CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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ORDER R4-2024-0390
NPDES NUMBER CA0064556

WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR NEWHALL RANCH SANITATION DISTRICT NEWHALL RANCH WATER RECLAMATION PLANT

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

Table 1. Discharger Information

Discharger:	Newhall Ranch Sanitation District (Discharger or Permittee)
Name of Facility:	Newhall Ranch Water Reclamation Plant (Newhall Ranch WRP or Facility)
Facility Address:	Hwy 126 at the Los Angeles/ Ventura County Line Newhall, CA 91355 Los Angeles County

Table 2. Discharge Location

Discharge point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Tertiary treated wastewater	34.40316667°	-118.689667°	Santa Clara River (Reach 5)

Table 3. Administrative Information

This Order was Adopted on:	December 19, 2024
This Order shall become effective on:	March 1, 2025
This Order shall expire on:	February 28, 2030
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:	Major

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

Jenny Newman

Digitally signed by Jenny Newman
Date: 2025.01.21 15:50:33 -08'00'

Susana Arredondo, Executive Officer

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1. FACILITY INFORMATION

Information describing the Newhall Ranch Water Reclamation Plant (Newhall Ranch 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 U.S. EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

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

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

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

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

THEREFORE, IT IS HEREBY ORDERED that Order Number R4-2019-0077 is terminated upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Permittee shall comply with the requirements in this Order. This action in no way prevents the Los Angeles Water Board from taking enforcement action for past violations of the previous Order.

3. DISCHARGE PROHIBITIONS

3.1. 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 when meeting the criteria for exceptions in 40 CFR 122.41(m), as discussed 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 2 million gallons per day (mgd) design capacity.

3.4. The Permittee shall not cause degradation of any water body, except as consistent with the State Water Resources Control Board (State Water Board) Resolution Number 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 Water Code.

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.

4. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

4.1. Effluent Limitations – Discharge Point 001

4.1.1. Final Effluent Limitations - Discharge Point 001

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

Table 4. Effluent Limitations for Discharge Point 001

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	3-Month Rolling Average	Notes
Biochemical Oxygen Demand ($BOD_5$20°C)	mg/L	20	30	45	---	---
$BOD_5$20°C	lbs/day	330	500	750	---	a
Total Suspended Solids (TSS)	mg/L	15	40	45	---	---
TSS	lbs/day	250	670	750	---	a

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	3-Month Rolling Average	Notes
Removal Efficiency for BOD and TSS	%	≥85	---	---	---	---
Oil and Grease	mg/L	10	---	15	---	---
Oil and Grease	lbs/day	170	---	250	---	a
Settleable Solids	mL/L	0.1	---	0.3	---	---
Total Residual Chlorine	mg/L	---	---	0.1	---	---
Total Residual Chlorine	lbs/day	---	---	1.7	---	a
Temperature	°F	---	---	80	---	--
Total coliform	MPN or CFU/100 mL	23	2.2	240	---	b
E. coli	MPN or CFU/ 100 mL	126	2.2	235	---	c
Combined Radium-226 and Radium 228	pCi/L	5	---	---	---	d
Gross Alpha particle activity (excluding radon and uranium)	pCi/L	15	---	---	---	d
Uranium	pCi/L	20	---	---	---	d
Gross Beta/photon emitters	millirem/ year	4	---	---	---	d
Strontium-90	pCi/L	8	---	---	---	d
Tritium	pCi/L	20,000	---	---	---	d
Chloride	mg/L	---	---	---	100	e
Chloride	lbs/day	---	---	---	1,700	a
Total Dissolved Solids	mg/L	1,000	---	---	---	---
Total Dissolved Solids	lbs/day	16,700	---	---	---	a
Sulfate	mg/L	400	---	---	---	---
Sulfate	lbs/day	6,700	---	---	---	a
Boron	mg/L	1.5	---	---	---	---
Boron	lbs/day	25	---	---	---	a
Copper	µg/L	11	---	34	---	---
Copper	lbs/day	0.18	---	0.57	---	a
Methylene Blue Activated Substance (MBAS)	mg/L	0.5	---	---	---	---

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	3-Month Rolling Average	Notes
MBAS	lbs/day	8	---	---	---	a
Nitrite (as N)	mg/L	0.9	---	---	---	---
Nitrite (as N)	lbs/day	15	---	---	---	a
Nitrate + Nitrite (as N)	mg/L	5	---	---	---	---
Nitrate + Nitrite (as N)	lbs/day	80	---	---	---	a
Ammonia Nitrogen	mg/L	1.75	---	5.2	---	f
Ammonia Nitrogen	lbs/day	29	---	87	---	a
Selenium	µg/L	4.5	---	6.8	---	---
Selenium	lbs/day	0.08	---	0.11	---	a
Cyanide	µg/L	4.3	---	8.1	---	---
Cyanide	lbs/day	0.071	---	0.14	---	a
2,3,7,8-TCDD	pg/L	0.014	---	0.028	---	---
2,3,7,8-TCDD	lbs/day	2.3×10^{-10}	---	4.7×10^{-10}	---	a
Bis(2-ethylhexyl) Phthalate	µg/L	4	---	---	---	---
Bis(2-ethylhexyl) Phthalate	lbs/day	0.07	---	---	---	---
Iron	µg/L	300	---	---	---	---
Iron	lbs/day	5	---	---	---	a
Total trihalomethanes (TTHMs)	µg/L	80	---	---	---	---
TTHMs	lbs/day	1.3	---	---	---	a
Chronic Toxicity *Raphidocelis subcapitata* Growth endpoint	Pass or Fail (Test of Significant Toxicity (TST)), % Effect	Pass	---	Pass (TST) or % Effect < 50 (growth endpoint)	---	g, h

Footnotes for Table 4

a. The mass-based effluent limitations are based on the plant design flow rate of 2 MGD and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

b. The wastes discharged to water courses shall 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.

c. The final effluent limitations for *Escherichia coli* (*E.coli)* are based on the Waste Load Allocations (WLAs) for the Newhall Ranch WRP, contained in Chapter 7-36 of the Basin Plan. The waste discharged shall meet the following effluent limits: 7-day median of 2.2 MPN/100 mL of *E. coli*, a daily maximum of 235 MPN/100mL and a geometric mean limit of 126/100 mL for *E. coli* are permitted within the month.
d. The radioactivity final effluent limitations shall not exceed the limits specified in Title 22, chapter 15, article 5, sections 64442 and 64443, of the California Code of Regulations (CCR) or subsequent revisions.
e. The final effluent limitation for chloride is expressed as a 3-month rolling average, consistent with the WLA for the Newhall Ranch WRP contained in Chapter 7-6 of the Basin Plan.
f. The final effluent limitation for ammonia as nitrogen is based on the WLA contained in Chapter 7-9 of the Basin Plan.
g. The effluent limitations for chronic toxicity are expressed as a Maximum Daily Effluent Limitation and as a Median Monthly Effluent Limitation (not an Average Monthly Effluent Limitation).
h. The effluent limitation shall be applicable to the green algae *Raphidocelis subcapitata* (formerly known as *Selenastrum capricornutum*) test until the Discharger completes the first species sensitivity screening for the Newhall Ranch WRP. The effluent limitation shall then be applicable to the most sensitive species determined from the first species sensitivity screening.

