CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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Los Angeles Regional Water Quality Control Board
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ORDER R4-2021-XXXX
NPDES NUMBER CA0059099

WASTE DISCHARGE REQUIREMENTS FOR THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS MALIBU MESA WATER RECLAMATION PLANT

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

Table 1. Discharger Information

Discharger:	Los Angeles County Department of Public Works (Discharger, or Permittee)
Name of Facility:	Malibu Mesa Water Reclamation Plant (Malibu Mesa WRP or Facility)
Facility Address:	3863 Malibu Country Drive Malibu, CA 90265 Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Tertiary-treated wastewater	34.03379°	-118.70895°	Marie Canyon Creek
002	Tertiary-treated wastewater	34.03393°	-118.71130°	Unnamed canyon west of Marie Canyon Creek

Table 3. Administrative Information

This Order was adopted on:	**April 08, 2021**
This Order shall become effective on:	**June 01, 2021**
This Order shall expire on:	**May 31, 2026**
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 reissuance of a NPDES permit no later than:	**180 days prior to the Order expiration date**
The United States Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board have classified this discharge as follows:	**Minor**

I, Renee Purdy, 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**.

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Renee Purdy, Executive Officer

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1. FACILITY INFORMATION

Information describing the Malibu Mesa Water Reclamation Plant (Malibu Mesa WRP 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 USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It serves 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 the monitoring and reporting program, 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 and G are also incorporated into this Order.

2.3. **Provisions and Requirements Implementing State Law.** The provisions and requirements in subsections 4.2, 4.3, and 5.2 are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

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 No. R4-2012-0181 is rescinded 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 violations of the previous Order.

3. DISCHARGE PROHIBITIONS

3.1. Discharge of treated wastewater at a location different from that described in this Order is prohibited.

3.2. 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.

3.3. The monthly average effluent dry weather discharge flow rate from the facility shall not exceed the 0.2 million gallons per day (mgd) permitted flow.

3.4. The Discharger shall not cause degradation of any water body, except as consistent with State Water Board Resolution No. 68-16.

3.5. 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 California Water Code (CWC).

3.6. The discharge of any substances in concentrations toxic to human, animal, plant, or aquatic life is prohibited.

3.7. The discharge of any radiological, chemical, or biological warfare agent or high-level radiological waste is prohibited.

3.8. 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.

3.9. Discharge of treated wastewater is prohibited from April 16 to October 31 unless authorized in writing by the Executive Officer upon demonstration of necessity under emergency conditions stated below in section 3.10.

3.10. Discharge of treated wastewater shall be limited to 10 days per year during the wet season (November 1 through April 15), unless authorized in writing by the Executive Officer upon demonstration of necessity under emergency conditions. Except for the high wildfire risk scenario discussed below, discharges are only allowed when all the following conditions are met:

3.10.1. Soils are saturated and cannot receive any additional irrigation water, as dictated by the hydrogeologic monitoring program, specified in Order No. 00-167, Waste Discharge Requirements and Water Recycling Requirements for County of Los Angeles Department of Public Works and Pepperdine University, Malibu Campus. Soil moisture content shall be measured and logged monthly during the wet season (November 1 through April 15) to monitor soil saturation. Soil saturation, as defined for this permit, is the point at which the vegetation cannot naturally absorb any additional water, as determined by daily field tests, including neutron probe samples and field observations. A log of soil moisture content during the wet season shall be submitted to the Los Angeles Water Board as part of the Hydrogeologic Monitoring Program Report required by Order No. 00-167.

3.10.2. The National Weather Service forecasts a wet weather event that could cause overtopping of the reservoirs. A log of pertinent weather forecasts prior to a discharge between November 1 to April 15 shall be submitted to the Los Angeles Water Board as part of the monthly report.

3.10.3. The storage reservoirs are at their maximum storage capacity with only freeboard left for precipitation and wave lap protection, and, therefore, cannot accept any more recycled water from the Facility. The maximum storage capacity is defined as the volume of the two reservoirs to the top of the first liner (an elevation of 245.56 feet) minus wave lap protection (0.25 feet) and necessary freeboard for the projected precipitation and runoff from the immediate vicinity.

During times of high wildfire risk, July through November, Pepperdine University is requested by the Los Angeles County Fire Department to maintain high-water level at Pepperdine University's recycled water storage reservoirs in order to supply fire-fighting water to their helicopters. This can significantly reduce the storage capacity of the reservoirs during the winter months since there is little opportunity and time to dispose of the water using irrigation between the end of the fire season and the onset of the storm season. Thus, during high wildfire risk periods, discharges are allowed upon receiving a written authorization from the Executive Officer by demonstrating that the two emergency conditions, stated above in sections 3.10.2 and 3.10.3, are met.

4. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS

4.1. **Effluent Limitations – Discharge Points 001 and 002**

4.1.1. **Final Effluent Limitations – Discharge Points 001 and 002**

a. The Discharger shall maintain compliance with the following effluent limitations in Table 4 at Discharge Points 001 and 002, with compliance measured at Effluent Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP), Attachment E:

Table 4. Effluent Limitations

Parameter	Units	Average Annual	Average Monthly	Average Weekly	Maximum Daily	Applicable Notes
Biochemical Oxygen Demand ($BOD_5$20°C)	mg/L	---	20	30	45	---
($BOD_5$20°C)	lbs/day	---	33	50	75	a
Total Suspended Solids (TSS)	mg/L	---	15	40	45	---
TSS	lbs/day	---	25	67	75	a
Removal Efficiency for BOD and TSS	%	---	≥85	---	---	---
Oil and Grease	mg/L	---	---	---	15	---
Oil and Grease	lbs/day	---	---	---	25	a
Settleable Solids	mL/L	---	---	---	0.3	---
Temperature	°F	---	---	---	80	---
Total coliform	MPN or CFU/100 mL	---	23	2.2	240	b
Chloride	mg/L	---	---	---	230	---

Parameter	Units	Average Annual	Average Monthly	Average Weekly	Maximum Daily	Applicable Notes
Chloride	lbs/day	---	---	---	384	a
MBAS	mg/L	---	---	---	0.5	---
MBAS	lbs/day	---	---	---	0.8	a
Ammonia Nitrogen	mg/L	---	---	---	15	c
Ammonia Nitrogen	lbs/day	---	---	---	25	a
Cyanide	µg/L	---	---	---	8.5	---
Cyanide	lbs/day	---	---	---	0.014	a
Bis(2-Ethylhexyl) Phthalate	µg/L	---	---	---	12	---
Bis(2-Ethylhexyl) Phthalate	lbs/day	---	---	---	0.02	a
DDT	µg/L	---	0.00022	---	0.00044	d
DDT	g/yr	0.061	---	---	---	d
PCBs as aroclors	µg/L	---	0.000064	---	0.00013	d
PCBs as aroclors	g/yr	0.019	---	---	---	d
Chronic Toxicity	Pass or Fail, % Effect (Test of Significant Toxicity (TST))	---	Pass	---	Pass or % Effect < 50	e and f

Footnotes for Table 4

a. The mass-based effluent limitations are based on the plant permitted flow rate of 0.20 mgd and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the 0.2 mgd permitted flow, the mass-based effluent limitations shall not apply, and concentration-based effluent limitations shall be the only applicable effluent limitations.

b. The wastes discharged to water courses shall always be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if (1) the median number of total coliform bacteria at some point in the treatment process does not exceed a 7-day median of 2.2 Most Probable Number (MPN) or Colony Forming Units (CFU) per 100 milliliters utilizing the bacteriological results of the last seven (7) days for which an analysis has been completed, (2) the number of total coliform bacteria does not exceed 23 MPN or CFU per 100 milliliters in more than one sample within any 30-day period, and (3) no sample exceeds 240 MPN or CFU of total coliform bacteria per 100 milliliters. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and disinfection processes.

c. The ammonia nitrogen effluent limitation is based on the water quality objectives for ammonia in Table 3-1 and Table 3-2 of the Basin Plan and the accompanying procedures for translation of these objectives into effluent limits.

d. The *Santa Monica Bay Total Maximum Daily Loads (TMDL) for DDTs and PCBs (Santa Monica Bay TMDL),* issued by the USEPA on March 26, 2012, includes Waste Load Allocations (WLAs) for the Malibu Mesa WRP. The Average Annual Effluent Limitation and Average Monthly Effluent Limitation for DDT and PCBs are consistent with the assumptions and requirements of these WLAs.

e. The average monthly effluent limitation is a Median Monthly Effluent Limitation (MMEL), and the MMEL shall be reported as "Pass" or "Fail." The Maximum Daily Effluent Limitation (MDEL) shall be reported as "Pass" or "Fail" and "% Effect." The MMEL for chronic toxicity shall only apply when there is a discharge on more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests may be conducted when one toxicity test results in "Fail."

f. A numeric water quality-based effluent limitation (WQBEL) is established because effluent data for cyanide showed that there is reasonable potential for the effluent to cause or contribute to an exceedance of the chronic toxicity water quality objective. Chronic toxicity is considered a pollutant of concern for protection and evaluation of narrative Basin Plan objectives. Therefore, the Chronic Toxicity final effluent limitation is protective of both the numeric acute toxicity and the narrative toxicity Basin Plan water quality objectives. These final effluent limitations will be implemented using the *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (USEPA 2002, EPA-821-R-02-013), current USEPA guidance in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June /2010)* and *EPA Regions 8, 9, and 10 Toxicity Training Tool (January 2010),* https://www.epa.gov/sites/production/files/documents/ToxTrainingTool10Jan2010.pdf.

End of Footnotes for Table 4

b. pH shall be maintained in the final effluent within the limits of 6.5 and 8.5.

c. For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the treated wastewater does not exceed any of the following: (a) an average of 2 Nephelometric Turbidity Units (NTU) within a 24-hour period, (b) 5 NTU more than 5 percent of the time (72 minutes) within a 24-hour period, and (c) 10 NTU at any time.

d. To protect the underlying ground water basin, pollutants shall not be present in the discharge at concentrations that pose a threat to groundwater quality.

e. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of

radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

4.1.2. Interim Effluent Limitations – Not Applicable

4.2. Land Discharge Specifications – Not Applicable

4.3. Recycling Specifications

Pursuant to Order No. 00-167 adopted by this Los Angeles Water Board on November 9, 2000, the Discharger is allowed to use its tertiary-treated effluent as recycled water for landscape irrigation at the Facility. This Order also authorizes the Discharger to deliver the tertiary-treated effluent as recycled water for landscape impoundment and irrigation at Pepperdine University. The Discharger shall continue to investigate the feasibility of recycling, conservation, and/or alternative disposal methods for wastewater, and/or beneficial use of stormwater and dry-weather urban runoff. The Discharger shall submit an update to this feasibility study as part of the submittal of the Report of Waste Discharge (ROWD) for the next permit renewal.

5. RECEIVING WATER LIMITATIONS

5.1. Surface Water Limitations

Receiving water limitations are based on the water quality objectives in the Basin Plan and on the *Final Report: Marie Canyon Beneficial Uses Survey* (dated October 2009) and are a required part of this Order. The discharge shall not cause the following in Marie Canyon Creek and an unnamed canyon west of Marie Canyon Creek:

5.1.1. The natural receiving water temperature of all regional waters shall not be altered unless it can be demonstrated to the satisfaction of the Los Angeles Water Board that such alteration in temperature does not adversely affect beneficial uses. Additionally, for waters designated with a warm freshwater habitat (WARM) beneficial use, water temperature shall not be altered by more than 5°F above the natural temperature. At no time shall these WARM-designated waters be raised above 80°F as a result of waste discharge.

5.1.2. The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of wastes discharged. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of wastes discharged. Natural conditions shall be determined on a case-by-case basis.

5.1.3. The dissolved oxygen in the receiving water shall not be depressed below 5 mg/L as a result of the wastes discharged.

5.1.4. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in natural turbidity attributable to controllable water quality factors shall not exceed the following limits, as a result of wastes discharged:

a. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%.

b. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.

5.1.5. The wastes discharged shall not produce concentrations of substances in the receiving water that are toxic to or cause detrimental physiological responses in human, animal, or aquatic life.

5.1.6. The wastes discharged shall not cause concentrations of contaminants to occur at levels that are harmful to human health in waters which are existing or potential sources of drinking water.

5.1.7. The concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses as a result of the wastes discharged.

5.1.8. The wastes discharged shall not contain substances that result in increases in BOD, which adversely affect the beneficial uses of the receiving waters.

5.1.9. Waters discharged shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

5.1.10. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions as a result of wastes discharged.

5.1.11. The wastes discharged shall not cause the receiving waters to contain any substance in concentrations that adversely affect any designated beneficial use.

5.1.12. The wastes discharged shall not degrade surface water communities and populations, including vertebrate, invertebrate, and plant species.

5.1.13. The wastes discharged shall not alter the natural taste, odor, or color of fish, shellfish, or other surface water resources used for human consumption.

5.1.14. The wastes discharged shall not result in problems due to breeding of mosquitoes, gnats, black flies, midges, or other pests.

5.1.15. The wastes discharged shall not result in visible floating particulates, foams, or oil and grease in the receiving waters.

5.1.16. The wastes discharged shall not cause objectionable aquatic growths or degrade indigenous biota.

5.1.17. The wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; or cause aesthetically undesirable discoloration of the receiving waters.

5.1.18. The wastes discharged shall not contain any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses of the receiving waters. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life as a result of the wastes discharged.

5.1.19. The wastes discharged shall not cause the ammonia water quality objective (WQO) in the Basin Plan to be exceeded in the receiving waters. Ammonia shall not be present at levels that, when oxidized to nitrate, pose a threat to groundwater quality.

5.1.20. Receiving waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO_3-N + NO_2-N), 45 mg/L as nitrate (NO_3), 10 mg/L as nitrate-nitrogen (NO_3-N), or 1 mg/L an nitrite-nitrogen (NO_2-N).

5.1.21. Chronic Toxicity Receiving Water Quality Objective

a. There shall be no chronic toxicity in ambient waters as a result of wastes discharged.

b. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.

c. If the chronic toxicity median monthly threshold at the immediate downstream receiving water location is not met and the toxicity cannot be attributed to upstream toxicity, as assessed by the Discharger, then the Discharger shall initiate accelerated monitoring according to Attachment E – MRP section 5.7.

d. If the chronic toxicity median monthly threshold of the receiving water at downstream stations is not met, but the chronic toxicity median monthly effluent limitation was met, then accelerated monitoring need not be implemented.

5.2. **Ground Water Limitations**

The discharge shall not cause the underlying groundwater to be degraded except as consistent with State Water Board Resolution No. 68-16. The discharge to groundwater shall not exceed WQOs, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

6. PROVISIONS

6.1. **Standard Provisions**

6.1.1. The Discharger 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 CWC.

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, as determined by the Los Angeles Water Board, are prohibited.

c. The Discharger shall coordinate with Pepperdine University such that the Discharger shall not continue filling the storage reservoirs so as to cause overflows.

d. In coordination with Pepperdine University, the Discharger shall take every precaution necessary to ensure that any discharges that occur are in conformance with the Discharge Prohibitions, section 3.10. In the event of an emergency discharge, the Discharger shall demonstrate to the satisfaction of the Executive Officer, through signed, contemporaneous logs or other relevant

evidence that the discharge is in conformance with the Discharge Prohibitions. The log shall be transmitted via e-mail to the Los Angeles Water Board as soon as it is determined that an emergency discharge is necessary and shall include, but is not limited to, verification of required conditions of: reservoir levels, soil moisture content and/or amount of actual or predicted precipitation. As soon as it is determined that an emergency discharge is necessary, the Discharger shall notify the Los Angeles County Department of Health Services of the impending discharge.

e. In the event of discharge to surface waters, the Discharger shall immediately notify the Los Angeles Water Board by telephone and provide a written report within five working days detailing the reasons.

f. In the event of discharge to surface waters, the Discharger shall begin sampling procedures to ensure compliance with effluent limitations and with the MRP requirements.

g. 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 recurrence interval of once in 100 years.

h. Collection, treatment, and disposal systems shall be operated in a manner that precludes or impedes public contact with wastewater.

i. 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.

j. 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.

k. Nothing in this permit 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.

l. 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 storm water management programs developed to comply with NPDES permits issued by the Los Angeles Water Board to local agencies.

m. Discharge of wastes to any point other than specifically described in this Order is prohibited and constitutes a violation thereof.

n. 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.

o. 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.

p. The Facility shall be protected to reduce infrastructure vulnerability to current and future impacts resulting from climate change, including but not limited to extreme wet weather events, flooding, storm surges, wildfires, and projected sea level rise when the facility is located near the ocean or discharges to the ocean.

r. 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.

s. A copy of these waste discharge requirements shall always be maintained and available to operating personnel at the discharge Facility.

t. 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.

u. 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.

v. 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.

w. 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.

x. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the 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.

y. 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.

z. CWC 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 CWC 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 of 40 CFR section 123.45 specifies the Group I and II pollutants. Pursuant to CWC 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."

aa. CWC section 13385(i) requires the Los Angeles Water Board to assess a mandatory minimum penalty of three thousand dollars ($3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation 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.

bb. Pursuant to CWC 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.

cc. CWC 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.

dd. 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 Chief of the Watershed Regulatory Section at the Los Angeles Water Board by telephone at (213) 620-2083, via email at losangeles@waterboards.ca.gov 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-6599 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.

   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.

b. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity testing, monitoring of internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

c. This Order may be modified, in accordance with the provisions set forth in title 40 of the Code of Federal Regulations (40 CFR) parts 122 and 124 to include requirements for the implementation of a watershed protection management approach.

d. The Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have reasonable potential to cause, or contribute to adverse impacts on beneficial uses or degradation of water quality of the receiving waters.

e. This Order may also be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR parts 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. If an applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Los Angeles Water Board may institute proceedings under these regulations to modify or revoke and reissue the Orders to conform to the toxic effluent standard or prohibition.

h. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments, thereto, the Los Angeles Water Board will revise and modify this Order in accordance with such standards.

i. This Order may be reopened and modified to revise effluent limitations as a result of future additions or amendments to a statewide water quality control plan or the Los Angeles Region's Basin Plan or the adoption or revision of a TMDL applicable to Marie Canyon Creek watershed.

j. This Order may be reopened to modify final effluent limits, if at the conclusion of necessary studies conducted by the Discharger, the Los Angeles Water Board determines that dilution credits or a mixing zone, attenuation factors, water effects ratio, site specific objectives, or metal translators are warranted.

k This Order will be reopened and modified to revise any and all of the chronic toxicity testing provisions and effluent limitations, to the extent necessary, to incorporate all elements contained in the State Water Board adopted Toxicity Plan promptly after USEPA-approval of such Plan to be consistent with the State Water Board precedential decisions, new policies, a new state-wide plan, new laws, or new regulations.

l. This Order will be reopened and modified to the extent necessary, to be consistent with new policies, new state-wide plans, new laws, or new regulations.

6.3.2. **Special Studies, Technical Papers 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) work plan in accordance with Monitoring and Reporting Program section 5.6.

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 certify 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; and,

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.

If the facility has reached 75 percent of capacity by the effective date of this Order but has not previously submitted such 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. **Storm Water Pollution Prevention Plan (SWPPP) – Not Applicable**

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 the SCCP for the Facility, which describes the activities and protocols to address clean-up of spills, overflows, and bypasses of untreated or partially treated wastewater from the Discharger's collection system or treatment facilities that reach water bodies, including dry channels and beach sands. At a minimum, the plan shall include sections on spill clean-up and containment measures, public notification, and monitoring. 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 Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

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

ii. A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in 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 CWC 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 priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

ii. Quarterly monitoring for the reportable priority 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 priority pollutant(s) in the effluent at or below the effluent limitation;

iv. Implementation of appropriate cost-effective control measures for the reportable priority 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 priority pollutant(s);
- A summary of all actions undertaken pursuant to the control strategy; and
- 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 (CWC sections 13625 – 13633).

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, wildfire, 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. For facilities that discharge to the ocean including desalination plants, the Climate Change Plan shall also include the impacts from sea level rise. The Climate Change Plan is due 12 months after the 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 to minimize failure due to moisture, liquid spray, flooding, wildfires, and other physical phenomena. The alternate power source shall be designed to permit 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.

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

a. **Biosolids Disposal Requirements.**

i. All biosolids generated at the wastewater treatment plant must be disposed of, treated, or applied to land in accordance with federal regulations contained in 40 CFR part 503. These requirements are enforced by USEPA. The biosolids generated at the Facility are hauled to Donald C. Tillman Water Reclamation Plant to treat.

b. **Pretreatment Requirements**

i. The Facility does not currently provide service to any Significant Industrial Users and therefore does not maintain an active pretreatment program.

ii. The Discharger shall assess future users of the Facility to determine if any Significant Industrial Users exist that would require development of a pretreatment program.

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 § 122.41(e)). The Discharger must report any non-compliance (40 CFR § 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 CFR § 122.41(d)). Since 2006, this Facility has beenenrolled into the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003.

d. **Filter Bypass**

Conditions pertaining to bypass are contained in Attachment D, Section 1.7 Standard Provisions – Permit Compliance. The bypass or overflow of untreated

or partially treated wastewater to waters of the State is prohibited, except as allowed under conditions stated in 40 CFR section 122.41(m) and (n). During periods of elevated, wet weather flows, a portion of the secondary treated wastewater may be diverted around the tertiary filters under emergency conditions. These anticipated discharges are approved under the bypass conditions when the resulting combined discharge of fully treated (tertiary) and partially treated (secondary) wastewater complies with the effluent and receiving water limitations in this Order.

