into the Order. The only cost here would be the cost of the feasibility investigation. Any additional costs associated with the feasibility investigation is reasonably necessary to prevent nuisance and protect beneficial uses identified in the Basin Plan, and to increase water supply. The failure to consider the feasibility of conservation or increased recycling could potentially result in the loss of, or impacts to, beneficial uses, and any such loss or impact would have a detrimental economic impact, particularly given the effects on beneficial uses and supplies of water from drought and climate change. Economic considerations related to costs of compliance are therefore not sufficient, in the Los Angeles Water Board's determination, to justify failing to prevent nuisance and protect beneficial uses.

9.6. Need for developing housing within the region: The Los Angeles Water Board does not anticipate that these state law requirements will adversely impact the need for housing in the area. The region generally relies on imported water to meet many of its water resource needs. Imported water makes up a vast majority of the region's water supply, with local groundwater, local surface water, and reclaimed water making up the remaining amount. This Order helps address the need for housing by controlling pollutants in discharges, which will improve the quality of local surface and ground

water, as well as water available for recycling and reuse. This in turn may reduce the demand for imported water, thereby increasing the region's capacity to support continued housing development. A reliable water supply for future housing development is required by law, and with less imported water available to guarantee this reliability, an increase in local supply is necessary. Therefore, the potential for developing housing in the area will be facilitated by the conservation of water, or reuse or the production of, recycled water that may result from the feasibility investigation.

9.7. Need to develop and use recycled water: The State Water Board's Recycled Water Policy requires the Los Angeles Water Boards to encourage the use of recycled water. In addition, as discussed immediately above, a need to develop and use recycled water exists within the region, especially during times of drought. To encourage recycling, the Permittee is required by this Order to continue to explore the feasibility of recycling to maximize the beneficial reuse of tertiary treated effluent and to report on its recycled water production and use. The Discharger shall submit an update to this feasibility investigation as part of the submittal of the Report of Waste Discharge (ROWD) for the next Order renewal.

10. PUBLIC PARTICIPATION

The Los Angeles Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the Avalon WWTP. As a step in the WDR adoption process, the Los Angeles Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

10.1. Notification of Interested Parties

The Los Angeles Water Board notified the Permittee and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations, and the public notice, the fact sheet, and the draft order were posted on the Los Angeles Water Board's home page at [Tentative Orders / Permits | Los Angeles Regional Water Quality Control Board \(ca.gov\)](https://www.waterboards.ca.gov/losangeles/board_decisions/tentative_orders/index.html) (https://www.waterboards.ca.gov/losangeles/board_decisions/tentative_orders/index.html) under the "Individual NPDES" heading. Permittee notification was provided by (to be provided after completion). In addition, interested agencies and persons were notified through a transmittal email to the Discharger, being included in the email transaction, for the Los Angeles Water Board's intention to prescribe WDRs for the discharge.

The public had access to the agenda and any changes in dates and locations through the [Los Angeles Water Board's website](https://www.waterboards.ca.gov/losangeles/board_info/agenda) at: [Agendas | Los Angeles Regional Water Quality Control Board \(ca.gov\)](https://www.waterboards.ca.gov/losangeles/board_info/agenda) (www.waterboards.ca.gov/losangeles/board_info/agenda).

10.2. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process electronically at: losangeles@waterboards.ca.gov with a copy to Don.Tsai@waterboards.ca.gov.

To be fully responded to by staff and considered by the Los Angeles Water Board, the written comments were due at the Los Angeles Water Board office by **5:00 p.m. on April 18, 2024**. Written comments submitted after the deadline may not be accepted

into the record or considered by the Los Angeles Water Board if doing so would prejudice any party or the Board.

10.3. Public Hearing

The Los Angeles Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: May 23, 2024
Time: 9:00 a.m.
Location: 320 W. 4th Street, Carmel Room
Los Angeles, California 90013

A virtual platform was also available for those who want to join online, and directions were provided in the agenda to register or to view the Board meeting.

Additional information about the location of the hearing and options for participating will be available 10 days before the hearing. Any person desiring to receive future notices about any proposed Board action regarding this Discharger, please contact Don Tsai at Don.Tsai@waterboards.ca.gov, to be included on the e-mail list. Interested persons were invited to attend. At the public hearing, the Los Angeles Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

10.4. Review of Waste Discharge Requirements

Any person aggrieved by this action of the Los Angeles Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, Title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100
Or by [email](mailto:waterqualitypetitions@waterboards.ca.gov) at waterqualitypetitions@waterboards.ca.gov

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

10.5. Information and Copying

The ROWD, other supporting documents, and comments received are on file and may be inspected at the address above by appointment between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Water Board at the address below or by calling (213) 576-6600.