End of Footnotes for Table 4

b. For the protection of the groundwater recharge (GWR) beneficial use of the surface water, which is intended to protect groundwater quality where surface water recharges groundwater, the wastes discharged shall not adversely affect the GWR beneficial use or cause a condition of pollution or nuisance.

c. pH shall be maintained in the final effluent within the limits of 6.5 and 8.5 standard units.

d. The turbidity of the treated wastewater shall 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.

4.1.2. Interim Effluent Limitations – Not Applicable

4.2. Land Discharge Specifications – Not Applicable

4.3. Recycling Specifications

To promote and track the use of recycled water, the Discharger shall do the following:

4.3.1. Recycled Water Feasibility Investigation

The Discharger shall continue to investigate the feasibility of recycling, conservation, and/or alternative disposal methods for wastewater (such as groundwater injection), and/or capture and treatment of dry-weather urban runoff and stormwater on a permissive basis for beneficial reuse. The Discharger shall submit a feasibility study one year following start-up of operations of the Newhall Ranch WRP.

4.3.2. The Discharger shall monitor and report recycled water usage from the Newhall Ranch WRP in accordance with section 9.3. of the MRP.

5. RECEIVING WATER LIMITATIONS

5.1. Surface Water Limitations

Receiving water limitations are based on the water quality objectives in the Basin Plan. The discharge shall not cause the following in the receiving water:

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. The total residual chlorine shall not persist in the receiving waters at any concentration that causes impairment of beneficial uses as a result of the wastes discharged.

5.1.5. 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%.

5.1.6. 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.

5.1.7. 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.

5.1.8. 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.

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

5.1.10. Wastes 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.

5.1.11. 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 waters discharged.

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

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 that cause nuisance or adversely affect beneficial uses.

5.1.16. 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.

5.1.17. No physical evidence of wastes discharged shall be visible at any time in the water or on beaches, shores, rocks, or structures.

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 natural hydrologic conditions necessary to support the physical, chemical, and biological characteristics present in wetlands shall be protected to prevent significant adverse effects on: (a) natural temperature, pH, dissolved oxygen, and other natural physical and chemical conditions; (b) movement of aquatic fauna; (c) survival and reproduction of aquatic flora and fauna; and (d) water levels.

5.1.20. The existing habitats and associated populations of wetlands fauna and flora shall be maintained by (a) maintaining substrate characteristics necessary to support flora and fauna, which would be present naturally; (b) protecting food supplies for fish and

wildlife; (c) protecting reproductive and nursery areas; and, (d) protecting wildlife corridors.

5.1.21. The wastes discharged shall not cause the ammonia concentration in the receiving water to be present at levels that, when oxidized to nitrate, pose a threat to groundwater quality.

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

5.2. Groundwater Limitations – Not Applicable

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 Water Code.

b. Odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system due to improper operation of facilities and/or spills, bypass, or overflow of sewage sludge, as determined by the Los Angeles Water Board, are prohibited.

c. All facilities used for collection, transport, treatment, or disposal of wastes shall be adequately protected against damage resulting from overflow, washout, or inundation from a storm or flood having a 1-percent chance of occurring in a 24-hour period in any given year.

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

e. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer of the Los Angeles Water Board.

f. The provisions of this order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.

g. Nothing in this 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.

h. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of stormwater to storm drain systems or other water courses under their jurisdiction, including

applicable requirements in municipal stormwater management programs developed to comply with the NPDES permit(s) issued by the Los Angeles Water Board to local agencies.

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

j. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the federal CWA and amendments thereto.

k. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility; and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

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

m. Oil or oily material, chemicals, refuse, or other polluting materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.

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

o. If there is any storage of hazardous or toxic materials or hydrocarbons at this Facility and if the Facility is not always manned, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

p. The Discharger shall file with the Los Angeles Water Board a report of waste discharge at least 120 days before making any proposed change in the character, location or volume of the discharge.

q. In the event of any change in name, ownership, or control of these waste disposal facilities, the Discharger shall notify the Los Angeles Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Los Angeles Water Board, 30 days prior to taking effect.

r. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this Order.

s. The Discharger shall notify the 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.

t. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this Facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

u. Water Code section 13385(h)(i) requires the Los Angeles Water Board to assess a mandatory minimum penalty of three-thousand dollars ($3,000) for each serious violation. Pursuant to Water Code section 13385(h)(2), a “serious violation” is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR section 123.45 specifies the Group I and II pollutants. Pursuant to Water Code section 13385.1(a)(1), a “serious violation” is also defined as “a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.”

v. Water Code section 13385(i) requires the Los Angeles Water Board to assess a mandatory minimum penalty of three-thousand dollars ($3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation four or more times in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three non-serious violations within that time period.

w. Pursuant to Water Code section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, “effluent limitation” means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.

x. Water Code section 13387(e) provides that any person who knowingly makes any false statement, representation, or certification in any record or other document

submitted or required to be maintained under this order, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained in this order shall be punished by a fine of not more than twenty-five thousand dollars ($25,000), imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code for 16, 20, or 24 months, or by both that fine and imprisonment. For a subsequent conviction, such a person shall be punished by a fine of not more than twenty-five thousand dollars ($25,000) per day of violation, by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code for two, three, or four years, or by both that fine and imprisonment.

y. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Manager of the Watershed Regulatory Section at the Los Angeles Water Board by telephone at (213) 576-6616 or by email at Jeong-Hee.Lim@waterboards.ca.gov 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-9322 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 Los Angeles Water Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order 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.