6.3.6. **Spill Reporting Requirements**

a. **Initial Notification**

Although State and Los Angeles Water Board staff do not have duties as first responders, this requirement is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. 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 as soon as possible, but no later than two hours after becoming aware of the release.

ii. In accordance with the requirements of CWC 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.

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 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 water body. 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 route of the spill including 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 a surface water at the time of notification;
- If ongoing, the estimated flow rate of the release at the time of the notification; and,
- 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 surface and ground waters). For spills that reach surface freshwaters, the Permittee shall monitor for E. coli density. For spills that reach marine water, the Permittee shall monitor for total coliform, fecal coliform and *enterococcus* density. The Discharger shall also analyze the samples for relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible, and safe). 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 County Department of Public Health authorizes cessation of monitoring.

c. **Reporting**

The initial notification required under section 6.3.6.a. shall be followed by:

i. As soon as possible, but not later than twenty-four hours after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, the Discharger shall submit a statement to the Los Angeles Water Board by email at augustine.anijielo@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 CWC 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 No., Order No., and MRP CI No., 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; and,
- 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 working 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 this Los Angeles Water Board. (A copy of the final written report, for a given incident, already submitted pursuant to the statewide General WDRs for Wastewater Collection System (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 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; and,

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 that 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, (ii) a Municipal Separate Storm Sewer System (MS4) NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements and (iii) the SSS WDRs. The Los Angeles Water Board also expects that the Discharger will coordinate with its departments regarding the potential for the permissive integration of the MS4 with the wastewater collection system.

f. **Consistency with SSS WDRs**

The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 United States Code sections 1311, 1342). The State Water Board adopted *General Waste Discharge Requirements for Sanitary Sewer Systems*, (WQ Order No. 2006-0003-DWQ; SSS WDRs) on May 2, 2006, to provide a consistent, statewide regulatory approach to address sanitary sewer overflows. The SSS WDRs requires public agencies that own or operate sanitary sewer systems to apply for coverage under the SSS WDRs, develop and implement sewer system management plans, and report all SSOs to the State Water Board's online SSO database. Regardless of the coverage obtained under the SSS WDR, the Discharger'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 § 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 Plan section), 6.3.4. (Construction, Operation and Maintenance Specifications section), and 6.3.6. (Spill Reporting Requirements section) 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 SSS WDRs requirements, related to the collection systems. The requirements of the SSS WDRs are considered the minimum thresholds (see finding 11 of State Water Board Order No. 2006-0003-DWQ). 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 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.

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

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 of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

7.3. Average Annual Effluent Limitation

If the average of discharge events over a calendar year exceeds the annual average effluent limitation for DDT and PCBs, an alleged violation will be flagged, and the Discharger will be considered out of compliance for that year for that parameter. If no discharge occurred and no sample is taken over a calendar year, no compliance determination can be made for that year with respect to effluent violation determination.

7.4. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection 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 taken 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 taken, 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.

7.5. **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 taken 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 taken, 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 in order to calculate and report a consecutive seven-day average value on Saturday.

7.6. **Maximum Daily Effluent Limitation (MDEL)**

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

7.7. **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).

7.8. **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).

7.9. **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 taken. If only a single sample is taken 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 taken, no compliance determination can be made for the six-month median effluent limitation.

7.10. **Median Monthly Effluent Limitation (MMEL)**

If the median of daily discharges over a calendar month exceeds the MMEL for a given parameter, an alleged violation will be flagged and the Discharger will 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). However, an alleged violation of the MMEL will be considered one violation for the purpose of assessing State mandatory minimum penalties. If no sample (daily discharge) is taken over a calendar month, no compliance determination can be made for that month with respect to effluent violation determination, but compliance determination can be made for that month with respect to reporting violation determination.

7.11. **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 *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 (Ho) for the TST statistical approach is: Mean discharge In-stream Waste Concentration (IWC) response ≤0.75 × 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:

((Mean control response - Mean discharge IWC response) ÷ Mean control response)) × 100

This is a t-test (formally Student’s 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 Maximum Daily Effluent Limitation (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" and the "Percent Effect" is ≥0.50.

The MMEL for chronic toxicity is exceeded and a violation will be flagged when the median of no more than three independent chronic toxicity tests, conducted within the same calendar month and analyzed using the TST statistical approach, results in "Fail." The MMEL for chronic toxicity shall only apply when there is a discharge on more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests may be conducted when one toxicity test results in "Fail."

The chronic toxicity MDEL and MMEL are set at the IWC for the discharge (100% effluent) and expressed in units of the TST statistical approach ("Pass" or "Fail", "Percent Effect"). All NPDES effluent compliance monitoring for the chronic toxicity MDEL and MMEL shall be reported using only the 100% 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 a multi-concentration test design when required by *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (USEPA 2002, EPA-821-R-02-013). The Los Angeles Water Board's review of reported toxicity test results will 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 TST results. 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 section 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 Discharger, 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 TIE/TRE studies in an enforcement action.

7.12. **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:

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

7.13. **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.

7.14. **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 B "Multiple Sample Data Reduction" above) in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

7.15. **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.

7.16. **Compliance with 2,3,7,8-TCDD Equivalents**

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

$$\text{Dioxin concentration} = \sum_{1}^{17}(\text{TEQ}_i) = \sum_{1}^{17}(C_i)(\text{TEF}_i)$$

where:

Ci = individual concentration of a dioxin or furan congener

TEFi = individual TEF for a congener

Congeners	MLs (pg/L)	TEFs
2,3,7,8-TetraCDD	10	1.0
1,2,3,7,8-PentaCDD	50	1.0
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	0.0001
2,3,7,8-TetraCDF	10	0.1

Congeners	MLs (pg/L)	TEFs
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-HeptaCDFs	50	0.01
1,2,3,4,7,8,9-HeptaCDFs	50	0.01
OctaCDF	100	0.0001

7.17. **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. 'Qi' and 'Ci' 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 taken in any calendar day. If a composite sample is taken, 'Ci' is the concentration measured in the composite sample and 'Qi' 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. 'Qi' and 'Ci' are the flow rate (mgd) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Qt' is the total flow rate of the combined waste streams.

7.18. **Bacterial Standards and Analysis**

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

$$\text{Geometric Mean} = (C_1 \times C_2 \times \ldots \times C_n)^{1/n}$$

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling.

7.18.2. 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 1000 per 100 ml for *enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.

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

7.18.4. Detection methods used for *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.

7.19. **Single Operational Upset (SOU)**

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

7.19.2. 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.

7.19.3. A permittee may assert SOU to limit liability only for those violations which the Permittee submitted notice of the upset as required in Provision 5.5.2.2. of Attachment D – Standard Provisions.

7.19.4. For purpose outside of CWC 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).

7.19.5. For purpose of CWC 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 CWC section 13385 (f)(2).

ATTACHMENT A – DEFINITIONS

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:

$$\text{Arithmetic mean } (\mu) = \frac{\Sigma x}{n}$$

where: Σx 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 regulators as a soil amendment for agricultural, silvicultural, horticultural, and land reclamation activities as specified under 40 C.F.R. Part 503.

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

Coefficient of Variation (CV)
CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

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

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

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

Detected, but Not Quantified (DNQ)
DNQ are 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.

DDT (Dichloro-diphenyl-trichloroethane)
DDT means the sum of 4,4′-DDT, 2,4′-DDT, 4,4′-DDE, 2,4′-DDE, 4,4′-DDD, and 2,4′-DDD.

Discharge Event
A Discharge event is defined as an event when the Facility necessitates discharging to surface waters. Discharge of treated wastewater is limited to 10 days per year, unless the discharge has satisfied the requirements and conditions of an emergency discharge in section 3.10 of the Order. If there are any pauses or breaks in the discharge within three days from the first day of the discharge, it shall still be considered as one discharge event and only one time of monitoring is required. If any consecutive discharge lasts longer than seven days, monitoring of BOD, Total Coliform, E.coli and nutrients is required once every seven days. If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger should indicate under a statement of perjury that no effluent was discharged to surface water.

Dilution Credit
Dilution Credit is 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.

Effluent Concentration Allowance (ECA)
ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as wasteload allocation (WLA) as used in U.S. EPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Enclosed Bays means 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.

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
Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

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).

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

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).

Median Monthly Effluent Limitation (MMEL)
The MMEL is, for the purposes of this Permit, an effluent limit based on the median results of up to three independent toxicity tests, conducted within the same calendar month, and analyzed using the TST approach. The MMEL is exceeded when the median result (i.e. two out of three) is a “fail”.

Method Detection Limit (MDL)
MDL is the minimum measured concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 CFR part 136, Attachment B.

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

Mixing Zone
Mixing Zone is 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.

Not Detected (ND)
Sample results which are less than the laboratory's MDL.

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 when monitoring using USEPA method 608.

PCBs as Congeners
The sum of the following 41 individually quantified PCB congeners or mixtures of isomers of a single congeners in a co-elution when using USEPA proposed method 1668c: 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
Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)
PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority 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
Pollution Prevention means 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.

Reporting Level (RL)
The 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 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water
Any water designated as municipal or domestic supply (MUN) in a Los Angeles Water Board Basin Plan.

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

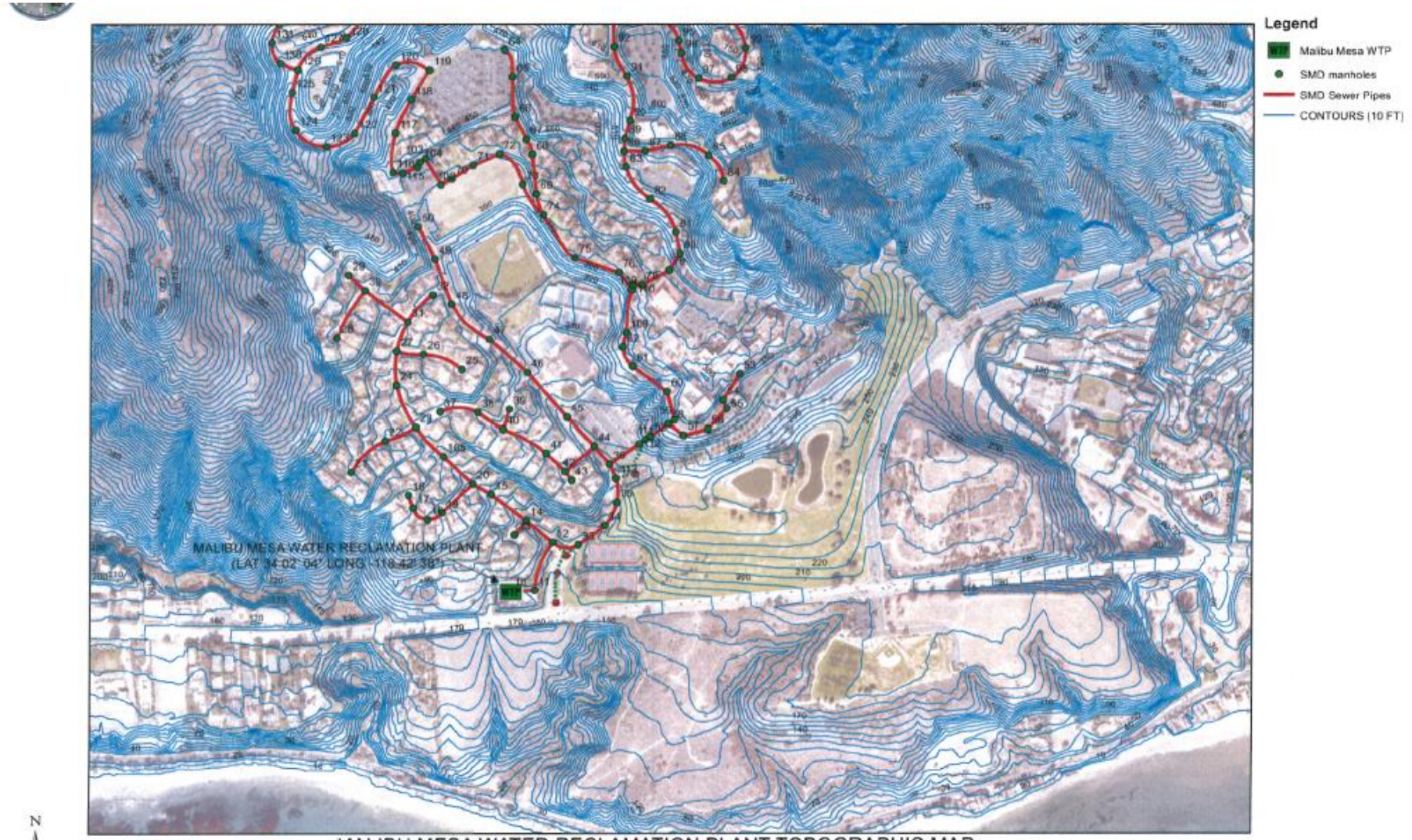
$$\text{Standard Deviation } (\sigma) = \frac{\Sigma(X-\mu)^2}{(n-1)^{0.5}}$$

where: x is the observed value; μ is the arithmetic mean of the observed values; and n is the number of samples.

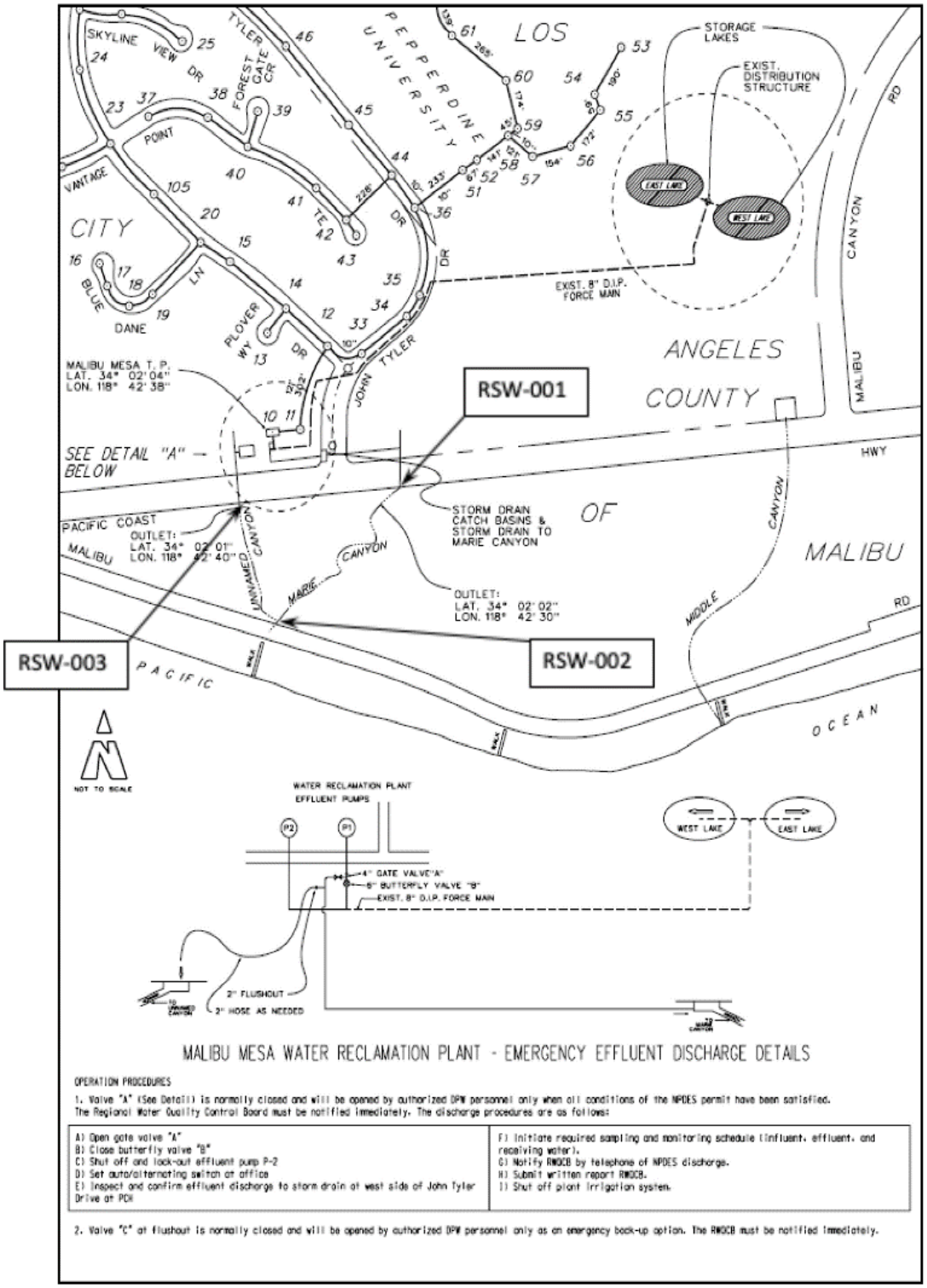
Statistical Threshold Value (STV)
The STV for the bacteria water quality objectives is a set value that approximates the 90th percentile of the water quality distribution of a bacterial population.

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

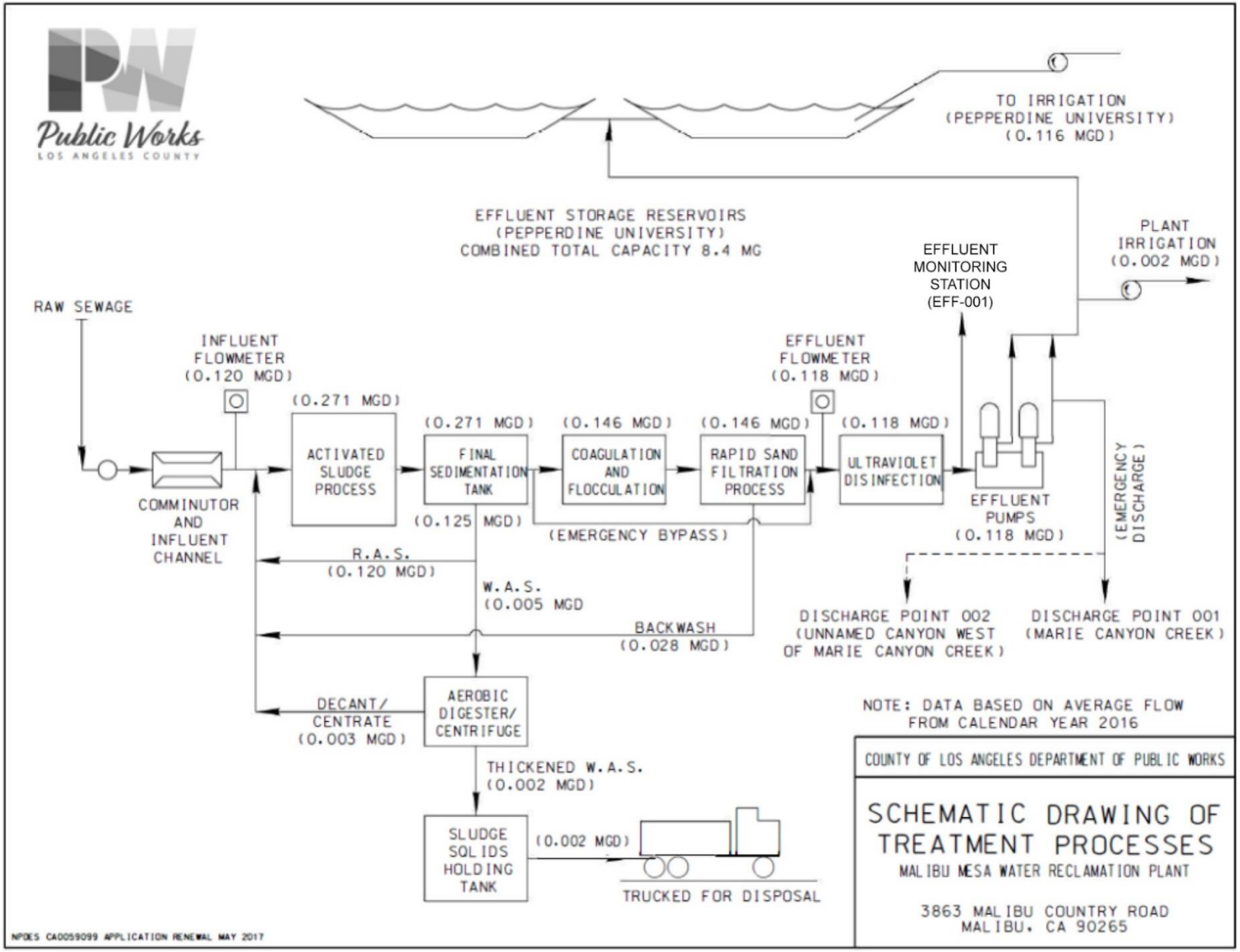
ATTACHMENT B-1 – MAP OF MALIBU MESA WRP



ATTACHMENT B-2 – MALIBU MESA WRP RECEIVING WATER STATIONS



ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. **Duty to Comply**

1.1.1. The Discharger must comply with all the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; 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) § 122.41(a); California Water Code (CWC), §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

1.1.2. The Discharger shall comply with effluent standards or prohibitions established under Section 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 § 122.41(a)(1).)

1.2. **Need to Halt or Reduce Activity Not a Defense**

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

1.3. **Duty to Mitigate**

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

1.4. **Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also 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 Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR § 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 § 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 § 122.5(c).)