Los Angeles Regional Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013-2343

10.6. 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 Los Angeles Water Board, reference this facility, and provide a name, address, and phone number.

10.7. Additional Information

Requests for additional information or questions regarding this order should be directed to Don Tsai at (213) 576-6681 or via [email](mailto:Don.Tsai@waterboards.ca.gov) at Don.Tsai@waterboards.ca.gov.

ATTACHMENT G. TOXICITY REDUCTION EVALUATION (TRE) WORK PLAN

1. Gather and Review Information and Data
 - 1.1. POTW Operations and Performance
 - 1.2. POTW Influent and Pretreatment Program
 - 1.3. Effluent Data, including Toxicity Results
 - 1.4. Sludge (Biosolids) Data
2. Evaluate Facility Performance
3. Conduct Toxicity Identification Evaluation (TIE)
4. Evaluate Sources and In-Plant Controls
5. Implement Toxicity Control Measures
6. Conduct Confirmatory Toxicity Testing

ATTACHMENT H. BIOSOLIDS AND SLUDGE MANAGEMENT

(Note: "Biosolids" refers to non-hazardous sewage sludge as defined in 40 CFR §503.9. Sewage sludge that is hazardous, as defined in 40 CFR part 261, must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA).)

1. GENERAL REQUIREMENTS

- 1.1. All biosolids generated by the Permittee shall be reused or disposed of in compliance with the applicable portions of:
 - a. 40 CFR part 503: for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated; 40 CFR § 503 Subpart B (land application) applies to biosolids placed on the land for the purposes of providing nutrients or conditioning the soil for crops or vegetation. 40 CFR § 503 Subpart C (surface disposal) applies to biosolids placed on land for the purpose of disposal.
 - b. 40 CFR part 258: for biosolids disposed of in a municipal solid waste landfills.
 - c. 40 CFR part 257: for all biosolids use and disposal practices not covered under 40 CFR parts 258 or 503.
- 1.2. The Permittee is responsible for assuring that all biosolids from its facility are used or disposed of in accordance with 40 CFR part 503, whether the Permittee uses or disposes of the biosolids itself or transfers their biosolids to another party for further treatment, reuse, or disposal. The Permittee is responsible for informing subsequent preparers, appliers, and disposers of requirements they must meet under 40 CFR part 503.
- 1.3. Duty to mitigate: The Permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal which may adversely impact human health or the environment.
- 1.4. No biosolids shall be allowed to enter wetland or other waters of the United States.
- 1.5. Biosolids treatment, storage, and use or disposal shall not contaminate groundwater.
- 1.6. Biosolids treatment, storage, use or disposal shall not create a nuisance such as objectionable odors or flies.
- 1.7. The Permittee shall assure that haulers transporting biosolids off site for further treatment, storage, reuse, or disposal take all necessary measures to keep the biosolids contained.
- 1.8. If biosolids are stored for over two years from the time they are generated, the Permittee must ensure compliance with all the requirements for surface disposal under 40 CFR part 503 Subpart C, or must submit a written request to USEPA with the information in part 503.20 (b), requesting permission for longer temporary storage.
- 1.9. Sewage sludge containing more than 50 mg/kg PCBs shall be disposed of in accordance with 40 CFR part 761.
- 1.10. Any off-site biosolids treatment, storage, use, or disposal site operated by the Permittee within Region 4 (Los Angeles Region of RWQCB) that is not subject to its own Waste Discharge Requirements shall have facilities adequate to divert surface runoff from the adjacent area, to protect the site boundaries from erosion, and to prevent any

conditions that would cause drainage from the materials in the disposal site to escape from the site. Adequate protection is defined as protected from at least a storm or flood having a 1-percent chance of occurring in a 24-hour period in an any given year and from the highest tidal stage that may occur.

- 1.11. There shall be adequate screening at the plant headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass, and other inert objects with a diameter greater than 3/8 inches are removed.

2. INSPECTION AND ENTRY

The Los Angeles Water Board, USEPA or an authorized representative thereof, upon the presentation of credentials, shall be allowed by the Permittee, directly or through contractual arrangements with their biosolids management contractors, to:

- a. enter upon all premises where biosolids are produced by the Permittee and all premises where Permittee biosolids are further treated, stored, used, or disposed, either by the Permittee or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal;
- b. have access to and copy any records that must be kept under the conditions of this permit or of 40 CFR part 503, by the Permittee or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal; and
- c. inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in the production of biosolids and further treatment, storage, use, or disposal by the Permittee or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal.