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

k. This Order may be reopened and modified to incorporate a requirement for the Discharger to develop a pretreatment program pursuant to 40 CFR 403.8(a) when the Los Angeles Water Board Executive Officer determines that a pretreatment program is necessary due to any new introduction of pollutants into the POTW or any substantial change in the volume or character of pollutants being introduced.

l. This Order may be reopened and modified to revise the test species used for chronic toxicity monitoring if a species sensitivity screening concludes that the most sensitive species is no longer the green algae *Raphidocelis subcapitata* (formerly known as *Selenastrum capricornutum)*.

6.3.2. Special Studies, Technical Papers and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

The Discharger shall update 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.

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

c. New Wastewater Treatment Unit or Plant Expansion

If the Discharger plans to install new treatment units or expand the wastewater treatment plant, the Discharger shall submit an antidegradation analysis and engineering report along with an installation schedule to the Los Angeles Water Board. The Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. If the Discharger increases plant capacity, the Discharger shall demonstrate that treatment systems are effective in preventing violations of effluent limitations.

6.3.3. Best Management Practices and Pollution Prevention

a. Stormwater 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 updated 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. At a minimum, the plan shall include sections on spill clean-up and containment measures, nuisance and odor control measures, public communication and notification, monitoring, and reporting to the public and regulatory agencies. The Discharger shall review and amend the plan as appropriate after each spill from the Facility or in the service area of the Facility. The Discharger shall include a discussion in the annual summary report of any modifications to the Plan and the application of the plan to all spills during the year.

c. Pollutant Minimization Program (PMP)

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

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

i. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the ML; or

ii. The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP.

The Discharger may consult with the Los Angeles Water Board prior to initiating a PMP to ensure a PMP is necessary and following the consultation, the Discharger shall initiate a PMP if directed by the Los Angeles Water Board. The goal of the PMP shall be to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Los Angeles Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan (PPP), if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

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

i. An annual review and semi-annual monitoring of potential sources of the reportable pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

ii. Quarterly monitoring for the reportable pollutant(s) in the influent to the wastewater treatment system;

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

iv. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy.

An annual status report that shall be submitted to the Los Angeles Water Board including:

(a) All PMP monitoring results for the previous year;

(b) A list of potential sources of the reportable priority pollutant(s);

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

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

6.3.4. Construction, Operation and Maintenance Specifications

a. Certified Wastewater Treatment Plant Operator. Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to California Code of Regulations (CCR), title 23, division 3, chapter 26 (Water Code sections 13625 – 13633). All treatment plant operators shall also be trained in emergency response.

b. Climate Change Effects Vulnerability Assessment and Mitigation Plan. The Discharger shall consider the impacts of climate change as they affect the operation of the treatment facility due to flooding, 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. The permittee shall also identify new or increased threats to the sewer system resulting from climate change that may impact desired levels of service in the next 20 years. The permittee shall project upgrades to existing assets or new infrastructure projects, and associated costs, necessary to meet desired levels of service. Climate change research also indicates the overarching driver of climate change is increased atmospheric carbon dioxide from human activity. The increased carbon dioxide emissions trigger changes to climatic patterns, which increase the intensity of sea level rise and coastal storm surges, lead to more erratic rainfall and local weather patterns, trigger a gradual warming of freshwater and ocean temperatures, and trigger changes to ocean water chemistry. As such, the Climate Change Plan shall also identify steps being taken or planned to address greenhouse

gas emissions attributable to wastewater treatment plants and effluent discharge processes. The Climate Change Plan is due 12 months after completion of the design phase of the Facility.

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. If the existing alternate power source is insufficient to prevent the discharge of raw or inadequately treated sewage, the Permittee shall develop a plan to provide additional back-up power to the facility.

d. Routine Maintenance and Operational Testing for Emergency Infrastructure/Equipment: The Permittee shall perform monthly maintenance and operational testing for all emergency infrastructure and equipment at the facility, including but not limited to any bypass gate/weir in the headworks, alarm systems, backup pumps, standby power generators, and other critical emergency pump station components. The Permittee shall update the Operation and Maintenance Plan to include monthly maintenance and operational testing of emergency infrastructure and equipment, and shall keep the records of all operational testing for emergency systems, repairs, and modifications.

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

a. Biosolids Disposal Requirements (Not Applicable)

b. Pretreatment Requirements (Not Applicable)

c. Collection System Requirements

The Discharger's collection system 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)).

d. Filter Bypass

Conditions pertaining to bypass are contained in Attachment D, Section 1.7 Bypass. 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 as a necessary means to avoid loss of life, personal injury or severe property damage. There are no

feasible alternatives to this diversion. These anticipated discharges are approved under the bypass conditions when all storage has been utilized and the resulting combined discharge of fully treated (tertiary) and partially treated (secondary) wastewater complies with the effluent and receiving water limitations in this Order. The ROWD constitutes notice of these anticipated bypasses.

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 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 or odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system as soon as possible, but no later than two hours after becoming aware of the release.

ii. In accordance with the requirements of Water Code section 13271, the Discharger shall provide notification to the California Office of Emergency Services (Cal OES) of the release of reportable amounts of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but not later than two hours after becoming aware of the release. The CCR, Title 23, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting these releases to the Cal OES is (800) 852-7550. In addition, the Permittee shall notify other interested persons of any such sewage spill, including but not limited to the South Coast Air Quality Management District (AQMD), cities within the jurisdiction of the spill, and Heal the Bay, by maintaining an email list of those interested persons that have requested such notification. The Discharger shall also include public outreach in their emergency communications protocols, which may include media updates, social media postings, and community notices. The Permittee shall submit an emergency communications protocol to the Los Angeles Water Board within 60 days of the effective date of the Order including specific outreach elements, such as mass emails and telephone calls to residents in the communities surrounding the plant.

iii. The Discharger shall notify the Los Angeles Water Board of any unauthorized release of sewage from its POTW that causes, or probably will cause, a discharge to a water of the state or odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system as soon as possible, but not later than two hours after becoming aware of the release. This initial notification does not need to be made if the Discharger has

notified Cal OES and the local health officer or the director of environmental health with jurisdiction over the affected 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.
- 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, groundwaters, etc.). If a grab sample cannot be obtained due to accessibility or safety concerns that cannot be addressed with the appropriate personal protective equipment or following proper sampling procedures, the sample shall be obtained as soon as it becomes safe to do so. The Discharger shall analyze the samples for total coliform, *E. coli, Enterococcus* (if spill reaches marine waters, where the salinity is greater than 1 part per thousand more than 5 percent of the time), and relevant pollutants of concern that are typically present in Newhall Ranch WRP's influent, upstream and downstream of the point of entry of the spill (if feasible, accessible, and safe). Rapid fecal monitoring is preferred in these situations, as long as a State Water Board's Environmental Laboratory Accreditation Program (ELAP)-certified lab is available to conduct the analyses. Daily monitoring shall be conducted from the time the spill is known until the results of two consecutive sets of bacteriological monitoring indicate the return to the background level or the County Department of Public Health authorizes cessation of monitoring.