1.6. **Inspection and Entry**

The Discharger 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. § 1318(a)(B); 40 CFR § 122.41(i); CWC, §§ 13267, 13383):

1.6.1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(B)(i); 40 CFR § 122.41(i)(1); CWC, §§ 13267, 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. § 1318(a)(B)(ii); 40 CFR § 122.41(i)(2); CWC, §§ 13267, 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. § 1318(a)(B)(ii); 40 CFR § 122.41(i)(3); CWC, §§ 13267, 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. § 1318(a)(B); 40 CFR § 122.41(i)(4); CWC, §§ 13267, 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 § 122.41(m)(1)(i).)

b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii).)

1.7.2. **Bypass not exceeding limitations.** The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance 1.7.3, 1.7.4, and 1.7.5 below. (40 CFR § 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 Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):

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

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of

equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and

c. The Discharger submitted notice to the Los Angeles Water Board as required under Standard Provisions – Permit Compliance 1.7.5 below. (40 CFR § 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 § 122.41(m)(4)(ii).)

1.7.5. **Notice**

a. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. As of December 21, 2023, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(i).)

b. **Unanticipated bypass.** The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting 5.5 below (24-hour notice). As of December 21, 2023, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (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 Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 CFR § 122.41(n)(1).)

1.8.1. **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 § 122.41(n)(2).)

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

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

b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));

c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting 5.5.2.2 below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance 1.3 above. (40 CFR § 122.41(n)(3)(iv).)

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

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 Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR § 122.41(f).)

2.2. Duty to Reapply

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

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 Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR §§ 122.41(l)(3), 122.61.)

3. STANDARD PROVISIONS – MONITORING

3.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR § 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 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 Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Los Angeles Water Board Executive Officer at any time. (40 CFR § 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 § 122.41(j)(3)(i));

4.2.2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));

4.2.3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));

4.2.4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));

4.2.5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and

4.2.6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

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

4.3.1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and

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

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information

The Discharger 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 Discharger 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 § 122.41(h); CWC, §§ 13267, 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 § 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., Los Angeles Administrators of U.S. EPA). (40 CFR § 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 § 122.22(b)(1));

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and

c. The written authorization is submitted to the Los Angeles Water Board and State Water Board. (40 CFR § 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 § 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 § 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 § 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 § 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. As of December 21, 2016, 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 § 122.41(l)(4)(i).)

5.3.3. If the Discharger 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 § 122.41(l)(4)(ii).)

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

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 § 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. 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, 2023, 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 C.F.R. 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 § 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 § 122.41(l)(6)(ii)(A).)

b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)

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

5.6. **Planned Changes**

The Discharger 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 § 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 § 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 § 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 § 122.41(l)(1)(iii))

5.7. **Anticipated Noncompliance**

The Discharger 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 § 122.41(l)(2).)

5.8. **Other Noncompliance**

The Discharger 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. 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 § 122.41(l)(7).)

5.9. **Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Los Angeles Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR § 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 § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

6.1. The Los Angeles Water Board is authorized to enforce the terms of this permit 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 § 122.41(a)(2); CWC section 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 § 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 § 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 § 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 § 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 § 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 § 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 § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Section 308(a) of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of title 40 of the Code of Federal Regulations (40 CFR) require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Los Angeles Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the 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. The Discharger is limited to discharging the treated effluent into the receiving water as necessary to 10 days per year and only during the wet season, unless otherwise authorized by the Executive Officer. When a qualifying discharge is necessary, the Discharger shall perform effluent analysis once per discharge event as described in section 4 of the MRP. In this permit, a discharge event is defined as an event when the Facility necessitates discharging to surface waters and has satisfied the requirements and conditions of an emergency discharge in section 3.10 of the Order. Results of analyses shall be reported in the monthly monitoring report following the analysis.

1.2. Pollutants 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 this Los Angeles Water Board or the State Water Board.

1.3. **Laboratory Certification.** Laboratories analyzing effluent samples and receiving water samples shall be certified by the State Water Resources Control Board, Division of Drinking Water (DDW) Environmental Laboratory Accreditation Program (ELAP) in accordance with CWC 13176 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 § 136.3. All QA/QC analyses must be run on the same dates that samples are analyzed. The Discharger 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 quarterly report.

1.5. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to ensure accuracy of measurements or shall ensure that both equipment activities will be conducted.

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 “all analyses were conducted at a laboratory certified for such analyses by the State Water Resources Control Board,

Division of Drinking Water, or approved by the Executive Officer and 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 Resources Control Board (State Water Board) in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, (State Implementation Policy or SIP),* February 9, 2005, Appendix 4. 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 reported ML.

1.9. The Discharger shall select the analytical method that provides an ML lower than the permit limit established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR part 136, and obtains approval for a higher ML from the Executive Officer, as provided for in section 1.11 below. If the effluent limitation is lower than all the MLs in Appendix 4, SIP, 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. In accordance with section 1.11 below, the Discharger's laboratory may employ a calibration standard lower than the ML in Appendix 4 of the SIP.

1.11. In accordance with section 2.4.3 of the SIP, the Los Angeles Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program Manager, may establish an ML that is not contained in Appendix 4 of the SIP to be included in the Discharger's permit in any of the following situations:

1.11.1. When the pollutant under consideration is not included in Appendix 4, SIP;

1.11.2. When the Discharger and the Los Angeles Water Board agree to include in the permit a test method that is more sensitive than those specified in 40 CFR part 136;

1.11.3. When the Discharger agrees to use an ML that is lower than those listed in Appendix 4;

1.11.4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 and proposes an appropriate ML for the matrix; or,

1.11.5. When the Discharger uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are 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, the Los Angeles Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

If there is any conflict between foregoing provisions and the SIP, the provisions stated in the SIP (section 2.4) shall prevail.

1.12. 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.

1.13. 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.

1.14. 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 1000 per 100 ml for *Enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.

1.14.1. 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.

1.14.2. Detection methods used for *E. coli* 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.

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:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
---	Influent Monitoring Station **INF-001**	Sampling stations 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 where representative samples of the influent can be obtained. Latitude: 34.03465° Longitude: -118.71080°
001 and 002	Effluent Monitoring Station **EFF-001**	Effluent samples are collected at the end of UV chamber and before the effluent pump station. Latitude: 34.03446° Longitude: -118.71090°
---	Receiving Water Monitoring Station **RSW-001**	Marie Canyon Creek, about 300 feet downstream of the discharge point (south of Pacific Coast Highway). Latitude: 34.03379° Longitude: -118.70895°
---	Receiving Water Monitoring Station **RSW-002**	Marie Canyon Creek, 10 feet upstream of the culvert under Malibu Road. Latitude: 34.03114° Longitude: -118.71101°
---	Receiving Water Monitoring Station **RSW-003**	Unnamed creek west of Marie Canyon Creek. Latitude: 34.03393° Longitude: -118.71130°

The North latitude and West longitude information in Table E-1 are approximate for administrative purposes. See Attachment B-2 for the location of the receiving water monitoring stations RSW-001, RSW-002 and RSW-003.

3. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to:

- Determine compliance with NPDES permit conditions.
- Assess treatment plant performance.

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

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Applicable Notes
Flow	mgd	recorder	continuous	a
pH	pH unit	Grab	Daily	b and d
Total Suspended Solids (TSS)	mg/L	24-hour composite	Daily	b and d
Biochemical Oxygen Demand (BOD_5 20°C)	mg/L	24-hour composite	1/Discharge event	b and d
Remaining EPA priority pollutants excluding asbestos	µg/L	24-hour composite/grab for VOCs, Bis(2-ethylhexyl)phthalate, and Chromium VI	1/Discharge event	b, c, and d

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 be reported (i.e. not the maximum flow).

b. Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Los Angeles Water Board or State Water Board. For any pollutant whose effluent limitation is lower than all the MLs specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

c. Priority pollutants are those constituents referred to in 40 CFR part 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423. PCB as aroclors shall be analyzed using method USEPA 608 and PCB as congeners shall be analyzed using method USEPA 1668c. USEPA recommends that until the USEPA proposed method 1668c is incorporated into 40 CFR 136, permittees should use for discharge monitoring reports/State monitoring reports: (1) USEPA method 608 for monitoring data, reported as aroclor results, that will be used for determining 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.

d. A Discharge event is defined as an event when the Facility necessitates discharging to surface waters. Discharge of treated wastewater is limited to 10 days per year, unless the discharge has satisfied the requirements and conditions of an emergency discharge in section 3.10 of the Order. If there are any pauses or breaks in the discharge within three days from the first day of the discharge, it shall still be considered as one discharge event, and only one time of monitoring is required. If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger should indicate under a statement of perjury that no effluent was discharged to surface water.

End of footnotes for Table E-2

4. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required at Eff-001 to:

- Determine compliance with National Pollutant Discharge Elimination System (NPDES) permit conditions and water quality standards.
- Assess and improve 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.
- Determine waste load allocation compliance and TMDL effectiveness.

The Discharger is limited to discharging the treated effluent into the receiving water as necessary to 10 days per year and only during the wet season, unless otherwise authorized by the Executive Officer. When a qualifying discharge is necessary, the Discharger shall monitor the discharge of tertiary-treated effluent at Effluent Monitoring Station EFF-001. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding minimum level.

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Applicable Notes
Total waste flow	mgd	recorder	continuous	a
Turbidity	NTU	recorder	continuous	a
Total coliform	MPN/100mL or CFU/100mL	Grab	1/Discharge event	b, c, and d
Fecal coliform	MPN/100mL or CFU/100mL	Grab	1/Discharge event	b, c, and d
E. coli	MPN/100mL or CFU/100mL	Grab	1/Discharge event	b, c, and d
Temperature	°F	Grab	Daily	b
pH	pH units	Grab	Daily	b and d
Settleable solids	mL/L	Grab	Daily	b
Total Suspended Solids (TSS)	mg/L	24-hr composite	Daily	b and d
BOD_5 20°C	mg/L	24-hr composite	1/Discharge event	b and d
Oil and grease	mg/L	Grab	1/Discharge event	b and d
Dissolved oxygen	mg/L	Grab	1/Discharge event	b and d
Chloride	mg/L	24-hr composite	1/Discharge event	b and d
Ammonia Nitrogen	mg/L	24-hr composite	1/Discharge event	b and d
Nitrite nitrogen	mg/L	24-hr composite	1/Discharge event	b and d
Nitrate nitrogen	mg/L	24-hr composite	1/Discharge event	b and d
Organic nitrogen	mg/L	24-hr composite	1/Discharge event	b and d
Total nitrogen	mg/L	24-hr composite	1/Discharge event	b and d

Parameter	Units	Sample Type	Minimum Sampling Frequency	Applicable Notes
TKN	mg/L	24-hr composite	1/Discharge event	b and d
Total phosphorus	mg/L	24-hr composite	1/Discharge event	b and d
Orthophosphate-P	mg/L	24-hr composite	1/Discharge event	b and d
Surfactants (MBAS)	mg/L	24-hr composite	1/Year	b, d, and e
Surfactants (CTAS)	mg/L	24-hr composite	1/Year	b, d, and e
Total hardness ($CaCO_3$)	mg/L	24-hr composite	1/Year	b, d, and e
Cyanide	µg/L	Grab	1/Discharge event	b and d
Bis(2-Ethylhexyl)Phthalate	µg/L	Grab	1/Discharge event	b and d
2,3,7,8-TCDD	pg/L	24-hr composite	1/Year	b, d, e, and f
Perchlorate	µg/L	Grab	1/Year	b, d, e, and g
1,4-Dioxane	µg/L	Grab	1/Year	b, d, e, and g
1,2,3-Trichloropropane	µg/L	Grab	1/Year	b, d, e, and g
Methyl tert-butyl-ether (MTBE)	µg/L	Grab	1/Year	b, d, e, and g
DDTs	µg/L	24-hr composite	1/Quarter	b, d, and e
PCBs as aroclors	µg/L	24-hr composite	1/Quarter	b, d, e, and h
PCBs as congeners	pg/L	24-hr composite	1/Year	b, d, e, and h
Chronic toxicity	Pass or Fail, % Effect (TST)	24-hr composite	1/Quarter	b, d, e, and i
Remaining USEPA priority pollutants excluding asbestos	µg/L	24-hr composite; grab for VOCs and Chromium VI	1/Year	b, d, e, and j
Mercury	ng/L	grab	1/Year	b, d, e, and k

Footnotes for Table E-3

a. Where continuous monitoring of a constituent is required, the following shall be reported:

   Total waste flow – Total daily and peak daily flow (24-hr basis), and monthly average flow; Turbidity – Maximum daily value, total amount of time each day the turbidity exceeded 5 NTU, flow proportioned average daily value. Grab sample collected at monitoring location EFF-001 shall be used to determine the flow-proportioned average daily value.

b. Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Los Angeles Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

c. *E. coli* testing shall be conducted only if total coliform testing is positive. If the total coliform analysis results in no detection, a result of less than (<) the reporting limit for total coliform will be reported for *E. coli*.

d. A Discharge event is defined as an event when the Facility necessitates discharging to surface waters Discharge of treated wastewater is limited to 10 days per year, unless the discharge has satisfied the requirements and conditions of an emergency discharge in section 3.10 of the Order. If there are any pauses or breaks in the discharge within three days from the first day of the discharge, it shall still be considered as one discharge event, and only one time of monitoring is required. If any consecutive discharge lasts longer than seven days, monitoring of BOD, Total Coliform, E. coli and nutrients is required once every seven days. If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger should indicate under a statement of perjury that no effluent was discharged to surface water.

e. Monitoring is only required during years in which discharge occurs. Annual and quarterly samples shall be collected during the first discharge of the year. Additional samples for quarterly sampling requirements shall be collected depending upon the number and spacing of discharge events. If there is no discharge to surface water, the corresponding quarterly monitoring report shall so state under penalty of perjury.

f. In accordance with the SIP, the Discharger shall conduct monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in the receiving water Station RSW-001, located downstream of discharge point 001. The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i), (i.e., $TEQ_i = C_i \times TEF_i$). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

$$\text{Dioxin concentration in effluent} = \sum_{1}^{17}(\text{TEQ}_i) = \sum_{1}^{17}(\text{C}_i)(\text{TEF}_i)$$

g. Emerging chemicals include 1,4-dioxane (USEPA 8270M test method), perchlorate (USEPA 314 test method, or USEPA method 331 if a detection limit of less than 6 µg/L is achieved), 1,2,3-trichloropropane (USEPA 504.1, 8260B test method, or USEPA 524.2 in SIM mode), and methyl tert-butyl ether (USEPA 8260B test method or USEPA method 624 if a detection level of less than 5 µg/L is achieved, and if the Discharger received ELAP certification to run USEPA method 624).

h. PCBs as aroclors shall be analyzed using USEPA method 608. PCBs as congeners shall be analyzed using method 1668c. USEPA recommends that until the USEPA proposed method 1668c is incorporated into 40 CFR 136, permittees should use for discharge monitoring reports/State monitoring reports: (1) USEPA method 608 for monitoring data, reported as aroclor results, that will be used for determining 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.

i. The Discharger shall conduct whole effluent toxicity monitoring as outlined in section 5. Please refer to section 5.7. of this MRP for the accelerated monitoring schedule. The median monthly summary result shall be reported as "Pass" or "Fail." The maximum daily single result shall be reported as "Pass or Fail" and "% Effect." When there is a discharge

on more than one day in a calendar month period, up to three independent toxicity tests may be conducted when one toxicity test results in "Fail."

j. Priority pollutants are those constituents referred to in 40 CFR part 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.

k. USEPA Method 1361E, per 40 CFR part 136, with a quantification level of 0.5 ng/L, shall be used to analyze total mercury. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR part 136, the Discharger may use that method in lieu of USEPA Method 1631E.

End of Footnotes for Table E-3

5. CHRONIC WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

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

The chronic toxicity IWC for this discharge is 100 percent 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. For the receiving water, sufficient sample volume shall also be collected during accelerated monitoring for subsequent TIE studies, if necessary, at each sampling event. 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 Discharger 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 Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR part 136). In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

5.3.1. A static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0).

5.3.2. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.01).

5.3.3. A static toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

5.4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this permit's first required sample collection. The Discharger 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 for the first discharge after the effective date of the permit. As allowed under

the test method for the *Ceriodaphnia dubia* and the *Pimephales promelas*, a second and third sample may be collected for use as test solution renewal water as the seven-day toxicity test progresses. However, that same sample shall be used to renew both the *Ceriodaphnia dubia* and the *Pimephales promelas*. If the result of all three species is "Pass", then the species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle. If only one species fails, then that species shall be used for routine monitoring during the permit cycle. If two or more species result in "Fail," then the species that exhibits the highest "Percent Effect" at the discharge IWC during the suite of species sensitivity screening shall be used for routine monitoring during the permit cycle, until a rescreening is required.

Species sensitivity rescreening is required once per permit term if there has been a discharge during dry weather conditions. If the intermittent discharge is only during wet weather, rescreening is not required. If rescreening is necessary, the Discharger shall rescreen with the fish, an invertebrate, and the alga species previously referenced and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive, then the rescreening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

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 and MMEL.

5.5. Quality Assurance and Additional Requirements

5.5.1. Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below. 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 *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 (Ho) for the TST approach is: Mean discharge IWC response ≤0.75 × 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: ((Mean control response - Mean discharge IWC response) ÷ Mean control response)) × 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. The Median Monthly Effluent Limit (MMEL) for chronic toxicity only applies when there is a discharge on more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests may be conducted when one toxicity test results in "Fail."

5.5.3. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (USEPA 2002, EPA-821-R-02-013) (See Table E-4, below), then the Discharger must re-sample and re-test within 14 days.

Table E-4. USEPA Methods and Test Acceptability Criteria

Species & USEPA Test Method Number	Test Acceptability Criteria
Fathead Minnow, *Pimephales promelas*, Larval Survival and Growth Test Method 1000.0. (Table 1 of Test Method)	80% or greater survival in controls; average dry weight per surviving organism in control chambers equals or exceeds 0.25 mg. (required)
Daphnid, *Ceriodaphnia dubia*, Survival and Reproduction Test Method 1002.0. Table 3 of Test Method)	80% or greater survival of all control organisms and an average of 15 or more young per surviving female in the control solutions. 60% of the surviving control females must produce three broods. (required)
Green Alga, *Selenastrum capricornutum*, Growth Toxicity Test Method 1003.0. (Table 3 of Test Method)	Mean cell density at least $1x10^6$ cells/mL in the controls; and variability (CV%) among control replicates less than or equal to 20%. (required)

5.5.4. Dilution and control water, including brine controls, shall be 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.

5.5.5. Monthly reference toxicant testing is sufficient. All reference toxicant test results shall be reviewed and reported using the EC25[1].

5.5.6. The Discharger shall perform toxicity tests on final 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 rational is explained in the Fact Sheet (Attachment F).

5.6. Preparation of an Initial Investigation TRE Work Plan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE work plan to the Executive Officer of the Los Angeles Water Board for approval

[1] 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.

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 Discharger shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the TRE Work Plan must contain the provisions in Attachment G. This work plan shall describe the steps that the Discharger intends to follow if toxicity is detected. At a 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.

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 Median Monthly Summary Result: "Fail"; and Accelerated Monitoring Schedule for Maximum Daily Single Result: "Fail and % Effect ≥50."

When there is discharge on more than one day in a calendar month, the Median Monthly summary result shall be used to determine if accelerated testing needs to be conducted. When there is discharge on only one day in a calendar month, the Maximum Daily single result shall be used to determine if accelerated testing needs to be conducted.

Once the Discharger becomes aware of this result, the Discharger shall implement an accelerated monitoring schedule within seven calendar days for the *Ceriodaphnia dubia* test, and within 5 calendar days for both the *Pimephales promelas* and *Selenastrum capricornutum* tests. The accelerated monitoring schedule shall consist of four toxicity tests (including IWC), conducted at approximately two-week intervals, over an eight-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 Discharger shall return to routine monitoring for the next monitoring period.

5.8. Toxicity Reduction Evaluation (TRE) Process

If one of the accelerated toxicity tests results in "Fail", the Discharger shall immediately implement the TRE Process conditions set forth below. During the TRE process, monthly effluent monitoring shall resume and TST results ("Pass" or "Fail", "Percent Effect") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.

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) and, within 30 days, submit to the Executive Officer a Detailed TRE Work Plan, which shall follow the TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the 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.

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 should 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 storm water 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 for compliance determination purposes 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. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

5.8.6. The 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, “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. 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-8.

5.9.2. A summary of water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, 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 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 Discharger 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 may be steps to demonstrate that the toxicity is caused by ammonia and no 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 TIE 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 is due to ammonia.

5.10.2. When it has been demonstrated 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, after submitting a written request to the Los Angeles Water Board, and receiving written permission expressing approval from the Executive Officer of the Los Angeles Water Board.