3. MONITORING

- 3.1. Biosolids shall be monitored for the metals required in 40 CFR § 503.16 (for land application) or § 503.26 (for surface disposal), using the methods in "Test Methods for Evaluating Solids Waste, Physical/Chemical Methods" (SW-846), as required in 503.8(b)(4), at the following minimum frequencies:

| Amount of Sewage Sludge (Metric Tons per 365 days) | Frequency |
|---|------------------|
| Greater than 0 but less than 290 | Once per year |
| Equal to or greater than 290 but less than 1,500 | Once per quarter |
| Equal to or greater than 1,500 but less than 15,000 | Once per 60 days |
| Equal to or greater than 15,000 | Once per month |

For accumulated, previously untested biosolids, the Permittee shall develop a representative sampling plan, which addresses the number and location of sampling points, and collect representative samples. Test results shall be expressed in milligrams pollutant per kilogram biosolids on a 100% dry weight basis. Biosolids used for land application shall be tested for organic nitrogen, ammonia nitrogen, and nitrate nitrogen at the frequencies required above.

- 3.2. Biosolids shall be monitored for the following constituents at the frequency stipulated in 40 CFR § 503.16: arsenic, cadmium, chromium, copper, lead, mercury, molybdenum,

nickel, selenium, zinc, organic nitrogen, ammonia nitrogen, and total solids. If biosolids are removed for use or disposal on a routine basis, sampling should be scheduled for regular intervals throughout the year. If biosolids are stored for an extended period prior to use or disposal, sampling may occur at regular intervals, or samples of the accumulated stockpile may be collected prior to use or disposal, corresponding to the tons accumulated in the stockpile for that period.

- 3.3. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with > 5 MGD influent flow shall sample biosolids for pollutants listed under section 307 (a) of the Clean Water Act (as required in the pretreatment section of the permit for POTWs with pretreatment programs). Class 1 facilities and Federal Facilities with > 5 MGD influent flow shall test dioxins/dibenzofurans using a detection limit of < 1 pg/g during their next sampling period if they have not done so within the past 5 years and once per 5 years thereafter.
- 3.4. The biosolids shall be tested annually or more frequently if necessary to determine hazardousness in accordance with Title 22 of the California Code of Regulations, Article 1, Chapter 11, Division 4.5 (section 66261.3).

4. PATHOGEN AND VECTOR CONTROL

- 4.1. Prior to land application, the Permittee shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR § 503.32. Prior to disposal in a surface disposal site, the Permittee shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.
- 4.2. If pathogen reduction is demonstrated using a "Process to Further Reduce Pathogens," the Permittee shall maintain daily records of the operating parameters used to achieve this reduction. If pathogen reduction is demonstrated by testing for fecal coliform and/or pathogens, samples must be collected at the frequency specified in Table 1 of 40 CFR § 503.16. If Class B is demonstrated using fecal coliform, at least seven grab samples must be collected during each monitoring period and a geometric mean calculated from these samples. The following holding times between sample collection and analysis shall not be exceeded: fecal coliform – 6 hours when cooled to <4 degrees Celsius (extended to 24 hours when cooled to <4 degrees Celsius for Class A composted, Class B aerobically digested, and Class B anaerobically digested sample types); Salmonella spp. Bacteria – 24 hours when cooled to <4 degrees Celsius (unless using Method 1682 – 6 hours when cooled to 10 degrees Celsius); enteric viruses – 6 hours when cooled to <10 degrees Celsius (extended to one month when cooled to <4 degrees Celsius).
- 4.3. For biosolids that are land applied or placed in a surface disposal site, the Permittee shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 40 CFR § 503.33 (b).

5. LAND APPLICATION

The Permittee shall ensure that Class A thermophilically digested biosolids are applied at a rate not to exceed the agronomic rate for the crop that is grown.

6. SURFACE DISPOSAL

If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring

program for the site or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

7. NOTIFICATION

The Permittee either directly or through contractual arrangements with their biosolids management contractors shall comply with the following 40 CFR part 503 notification requirements.

7.1. Notification of Non-compliance

The Permittee shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of any noncompliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Permittee shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of the non-compliance in writing within 10 working days of becoming aware of the non-compliance.