c. Reporting

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

i. As soon as possible, but not later than twenty-four (24) hours after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, or a spill, bypass or upset that results in odors, vectors, or other nuisances of sewage sludge origin beyond the limits of the

treatment plant site or the sewage collection system, the Discharger shall submit a statement to the Los Angeles Water Board by email at augustine.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 Water Code section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:

- Agency, NPDES Number, Order Number, and MRP CI Number, if applicable;
- The location, date, and time of the discharge;
- The water body that received the discharge;
- A description of the level of treatment of the sewage or other waste discharged;
- An initial estimate of the amount of sewage or other waste released and the amount that reached a surface water;
- The Cal OES control number and the date and time that notification of the incident was provided to Cal OES; 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 business days after disclosure of the incident is required. Submission to the Los Angeles Water Board of the California Integrated Water Quality System (CIWQS) Sanitary Sewer Overflow (SSO) event number shall satisfy this requirement. Within 30 days after submitting the preliminary report, the Discharger shall submit the final written report to the Los Angeles Water Board. (A copy of the final written report, for a given incident, already submitted pursuant to a *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* (SSS WDRs), may be submitted to the Los Angeles Water Board to satisfy this requirement). The written report shall document the information required in paragraph “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, including the Pretreatment Program, (ii) a Municipal Separate Storm Sewer Systems (MS4) NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements, and (iii) the SSS WDRs or subsequent updates. The Los Angeles Water Board also expects the POTW's owners/operators to consider coordination with other agencies regarding the potential for the permissive integration of the MS4 with the wastewater collection system.

f. Consistency with SSS WDRs

The Permittee must separately comply with the SSS WDRs (State Water Board Order Number 2022-0103-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*) in which the Permittee currently is enrolled and assigned WDID 4SS018115.

Because there may be overlap between sections 6.3.3.b. (SCCP), 6.3.4. (Construction, Operation and Maintenance Specifications), and 6.3.6. (Spill Reporting Requirements) of this Order and the SSS WDRs requirements related to the collection systems, the Los Angeles Water Board will accept documentation

prepared by the Discharger under the SSS WDRs satisfying the requirements in sections 6.3.3.b, 6.3.4, and 6.3.6 of this Order, provided the submission addresses the more stringent provisions contained in this Order and is submitted with the routine NPDES monitoring report. Pursuant to the SSS WDRs, section D, provision 2(iii) and (iv), the provisions of this Order supersede the SSS WDRs, for all purposes, including enforcement, to the extent the requirements may be deemed duplicative.

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

7.3. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by 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 collected during the calendar month and the

analytical result for that sample exceeds the AMEL, the Discharger may be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is collected, no compliance determination can be made for that calendar month with respect to the AMEL.

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

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

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

7.4. Average Weekly Effluent Limitation (AWEL)

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

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

7.5. Maximum Daily Effluent Limitation (MDEL)

If the initial grab sample exceeds the MDEL in a day, then the Discharger may initiate accelerated testing, consisting of a minimum of two additional grab samples during the remainder of the calendar day. The average (or median when any data is not detected (ND) or detected but not quantified (DNQ), see section 7.2 of this Order) of all grab samples collected in one calendar day shall be used to determine compliance with the MDEL. When the median is used to determine compliance with the concentration-based MDEL, compliance with the mass-based MDEL shall be determined as the product of these three values: the maximum concentration detected (expressed in mg/L), the peak flow on that calendar day (expressed in MGD), and the 8.34 conversion factor.

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 collected 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.

7.6. Instantaneous Minimum Effluent Limitation

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

7.7. Instantaneous Maximum Effluent Limitation

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

7.8. Six-month Median Effluent Limitation

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

7.9. 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 collected 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.

7.10. Chronic Toxicity

The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, Table A-1, and Appendix B, Table B-1, and the procedures described in the *State Policy for Water Quality Control: Toxicity Provisions*. Attainment of the water quality objective is demonstrated by conducting chronic aquatic toxicity testing as described in Section III.B.2 of the Toxicity Provisions and rejecting the null hypothesis in accordance with the TST statistical approach described in Section III.B.3. of the Toxicity Provisions. 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, a statistical analysis comparing two sets of replicate observations - in the case of Whole Effluent Toxicity (WET), only two test concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail")). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances.

The MDEL for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed at the IWC for the reproduction endpoint using the TST statistical approach, results in "Fail" and the "Percent Effect" of the survival endpoint is ≥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, initiated within the same calendar month and analyzed using the TST statistical approach, results in "Fail" for any endpoint.

If a chronic aquatic toxicity routine monitoring test results in a "Fail" at the IWC, the Permittee shall complete a maximum of two MMEL compliance tests. The MMEL compliance tests shall be initiated within the same calendar month that the first routine monitoring test was initiated that resulted in the "Fail" at the IWC. If the first chronic MMEL compliance test results in a "Fail" at the IWC, then the second MMEL compliance test is not necessary because the "Fail" results from the first two tests would constitute a violation of the chronic toxicity MMEL.

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, initially using the green algae *Raphidocelis subcapitata* (formerly known as *Selenastrum capricornutum*), which was determined to be the most sensitive species for the Newhall Ranch WRP discharge based on the sensitivity of the effluent from the Valencia WRP. After the first species sensitivity screening has been completed for the

Newhall Ranch WRP discharge, the most sensitive species from the species sensitivity screening will be the species applicable to the effluent limitations. 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). However, if the USEPA approves the Alternative Test Procedure, the Discharger may use a two-concentration test design. The Los Angeles Water Board's review of reported toxicity test results will not include review of concentration-response patterns as appropriate (see Fact Sheet discussion at 4.3.6.). As described in the bioassay laboratory audit correspondence from the State Water Resources Control Board dated August 7, 2014, and from the USEPA dated December 24, 2013, the Percent Minimum Significant Difference (PMSD) criteria only apply to compliance reporting for the No Observable Effect Concentration (NOEC) and the sublethal statistical endpoints of the NOEC, and therefore are not used to interpret results using the TST statistical approach. Standard Operating Procedures used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent (and receiving water) toxicity test measurement results from the TST statistical approach must be consistent with *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 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.