6. LAND DISCHARGE MONITORING REQUIREMENTS (NOT APPLICABLE)

7. RECYCLING MONITORING REQUIREMENTS (NOT APPLICABLE)

8. RECEIVING WATER MONITORING REQUIREMENTS

Monitoring Location RSW-001, RSW-002, and RSW-003 – The Discharger shall monitor Marie Canyon Creek and an unnamed canyon west of Marie Canyon at RSW-001, RSW-002, or RSW-003 as follows:

Table E-5. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Applicable Notes
Total flow	cfs	calculation	1/Discharge event	a
Turbidity	NTU	grab	1/Discharge event	a and b
Temperature	°F	grab	1/Discharge event	a and b
pH	pH units	grab	1/Discharge event	a and b
Settleable solids	mL/L	grab	1/Discharge event	a and b
Total Suspended Solids (TSS)	mg/L	grab	1/Discharge event	a and b
Dissolved oxygen	mg/L	grab	1/Discharge event	a and b
E. coli	MPN/100mL or CFU/100mL	grab	1/Discharge event	a and b
BOD_5 20°C	mg/L	grab	1/Discharge event	a and b
Total Organic Carbon	mg/L	grab	1/Discharge event	a and b
Oil and grease	mg/L	grab	1/Discharge event	a and b
Total hardness ($CaCO_3$)	mg/L	grab	1/Year	a and b
Conductivity	µmho/cm	grab	1/Discharge event	a and b
Chloride	mg/L	grab	1/Discharge event	a and b
Ammonia Nitrogen	mg/L	grab	1/Discharge event	a and b
Nitrite nitrogen	mg/L	grab	1/Discharge event	a and b
Nitrate nitrogen	mg/L	grab	1/Discharge event	a and b
Organic nitrogen	mg/L	grab	1/Discharge event	a and b
Total nitrogen	mg/L	grab	1/Discharge event	a and b
Total Kjeldahl Nitrogen (TKN)	mg/L	grab	1/Discharge event	a and b
Total phosphorus	mg/L	grab	1/Discharge event	a and b
Orthophosphate-P	mg/L	grab	1/Discharge event	a and b

Parameter	Units	Sample Type	Minimum Sampling Frequency	Applicable Notes
Surfactants (MBAS)	mg/L	grab	1/Year	a, b and c
Surfactants (CTAS)	mg/L	grab	1/Year	a, b and c
Chronic toxicity	Pass or Fail, % Effect (TST)	grab	1/Quarter	a, b, c and d
Cyanide	µg/L	grab	1/Discharge event	a and b
Bis(2-ethylhexyl) phthalate	µg/L	grab	1/Discharge event	a and b
Methyl tert-butyl-ether (MTBE)	µg/L	grab	1/Year	a, b, c and e
Perchlorate	µg/L	grab	1/Year	a, b, c,and e
1,2,3-trichloropropane	µg/L	grab	1/Year	a, b, c and e
1,4-dioxane	µg/L	grab	1/Year	a, b, c and e
2,3,7,8-TCDD	µg/L	grab	1/Year	a, b, c and f
DDT	µg/L	grab	1/Quarter	a, b, and c
PCBs as aroclors	µg/L	grab	1/Quarter	a, b, c and g
PCBs as congeners	µg/L	grab	1/Year	a, b, c and g
Remaining USEPA priority pollutants excluding asbestos and PCBs	µg/L	grab	1/Year	a, b, c and h

Footnotes for Table E-5

a. Pollutants shall be analyzed using the analytical methods described in 40 CFR § 136; where no methods are specified for a given pollutant, by methods approved by this Los Angeles Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

b. A Discharge event is defined as an event when the Facility needs to discharge to surface waters. Discharge of treated wastewater is limited to 10 days per year, unless the discharge has satisfied the requirements and conditions of an emergency discharge in section 3.10 of the Order. If there are any pauses or breaks in the discharge within three days from the first day of the discharge, it shall still be considered as one discharge event, and only one time of monitoring is required. If any consecutive discharge lasts longer than seven days, monitoring of BOD, Total Coliform, E. coli and nutrients is required once every seven days. If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger should indicate under a statement of perjury that no effluent was discharged to surface water.

c. Monitoring is only required during years in which discharge occurs. Annual and quarterly samples shall be collected during the first discharge of the year. Additional samples for quarterly sampling requirements shall be collected depending upon the number and spacing of discharge events. If there is no discharge to surface water, the corresponding quarterly monitoring report shall so state under penalty of perjury.

d. The Discharger shall conduct whole effluent toxicity monitoring as outlined in Section 5. Please refer to Section 5.7. of this MRP for the accelerated monitoring schedule. The median monthly summary result shall be reported as "Pass" or "Fail." The maximum daily single result is a threshold value for a determination of not meeting the narrative receiving water objective and shall be reported as "Pass or Fail" and "% Effect." When there is a discharge on more than one day in a calendar month period, up to three independent toxicity tests may be conducted when one toxicity test results in "Fail." If the chronic toxicity median monthly threshold at the immediate downstream receiving water location is not met and the toxicity cannot be attributed to upstream toxicity, as assessed by the Discharger, then the Discharger shall initiate accelerated monitoring. For example, if the chronic toxicity median monthly threshold of the receiving water at both upstream and downstream stations are not met, but the effluent chronic toxicity monthly median effluent limitation was met, then accelerated monitoring need not be implemented.

e. Emerging chemicals include 1,4-dioxane (USEPA test method 8270M), perchlorate (USEPA test method 314, or 331 if a detection limit of less than 6 µg/L is achieved), 1,2,3-trichloropropane (USEPA test method 504.1, 8260B, or 524.2 in SIM mode), and methyl tert-butyl ether (USEPA test method 8260B, or 624 if a detection level of less than 5 µg/L is achieved, and if the laboratory received ELAP certification to conduct USEPA method 624).

f. In accordance with the SIP, the Discharger shall conduct monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in the receiving water Station RSW-001, located downstream of discharge point 001. The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i), (i.e., $TEQ_i = C_i \times TEF_i$). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

$$\text{Dioxin concentration in effluent} = \sum_{1}^{17}(\text{TEQ}_i) = \sum_{1}^{17}(\text{C}_i)(\text{TEF}_i)$$

g. PCBs as aroclors shall be analyzed using USEPA method 608. PCBs as congeners shall be analyzed using method 1668c. USEPA recommends that until the USEPA proposed method 1668c is incorporated into 40 CFR 136, permittees should use for discharge monitoring reports/State monitoring reports: (1) USEPA method 608 for monitoring data, reported as aroclor results, that will be used for determining 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.

h. Priority pollutants are those constituents referred to in 40 CFR part 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.

End of Footnotes for Table E-5

If a discharge event continues for seven days or longer, the required minimum sampling for BOD, nutrients, and E. coli will be weekly.

Receiving water samples are required at either RSW-001 or RSW-003 depending upon the point of discharge. If the conditions at RSW-001 or RSW-003 are deemed unsafe, then RSW-002 can be substituted. If conditions at RSW-002 are also unsafe, sampling may be rescheduled. The monthly monitoring report shall note such occasions.

9. OTHER MONITORING REQUIREMENTS

9.1. Tertiary Filter Treatment Bypasses

9.1.1. During any day that filters are bypassed, the Discharger shall monitor the effluent daily for BOD, suspended solids, settleable solids, and oil and grease, until it is demonstrated that the filter "bypass" has not caused an adverse impact on the receiving water.

9.1.2. The Discharger shall maintain chronological log of tertiary filter treatment process bypasses, to include the following:

a. Date and time of bypass start and end;

b. Total duration time; and,

c. Estimated total volume bypassed.

9.1.3. The Discharger shall notify Los Angeles Water Board staff by telephone within 24 hours of the filter bypass event.

9.1.4. The Discharger shall submit a written report to the Los Angeles Water Board, according to the corresponding monthly self-monitoring report schedule. The report shall include, at a minimum, the information from the chronological log. Results from the daily effluent monitoring, required by 9.2.1. above, shall be verbally reported to the Los Angeles Water Board as the results become available and submitted as part of the monthly SMR.

9.2. Monitoring of Volumetric Data for Wastewater and Recycled Water

The State Water Board adopted "Water Quality Control Policy for Recycled Water" (Recycled Water Policy) on December 11, 2018 and the Recycled Water Policy 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 category of reuse. 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. 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 reporting requirements in accordance with Section 3 of the Recycled Water Policy (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf). The State Water Board's Order WQ 2019-0037 EXEC will no longer be applicable to the Discharger upon the effective date of this Order.

9.2.1 **Influent**: The Discharger shall monitor monthly total volume of wastewater collected and treated by the wastewater treatment plant.

9.2.2 **Production**: The Discharger shall monitor monthly volume of wastewater treated, specifying level of treatment.

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

9.2.4. **Reuse**: The Discharger shall monitor 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.

9.3. Monitoring of Soil Moisture Content

Soil moisture content shall be measured and logged monthly during the wet season (November 1 through April 15) to monitor soil saturation and reported in the Hydrogeologic Monitoring Program Report required by Order No. 00-167.

10. REPORTING REQUIREMENTS

10.1. General Monitoring and Reporting Requirements

10.1.1. The Discharger 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, as well as all excursions of effluent limitations.

10.1.4. The Discharger shall inform the Los Angeles Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

10.2. Self-Monitoring Reports (SMRs)

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

10.2.2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections 3 through 9. The Discharger shall submit 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 Discharger monitors any pollutant more frequently than required by this Order,

the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

10.2.3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule. Sampling is only required when there is a discharge.

Table E-6. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	Submit with monthly SMR
1/Discharge event (daily)	First discharge event after the effective date of this Order	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
1/Discharge event (weekly)	First discharge event after the effective date of this Order	Sunday through Saturday	Submit with monthly SMR
1/Discharge event (quarterly)	First discharge event after the effective date of this Order	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August1 November 1 February 1
1/Discharge event (annually)	First discharge event after the effective date of this Order	January 1 through December 31	April 15
1/Year (annually for volumetric reporting)	Order effective date	January 1 through December 31	April 30

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

a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported. For 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 (± 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. Dischargers 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 Discharger 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 Attachment A. For purposes of reporting and administrative enforcement by the Los Angeles Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

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

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 of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

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

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

entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; 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 Discharger shall report the results of any special studies, chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – 6.3. The Discharger shall submit reports in compliance with SMR reporting requirements described in subsection 10.2. above. In addition, the Discharger shall report the progress of wastewater treatment process modifications associated with the membrane bioreactor (MBR) installation with regular quarterly report submittals.

10.4.2. Annual Summary Report

By April 15 of each year, the Discharger 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 including the MBR installation, or the outfall system. The Discharger shall submit an annual report 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 or not 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 should also be provided:

a. A list of the pollutant(s) that triggered reasonable potential;

b. The Basin Plan or CTR criteria that was exceeded for each given pollutant;

c. The concentration of the pollutant(s);

d. The test method used to analyze the sample; and,

e. The date and time of sample collection.

10.4.3. The Discharger shall submit to the Los Angeles Water Board, together with the first monitoring report required by this permit, 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.

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

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.

10.4.5. **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, wildfire, or other climate-related changes. The Permittee 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. For facilities that discharge to the ocean including desalination plants, the Climate Change Plan shall also include the impacts from sea level rise. The Climate Change Plan is due 12 months after the effective date of this Order.

10.4.6. **Annual Volumetric Reporting of Wastewater and Recycled Water**

The Discharger shall electronically submit annual volumetric reports to the State Water Board by April 30 each year covering data collected during the previous calendar year using the State Water Board's GeoTracker website (geotracker.waterboards.ca.gov) under a site-specific global identification number. The annual volumetric report shall include information specified in section 9.2, above. A report upload confirmation from the GeoTracker shall be included in the annual report, which shall be submitted into CIWQS, by the report due date to demonstrate compliance with this reporting requirement.

ATTACHMENT F – FACT SHEET

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TABLES

ATTACHMENT F – FACT SHEET

As described in section 2.2 of this Order, the Los Angeles Regional Water Quality Control Board (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. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4B190107048
Discharger	Los Angeles County Department of Public Works
Name of Facility	Malibu Mesa Water Reclamation Plant and its associated wastewater collection system and outfalls
Facility Address	3863 Malibu Country Drive Malibu, CA 90265 Los Angeles County
Facility Contact, Title and Phone	Jeffrey Bouse, Senior Civil Engineer, (626) 300-3373 Richard Eldridge, Director of Governmental and Regulatory Affairs, Pepperdine University, (310) 506-4702
Authorized Person to Sign and Submit Reports	William J. Winter, Assistant Deputy Director, (626) 300-3304 Martin Moreno, Principal Engineer, (626) 300-3312 Jeffrey Bouse, Senior Civil Engineer, (626) 300-3373 Patrick Dolan, WWTP Operator Supervisor, (310) 779-0867
Mailing Address	900 South Fremont Avenue, Alhambra, CA 91803
Billing Address	SAME
Type of Facility	POTW
Major or Minor Facility	Minor
Threat to Water Quality	1
Complexity	B
Pretreatment Program	N
Recycling Requirements	Producer/User
Facility Permitted Flow	Monthly average dry weather flow of 0.20 million gallons per day (mgd)
Facility Design Flow	0.60 mgd
Watershed	Marie Canyon Creek
Receiving Water	Marie Canyon Creek and an unnamed canyon west of Marie Canyon Creek
Receiving Water Type	Inland surface water

1.1. The Los Angeles County Department of Public Works (Discharger) owns and operates a publicly owned treatment works (POTW) comprised of Malibu Mesa Water Reclamation Plant (Malibu Mesa WRP or Facility) and its associated wastewater collection system and outfalls. Pepperdine University located at 24255 Pacific Coast Highway, Malibu, California, hereinafter referred to as User, uses the treated (recycled) wastewater for landscape impoundment and irrigation at the Pepperdine University campus. The landscape impoundment (also known as storage reservoirs) and the irrigation facilities are owned, operated, and maintained by Pepperdine University.

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

1.2. The Facility discharges wastewater to Marie Canyon Creek and an unnamed canyon west of Marie Canyon Creek, both waters of the United States. The Discharger was previously regulated by Order No. R4-2012-0181, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0059099, adopted by the Los Angeles Water Board on December 6, 2012. This Order expired on November 10, 2017.

Regulations at 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 May 11, 2017. Supplemental information was requested on June 8, 2017 and received on June 27, 2017. The application was deemed complete on July 17, 2017, but the permit remained on hold while the Discharger explored options to comply with the Time Schedule Order No. R4-2012-0182. Multiple options were considered to meet the final effluent limitation for ammonia nitrogen including proposed improvement of the treatment system using a Membrane Bioreactor (MBR). On March 9, 2020, the Discharger asked the Los Angeles Water Board to proceed with the NPDES permit renewal process in anticipation of a future improvement in the treatment system by replacing it with a treatment system utilizing an MBR. A site visit was conducted on February 10, 2021, to observe operations and collect additional data to develop permit limitations and conditions. The terms and conditions of the current NPDES permit have been automatically continued and remain in effect until new WDRs and a NPDES permit are adopted pursuant to this Order. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

1.3. Applicable state law requires dischargers to file a petition with the State Water Board, Division of Water Rights and receive approval for any change in the point of discharge, place of use, or purpose of use of treated wastewater that decreases the flow in any portion of a watercourse. The State Water Board retains separate jurisdictional authority to enforce any applicable requirements under Water Code section 1211. This is not an NPDES permit requirement.

2. FACILITY DESCRIPTION

2.1. Description of Wastewater and Biosolids Treatment and Controls

2.1.1. The Facility's dry weather average flow rate is 0.20 mgd. The facility serves a population of approximately 5,800 persons at Pepperdine University and the community of Malibu Country Estates. All domestic wastewater generated by Pepperdine University is collected at the flow equalization station. The majority of the wastewater is sent to the Facility and any portion of wastewater that would exceed the permit requirements is sent to the Las Virgenes Municipal Water District (Las Virgenes), Tapia Water Reclamation Facility (Tapia). Domestic wastewater generated by Malibu Country Estates flows directly to the Facility.

Under normal operation, the tertiary-treated effluent is not discharged into the permitted discharge outfalls. A small portion of the tertiary-treated effluent is used for the landscape irrigation at the Facility. The major portion of the tertiary-treated effluent from the Facility is diverted into the storage reservoirs with a total capacity of 8.4 million gallons for recycling and reuse at Pepperdine University. The recycled water is then used for irrigation of approximately 141 acres of the approximately 282 developed acres of the Pepperdine University campus. Pepperdine University operates the storage reservoirs and the landscape irrigation facilities. The reuse of the recycled water at the Facility and by Pepperdine University is regulated under a separate Waste Discharge Requirements and Water Recycling Requirements (WDRs/WRRs) for County of Los Angeles Department of Public Works and Pepperdine University, Malibu Campus, Order No. 00-167, File No. 70-060, CI-5689, adopted by the Los Angeles Water Board on November 9, 2000.

Per 40 CFR 122.2, continuous discharge is defined as a discharge which occurs without interruption throughout the operating hours of the Facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities. Based on this definition of continuous discharge and the following information available at the time of this permit renewal, the Los Angeles Water Board determines that this Facility's discharge is a non-continuous discharge for the following reasons:

a. The Facility has not discharged since 2005.

b. The Facility is prohibited to discharge during the summer, unless authorized in writing by the Executive Officer (EO) upon demonstration of necessity under emergency conditions described in section 3.10 of the waste discharge requirements.

c. The Facility is allowed to discharge up to 10 days during the wet season. Discharges more than 10 days during the wet season (November 1 through April 15) require the EO approval.

d. During high wildfire risk periods, July through November, the Facility is allowed to discharge upon receiving a written authorization from the Executive Officer by demonstrating the emergency conditions described in sections 3.10.2 and 3.10.3 of the waste discharge requirements are met.

2.1.2. The Facility provides primary, secondary, and tertiary treatment, with disinfection by an ultraviolet system. The following are brief descriptions of the major unit processes, operations, and/or equipment:

a. **Primary Treatment:** Primary treatment consists of a headwork with comminutor, a bypass channel with bar screen. An influent flow meter is located after the bypass channel.

b. **Secondary Treatment:** Secondary treatment consists of the Walker Process packaged activated sludge plant that includes an aeration basin with coarse bubble diffusers, two aeration blowers (one of which is a standby), an aerobic digester, and a secondary sedimentation basin. Return activated sludge and waste activated sludge is pumped by airlift pump.

c. **Tertiary Treatment:** Tertiary treatment is provided through coagulation, rapid mix, flocculation, and sand filtration. Filtration consists of three continuous backwash Dynasand® filters. No chlorine is added to the system.

d. **Disinfection:** Disinfection is provided by four ultraviolet lamps in series.

e. **Solids Handling:** The waste activated sludge is aerobically digested and pumped to a centrifuge for partial thickening. The thickened, digested sludge is stored in a 10,000-gallon underground storage tank prior to hauling to the Donald C. Tillman Water Reclamation Plant located at 6100 Woodley Avenue, Van Nuys, California.

f. **Operational Emergencies:** In the event of upsets or other operational emergencies at the Facility, wastewater from Pepperdine University can be pumped to Tapia for treatment under an agreement between Pepperdine University and Las Virgenes. The wastewater from Malibu Country Estates can be diverted to the sludge storage tank and hauled to the Donald C. Tillman Water Reclamation Plant for treatment. In the event of a power failure, the Facility has a standby diesel-powered generator onsite to prevent the discharge of raw or inadequately treated sewage.

g. **Laboratory Waste Handling:** All laboratory waste generated by Pepperdine University is stored in 55-gallon drums and hauled offsite to a legal point of disposal.

h. **Effluent Pump Station:** The tertiary-treated effluent with UV disinfection is discharged to the Pepperdine University under normal conditions and/or Marie Canyon Creek under emergency conditions by the Effluent Pump Station. Effluent samples are pulled from Effluent Monitoring Station Eff 001 located at the end of UV chamber and before the Effluent Pump Station.

2.2. Discharge Points and Receiving Waters

During the wet season (November 1 through April 15 of each year) the Facility is allowed to discharge the tertiary-treated effluent to surface water through the Discharge Points 001 or 002 for up to 10 days a year.

Discharge Point 001 (approximate coordinates: 34.03389°N, 118.70833°W): flows to Marie Canyon Creek.

Discharge Point 002 (approximate coordinates: 34.03361°N, 118.71111°W): flows to an unnamed canyon west of Marie Canyon Creek.

In the event that the Facility has already discharged 10 days in the calendar year, the conditions of discharge are specified in Section 3.10 of the Order.

Both Marie Canyon Creek and the unnamed canyon west of Marie Canyon Creek flow to Amarillo Beach, a water of the United States. The upper end of Marie Canyon Creek is located approximately one quarter of a mile away from Amarillo Beach.

The Discharger is permitted to discharge into the unnamed canyon west Marie Canyon Creek (Discharge Point 002) adjacent to the Facility. Even though the Discharger has not used this outfall for at least 20 years, Discharge Point 002 will be maintained as an alternative point of discharge when the discharge of treated effluent to Discharge Point 001 is not feasible because of environmental concerns or geological instability. Therefore, this Order only allows the Discharger to use Discharge Point 002 with prior notice to the Los Angeles Water Board.