7.2. Interstate Notification

If bulk biosolids are shipped to another State or to Indian Lands, the Permittee must send written notice within 60 days of the shipment and prior to the initial application of bulk biosolids to the permitting authorities in the receiving State or Indian Land (the USEPA Regional Office for the area and the State/Indian authorities).

7.3. Land Application Notification

A reuse/disposal plan shall be submitted to USEPA Region 9 Coordinator and, in the absence of other state or regional reporting requirements, to the state permitting agency, prior to the use or disposal of any biosolids from this facility to a new or previously unreported site. The plan shall be submitted by the land applier of the biosolids and shall include a description and a topographic map of the proposed site(s) for reuse or disposal, names and addresses of the applier(s) and site owner(s), and a list of any state or local permits which must be obtained. For land application sites, the plan shall include a description of the crops or vegetation to be grown, proposed nitrogen loadings to be used for the crops, a determination of agronomic rates, and a groundwater monitoring plan or a description of why groundwater monitoring is not required.

If the biosolids do not meet 40 CFR § 503.13 Table 3 metals concentration limits, the Permittee must require their land applier to contact the state permitting authority to determine whether bulk biosolids subject to the cumulative pollutant loading rates in 40 CFR § 503.12(b)(2) have been applied to the site since July 20, 1993, and, if so, the cumulative amount of pollutants applied to date, and background concentration, if known. The Permittee shall then notify USEPA Region 9 Coordinator of this information.

For biosolids that are land applied, the Permittee shall notify the applier in writing of the nitrogen content of the biosolids, and the applier's requirements under 40

CFR part 503, including the requirements that the applier certify that the requirement to obtain information in Subpart A, and that the management practices, site restrictions, and any applicable vector attraction reduction requirements Subpart D have been met. The Permittee shall require the applier to certify at the end of 38 months following application of Class B biosolids that those harvesting restrictions in effect for up to 38 months have been met.

7.4. Surface Disposal Notification

Prior to disposal at a new or previously unreported site, the Permittee shall notify USEPA and the State. The notice shall include a description and topographic map of the proposed site, depth to groundwater, whether the site is lined or unlined, site operator and site owner, and any state or local permits. It shall also describe procedures for ensuring grazing and public access restrictions for three years following site closure. The notice shall include a groundwater monitoring plan or description of why groundwater monitoring is not required.

8. REPORTING

The Permittee shall submit an annual biosolids report to USEPA Region 9 Biosolids Coordinator and the Los Angeles Regional Water Quality Control Board by February 19 of each calendar year. The report shall include:

- 8.1. The amount of biosolids generated that year, in dry metric tons, and the amount accumulated from previous years.
- 8.2. Results of all pollutant monitoring required in the Monitoring Section above. Results must be reported on a 100% dry weight basis.
- 8.3. Descriptions of pathogen reduction methods, and vector attraction reduction methods, as required in 40 CFR § 503.17 and 503.27, and certifications.
- 8.4. Results of any groundwater monitoring or certification by groundwater scientist that the placement of biosolids in a surface disposal site will not contaminate an aquifer.
- 8.5. Names and addresses of land appliers and surface disposal site operators, and volumes applied (dry metric tons).
- 8.6. Names and addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, deep well injection, or other reuse/disposal methods not covered above, and volumes delivered to each.
- 8.7. The Permittee shall submit, or require all parties contracted to manage their biosolids to submit, an annual biosolids report to USEPA Region 9 Biosolids Coordinator by February 19 of each year for the period covering the previous calendar year. The report shall include:

Names and addresses of land appliers and surface disposal site operators, name, location (latitude/longitude), and size (hectares) of site(s), volumes applied/disposed (dry metric tons), results of any groundwater monitoring; for land application: biosolids loading rates (metric tons per hectare), nitrogen loading rates (kg/ha), calculated plant available nitrogen, dates of applications,

crops grown, dates of seeding and harvesting and certifications that the requirement to obtain information in 40 CFR § 503.12(e)(2), management practices in §503.14, site restrictions in § 503.32(b)(5) have been met; for biosolids exceeding 40 CFR §503.13 Table 3 metals concentrations, the locations of sites where the biosolids were applied and cumulative metals loading at the sites to date; and for closed sites, the date of site closure and certifications of management practiced for three years following site closure.

- 8.8. The annual biosolids report shall be submitted to USEPA using USEPA's NPDES [Central Data Exchange \(CDX\)](https://cdx.epa.gov/) and can be accessed at <https://cdx.epa.gov/>.