7.11. 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:

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

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

7.12. 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.

7.13. 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 7.2 "Multiple Sample Data Reduction" above) in

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

7.14. 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.

7.15. Compliance with 2,3,7,8-TCDD and its Equivalents

Compliance with the 2,3,7,8-TCDD (dioxin) effluent limitation shall be determined based on 2,3,7,8-TCDD alone. However, TCDD equivalents shall be monitored and calculated using the following formula, where the MLs and toxicity equivalency factors (TEFs) are as provided in the table below. The 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.

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

where:
Ci = individual concentration of a dioxin or furan congener
TEFi = individual TEF for a congener

MLs and TEFs

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

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

7.16. Compliance with Gross Beta/photon Emitters

The monthly average effluent limitation for gross beta/photon is equal to 4 millirem/year with a screening level of 50 picoCuries per liter (pCi/L). Due to naturally occurring Potassium-40, the results of the Potassium-40 may be subtracted from the total gross beta activity to determine if the screening level is exceeded. The Potassium-40 beta particle activity must be calculated by multiplying elemental potassium concentration (in mg/L) by a factor of 0.82 to determine activity from Potassium-40. The Potassium-40 must be analyzed from the same or equivalent sample used for the gross beta analysis.

If the gross beta particle activity minus the naturally occurring Potassium-40 is less than or equal to 50 pCi/L, the facility is in compliance and the value shall be reported as <4 millirem/year. If the gross beta particle activity minus the naturally occurring Potassium-40 beta particle activity exceeds 50 pCi/L, the Discharger must have the samples further analyzed for the *individual* nuclides. The Discharger is required to monitor those radiochemicals with test methods that can be performed by any commercially available laboratory. The calculation for the sum of the fractions is presented below.

The maximum contaminant level (MCL) for gross beta/photon emitters is equal to 4 millirem per year. A millirem is a dose of energy to the body or any internal organ. USEPA regulates 179 man-made nuclides, and each of them has a concentration of radiation measured in pCi/L, which produces the 4 millirem dose. These concentrations are listed in table, *Derived Concentrations of (pCi/L) of Beta and Photon Emitters in Drinking Water,* which shall be used to determine compliance.

Derived Concentrations (pCi/l) of Beta and Photon Emitters in Drinking Water

Yielding a Dose of 4 mrem/yr to the Total Body or to any Critical Organ as defined in NBS Handbook 69

Nuclide	pCi/l	Nuclide	pCi/l	Nuclide	pCi/l	Nuclide	pCi/l	Nuclide	pCi/l	Nuclide	pCi/l
H-3	20,000	Ni-65	300	Nb-95	300	Sb-124	60	Nd-147	200	Os-191	600
Be-7	6,000	Cu-64	900	Nb-97	3,000	Sb-125	300	Nd-149	900	Os-191m	9,000
C-14	2,000	Zn-65	300	Mo-99	600	Te-125m	600	Pm-147	600	Os-193	200
F-18	2,000	Zn-69	6,000	Tc-96	300	Te-127	900	Pm-149	100	Ir-190	600
Na-22	400	Zn-69m	200	Tc-96m	30,000	Te-127m	200	Sm-151	1,000	Ir-192	100
Na-24	600	Ga-72	100	Tc-97	6,000	Te-129	2,000	Sm-153	200	Ir-194	90
Si-31	3,000	Ge-71	6,000	Tc-97m	1,000	Te-129m	90	Eu-152	200	Pt-191	300
P-32	30	As-73	1,000	Tc-99	900	Te-131m	200	Eu-154	60	Pt-193	3,000
S-35 inorg	500	As-74	100	Tc-99m	20,000	Te-132	90	Eu-155	600	Pt-193m	3,000
Cl-36	700	As-76	60	Ru-97	1,000	I-126	3	Gd-153	600	Pt-197	300
Cl-38	1,000	As-77	200	Ru-103	200	I-129	1	Gd-159	200	Pt-197m	3,000
K-42	900	Se-75	900	Ru-105	200	I-131	3	Tb-160	100	Au-196	600
Ca-45	10	Br-82	100	Ru-106	30	I-132	90	Dy-165	1,000	Au-198	100
Ca-47	80	Rb-86	600	Rh-103m	30,000	I-133	10	Dy-166	100	Au-199	600
Sc-46	100	Rb-87	300	Rh-105	300	I-134	100	Ho-166	90	Hg-197	900
Sc-47	300	Sr-85 m	20,000	Pd-103	900	I-135	30	Er-169	300	Hg-197m	600
Sc-48	80	Sr-85	900	Pd-109	300	Cs-131	20,000	Er-171	300	Hg-203	60
V-48	90	Sr-89	20	Ag-105	300	Cs-134	80	Tm-170	100	Tl-200	1,000
Cr-51	6,000	Sr-90	8	Ag-110m	90	Cs-134m	20,000	Tm-171	1,000	Tl-201	900
Mn-52	90	Sr-91	200	Ag-111	100	Cs-135	900	Yb-175	300	Tl-202	300
Mn-54	300	Sr-92	200	Cd-109	600	Cs-136	800	Lu-177	300	Tl-204	300
Mn-56	300	Y-90	60	Cd-115	90	Cs-137	200	Hf-181	200	Pb-203	1,000
Fe-55	2,000	Y-91	90	Cd-115m	90	Ba-131	600	Ta-182	100	Bi-206	100
Fe-59	200	Y-91m	9,000	In-113m	3,000	Ba-140	90	W-181	1,000	Bi-207	200
Co-57	1,000	Y-92	200	In-114m	60	La-140	60	W-185	300	Pa-230	600
Co-58	300	Y-93	90	In-115	300	Ce-141	300	W-187	200	Pa-233	300
Co-58m	9000	Zr-93	2,000	In-115m	1,000	Ce-143	100	Re-186	300	Np-239	300
Co-60	100	Zr-95	200	Sn-113	300	Ce-144	30	Re-187	9,000	Pu-241	300
Ni-59	300	Zr-97	60	Sn-125	60	Pr-142	90	Re-188	200	Bk-249	2,000
Ni-63	50	Nb-93m	1,000	Sb-122	90	Pr-143	100	Os-185	200		

The sum of the fraction method is used because each photon emitter targets a different organ of the body, which results in a different magnitude of risk. The sum of the beta and photon emitters shall not exceed 4 millirem/year (40 CFR section 141.66(d)(2).

Each nuclide has a different concentration that produces the 4 millirem dose because different radionuclides have different energy levels. Some nuclides need to be in a higher concentration to give the same 4 millirem dose.