2.3. **Summary of Existing Requirements and SMR Data**

As noted above, the Discharger has not discharged to surface water since 2005 and all tertiary-treated effluent from this facility has been recycled. Effluent water quality monitoring has therefore not been conducted since 2005. However, Malibu Mesa WRP has performed monitoring for priority pollutants and some other parameters in their recycled water, which is tertiary-treated effluent, that are required under the WDRs/WRRs, Order No. 00-167, and the detected results are provided in Table F-2. For the parameters that are not collected under the WDRs/WRRs Order No. 00-167, monitoring data collected during 2001 to 2005 are also provided in Table F-2. Effluent limitations contained in the existing Order for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from January 2015 to September 2020 collected under Order No. 00-167 are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

CTR No.	Parameter	Unit	Average Monthly	Average Weekly	Maximum Daily	Highest Reported Concentration or Maximum Detection Limit
	$BOD_5 20^oC$	mg/L	20	30	45	36.5
	Suspended Solids	mg/L	15	40	45	21
	Oil and Grease	mg/L	10	---	15	<5.55
	Settleable Solids	mg/L	0.1	---	0.3	8
	Methylene blue activated substances (MBAS)]	mg/L	0.5	---	---	<0.05
	Chloride	mg/L	230	---	---	232
	Ammonia as nitrogen	mg/L	3.5	---	15	44
	Chronic Toxicity	Pass or Fail, % Effect (TST)	Pass	---	Pass or % effect < 50	---
6	Copper	µg/L	24	---	52	13

CTR No.	Parameter	Unit	Average Monthly	Average Weekly	Maximum Daily	Highest Reported Concentration or Maximum Detection Limit
9	Nickel	µg/L	---	---	---	6.0
13	Zinc	µg/L	---	---	---	68.6
14	Cyanide	µg/L	---	---	---	39
26	Chloroform	µg/L	---	---	---	1.3
68	Bis(2-Ethylhexyl)Phthalate	µg/L	5.9	---	16	7.6
	DDT	µg/L	0.00022	---	0.00044	<0.05
108	4-4'-DDT	µg/L	---	---	---	<0.05
109	4-4'-DDE	µg/L	---	---	---	<0.05
110	4-4'-DDD	µg/L	---	---	---	<0.05
	PCB sum of aroclors	µg/L	0.000064	---	0.00013	<2.5
119	PCB 1016	µg/L	---	---	---	<2.5
120	PCB 1221	µg/L	---	---	---	<2.5
121	PCB 1232	µg/L	---	---	---	<2.5
122	PCB 1242	µg/L	---	---	---	<2.5
123	PCB 1248	µg/L	---	---	---	<2.5
124	PCB 1254	µg/L	---	---	---	<2.5
125	PCB 1260	µg/L	---	---	---	<2.5
126	Toxaphene	µg/L	---	---	---	<2.5

2.4. **Compliance Summary**

The Discharger has not discharged tertiary-treated effluent into Marie Canyon Creek and to the unnamed canyon west of Marie Canyon Creek since 2005. The tertiary-treated effluent from the Facility is diverted into the storage reservoirs for recycling and reuse at Pepperdine University. The reuse of the reclaimed water by Pepperdine University is regulated under a separate WDRs/WRRs for County of Los Angeles Department of Public Works and Pepperdine University, Malibu Campus, Order No. 00-167, File No. 70-060, CI-5689. Therefore, the Discharger has been in compliance with the effluent limits.

2.5. **Planned Changes**

The Discharger plans to upgrade the facility with a Membrane Bioreactor (MBR) that is capable of reducing the amount of nitrogen compounds including ammonia from the effluent discharge to meet discharge requirements. The Project is currently underway with an anticipated design completion in early 2022. Construction will occur in multiple phases to keep the plant in service during construction. The new treatment process is expected to be operational in 2026 after the NPDES permit is renewed with the new treatment process. The Discharger shall submit a ROWD to the Los Angles Water Board, which includes the planned physical alterations or additions to the Facility, prior to the expiration date of this Order or prior to discharging with the new treatment process, whichever is sooner.

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 location described in Table 2 subject to the WDRs in this Order.

3.2. **California Environmental Quality Act (CEQA)**

Under CWC section 13389, this action to adopt an NPDES permit is exempt from CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

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

3.3.1. **Water Quality Control Plan.** The Water Quality Control Plan for the Los Angeles Region (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.

a. Beneficial uses of receiving surface waters:

The Facility discharges into Marie Canyon Creek. Marie Canyon Creek is one of the waterbodies that does not have specific beneficial uses identified in the Basin Plan. According to the Basin Plan, those waters not specifically listed (generally small tributaries) are designated with the same beneficial uses as the streams, lakes, or reservoirs to which they are tributary. This is commonly referred to as the “tributary rule.” Given that Marie Canyon Creek discharges to the Pacific Ocean, the beneficial uses assigned to Marie Canyon Creek are as follows: REC-1(I), REC-2(I), WARM(I), and WILD.

Under federal law, all waters are assumed to be “fishable” and “swimmable” unless a Use Attainability Analysis (UAA) has been done to justify the unattainability of these uses. This would apply REC-1(I), REC-2(I), WARM(I), and WILD.

The Discharger conducted a reach-specific beneficial use study of Marie Canyon Creek to comply with the Los Angeles Water Board’s Time Schedule Order R4-2007-0003. The results of this study are contained in the report titled, *Final Report: Marie Canyon Beneficial Uses Survey* (Beneficial Use Study), dated October 2009. The study was conducted within the 1,400 linear feet of natural creek from Pacific Coast Highway to Malibu Road. Based on results of the study, the existing beneficial uses applicable to Marie Canyon Creek are: WARM, WILD, REC-1, and REC-2. Based on the results of the study, there is no evidence that Marie Canyon Creek provides the beneficial uses of MUN directly or indirectly through groundwater recharge (GWR); therefore, this use is not applicable.

The results of the beneficial uses study for Marie Canyon Creek are not currently identified in the Basin Plan. However, as noted above, in order to protect the existing beneficial uses, even if not identified in the Basin Plan, the Los Angeles

Water Board is required under section 301(b)(1)(C) of the CWA and its implementing regulations (40 CFR part 122.4(a); 40 CFR part 122.4(d); 40 CFR part 122.44(d)) to establish conditions in NPDES permits that ensure compliance with State water quality standards, including antidegradation requirements. The federal antidegradation policy (40 CFR part 131.12(a)(1)) requires that "existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." As defined in 40 CFR part 131.3(e), "[e]xisting uses are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards" (emphasis added).

Therefore, the beneficial uses applicable to Marie Canyon Creek (and an unnamed canyon west of Marie Canyon Creek) are as follows:

Table F-3. Basin Plan Beneficial Uses – Surface Waters

USGS Hydrologic Unit Code (HUC)	Receiving Water Name	Beneficial Use(s)
18070104 (Calwater Hydro Unit 404.31)	Marie Canyon Creek and Unnamed canyon west of Marie Canyon Creek	**Existing:** Water contact recreation (REC-1); non-contact water recreation (REC-2); warm freshwater habitat (WARM); and wildlife habitat (WILD)
18070104 (Calwater Hydro Unit 404.21)	Amarillo Beach (Pacific Ocean)	**Existing:** Navigation (NAV); water contact recreation (REC-1); non-contact water recreation (REC-2); commercial and sport fishing (COMM); marine habitat (MAR); wildlife habitat (WILD); and shellfish harvesting (SHELL) **Potential:** Spawning, reproduction, and/or early development (SPWN)

b. Beneficial uses of the receiving groundwaters:

SWRCB Resolution No. 88-63, Adoption of Policy Entitled "Sources of Drinking Water" followed by Los Angeles Water Board Resolution No. 89-03, Incorporation of "Sources of Drinking Water" Policy into the Water Quality Control Plans (Basin Plans) states that all surface and ground waters of the State are considered to be suitable, or potentially suitable, for municipal or domestic water supply and should be so designated by the Los Angeles Water Board with the exception of surface and groundwaters where:

i. The total dissolved solids (TDS) exceed 3,000 mg/L (5,000 µS/cm, electrical conductivity) and it is not reasonably expected by the Los Angeles Water Board to supply a public water system;

ii. There is contamination, either by natural processes or by human activity (unrelated to the specific pollution incident), that cannot reasonably be treated

for domestic use using either Best Management Practices or best economically achievable treatment practices; or

iii. The water source does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day.

Marie Canyon Creek is not listed in the Basin Plan as overlying a designated groundwater basin. Based on the Beneficial Use Study, Marie Canyon Creek does not provide the beneficial use of municipal and domestic water supply (MUN) directly or indirectly through groundwater recharge (GWR).

The following factors were considered in deriving these conclusions:

i. Relatively impervious soil with underlying bedrock creates low infiltration potential for groundwater recharge.

ii. The unlined natural creek is too steep and short for substantial percolation, in fact, the creek is a gaining stream receiving seepage from the shallow groundwater supply.

iii. The surface water and potential water sources from groundwater consistently show high TDS (or electrical conductivity). Furthermore, the field data collected in April 2009 for TDS in Marie Canyon Creek was 3,576 and 3,198 mg/L.

iv. The potential for domestic or municipal water wells being located this close to the ocean is unfeasible due to saltwater intrusion for any type of pumping well.

Since Marie Canyon Creek does not support MUN and GWR beneficial use, Title 22-based effluent limitations, except total coliform, MBAS, and turbidity, are not applicable in this Order.

3.3.2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.

3.3.3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Los Angeles Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

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.

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. Restrictions on BOD and TSS, are discussed in section 4.2.2. of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are carried over from the previous permit.

WQBELs have been scientifically derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law and are the applicable federal water quality standards. All beneficial uses and WQOs contained in the Basin Plan and the Ocean Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any WQOs and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA and the applicable water quality standards for purposes of the CWA. 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 regulation 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 must be consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16.

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 must be as stringent as those in the previous permit, with some

exceptions in which limitations may be relaxed. This Order complies with anti-backsliding provisions.

3.3.8. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 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 Endangered Species Act.

3.3.9 **Water Rights.** Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a surface or subterranean stream, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change from the State Water Board. The State Water Board retains the jurisdictional authority to enforce such requirements under Water Code section 1211.

3.3.10. **Water Recycling.** In accordance with statewide policies concerning water reclamation[2], this Los Angeles Water Board strongly encourages, wherever practical, water recycling, water conservation, and use of stormwater and dry-weather urban runoff. However, those recycling efforts shall consider the necessity of a water rights 1211 application which would be necessary if the additional recycling would reduce the current discharge flow rate to the affected water body. When the facility starts using recycled water, these reports shall be included in the annual report submittal as described in the MRP.

The State Water Board adopted “Water Quality Control Policy for Recycled Water” (Recycled Water Policy) on February 3, 2009. The State Water Board amended the Recycled Water Policy on January 22, 2013 and December 11, 2018. The 2018 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 category of reuse. 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. 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 reporting requirements in accordance with Section 3 of the Recycled Water Policy (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf). The State Water Board’s Order WQ 2019-

[2] See, e.g., Water Code sections 13000 and 13550-13557, State Water Board Resolution No. 77-1 (Policy with Respect to Water Reclamation in California), and State Water Board Resolution No. 2009-0011, 2013-0003, and 2018-0057 (Recycled Water Policy).

0037 EXEC will no longer be applicable to the Discharger upon the effective date of this Order.

3.3.11. **Monitoring and Reporting.** 40 CFR part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize 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.

3.3.12. **Sewage Sludge and Biosolids.** 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. Therefore, this Order does not prescribe requirements for sewage sludge/biosolids (40 CFR part 503). USEPA is the implementing agency, not the Los Angeles Water Board.

3.3.13. **Mercury Provisions.** The State Water Board adopted "*Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California-Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions*" (Mercury Provisions) through Resolution No. 2017-0027, which was approved by OAL on June 28, 2017 and became effective upon USEPA approval on July 14, 2017.

The Mercury Provisions contain provisions that apply to POTWs and individual industrial discharges. The Mercury Provisions converted the fish tissue-based water quality objectives to water column values, denoted as "C". The implementation section of the Mercury Provisions requires the application of section 1.3 of SIP with modifications to determine whether a discharge has reasonable potential to cause or contribute to an exceedance of the water column concentration for mercury and the development of effluent limitations for mercury based on the water quality objective applicable to the receiving water in accordance with Chapter IV.D.2.b.

The Mercury Provisions convert the fish tissue-based water quality objectives into water column values to be used for reasonable potential analysis and development of effluent limitations. The objective for Marie Canyon Creek, which is a flowing water body, is 12 ng/L total mercury. Mercury sample results were reported as "non-detect" with the detection limit from 0.05 µg/L to 0.5 µg/L for the monitoring between 2015 and 2019. According to the Mercury Provisions, "non-detect" data with the detection limit higher than 4 ng/l are not suitable for the analysis. Since the collected data did not meet the minimum detection limit stated by the Mercury Provisions, those data were not qualified to be evaluated and be used for the purposes of performing RPA. Therefore, no effluent limitations were set in this Order. However, a monitoring requirement for mercury in effluent is included in Attachment E with a new detection limit of 0.5 ng/L.

3.3.14. **Bacteria Provisions.** The State Water Board adopted "*Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Bacteria Provisions and Water Quality Standards Variance Policy*" through Resolution No. 2018-0038, which was approved by OAL on February 4, 2019 and became effective upon USEPA approval on March 22, 2019. The Bacteria

Provisions establish *Escherichia coli* (*E. coli*) as the sole indicator of pathogens in freshwater. These *E. coli* water quality objectives supersede any numeric water quality objectives for bacteria for the protection of the REC-1 beneficial use in Los Angeles Water Board Basin Plans prior to the effective date of the Bacteria Provisions, except in certain circumstances, such as where there are existing final effluent limitations based on Title 22 requirements that are more stringent than ISWEBE Bacteria Provisions. Since the total coliform final effluent limitations are more stringent than the water quality objectives established through the ISWEBE Bacteria Provisions, the Title 22 based effluent limitations are retained. In addition, USEPA states in their "NPDES Water Quality Based Permit Limits for Recreational Water Quality Criteria (2015)" that they expect the direct application of criteria values at the end-of-pipe approach where the receiving water objective is applied directly as a permit limit at the discharge point. Since the effluent limitations are applied at the discharge point (end-of-pipe) based on Title 22, which are more stringent than the ISWEBE Bacteria Provisions, additional receiving water limitations are not established.

3.4. **Impaired Water Bodies on the CWA section 303(d) List**

The State Water Board adopted the California 2014 and 2016 Integrated Report based on a compilation of the regional board's Integrated Reports. The Integrated Report contains both the Clean Water Act (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 October 03, 2017 the State Water Board adopted the CWA Section 303(d) List portion of the State's 2014 and 2016 Integrated Report (State Water Board Resolution No. 2017-0059). On April 06, 2018, the USEPA approved California's 2014 and 2016 Integrated Report. The CWA section 303(d) List can be found at the following link: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml.

Neither Marie Canyon Creek nor Miscellaneous Los Angeles County Coastal Streams were included as being impaired in the State's 2014 and 2016 Integrated Report. However, the beach that Marie Canyon Creek drains to, Amarillo Beach, was listed impaired by DDTs and PCBs on the1998 CWA 303(d) List. These impairments were addressed by a USEPA established TMDL (*Santa Monica Bay TMDLs for DDTs and PCBs)*, on March 26, 2012. In addition, Santa Monica Bay nearshore and offshore areas were identified as being impaired by debris on the 1998, 2002, and 2006 CWQ 303(d) List, but the Santa Monica Bay Debris TMDL did not find that Malibu Mesa was a source of debris to the Santa Monica Bay.

3.5. **Other Plans, Polices and Regulations**

3.5.1. Climate Change Adaptation and Mitigation

On March 07, 2017 the State Water Board adopted a resolution in recognition of the challenges posed by climate change that requires a proactive approach to climate change in all State Water Board actions, including drinking water regulation, water quality protection, and financial assistance (Resolution No. 2017-0012). The resolution lays the foundation for a 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 Boards. In addition to the State Water Board's resolution (No. 2017-0012), the Los Angeles Water Board adopted "A Resolution to Prioritize Actions to Adapt and Mitigate the Impacts of Climate Change on the Los Angeles Region's Water Resources and Associated Beneficial Uses" (Resolution No. R18-004) on May 10, 2018. The 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 steps to move forward. These include the identification of potential regulatory adaptation and mitigation measures that could be mitigated on a short-term and long-term basis by each of the Los Angeles Water Board's programs to take into account, and assist in mitigating where possible, the effects of climate change on water resources and associated beneficial uses. 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.

The Permittee shall develop a Climate Change Effects Vulnerability Assessment and Management Plan (Climate Change Plan) and submit the Climate Change Plan to the Los Angeles Water Board for the Executive Officer's approval no later than 12 months after the effective date of this Order. The Climate Change Plan shall include an assessment of short and long term vulnerabilities of facilities and operations as well as plans to address vulnerabilities of collection systems, facilities, treatment systems, and outfalls for predicted impacts in order to ensure that facility operations are not disrupted, compliance with permit conditions is achieved, and receiving waters are not adversely impacted by discharges. Control measures shall include, but are not limited to, emergency procedures, contingency plans, alarm/notification systems, training, backup power and equipment, and the need for planned mitigations to ameliorate climate-induced impacts including, but not limited to, changing influent and receiving water quality and conditions, as well as the impact of rising sea level (where applicable), wildfires, storm surges, and back-to-back severe storms that are expected to become more frequent.

3.5.2. **Sources of Drinking Water Policy.** On May 19, 1988, the State Water Board adopted Resolution No. 88-63, Sources of Drinking Water (SODW) Policy, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with the State Water Board's SODW Policy, on March 27, 1989, the Los Angeles Water Board adopted Resolution No. 89-03, Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans) – Santa Clara River Basin (4A)/ Los Angeles River Basin (4B). As discussed in section 3.3.1, Marie Canyon Creek is not listed in the Basin Plan as overlying a designated groundwater basin. Additionally, based on the Beneficial Use Study, Marie Canyon Creek does not provide the beneficial use of municipal and domestic water supply (MUN) directly or indirectly through groundwater recharge (GWR). This permit is designed to be consistent with the existing Basin Plan, as further explained in section 3.3.1.a, *supra*.

3.5.3. **Title 22 of the California Code of Regulations (CCR Title 22).** The State Water Resources Control Board, Division of Drinking Water, established primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and

radioactive contaminants in drinking water. These MCLs are codified in Title 22. The Basin Plan (Chapter 3) incorporates Title 22 primary MCLs by reference. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect. The Facility discharges its tertiary-treated effluent to Marie Canyon Creek, which does not support MUN and GWR beneficial use. Thus, Title 22 MCLs based effluent limitations are not applicable in this Order.

3.5.4. **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 incorporated into this Order, except where more stringent limitations are required by other applicable plans, policies, or regulations or to prevent backsliding.

3.5.5. **Storm Water.** 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 § 122.26 that established requirements for stormwater discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Water Board issued a statewide general permit, General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities. This permit was amended in September 1992 and reissued on April 17, 1997 in State Water Board Order No. 97-03-DWQ to regulate storm water discharges associated with industrial activity. General NDPES Permit No. CAS000001 was revised on April 1, 2014 and became effective on July 1, 2015.

Industrial activities covered by this General permit are facilities used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge, that are located within the confines of the facility, with a design flow of 1 mgd or more, or are required to have an approved pretreatment program under 40 CFR part 403. General NPDES Permit No. CAS000001 is not applicable to the Malibu Mesa WRP because the Facility's design flow capacity is less than 1 mgd.

3.5.6. **Sanitary Sewer Overflows (SSOs).** The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 United States Code (USC) sections 1311 and 1342). The Discharger must comply with State Water Board Water Quality Order No. 2006-0003-DWQ, Statewide *General Waste Discharge Requirements for Sanitary Sewer Systems* ((SSS WDRs) as amended by State Water Board Order No. WQ 2013-0058-exec and any subsequent order updating these requirements. These statewide WDRs require public agencies that own or operate sanitary sewer systems with 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. Regardless of the coverage obtained under the SSS WDRs, the Discharger'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 § 122.41 (e)), report any noncompliance (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. (Spill Cleanup Contingency Plan section), 6.3.4. (Construction, Operation and Maintenance Specifications section), and 6.3.6. (Spill Reporting Requirements section) 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 SSS WDRs requirements, related to the collection systems. The requirements of the SSS WDRs are considered the minimum thresholds (see Finding 11 of State Water Board Order No. 2006-0003- DWQ). 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 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 of this permit are more stringent that the SSS WDRs because in addition to the SSS WDRs requirements, this NPDES permit requires water quality monitoring of the receiving water when the spill reaches the surface water.

3.5.7. **Watershed Management.** This Los Angeles Water Board has been implementing a Watershed Management Approach (WMA) to address water quality protection in the Los Angeles Region. Information about watersheds in the region can be obtained at the Los Angeles Water Board's website 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.

3.5.8. **Relevant TMDLs.** Section 303(d) of the CWA requires states to identify water bodies that do not meet water quality standards and then to establish TMDLs for each water body for each pollutant of concern. TMDLs identify the maximum amount of pollutants that can be discharged to water bodies without causing violations of water quality standards.

Santa Monica Bay TMDLs for DDTs and PCBs – Consistent with 40 CFR 130.2 and 130.7, section 303(d) of the CWA, and USEPA guidance for developing TMDLs in California (USEPA, 2000a), the USEPA established the Santa Monica Bay TMDLs for DDTs and PCBs on March 26, 2012. The TMDL includes WLAs for the Malibu Mesa WRP. This permit incorporates the WLAs as effluent limitations for DDTs and PCBs.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the

Code of Federal Regulations: 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

The variety of potential pollutants found in the Facility discharges presents a potential for aggregate toxic effects to occur. Whole effluent toxicity (WET) is an indicator of the combined effect of pollutants contained in the discharge. Chronic toxicity is a more stringent requirement than acute toxicity. Therefore, chronic toxicity is considered a pollutant of concern for protection and evaluation of narrative Basin Plan Objectives.

4.1. **Discharge Prohibitions.** Effluent and receiving water limitations in this Order are based on the CWA, Basin Plan, State Water Board's plans and policies, USEPA guidance and regulations, and best practicable waste treatment technology. This Order authorizes the discharge of tertiary-treated wastewater from Discharge Points 001 and 002. It does not authorize any other type of discharges.