The laboratory shall measure the nuclide concentration in the water and compare this result to the concentration allowed for that particular nuclide (see table below). The comparison results in a fraction. This is shown in calculation below:

$$\text{Fraction of the maximum 4 millirem/year exposure limit} = \frac{pCi/L\ found\ in\ sample\ (from\ laboratory\ results)}{pCi/L\ equivalent\ from\ 4\ millirem\ of\ exposure\ (from\ conversion\ table)}$$

Each fraction must then be converted to a dose equivalent of 4 millirem/year by multiplying the fraction by 4. The results for each emitter must be summed to determine compliance.

A sample calculation is presented in the table below:

---	X	Y	X/Y	4(X/Y)
Emitter	Lab Analysis (pCi/L)	Conversion from table (pCi/4millirem)	Calculate Fraction	Calculate Total (millirem)
Cs-134m	5,023	20,000	0.25115	1.0
Cs-137	30	200	0.150	0.6
Sr-90	4	8	0.5	2.0
I-131	2	3	0.7	2.8
Sum of the Fractions	---	---	1.60115	6.4

In the example above, the system would be considered in violation of the gross beta/photon effluent limitation because the “sum-of-the-fractions” is 6.4 millirem, which means that the sum of the annual dose equivalent to the total body, or to any internal organ, exceeds 4 millirem/year.

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

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

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

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

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

7.19. Single Operational Upset (SOU)

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:

7.19.1. An SOU is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.

7.19.2. A Permittee may assert SOU to limit liability only for those violations which the Permittee submitted notice of the upset as required in Provision 5.5.2.b. of Attachment D – Standard Provisions.

7.19.3. For violations other than violations of Water Code section 13385 subdivisions (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for permittees to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA Memorandum “Issuance of Guidance Interpreting Single Operational Upset” (September 27, 1989).

7.19.4. For purpose of Water Code section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for permittees to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with Water Code section 13385(f)(2).

ATTACHMENT A – DEFINITIONS

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 CFR Part 503.

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

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

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

Composite sample, for other than flow rate measurements:

a. No fewer than eight individual sample portions collected at equal time intervals for 24 hours. The volume of each individual sample portion shall be directly proportional to the discharge flow rate at the time of sampling; or,

b. No fewer than eight individual sample portions collected of equal volume collected over a 24-hour period. The time interval between each individual sample portion shall vary such that the volume of the discharge between each individual sample portion remains constant.

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

Daily Discharge
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 Order), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

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

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

Detected, but Not Quantified (DNQ)
Those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

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

Effluent Concentration Allowance (ECA)
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 USEPA guidance (*Technical Support Document For Water Quality-based Toxics Control*, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the

enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

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
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.

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

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 that reasonably represents a calendar day for purposes of sampling). 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.

Maximum Daily Flow
The maximum instantaneous flow of 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)
For the purposes of chronic aquatic toxicity, MMEL is an effluent limitation based on a maximum of three independent toxicity tests, analyzed using the TST.

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

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

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.

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: PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

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

Pollutant Minimization Program (PMP)
Waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a 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
Any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Resources Control Board (State Water Board) or Los Angeles Water Board.

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

Reporting Level (RL)
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)
A measure of variability that is calculated as follows:

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

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

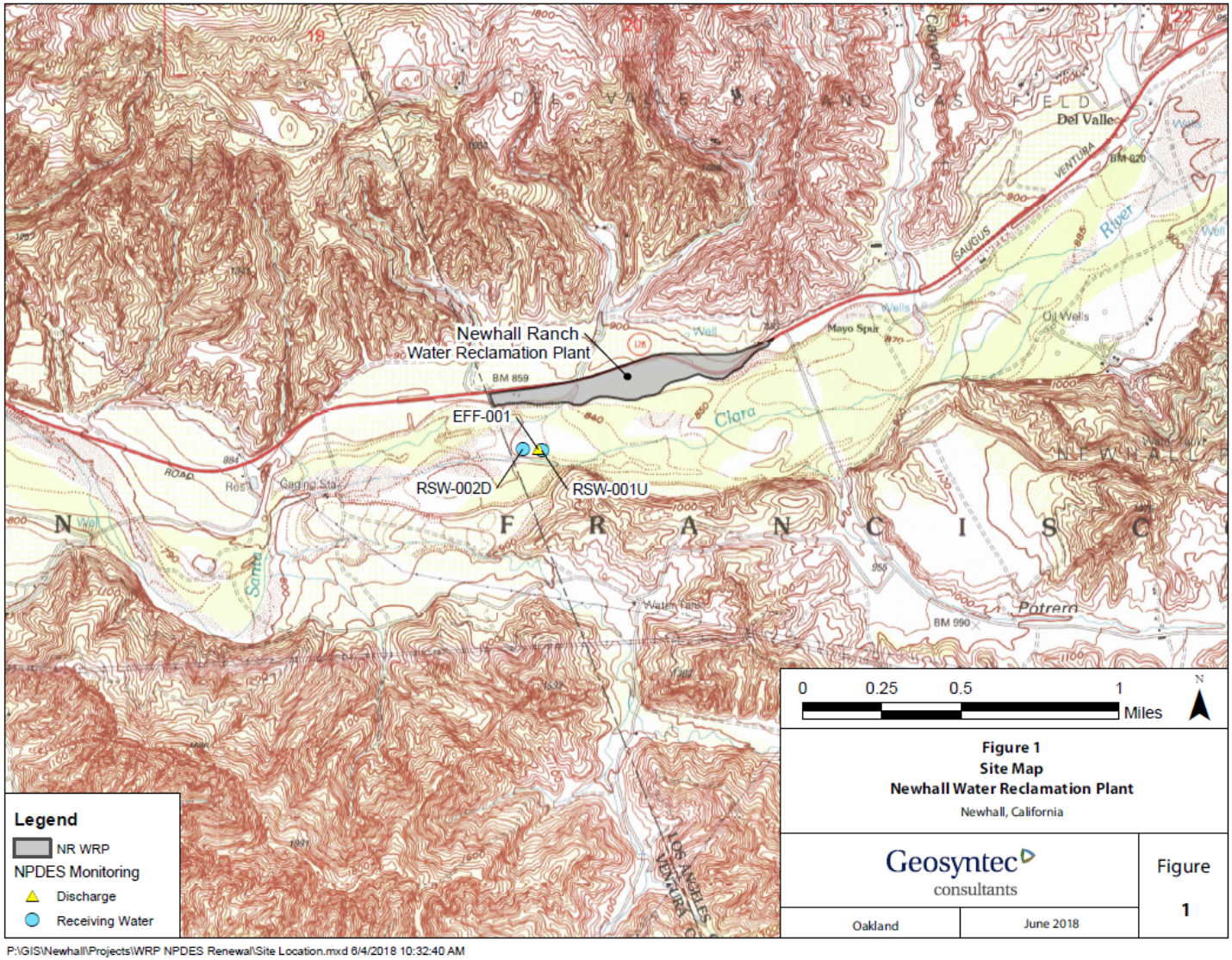
Total Nitrogen
The sum of nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, and total organic nitrogen.