4.2. **Technology-based Effluent Limitations**

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 Discharger 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," that all POTWs were required to meet by July 1, 1977. More specifically, section 301(b)(1)(B) of the CWA required that 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 $BOD_5$20°C and TSS.

4.2.2. **Applicable TBELs**

This Facility is subject to the technology-based regulations for the minimum level of effluent quality attainable by secondary treatment in terms of $BOD_5$20°C and TSS. The principal design parameters for wastewater treatment plants are the daily BOD and TSS loading rates and the corresponding removal rate of the system. In applying 40 CFR Part 133 for weekly and monthly average BOD and TSS limitations, the application of tertiary treatment processes results in the ability to achieve lower levels of BOD and TSS than the secondary standards. This Facility is also subject to TBELs contained in similar NPDES permits, for similar facilities, based on the treatment level available by tertiary treated wastewater treatment systems. In addition to the average weekly and average monthly effluent limitations, daily maximum effluent limitations for BOD and TSS are included in the Order to ensure that the treatment works are not organically overloaded and operate in accordance with design capabilities. The Malibu Mesa WRP can meet these limitations with the existing treatment processes in place at the POTW. Further, mass-based effluent limitations are based on a flow rate of 0.2 mgd. The removal

efficiency for BOD and TSS is set at the minimum level attainable by secondary treatment technology. The following table summarizes the TBELs applicable to the Facility:

Table F-4. Summary of TBELs

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily
$BOD_5$20°C	mg/L	20	30	45
$BOD_5$20°C	lbs/day	33	50	75
TSS	mg/L	15	40	45
TSS	lbs/day	25	67	75
Removal Efficiency for BOD and TSS	%	≥85	---	---

Additional reasoning upon which the foregoing limits are based is set forth below:

$BOD_5$20°C and TSS

$BOD_5$20°C is a measure of the quantity of the organic matter in the water and, therefore, the water's potential for becoming depleted in dissolved oxygen. As organic degradation takes place, bacteria and other decomposers use the oxygen in the water for respiration. Unless there is a steady resupply of oxygen to the system, the water will quickly become depleted of oxygen. Adequate dissolved oxygen levels are required to support aquatic life. Depressions of dissolved oxygen can lead to anaerobic conditions resulting in odors, or, in extreme cases, in fish kills.

40 CFR part 133 describes the minimum level of effluent quality attainable by secondary treatment, for BOD and TSS, as:

- The 30-day average shall not exceed 30 mg/L, and
- The 7-day average shall not exceed 45 mg/L.

The Malibu Mesa WRP provides tertiary treatment so the BOD and TSS limits in the permit are more stringent than secondary treatment requirements and are based on Best Professional Judgment (BPJ). The Facility achieves solids removals that are better than secondary-treated wastewater by filtering the effluent.

In addition to having mass-based and concentration-based effluent limitations for BOD and TSS, the Malibu Mesa WRP also has a percent removal requirement for these two constituents. In accordance with 40 CFR sections 133.102(a)(3) and 133.102(b)(3), the 30-day average percent removal shall not be less than 85 percent. Percent removal is defined as a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the Facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

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

requirements more stringent than secondary treatment requirements that are necessary to meet applicable water quality standards. Where appropriate, the Los Angeles Water Board has considered the factors listed in Water Code section 13241 in establishing these requirements. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements or other provisions, is discussed beginning in section 4.3.2. of this Fact Sheet.

Section 122.44(d)(1)(i) of 40 CFR requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) 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).

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 water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

4.3.2. **Applicable Beneficial Uses and Water Quality Criteria and Objectives**

The Basin Plan establishes the beneficial uses for surface water bodies in the Los Angeles region. The beneficial uses of Marie Canyon Creek affected by the discharge have been described previously in this Fact Sheet. The Basin Plan also specifies narrative and numeric WQOs applicable to surface water as described below:

a. **Oil and Grease**

Oil and grease are not readily soluble in water and form a film on the water surface. Oily films can coat birds and aquatic organisms, impacting respiration and thermal regulation, and causing death. Oil and grease can also cause nuisance conditions (odors and taste), are aesthetically unpleasant, and can restrict a wide variety of beneficial uses. The final effluent imitations for oil and grease are maximum daily limitations of 15 mg/L and 25 lbs/day. These limitations are based on the Basin Plan (page 3-34) narrative WQO, "Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses."

The numeric limits are empirically based on concentrations at which an oily sheen becomes visible in water. It is impracticable to use a 7-day or monthly average limitation, because the Facility's discharge is non-continuous rather than continuous, as defined in 40 CFR Section 122.2. The daily maximum effluent

limitation would be sufficiently protective of beneficial use. The Facility has been able to meet the daily maximum limit. The limit is continued herein.

b. **Residual Chlorine**

Disinfection of wastewaters with chlorine produces a residual. Chlorine and its reaction products are toxic to aquatic life. The limit for residual chlorine is based on the Basin Plan (page 3-30) narrative WQO, “Chlorine residual shall not be present in surface water discharges at concentrations that exceed 0.1 mg/L and shall not persist in receiving waters at any concentration that causes impairment of beneficial uses.” It is impracticable to use a 7-day average or a 30-day average limitation, because it is not as protective of beneficial uses as a daily maximum limitation is. Chlorine is very toxic to aquatic life and short-term exposures of chlorine may cause fish kills.

However, the Facility uses UV lamps to disinfect the effluent, and chlorine is not used at the Facility. Therefore, no effluent limitation and monitoring for residual chlorine are included in this Order.

c. **TDS, Chloride, Sulfate, and Boron**

The effluent discharge from the Malibu Mesa WRP flows to Marie Canyon Creek, and to Miscellaneous Los Angeles County Coastal Streams. The Basin Plan indicates that there are no waterbody specific objectives for TDS, chloride, sulfate and boron. Although there are no specific objectives for these minerals, Table 3-10, Water Quality Objectives for Selected Constituents in Inland Surface Water of the Basin Plan also provides recommended objectives for minerals or nutrients (refer to footnote f). The receiving water has beneficial use for aquatic life (freshwater) as WARM. In order to protect the most sensitive beneficial use of the receiving water, a chloride effluent limitation of 230 mg/L will be included in this Order. TDS, sulfate, and boron effluent limitations will not be included in this Order, as there are no applicable recommended objectives for the freshwater aquatic life beneficial uses of the receiving waters in footnote f of Table 3-10.

d. **Methylene Blue Activated Substances (MBAS)**

The MBAS limit protects the recreational, aquatic life, and wildlife beneficial uses of the surface receiving water downstream of the discharge against foam. The MBAS limit implements the Basin Plan WQO for floating material. Volume 44, No.179 of the Federal Register (on page 53467) explains that foaming is a characteristic of water which has been contaminated by the presence of detergents and similar substances. The 0.5 mg/l limit for foaming agents is based on the fact that at higher concentrations, the water may exhibit undesirable tastes and foaming properties.

Limits for MBAS are included here because the Facility accepts domestic wastewater into the sewer system and treatment plant, and due to the characteristics of the pollutants discharged, the discharge has reasonable potential to exceed both the numeric MBAS WQO and the narrative WQO for the prohibition of floating material such as foams and scums. Additionally, limits for MBAS have been in the permit since 2000. Therefore, the effluent limitation for MBAS in the Order No. R4-2012-0181 is carried into this Order and changed

from monthly average to daily maximum due to the fact that the Facility does not have a continuous discharge.

Cobalt thiocyanate active substances (CTAS) are monitored in the same way as MBAS. The presence or absence of CTAS during sampling assists permit writers and the Discharger in diagnosing the source of floating materials, such as foam or scum, which are prohibited by the Basin Plan when they cause nuisance or adversely affect beneficial uses. There is no limitation or compliance requirement for CTAS because it has no established water quality objective.

e. **Mercury**

The State Water Resources Control Board adopted "Part 2 of the Water Quality Control Plan for the Inland Surface Waters, Enclosed Bays, and Estuaries of California- Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions" (Mercury Provisions) through Resolution No. 2017-0027. The Mercury Provisions were approved by USEPA on July 14, 2017. The minimum detection level for analytical method used for effluent monitoring of mercury completed under R4-2012-0181 ranged from 0.05 ug/L to 0.5 ug/L, and results were reported as "non-detect." According to the Mercury Provisions, "non-detect" data with a detection limit higher than 4 ng/L are not suitable for analysis. Since the collected data did not meet the minimum detection limit stated by the Mercury Provisions, those data were not qualified to be evaluated and used for the purposes of performing RPA. Therefore, no effluent limitations were set in this Order. However, monitoring requirements for mercury in effluent are included with a new detection limit of 0.5 ng/L, which is the most sensitive method, based on USEPA Method 1361E, per 40 CFR part 136.

f. Total Inorganic Nitrogen (NO_2 +NO_3 as N)

Total inorganic nitrogen is the sum of Nitrate-nitrogen and Nitrite-nitrogen. High nitrate levels in drinking water can cause health problems in humans. Infants are particularly sensitive and can develop methemoglobinemia (blue-baby syndrome). Nitrogen is also considered a nutrient. Excessive amounts of nutrients can lead to other water quality impairments such as algal growth. Excessive growth of algae and/or other aquatic plants can degrade water quality. Algal blooms sometimes occur naturally, but they are often the result of excess nutrients (i.e., nitrogen, phosphorus) from waste discharges or nonpoint sources. These algal blooms can lead to problems with tastes, odors, color, and increased turbidity and can depress the dissolved oxygen content of the water, leading to fish kills. Floating algal scum and algal mats are also an aesthetically unpleasant nuisance.

The narrative WQO for biostimulatory substances in the Basin Plan (page 3-29) is, "Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses".

Based on the results of the Beneficial Use Study conducted by the Discharger, the receiving water and the underlying groundwater do not support an MUN beneficial use and the Basin Plan does not provide any water body specific objectives for Marie Canyon or Miscellaneous Los Angeles County Coastal

Streams. The footnote "f" of the Table 3-10 of the Basin Plan, which shows Water Quality Objectives for Selected Constituents in Inland Surface Waters, provides a guide for establishing effluent limits for coastal streams that do not have designated water quality objectives. The footnote states: "Site-specific objectives have not been determined for these reaches at this time. These areas are often impaired (by high levels of minerals) and there is not sufficient historic data to designate objectives based on natural background conditions. The following table illustrates the mineral or nutrient quality necessary to protect different categories of beneficial uses and will be used as a guideline for establishing effluent limits in these cases. Protection of the most sensitive beneficial use(s) would be the determining criteria for the selection of effluent limits". Based on the Beneficial Use Study, the most sensitive beneficial use applicable to Marie Canyon Creek is WARM. WARM is included within the category of beneficial uses identified in the footnote table as AQ LIFE (Freshwater), which notes that "Aquatic life includes a variety of Beneficial Uses including WARM, COLD, SPWN, MIGR, and RARE." The AQ LIFE category does not include any objectives for nitrogen. Therefore, effluent limitations for total inorganic nitrogen are not established in this Order. However, monitoring of nitrogen compounds is required to assess potential impacts to the receiving water quality, including eutrophication.

g. Total Ammonia

Ammonia is a pollutant routinely found in the wastewater effluent of POTWs, in landfill-leachate, as well as in runoff from agricultural fields where commercial fertilizers and animal manure are applied. Ammonia exists in two forms – un-ionized ammonia (NH_3) and the ammonium ion (NH_4^+). They are both toxic, but the neutral, un-ionized ammonia species (NH_3) is much more toxic, because it diffuses across the epithelial membranes of aquatic organisms much more readily than the charged ammonium ion. The form of ammonia is primarily a function of pH, but it is also affected by temperature and other factors. Additional impacts can also occur as the oxidation of ammonia lowers the dissolved oxygen content of the water, further stressing aquatic organisms. Oxidation of ammonia to nitrate may lead to groundwater impacts in areas of recharge. Ammonia also combines with chlorine (often both are present in POTW treated effluent discharges) to form chloramines – persistent toxic compounds that extend the effects of ammonia and chlorine downstream.

The Basin Plan contains water quality objectives for ammonia to protect aquatic life, including Early Life Stages (ELS) of fish in inland surface water supporting aquatic life.

The procedures for calculating the ammonia WQBELs based on the Basin Plan WQOs are discussed below.

Step 1 – Identify applicable water quality objective.
From the Discharger's effluent, the following data are summarized:

pH = 7.00 at 50th percentile and temperature = 20°C
pH = 7.35 at 90th percentile and temperature = 20°C

One-hour Average Objective

Based on the discussion of applicable beneficial uses in section 3.3.1 above, the applicable ammonia water quality objective is the one that corresponds to "Waters not Designated COLD or MIGR." The one-hour average objective is dependent on pH and whether salmonid fish species are present, but is independent of temperature.

For waters not designated COLD or MIGR, the one-hour average concentration of total ammonia as nitrogen (in mg N/L) shall not exceed the values in Table 3-1 of the Basin Plan or as described in the equation below:

$$\text{One-hour Average Concentration} = \frac{0.411}{1+10^{7.204-\text{pH}}} + \frac{58.4}{1+10^{\text{pH}-7.204}}$$

Using the 90th percentile pH = 7.35 in the formula above, the resulting One-hour Average Objective is equal to 24.58 mg/L.

30-day Average Objective

ELS is presumptively present and must be protected at all times of the year unless the water body is listed in Table 3-5 of the Basin Plan or unless a site-specific study is conducted, which justifies applying the ELS absent condition or a seasonal ELS present condition. Malibu Mesa WRP discharges into Marie Canyon Creek and an unnamed canyon west of Marie Canyon Creek and are not listed in Table 3-5. Therefore, these receiving waters will be designated having an "ELS Present" condition. For freshwaters subject to the "Early Life Stage Present" condition, the thirty-day average concentration of total ammonia as nitrogen (in mg N/L) shall not exceed the values in Table 3-2 of the Basin Plan or as described in the equation below:

30-day Average Concentration =

$$\left(\frac{0.0577}{1+10^{7.688-\text{pH}}} + \frac{2.487}{1+10^{\text{pH}-7.688}}\right) * MIN\left(2.85, 1.45 * 10^{0.028*(25-T)}\right)$$

Where T = temperature expressed in ºC.

The 30-day average objective is dependent on pH, temperature, and the presence or absence of early life stages of fish. The 50th percentile of effluent pH and temperature is 7.0 pH and 20°C, respectively. Use of the 50th percentile pH and temperature is appropriate to set the 30-day average objective, because the 30-day average represents more long-term conditions. Additionally, there is little variability in the effluent pH data, and the 30-day objective is primarily dependent upon pH. Using the Discharger's monitoring data in the formula above, the resulting 30-Day Average Objective is equal to 4.15 mg/L. The 4-day Average Objective is 2.5 times the 30-Day Average Objective:
4-day Average Objective = 2.5 x 4.15 = 10.38 mg/L

Step 2 – For each water quality objective, calculate the effluent concentration allowance (ECA) using the steady-state mass balance model. Since mixing has not been authorized by the Los Angeles Water Board, this equation applies:

ECA = WQO

Step 3 – Determine the Long-Term Average discharge condition (LTA) by multiplying each ECA with a factor (multiplier) that adjust for variability. By using Table 3-6 of the Basin Plan, calculated CV (i.e., standard deviation/mean for ammonia), the following are the ECA.

ECA multiplier from Table 3-6, when CV = 1.32
One-hour Average = 0.160
Four-day Average = 0.296
30-day Average = 0.592

Using the LTA equations:

$LTA_{1\text{-hour/99}} = ECA_{1\text{-hour}} \times ECA\ multiplier_{1\text{-hour99}}$
$= 24.58 \times 0.160 = 3.9324$ mg/L

$LTA_{4\text{-day/99}}$ ELS Present $= ECA_{4\text{-day}} \times ECA\ multiplier_{4\text{-day99}}$
$= 10.38 \times 0.296 = 3.0712$ mg/L

$LTA_{30\text{-day/99}}$ ELS Present $= ECA_{30\text{-day}} \times ECA\ multiplier_{30\text{-day99}}$
$= 4.15 \times 0.592 = 2.457$ mg/L

Step 4 – Select the (most limiting) of the LTAs derived in Step 3 (LTA_{min})
$LTA_{min} = 2.457$ mg/L

Step 5 – Calculate water quality based effluent limitation MDEL and AMEL by multiplying LTA_{min} as selected in Step 4, with a factor (multiplier) found in Table 3-7.

Monthly sampling frequency (n) is 30 times per month or less, and the minimum LTA is the $LTA_{1\text{-hour/99}}$, therefore n = 30.

CV = 1.32
MDEL multiplier = 6.245
AMEL multiplier = 1.437
MDEL = $LTA_{min} \times MDEL\ multiplier_{99} = 2.457 \times 6.245 = 15.34$ mg/L
AMEL = $LTA_{min} \times AMEL\ multiplier_{95} = 2.457 \times 1.437 = 3.53$ mg/L

Since the Los Angeles Water Board determines that the Facility's discharge is non-continuous, it is impractical to keep the monthly average effluent limitation of ammonia for the Discharger. The MDEL calculated above is the WQBEL contained herein.

Table F-5. Summary of Ammonia Effluent Limitations for Discharge Points 001 &002

Constituent	Units	Maximum Daily
Ammonia Nitrogen	mg/L	15
Ammonia Nitrogen	lbs/day	25

h. Bacteria Indicators

Total coliform bacteria are used to indicate the likelihood of pathogenic bacteria in surface waters. Given the nature of the Facility, a wastewater treatment plant, pathogens are likely to be present in the effluent if the disinfection process is not operating adequately. As such, the permit contains the following effluent and receiving water limitations:

Effluent Limitations

i. The 7-day median number of total coliform bacteria at some point in the treatment process must not exceed a Most Probable Number (MPN) or Colony Forming Unit (CFU) of 2.2 per 100 milliliters,

ii. The number of total coliform bacteria must not exceed an MPN or CFU of 23 per 100 milliliters in more than one sample within any 30-day period; and

iii. No sample shall exceed an MPN for CFU of 240 total coliform bacteria per 100 milliliters.

These disinfection-based effluent limitations for total coliform are for human health protection and are consistent with requirements established by the State Water Resource Control Board, Division of Drinking Water. These limits for total coliform must be met at the point of the treatment train immediately following disinfection, as a measure of the effectiveness of the disinfection process, and thus these limits are continued herein.

Receiving Water Limitations

No receiving water limitations are proposed for bacteria in this Order. Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries (ISWEBE Plan) of California- Bacteria Provisions and Water Quality Standards Variance Policy, which went into effect upon USEPA approval on March 22, 2019, established *Escherichia coli* (*E. coli*) as the sole indicator of pathogens in freshwater. These *E. coli* water quality objectives supersede any numeric water quality objectives for bacteria for the protection of the REC-1 beneficial use in Los Angeles Water Board Basin Plans prior to the effective date of the Bacteria Provisions, except in certain circumstances, such as where there are existing final effluent limitations based on Title 22 requirements that are more stringent than ISWEBE Bacteria Provisions. Since the total coliform final effluent limitations are more stringent than the water quality objectives established through the ISWEBE Bacteria Provisions, the Title 22 based effluent limitations are retained. In addition, USEPA states in their “NPDES Water Quality Based Permit Limits for Recreational Water Quality Criteria (2015)” that they expect the direct application of criteria values at the end-of-pipe, where the objective is applied directly as permit limits at the discharge point. Since the effluent limitations are applied at the discharge point (end-of-pipe) based on Title 22, which are more stringent than the ISWEBE Bacteria Provisions, additional receiving water limitations are not established.

i. **Temperature**

The Basin Plan contains the following water quality objective for temperature:

The natural receiving water temperature of all regional waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. Alterations that are allowed must meet the requirements below.

For waters designated WARM, water temperature shall not be altered by more than 5°F above the natural temperature. At no time shall these WARM-designated waters be raised above 80°F as a result of waste discharges.

Temperature can adversely affect beneficial uses. The USEPA document, *Quality Criteria for Water 1986* [EPA 440/5-86-001, May 1, 1986], also referred to as the *Gold Book*, discusses temperature and its effects on beneficial uses, such as recreation and aquatic life.

i. The Federal Water Pollution Control Administration in 1967 called temperature "a catalyst, a depressant, an activator, a restrictor, a stimulator, a controller, a killer, and one of the most important water quality characteristics to life in water." The suitability of water for total body immersion is greatly affected by temperature. Depending on the amount of activity by the swimmer, comfortable temperatures range from 20°C to 30°C (68 °F to 86 °F).

ii. Temperature also affects the self-purification phenomenon in water bodies and therefore the aesthetic and sanitary qualities that exist. Increased temperatures accelerate the biodegradation of organic material both in the overlying water and in bottom deposits which makes increased demands on the dissolved oxygen resources of a given system. The typical situation is exacerbated by the fact that oxygen becomes less soluble as water temperature increases. Thus, greater demands are exerted on an increasingly scarce resource which may lead to total oxygen depletion and obnoxious septic conditions. Increased temperature may increase the odor of water because of the increased volatility of odor-causing compounds. Odor problems associated with plankton may also be aggravated.

iii. Temperature changes in water bodies can alter the existing aquatic community. Coutant (1972) has reviewed the effects of temperature on aquatic life reproduction and development. Reproductive elements are noted as perhaps the most thermally restricted of all life phases assuming other factors are at or near optimum levels. Natural short-term temperature fluctuations appear to cause reduced reproduction of fish and invertebrates.