Total phosphorus
The sum of orthophosphate, condensed phosphate, and organic phosphate.

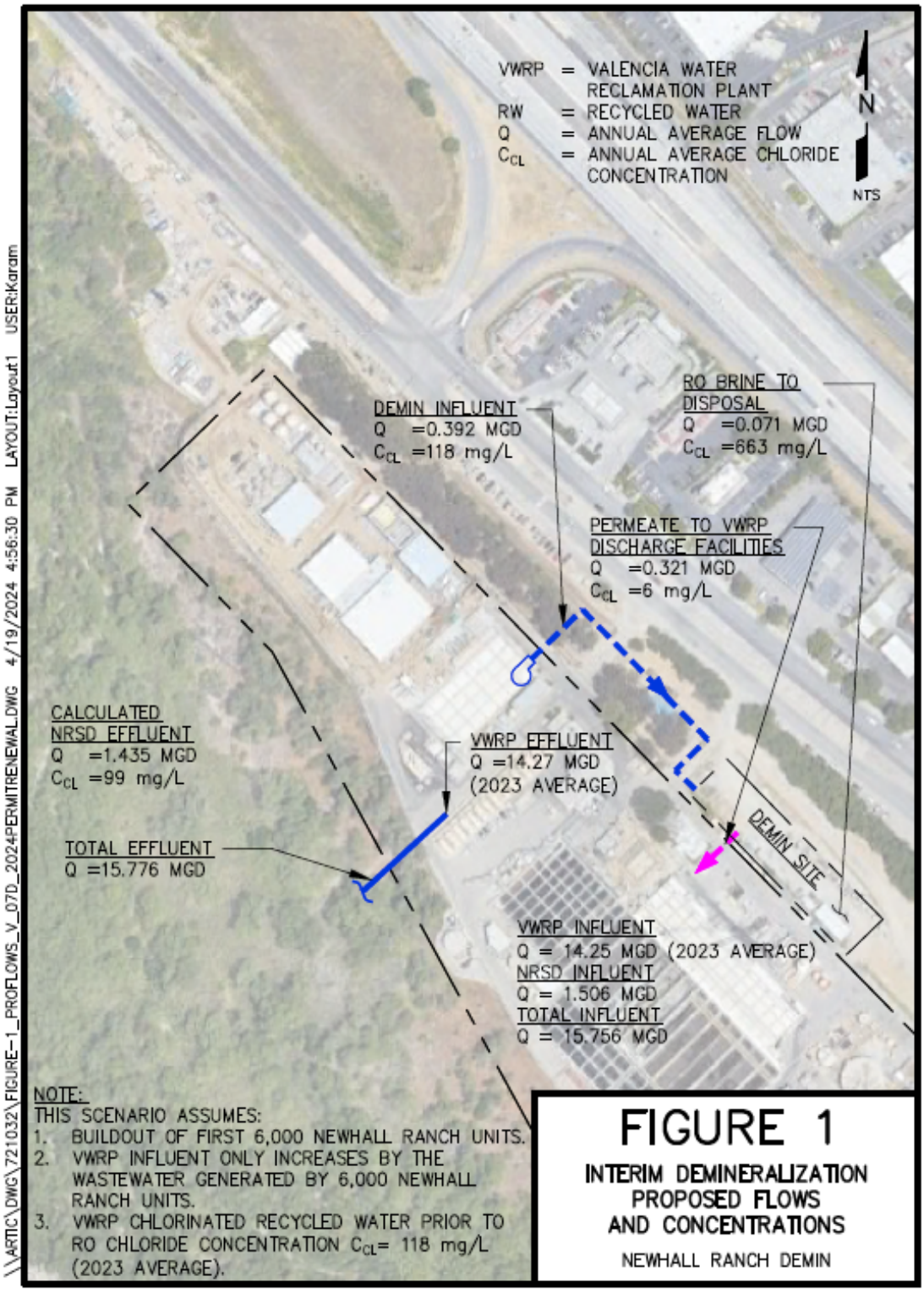
Total Trihalomethanes (TTHMs)
The sum of concentrations of the trihalomethane compounds: bromodichloromethane, bromoform, chloroform, and dibromochloromethane.