It is impracticable to use a 7-day average or a 30-day average limitation for temperature because it is not adequately protective of beneficial uses. A daily maximum limitation is necessary to protect aquatic life and to implement the Basin Plan water quality objective, which states that at no time shall WARM-designated waters be raised above 80°F as a result of waste discharges.

Based on the Basin Plan Water Quality Objective, this Order contains a final effluent limitation for temperature of 80°F. The prior Order stated, "[t]he temperature of wastes discharged shall not exceed 86°F except as the result of external ambient temperature." Since there has been no discharge since 2005, there is limited data available regarding the temperature for the receiving water

near the outfall and the final effluent, so it is unclear how the discharge will impact the receiving water temperature. The discharge is not expected to cause an exceedance of the Basin Plan water quality objective for temperature because the temperature of the effluent ranged from 67° F to 68° during their discharge from 2001 to 2005. The discharge usually occurred during wet months, January to early March.

j. **Turbidity**

Turbidity is an expression of the optical property that causes light to be scattered in water due to particulate matter such as clay, silt, organic matter, and microscopic organisms. Turbidity can result in a variety of water quality impairments. The effluent limitation for turbidity which reads, “For the protection of the water contact recreation beneficial use, the discharge to water courses shall have received adequate treatment, so that the turbidity of the wastewater does not exceed: (a) a daily average of 2 Nephelometric turbidity units (NTU); (b) 5 NTU more than 5 percent of the time (72 minutes) during any 24 hour period; and (c) 10 NTU at any time” is based on section 60301.320 of Title 22, chapter 3, “Filtered Wastewater” of the CCR. These turbidity effluent limits are continued in this Order.

k. **Radioactivity**

Radioactive substances are generally present in natural waters in extremely low concentrations. Mining or industrial activities increase the amount of radioactive substances in waters to levels that are harmful to aquatic life, wildlife, or humans. Section 301(f) of the CWA contains the following statement with respect to effluent limitations for radioactive substances, “Notwithstanding any other provisions of this Act, it shall be unlawful to discharge any radiological, chemical, or biological warfare agent, any high-level radioactive waste, or any medical waste, into the navigable waters.” Chapter 5.5 of the CWC contains a similar prohibition under section 13375, which reads as follows: “The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is hereby prohibited.” Since this Facility discharges to a reach that has no GWR or MUN beneficial use, no effluent limitation for radioactivity is established in this Order.

l. **Settleable Solids**

Excessive deposition of sediments can destroy spawning habitat, blanket benthic (bottom dwelling) organisms, and abrade the gills of larval fish. The limits for settleable solids are based on the Basin Plan (page 3-16) narrative, “Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses.” The numeric limits are empirically based on results obtained from the settleable solids 1-hour test, using an Imhoff cone.

It is impracticable to use an average weekly or a monthly average limitation for non-continuous discharges, and a daily maximum limitation is protective of beneficial uses because of the intermittent discharge with a limited number of allowed discharge during the wet season. This Facility also has not discharged to a receiving water since 2005, and the probability of the Facility discharging for 7

days in a discharge event is very low. Thus, the daily maximum limit of 0.3 ml/L was is retained herein.

j. **pH**

The hydrogen ion activity of water (pH) is measured on a logarithmic scale, ranging from 0 to 14. While the pH of "pure" water at 25°C is 7.0, the pH of natural waters is usually slightly basic due to the solubility of carbon dioxide from the atmosphere. Minor changes from natural conditions can harm aquatic life. In accordance with 40 CFR part 133.102(c), the effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the POTW demonstrates that (1) inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0. The effluent limitation for pH in this permit requiring that the wastes discharged shall at all times be within the range of 6.5 to 8.5 is taken from the Basin Plan which reads "the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge."

4.3.3. **CTR and SIP**

The CTR and the SIP specify numeric objectives for toxic substances and the procedures whereby these objectives are to be implemented. The procedures include those used to conduct reasonable potential analysis (RPA) to determine the need for effluent limitations for priority pollutants. The Technical Support Document (TSD) also specifies procedures to conduct reasonable potential analyses.

4.3.4. **Determining the Need for WQBELs**

The Los Angeles Water Board developed WQBELs for DDTs and PCBs that have WLAs established in the Santa Monica Bay TMDLs. The Los Angeles Water Board developed WQBELs for these pollutants pursuant to 40 CFR section 122.44(d)(1)(vii), which does not require or contemplate a separate reasonable potential analysis at the time of permit development. The NPDES regulations at 40CFR 122.44(d)(1)(vii)(B) require that NPDES permits include effluent limitations developed consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL. Thus, consistent with the federal requirement and with the NPDES Permit Writers' Manual (EPA-833-K-10-001, September 2010), final effluent limitations have been included in this Order for DDT and PCBs for which a WLA has been assigned to the Facility through the Santa Monica Bay TMDLs.

The SIP at Section 1.3 recognizes that a separate reasonable potential analysis at the time of permit development is not appropriate if a TMDL has been developed.

In accordance with Section 1.3 of the SIP, the Los Angeles Water Board conducted a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Los Angeles Water Board analyzed effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that demonstrate reasonable potential, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and

NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Los Angeles Water Board staff identified the maximum effluent concentration (MEC) and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger. Since the Discharger has not discharged since 2005, the monitoring data collected during 2015-2019 for priority pollutants and a few pollutants from WDRs/WRRs Order No. 00-167 are used to determine reasonable potential. Background data collected during 2001-2005 were not used in this Order because the background data were collected downstream of discharge points. The SIP requires that ambient background concentration should be measured immediately upstream or near the discharge point. Thus, previous effluent limits for copper that were based on background information (Trigger 2) were removed from the reasonable potential analysis for this Order.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete an RPA:

Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limitation is needed.

Trigger 2 – If background water quality (B) > C and the pollutant is detected in the effluent, a limitation is needed.

Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, then best professional judgment is used to determine that a limit is needed.

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Los Angeles Water Board to conduct the RPA. Upon review of the data, and if the Los Angeles Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. Based on the RPA, pollutants that demonstrate reasonable potential are cyanide and bis(2-ethylhexyl)phthalate because the MEC is greater than the C. Table F-6 summarizes the results from the RPA for toxic pollutants and only shows constituents with detected values. Constituents with WLAs from TMDLs, which don't require a separate RPA, are also presented in the Table F-6.

Table F-6. Summary of Reasonable Potential Analysis

CTR No.	Constituent	Applicable Water Quality Criteria (C) µg/L	Max Effluent Concentration (MEC) µg/L (2015 – 2019 Data)	RPA Result – Need Limitation?	Reason
6	Copper	30.5	13	No	C>MEC
9	Nickel	168.54	6	No	C>MEC
13	Zinc	388	68.6	No	C>MEC
14	**Cyanide**	5.2	39	**Yes**	**C<MEC**
26	Chloroform	No criteria	1.3	No	No criteria

CTR No.	Constituent	Applicable Water Quality Criteria (C) µg/L	Max Effluent Concentration (MEC) µg/L (2015 – 2019 Data)	RPA Result – Need Limitation?	Reason
68	**Bis(2-Ethylhexyl) Phthalate**	5.9	7.6	**Yes**	**MEC>C**
108	**4,4'-DDT**	0.00059	<0.05	**Yes**	**TMDL**
109	**4,4'-DDE**	0.00059	<0.05	**Yes**	**TMDL**
110	**4,4'-DDD**	0.00084	<0.05	**Yes**	**TMDL**
119	**PCB 1016**	0.00017	<2.5	**Yes**	**TMDL**
120	**PCB 1221**	0.00017	<2.5	**Yes**	**TMDL**
121	**PCB 1232**	0.00017	<2.5	**Yes**	**TMDL**
122	**PCB 1242**	0.00017	<2.5	**Yes**	**TMDL**
123	**PCB 1248**	0.00017	<2.5	**Yes**	**TMDL**
124	**PCB 1254**	0.00017	<2.5	**Yes**	**TMDL**
125	**PCB 1260**	0.00017	<2.5	**Yes**	**TMDL**

4.3.5. **WQBEL Calculations**

a. Calculation Options. Once RPA has been conducted using either the TSD or the SIP methodologies, WQBELs are calculated. Alternative procedures for calculating WQBELs include:

i. Use WLA from applicable TMDL

ii. Use a steady-state model to derive MDELs and AMELs.

iii. Where sufficient data exist, use a dynamic model which has been approved by the State Water Board.

b. DDT and PCBs Limitations of Santa Monic Bay TMDL

Concentration-based and sediment-based final DDT and PCBs WLAs were established for the Malibu Mesa WRP in the DDT and PCBs TMDL. Therefore, the permit contains final concentration and mass effluent limitations for DDT and PCBs, which are consistent with their final WLAs. The final limits for DDT and PCBS are carried over from Order No. R4-2012-0181.

c. **SIP Calculation Procedure**. Section 1.4 of the SIP requires the step-by-step procedure to "adjust" or convert CTR numeric criteria into AMELs and MDELs, for toxics.

Step 3 of Section 1.4 of the SIP (page 8) lists the statistical equations that adjust CTR criteria for effluent variability.

Step 5 of Section 1.4 of the SIP (page 10) lists the statistical equations that adjust CTR criteria for averaging periods and exceedance frequencies of the criteria/objectives. This section also reads, "For this method only, maximum daily effluent limitations shall be used for POTWs in place of average weekly limitations.

Sample calculation for bis(2-ethylhexyl)phthalate:

Step 1: Identify applicable water quality criteria.

From California Toxics Rule (CTR), we can obtain the human health criterion. There is no Criterion Maximum Concentration (CMC) or the Criterion Continuous Concentration (CCC) for bis(2-ethylhexyl)phthalate.

Human Health Criteria for Organisms only = 5.9 µg/L (CTR page 31712, column D2).

Step 2: Calculate effluent concentration allowance (ECA)

ECA = Criteria in CTR, since no dilution is allowed.

Step 3: Determine long-term average (LTA) discharge condition

Calculate CV:

CV = 0.6, which is a default setting for the number of effluent data points less than ten. In this case, there are five data points.

Find the ECA Multipliers from SIP Table 1 (page 9), or by calculating them using equations on SIP page 6. When CV = 0.6:

ECA Multiplier acute = 0.321 and

ECA Multiplier chronic = 0.527

LTA acute = ECA acute x ECA Multiplier acute = No Criteria

LTA chronic = ECA chronic x ECA Multiplier chronic = No Criteria

Step 4: Select the lowest LTA

In this case there is no LTA since there is no criteria.

Step 5: Calculate the Average Monthly Effluent Limitation (AMEL) & Maximum Daily Effluent Limitation (MDEL) for AQUATIC LIFE

Not applicable since there is no criteria.

Step 6: Find the Average Monthly Effluent Limitation (AMEL) & Maximum Daily Effluent Limitation (MDEL) for HUMAN HEALTH

Find factors. Given CV = 0.6 and n = 4.

MDEL human health limit, factor = 3.11

For AMEL human health limit, factor = 1.55.

The MDEL/AMEL human health factor = 2.01

AMEL human health = ECA = 5.9 µg/L

MDEL human health = ECA x MDEL/AMEL factor

= 5.9 µg/L x 2.01 = 11.8 µg/L

Step 7: Compare the AMELs for Aquatic life and Human health and select the lowest. Compare the MDELs for Aquatic life and Human health and select the lowest

Lowest AMEL = 5.9 µg/L (based on aquatic life protection)

Lowest MDEL = 12 µg/L (based on human health protection)

d. **Impracticability Analysis**

Federal NPDES regulations contained in 40 CFR § 122.45(d) (continuous discharges) state that, for POTWs, all effluent limitations, standards, and prohibitions, including those to achieve water quality standards, shall unless impracticable be stated as average weekly and average monthly discharge limitations.

Since this Facility's discharge is a non-continuous discharge, as set forth in Section 2.1.1, supra, it, it is not necessary to do an impracticability analysis. That said, it is in fact impracticable to include average weekly and average monthly effluent limitations in this permit. This is particularly true since this Facility has not discharged to a water of the United States since 2005; and if it discharges at all, it is allowed to do so either for a total of only 10 days during the wet season, or if there is an emergency as set forth in Section 3.10, and authorized by the Executive Officer. The probability of the Facility discharging for 7 continuous days is very low. Due to the infrequent and non-continuous nature of the discharge, it would be impracticable to include limitations that were developed based on a steady-state discharge. Instead, the effluent limitations for pollutants with water quality based effluent limitations that were developed based on short-term exposure are included as maximum daily limits. The development of the chronic toxicity limits are discussed below in Section 4.3.6.

e. Mass-based limits. 40 CFR § 122.45(f)(1) requires that, except under certain conditions, or for certain pollutants, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR § 122.45(f)(2) allows the permit writer, at his/her discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents.

Table F-7. Summary of Calculated WQBELs for Discharge Points 001 and 002

Parameter	Units	Average Annual	Average Monthly	Average Weekly	Maximum Daily	Notes
Ammonia Nitrogen	mg/L	---		---	15	a
Ammonia Nitrogen	lbs/day	---		---	25	b
Cyanide	µg/L	---		---	8.5	c
Cyanide	lbs/day	---		---	0.014	b
Bis(2-Ethylhexyl) Phthalate	µg/L	---		---	12	c

Parameter	Units	Average Annual	Average Monthly	Average Weekly	Maximum Daily	Notes
Bis(2-Ethylhexyl) Phthalate	lbs/day	---		---	0.02	b
DDT	µg/L	---	0.00022	---	0.00044	a, d
DDT	g/yr	0.061	---	---	---	a, d
PCBs as aroclors	µg/L	---	0.000064	---	0.00013	a, d
PCBs as aroclors	g/yr	0.019	---	---	---	a, d
Chronic Toxicity	Pass or Fail, % Effect (TST)	---	Pass	---	Pass or % Effect <50	e, f

Footnotes for Table F-7

a. Carryover of limits specified in the Order No. R4-2012-0181.

b. The mass-based effluent limitations are based on the plant flow rate of 0.2 mgd and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

c. There is a reasonable potential to exceed the California Toxics Rule cyanide water quality criteria.

d. The *Santa Monica Bay Total Maximum Daily Loads (TMDL) for DDTs and PCBs (Santa Monica Bay TMDLs),* issued by the USEPA on March 26, 2012, includes Waste Load Allocations (WLAs) for Malibu Mesa WRP. The Average Annual Effluent Limitation and Average Monthly Effluent Limitation for DDTs and PCBs are derived from the Santa Monica Bay TMDLs.

e. The average monthly is a Median Monthly Effluent Limitation (MMEL), and the MMEL shall be reported as “Pass” or “Fail.” The Maximum Daily Effluent Limitation (MDEL) shall be reported as “Pass” or “Fail” and “% Effect.” The MMEL for chronic toxicity shall only apply when there is a discharge on more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests may be conducted when one toxicity test results in “Fail.”

f. Numeric WQBELs are established because effluent data for cyanide and bis(2-ethylhexyl)phthalate showed that there is reasonable potential for the effluent to cause or contribute to an exceedance of the chronic toxicity water quality objective. Chronic toxicity is considered a pollutant of concern for protection and evaluation of narrative Basin Plan objectives. Therefore, the Chronic Toxicity final effluent limitation is protective of both the numeric acute toxicity and the narrative toxicity Basin Plan water quality objectives. These final effluent limitations will be implemented using the *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (USEPA 2002, EPA-821-R-02-013), current USEPA guidance in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June /2010)* and *EPA Regions 8, 9, and 10 Toxicity Training Tool (January 2010),* https://www.epa.gov/sites/production/files/documents/ToxTrainingTool10Jan2010.pdf.

End Footnotes for Table F-7

4.3.6. **Whole Effluent Toxicity (WET)**

Whole effluent toxicity (WET) testing protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test

is conducted over a short period and measures mortality. A chronic toxicity test is conducted over a longer period and may measure mortality, reproduction, and growth. Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects until it gets to the higher level.

The effluent limitations for chronic toxicity were established regardless of whether or not there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards.

In the past, the State Water Board reviewed circumstances warranting a numeric chronic toxicity effluent limitation for POTWs when there is reasonable potential. (See SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions].) On September 16, 2003, at a public hearing, the State Water Board adopted Order No. 2003-0012 deferring the issue of numeric chronic toxicity effluent limitation for POTWs until a subsequent Phase of the SIP is adopted. In the meantime, the State Water Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1 TUc trigger, in the Long Beach and Los Coyotes WRP NPDES permits. The Malibu Mesa WRP's NPDES permit contained a similar narrative chronic toxicity effluent limitation, with a numeric trigger for accelerated monitoring, consistent with the State Water Board's precedential Order.

However, many facts have changed since the State Water Board adopted the Los Coyotes Order in 2003. Specifically, USEPA published two new guidance documents with respect to chronic toxicity; the Los Angeles Board has adopted NPDES permits for almost all POTWs and multiple industrial facilities incorporating TST-based effluent limitations for chronic toxicity and has adopted numeric chronic toxicity effluent limitations. In addition to these factual developments, the State Water Board adopted statewide numeric water quality objectives for both acute and chronic toxicity (Toxicity Provisions) on December 1, 2020, but the Toxicity Provisions have not become effective yet. The Los Angeles Water Board finds that numeric effluent limitations for chronic toxicity are necessary, feasible, and appropriate.

Because effluent data exhibited reasonable potential to cause or contribute to an exceedance of the water quality objective, this Order contains numeric chronic toxicity effluent limitations. Compliance with the chronic toxicity requirement contained in this Order shall be determined in accordance with sections 7.10. of this Order. This Order contains a reopener to allow the Los Angeles Water Board to modify the permit, if necessary, to make it consistent with any new policy, law, or regulation.

For this permit, chronic toxicity in the discharge is evaluated using a median monthly effluent limitation and a maximum daily effluent limitation that utilizes USEPA's 2010 TST hypothesis testing approach. The chronic toxicity effluent limitations are expressed as "Pass" for the median monthly summary result and as "Pass" or "<50 % Effect" 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 section 122.45(d) require that all permit limitations be expressed, unless impracticable, as an Average Weekly Effluent Limitation (AWEL) and an Average Monthly Effluent Limitation (AMEL) for POTWs. Following Section 5.2.3 of the TSD, the use of an AWEL is not appropriate for WET. In lieu of an AWEL for POTWs, USEPA recommends establishing an MDEL for toxic pollutants and pollutants in water quality permitting, including WET. This is appropriate for two reasons. The basis for the average weekly requirement for POTWs derives from secondary treatment regulations and is not related to the requirement to assure achievement of water quality standards (WQS). Moreover, an average weekly requirement comprising of up to seven daily samples could average out daily peak toxic concentrations for WET and therefore, the discharge's potential for causing acute and chronic effects would be missed. It is impracticable to use an AWEL, because short-term spikes of toxicity levels that would be permissible under the 7-day average scheme would not be adequately protective of all beneficial uses. 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. However, in cases where a chronic mixing zone is not authorized, USEPA Regions 9 and 10 continue to recommend that the AMEL for chronic WET should be expressed as a median monthly limit (MMEL).

Later in June 2010, USEPA published another guidance document titled, 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 EPA's WET test methods. Section 9.4.1.2 of the USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002), recognizes that, "the statistical methods 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 EPA WET test methods.

USEPA's WET testing program and acute and chronic WET methods rely on the measurement result for a specific test endpoint, not upon achievement of specified concentration-response patterns to determine toxicity. USEPA's WET methods do not require achievement of specified effluent or ambient concentration-response patterns prior to determining that toxicity is present[3]. Nevertheless, USEPA's acute and chronic WET methods require that effluent and ambient concentration-response patterns generated for multi-concentration acute and chronic toxicity tests be reviewed - as a component of test review following statistical analysis - to ensure that the calculated measurement result for the toxicity test is interpreted

[3] See, Supplementary Information in support of the Final Rule establishing WET test methods at 67 Fed.Reg. 69952, 69963, November 19, 2002.

appropriately. (EPA-821-R-02-012, section 12.2.6.2; EPA-821-R-02-013, section 10.2.6.2.). In 2000, USEPA provided guidance for such reviews to ensure that test endpoints for determining toxicity based on the statistical approaches utilized at the time the guidance was written (NOEC, LC50's, IC25's) were calculated appropriately (EPA 821-B-00-004).

USEPA designed its 2000 guidance as a standardized step-by step review process that investigates the causes for 10 commonly observed concentration-response patterns and provides for the proper interpretation of the test endpoints derived from these patterns for NOECs, LC50s, and IC25s, thereby reducing the number of misclassified test results. The guidance provides one of three determinations based on the review steps: (1) that calculated effect concentrations are reliable and should be reported, (2) that calculated effect concentrations are anomalous and should be explained, or (3) that the test was inconclusive and should be repeated with a newly collected sample. The standardized review of the effluent and receiving water concentration-response patterns provided by USEPA's 2000 guidance decreased discrepancies in data interpretation for NOEC, LC50, and IC25 test results, thereby lowering the chance that a truly nontoxic sample would be misclassified and reported as toxic.

Appropriate 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 those samples. 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 toxicity 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 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 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 Accreditation Program (40 CFR section 122.41(h)). As

described in the bioassay laboratory audit directives to the San Jose Creek Water Quality Laboratory from the State Water Resources Control Board dated August 7, 2014, and from the USEPA dated December 24, 2013, 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**

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR § 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, except for copper. In addition, some of pollutants that had monthly average effluent limitations based on water quality objectives (i.e. oil and grease, settleable solids, chloride, MBAS, ammonia, cyanide, and bis(2-ethylhexyl) phthalate) now only have daily maximum effluent limitations based on the fact that the discharge is non-continuous. The backsliding analysis for these pollutants, and copper, is set forth below.

a. Copper: Attainment Water

The final effluent limitations for copper were included in the previous Order but were removed in this Order because, based on the most recent monitoring data, the pollutant did not exhibit reasonable potential to cause or contribute to an exceedance of the applicable water quality criteria.

Section 402(o)(2) of the CWA provides statutory exceptions to the general prohibition of backsliding contained in 402(o)(1). One of these exceptions allows backsliding if, “information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.” The reasonable potential analysis using the updated monitoring data justifies the removal of the effluent limitations for copper based on this exception as long as the cumulative effect of removing the limits results in a decrease in the amount of pollutants discharged into the receiving water. The reasonable potential analysis process focuses on the contaminants with the potential to cause an exceedance of the water quality criteria in the receiving water, and thus results in an overall decrease in the mass of pollutants discharged into the receiving water. The potential for a final effluent limitation to be removed if there is no reasonable potential for the pollutant to cause or contribute to an exceedance of the water quality objective provides an incentive to the discharger to reduce the pollutant load in its discharge, and thus results in an overall decrease in the amount of pollutants discharged into the receiving water. The removal of effluent limitations for this pollutant is thus consistent with the anti-backsliding requirements of the CWA and federal regulations.

In addition, section 303(d)(4)(B) of the CWA allows for a relaxation of effluent limitations where the quality of the receiving water equals or exceeds the levels necessary to protect the designated beneficial uses of the receiving water or

otherwise required by applicable water quality standards, if the revision is subject to and consistent with the State's Antidegradation Policy. Marie Canyon Creek for Discharge Point 001 and unnamed canyon west of Marie Canyon Creek for Discharge Point 002 are not impaired for copper. As described below in section 4.4.2, relaxation or removal of effluent limitations for this pollutant is consistent with the state and federal antidegradation policies. Therefore, the exception to the prohibition on relaxation of effluent limitations found in section 303(d)(4)(B) allows the removal of these effluent limitations.

b. Daily maximum effluent limitation only pollutants:

CWA section 402(o)(2)(A) allows for less stringent final effluent limitations if "material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation."

Here, there were material and substantial alterations and additions to the Facility that made it possible for the Discharger to discharge their effluent intermittently (non-continuous discharge) rather than continuous. Specifically, the size of the flow equalization station upstream of the treatment facility was increased in size and converted from above ground to below ground to facilitate gravity flow. During this time, the wet-weather storage capacity of the reservoirs was also increased from 3.5 million gallons to a net capacity of 7.4 million gallons.

Since the increased volume of the storage reservoirs was the result of a significant modification and addition to the operation practice and treatment process, the removal of the monthly average limits for these pollutants is permitted under CWA 402(o)(2)(A). The daily maximum effluent limitations for these pollutants are continued to be based on the water quality objectives in the Basin Plan, and/or the California Code of Regulations. Since the daily maximum effluent limitations are based on the applicable regulations for the protection of the beneficial uses, the final effluent limitations for these pollutants will ensure the discharge meets the applicable water quality objective and prohibit pollutant loads above that which are protective of the beneficial uses of the receiving water.

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.

Effluent limitations for copper are not included in this Order because monitoring data demonstrated that there is no reasonable potential for the discharge to cause or contribute to an exceedance of the water quality standard for the pollutant. Monitoring for this pollutant in the effluent and receiving water continue to be required under this Order. As such, the discharges in this Order are consistent with the antidegradation provisions of 40 CFR part 131.12 and State Water Board Resolution No. 68-16 for copper because the discharge will not degrade the receiving water quality.

The other final effluent limitations that were relaxed are for pollutants for which the previous permit included average monthly effluent limitations, specially, oil and grease, settleable solids, chloride, MBAS, ammonia, cyanide, and bis(2-ethylhexyl) phthalate. Due to the increase of the storage volume of the two reservoirs, the Discharger has not needed to discharge since 2005 and the Los Angeles Water Board has found that the discharge is non-continuous. However, this Order does not allow for a reduction in the level of treatment. Moreover, the daily maximum effluent limitations include both concentration-based and mass-based limitations, which ensure that the Discharger will be held to performance levels that will not adversely impact the beneficial uses or degrade the water quality of Marie Canyon Creek, the unnamed canyon west of Marine Canyon Creek or the Pacific Ocean. These maximum daily effluent limitations have been developed consistent with federal effluent limitation guidelines and state regulations. Together with the receiving water limitations, and effluent and receiving water monitoring requirements, the effluent limitations in this permit ensure that any excursions above water quality objectives applicable to the Marie Canyon Creek and the unnamed canyon west of Marine Canyon Creek will be apparent and can be addressed immediately. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Therefore, the permitted discharge is consistent with the state's antidegradation policy.

The Los Angeles Water Board may modify the terms of this Order to prevent degradation of the receiving water quality based on any change in the concentration of these constituents in the effluent or receiving water that indicates that a degradation of the receiving water quality may occur.

With respect to all of the discharges authorized herein, the treatment or controls required by this Order are the best practicable treatment or controls of the discharge necessary to assure that a pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the State will be maintained.

4.4.3. **Stringency of Requirements for Individual Pollutants**

This Order contains both TBELs and WQBELs for individual pollutants. The TBELs consist of restrictions on BOD, TSS, and percent removal of BOD and TSS. Restrictions on BOD, TSS, and percent removal of BOD and TSS are discussed in section 4.2. of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In

addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards.

Water quality-based effluent limitations have been scientifically derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR implemented by the SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and WQOs contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR section 131.21(c)(1). This Order's restrictions on individual pollutants are collectively no more stringent than required to implement the requirements of the CWA and the applicable water quality standards for purposes of the CWA.

Table F-8. Summary of Final Effluent Limitations for Discharge Points 001 and 002

Parameter	Units	Average Annually	Average Monthly	Average Weekly	Maximum Daily	Notes
Biochemical Oxygen Demand ($BOD_5$20°C)	mg/L	---	20	30	45	a
$BOD_5$20°C	lbs/day	---	33	50	75	b
Total Suspended Solids (TSS)	mg/L	---	15	40	45	a
TSS	lbs/day	---	25	67	75	b
Removal Efficiency for BOD and TSS	%	---	≥85	---	---	a, c
Oil and Grease	mg/L	---		---	15	a
Oil and Grease	lbs/day	---		---	280	b
Settleable Solids	mL/L	---		---	0.3	a
pH	Standard Unit	---	---	---	6.5-8.5	d
Temperature	°F	---	---	---	80	d
Total coliform	MPN or CFU/100 mL	---	23	2.2	240	e
Chloride	mg/L	---		---	230	d
Chloride	lbs/day	---		---	384	b
MBAS	mg/L	---		---	0.5	a
MBAS	lbs/day	---		---	0.8	b
Ammonia Nitrogen	mg/L	---		---	15	a
Ammonia Nitrogen	lbs/day	---		---	25	b
Cyanide	µg/L	---		---	8.5	f
Cyanide	lbs/day	---		---	0.014	b
Bis(2-Ethylhexyl)	µg/L	---		---	12	f

Parameter	Units	Average Annually	Average Monthly	Average Weekly	Maximum Daily	Notes
Phthalate						
Bis(2-Ethylhexyl) Phthalate	lbs/day	---		---	0.02	b
DDT	µg/L	---	0.00022	---	0.00044	a, g
DDT	g/yr	0.061	---	---	---	a, g
PCBs as aroclors	µg/L	---	0.000064	---	0.00013	a, g
PCBs as aroclors	g/yr	0.019	---	---	---	a, g
Turbidity	NTU	---	---	---	---	h
Chronic Toxicity	Pass or Fail, % Effect (TST)	---	Pass	---	Pass or % Effect <50	i, j

Footnotes for Table F-8

a. Carryover of limits specified in the Order No. R4-2012-0181.

b. The mass-based effluent limitations are based on the plant permitted flow rate of 0.2 mgd and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

c. 40 CFR part 133.

d. Basin Plan.

e. The wastes discharged to water courses shall always be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if (1) the median number of total coliform bacteria at some point in the treatment process does not exceed a 7-day median of 2.2 Most Probable Number (MPN) or Colony Forming Units (CFU) per 100 milliliters utilizing the bacteriological results of the last seven (7) days for which an analysis has been completed, (2) the number of total coliform bacteria does not exceed 23 MPN or CFU per 100 milliliters in more than one sample within any 30-day period, and (3) no sample shall exceed 240 MPN or CFU of total coliform bacteria per 100 milliliters. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and disinfection processes.

f. There is a reasonable potential to exceed the California Toxics Rule water quality criteria.

g. The *Santa Monica Bay Total Maximum Daily Loads (TMDL) for DDTs and PCBs (Santa Monica Bay TMDLs),* issued by the USEPA on March 26, 2012, includes Waste Load Allocations (WLAs) for Malibu Mesa WRP. The Average Annual Effluent Limitation and Average Monthly Effluent Limitation for DDTs and PCBs are derived from the Santa Monica Bay TMDLs.

h. For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the wastewater does not exceed any of the following: (a) an average of 2 Nephelometric turbidity units (NTUs) within a 24-hour period; (b) 5 NTUs more than 5 percent of the time (72 minutes) within a 24-hour period; and (c) 10 NTU at any time.

i. The average monthly is a Median Monthly Effluent Limitation (MMEL), and the MMEL shall be reported as “Pass” or “Fail.” The Maximum Daily Effluent Limitation (MDEL) shall be reported as “Pass” or “Fail” and “% Effect.” The MMEL for chronic toxicity shall only apply when there is a discharge on more than one day in a calendar month period. During such

calendar months, up to three independent toxicity tests may be conducted when one toxicity test results in "Fail."

j. Numeric toxicity effluent limitations are established due to the presence of toxic pollutant and other pollutants, such as ammonia and cyanide, in the effluent, which can aggregate toxic effects to occur. Chronic toxicity is considered a pollutant of concern for protection and evaluation of narrative Basin Plan objectives. Therefore, the Chronic Toxicity final effluent limitation is protective of both the numeric acute toxicity and the narrative toxicity Basin Plan water quality objectives. These final effluent limitations will be implemented using the *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (USEPA 2002, EPA-821-R-02-013), current USEPA guidance in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June /2010)* and *EPA Regions 8, 9, and 10 Toxicity Training Tool (January 2010),* https://www.epa.gov/sites/production/files/documents/ToxTrainingTool10Jan2010.pdf.

End Footnotes for Table F-8

4.5. **Interim Effluent Limitations – Not Applicable**

4.6. **Land Discharge Specifications – Not Applicable**

4.7. **Recycling Specifications**

Pursuant Order No. 00-167 adopted by this Los Angeles Water Board on November 9, 2000, the Discharger is allowed to use its tertiary-treated effluent as recycled water for landscape irrigation at the Facility. This Order also authorizes the Discharger to deliver the tertiary-treated effluent as recycled water for landscape impoundment and irrigation at the Pepperdine University. The Discharger shall continue to investigate the feasibility of recycling, conservation, and/or alternative disposal methods for wastewater (such as groundwater injection), and/or beneficial use of stormwater and dry-weather urban runoff. The Discharger is not required to submit a recycled water feasibility study because approximately 100% of the final effluent produced at the Malibu Mesa WRF is already recycled.

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

5.1. **Surface Water**

Receiving water limitations are based on WQOs contained in the Basin Plan and other statewide plans and are a required part of this Order.

5.2. **Groundwater – Not Applicable**

This Order and Monitoring and Reporting Program do not include requirements for groundwater monitoring because no limitations are based upon the protection of MUN use of underlying groundwater.

6. RATIONALE FOR PROVISIONS

6.1. **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. The Discharger

must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

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 sections 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).

6.2. **Special Provisions**

6.2.1. **Reopener Provisions**

These provisions are based on 40 CFR part 123. 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 use or disposal practices, or adoption of new regulations by the State Water Board or Los Angeles Water Board, including revisions to the Basin Plan.

6.2.2. **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 No. 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. This provision requires the Discharger to clarify that it has increased plant capacity through the addition of new treatment system(s) to obtain alternative effluent limitations for the discharge from the treatment system(s). This provision requires the Discharger to report specific time schedules for the plant's projects. This provision requires the Discharger 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 CWC and allows a time 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 Facility's increasing hydraulic capacity and growth in the service area.

6.2.3. **Best Management Practices and Pollution Prevention**

Pollution Minimization Program (PMP). This provision is based on the requirements of section 2.4.5 of the SIP.

6.2.4. **Construction, Operation, and Maintenance Specifications**

This provision is based on the requirements of 40 CFR section 122.41(e) and the previous order.

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

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 Los Angeles Water Boards, Arizona Department of Environmental Quality or USEPA, to whose jurisdiction the Facility's biosolids will be transported and applied.

b. **Pretreatment Requirements.** This facility does not currently provide service to any significant industrial users (SIUs) and therefore does not maintain an active pretreatment program. The Discharger shall assess current and future users to determine if SIUs exist that would require the development of a pretreatment program.

c. **Filter Bypass Requirements.** Conditions pertaining to bypass are contained in Attachment D, Section I. Standard Provisions – Permit Compliance, subsection G. The bypass or overflow of untreated or partially treated wastewater to waters of the State is prohibited, except as allowed under conditions stated in 40 CFR section 122.41(m) and (n). During periods of elevated, wet weather flows, a portion of the secondary treated wastewater is diverted around the tertiary filters. These anticipated discharges are approved under the bypass conditions when the resulting combined discharge of fully treated (tertiary) and partially treated (secondary) wastewater complies with the effluent and receiving water limitations in this Order.

d. **Spill Reporting Requirements.** This Order established 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.

The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (SSS WDRs) on May 2, 2006. The Monitoring and Reporting Requirements for the SSS WDRs were amended by Water Quality Order WQ 2008-0002-EXEC on February 20, 2008. The SSS WDRs requires 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 requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Furthermore, the SSS WDRs contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. Inasmuch that 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 region has experienced loss of recreational use at coastal beaches and in Arroyo Conejo as a result of major sewage spills. The SSS WDRs requirements are intended to prevent or minimize impacts to receiving waters as a result of spills.

6.2.6. **Other Special Provisions (Not Applicable)**

6.2.7. **Compliance Schedules (Not Applicable)**

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 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 sections 13267 and 13383 also authorize the Los Angeles Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

7.1. Influent Monitoring

Influent Monitoring is required:

- To determine compliance with the permit conditions for $BOD_5$20°C and suspended solids removal rates.
- To assess treatment plant performance.
- To assess the effectiveness of the Pretreatment Program.
- As a requirement of the PMP.

7.2. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order 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 of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the CWC, and Los Angeles Water Board policies. The MRP also contains sampling program specific for the Discharger'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. Further, in accordance with section 1.3 of the SIP, a periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

Monitoring for those pollutants expected to be present in the discharge from the Facility, will be required as shown on the MRP and as required in the SIP.

Table F-4. Monitoring Frequency Comparison

Parameter	Monitoring Frequency (2012 Permit)	Monitoring Frequency (2021 Permit)
Total waste flow	continuous	No change
Turbidity	1/Discharge	No change
Temperature	Daily	No change
pH	Daily	No change
Settleable solids	Daily	No change
Total suspended solids	Daily	No change
Oil and grease	1/Discharge	No change
$BOD_5$20°C	1/Discharge	No change
Dissolved Oxygen	1/Discharge	No change
Chloride	1/Discharge	No change
Total coliform	1/Discharge	No change
Fecal Coliform	1/Discharge	No change
E. coli	1/Discharge	No change
MBAS	1/Discharge	1/Year
CTAS	1/Discharge	1/Year
Ammonia nitrogen	1/Discharge	No change
Nitrate nitrogen	1/Discharge	No change
Nitrite nitrogen	1/Discharge	No change
Organic nitrogen	1/Discharge	No change
Total nitrogen	1/Discharge	No change
Total hardness ($CaCO_3$)	1/Discharge	1/Year
Chronic toxicity	1/Discharge	1/Quarter
Acute toxicity	1/Discharge	Removed
Cyanide	1/Discharge	No change
Bis(2-ethylhexyl)phthalate	1/Discharge	No change
DDTs (DDT,DDE, DDD)	1/Discharge	1/Quarter
PCBs as aroclors	1/Discharge	1/Quarter
PCBs as congeners	1/Discharge	1/Year
Methyl tert butyl ether (MTBE)	1/Discharge	1/Year
Perchlorate	1/Discharge	1/Year
1,4-dioxane	1/Discharge	1/Year
1,2,3-trichloropropane	1/Discharge	1/Year
USEPA Priority Pollutants	1/Discharge	1/Year

7.3. **Whole Effluent Toxicity Testing Requirements**

WET testing protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a short or longer period and may measure mortality, reproduction, and growth. Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects until it gets to the higher level. For this permit, chronic toxicity in the discharge is evaluated using USEPA's 2010 TST hypothesis testing approach. The chronic toxicity effluent limitations are as stringent as necessary to protect the Basin Plan Water Quality Objective for chronic toxicity. The rationale for WET has been discussed extensively in section 4.3.6. of this Fact Sheet.

7.4. **Receiving Water Monitoring**

7.4.1. **Surface Water**

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water.

7.4.2. **Groundwater – (Not Applicable)**

7.5. **Other Monitoring Requirements – (Not Applicable)**

7.5.1. **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. CONSIDERATION OF NEED TO PREVENT NUISANCE AND CWC SECTION 13241 FACTORS

Some of the provisions/requirements in this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations. As required by CWC section 13263, the Los Angeles Water Board has considered the need to prevent nuisance and the factors listed in CWC section 13241 in establishing the state law

provisions/requirements. The Los Angeles Water Board finds, on balance, that the state law requirements in this Order are 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.

8.1. Need to prevent nuisance: The state law requirements in this Order are required to prevent pollution or nuisance as defined in section 13050, subdivisions (l) and (m), of the CWC. Many are also required in accordance with narrative water quality objectives in the Basin Plan. These state requirements include, but are not limited to, groundwater limitations, spill prevention plans, operator certification, sanitary sewer overflow reporting, and requirements for standby or emergency power. The Los Angeles Water Board has taken this factor into account in establishing effluent limitations in the Order.

8.2. 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. The Los Angeles Water Board has taken this factor into account in establishing effluent limitations in the Order. The limits herein protect the past, present and probable future beneficial uses of the water; and the limits are in compliance with the Recycled Water Policy.

8.3. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto: The environmental characteristics are discussed in the Basin Plan, the Region's Watershed Management Initiative Chapter, and are also 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 water, will be improved by compliance with the requirements of this Order. Additional information on the Santa Monica Bay Watershed Management Area is available at http://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/ws_santamonica.shtml.

8.4. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area: The beneficial uses of the waterbodies in the Marie Canyon Creek Watershed can reasonably be achieved through the coordinate control of all factors that affect water quality in the area. A TMDL has been developed (as required by the CWA) for impairments due to DDT and PCBs in Santa Monica Bay to which the Marie Canyon Creek discharges. Several Regional Water Board programs and actions are in place to address the water quality impairments, including regulation of point source municipal and industrial discharges with appropriate NPDES permits and non-point source discharges such as irrigated agriculture. All these regulatory programs control the discharge of pollutants to surface and ground waters to prevent nuisance and protect beneficial uses. These regulatory programs have resulted in watershed solutions and have improved water quality. Generally, improvements in the quality of the receiving waters impacted by the permittee's discharges can be achieved by reducing the volume of discharges to receiving waters (e.g., through increased recycling), reducing pollutant loads through source control/pollution prevention, including operational source control such as public education (e.g., disposal of pesticides, pharmaceuticals, and personal care products

into the sewer) and product or materials elimination or substitution, and removing pollutants through treatment.

8.5. 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. Any additional costs associated with complying with state law requirements are reasonably necessary to prevent nuisance and protect beneficial uses identified in the Basin Plan. Further, the loss of, or impacts to, beneficial uses would have a detrimental economic impact. 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.

8.6. Need for developing housing within the region: The Los Angeles Water Board does not anticipate that the state law requirements in this Order 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 making more 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 improved water quality.

8.7. Need to develop and use recycled water: The State Water Board's Recycled Water Policy requires the 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 additional 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. Moreover, the Permittee's facility generates recycled water in conformance with the Recycled Water Policy and that water is used by facilities like Pepperdine University. Therefore this factor weighs heavily in support of issuing this Order.

9. PUBLIC PARTICIPATION

The Los Angeles Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the Malibu Mesa WRP. 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.

9.1. Notification of Interested Parties

The Los Angeles Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the following: (1) At the county office at 900 South Fremont Avenue, Alhambra, CA 91803, and (2) At the Malibu Mesa WRP at 3836 Malibu Country Drive, Malibu, CA 90265. Interested agencies and persons were also copied on the transmittal email to the

Discharger regarding 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 at http://www.waterboards.ca.gov/losangeles/.

9.2. **Written Comments**

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Los Angeles Water Board at the address on the cover page of this Order, or by email submitted to losangeles@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 March 5, 2021**.

9.3. **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:	April 8, 2021
Time:	09:00 a.m.
Location:	Remote meeting

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.

9.4. **Reconsideration 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 at waterqualitypetitions@waterboards.ca.gov

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

9.5. **Information and Copying**

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the 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

9.6. **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.

9.7. **Additional Information**

Requests for additional information or questions regarding this order should be directed to Don Tsai 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