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 B1 – TOPO MAP OF NEWHALL RANCH WRP & DISCHARGE LOCATION



ATTACHMENT B2 – PROPOSED FLOWS FOR INTERIM DEMINERALIZATION FACILITY



ATTACHMENT B3 – JOINT ADMINISTRATIVE AGREEMENT STRUCTURE

ATTACHMENT B4 – NEWHALL RANCH WRP: PHASE 1 SITE LAYOUT

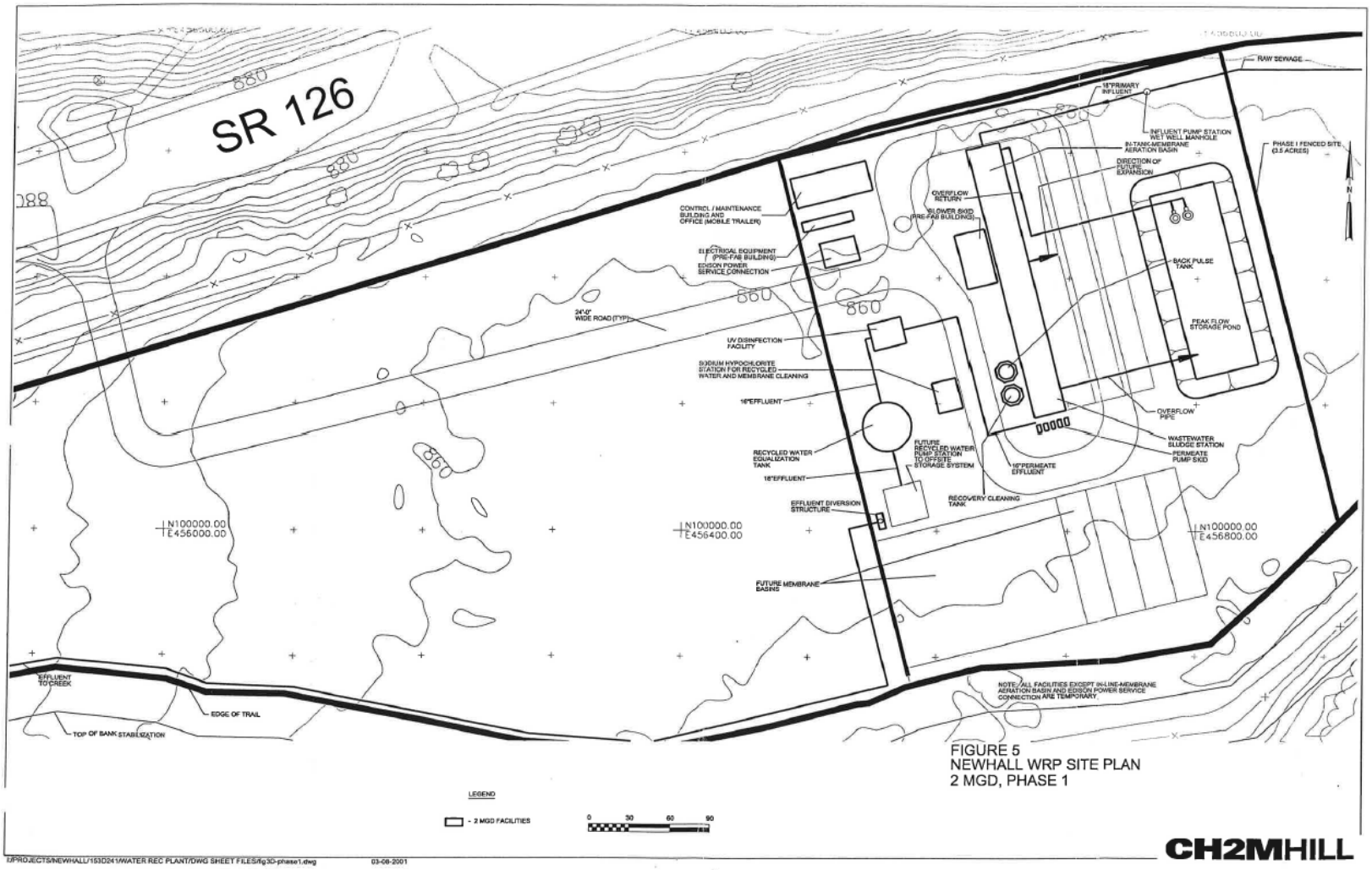
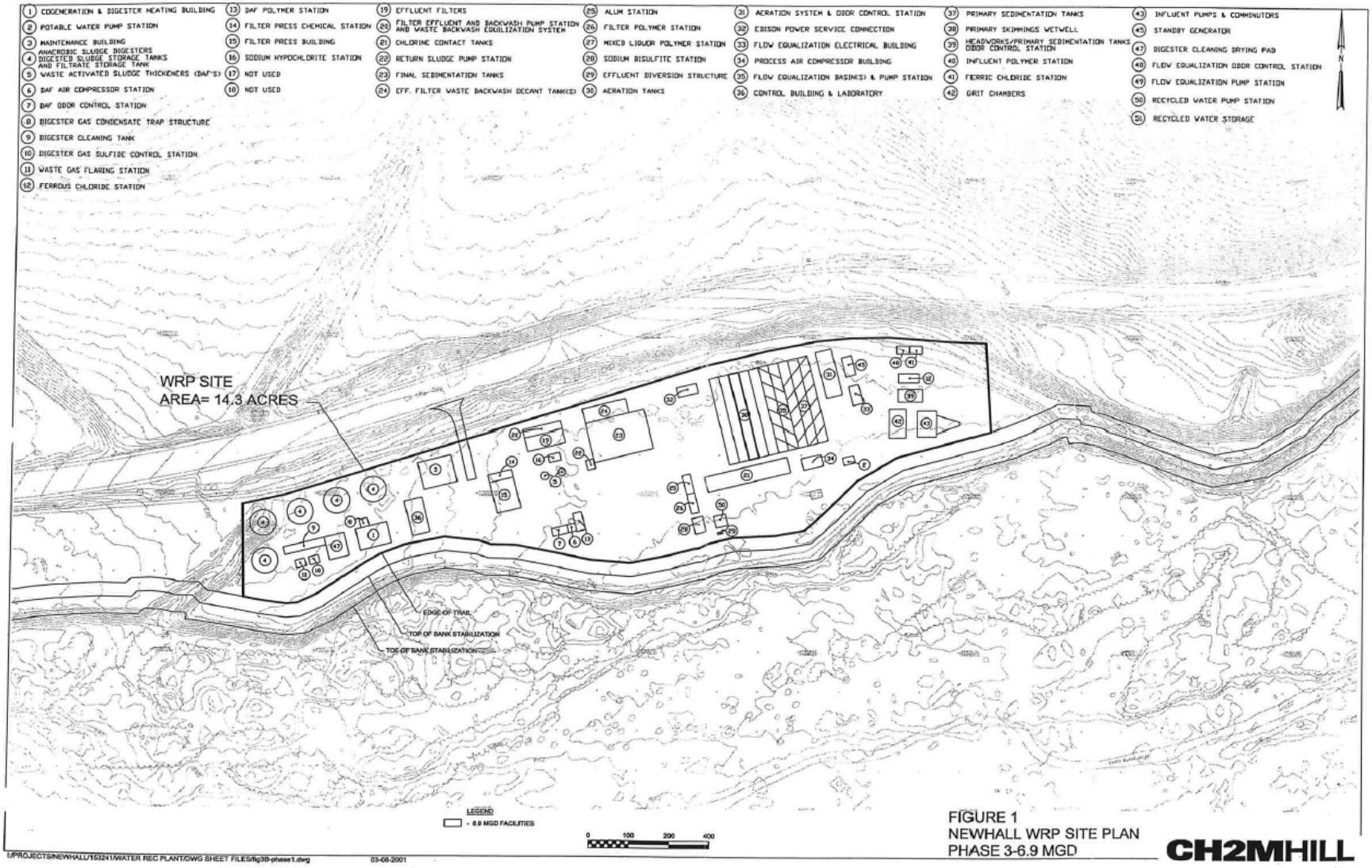
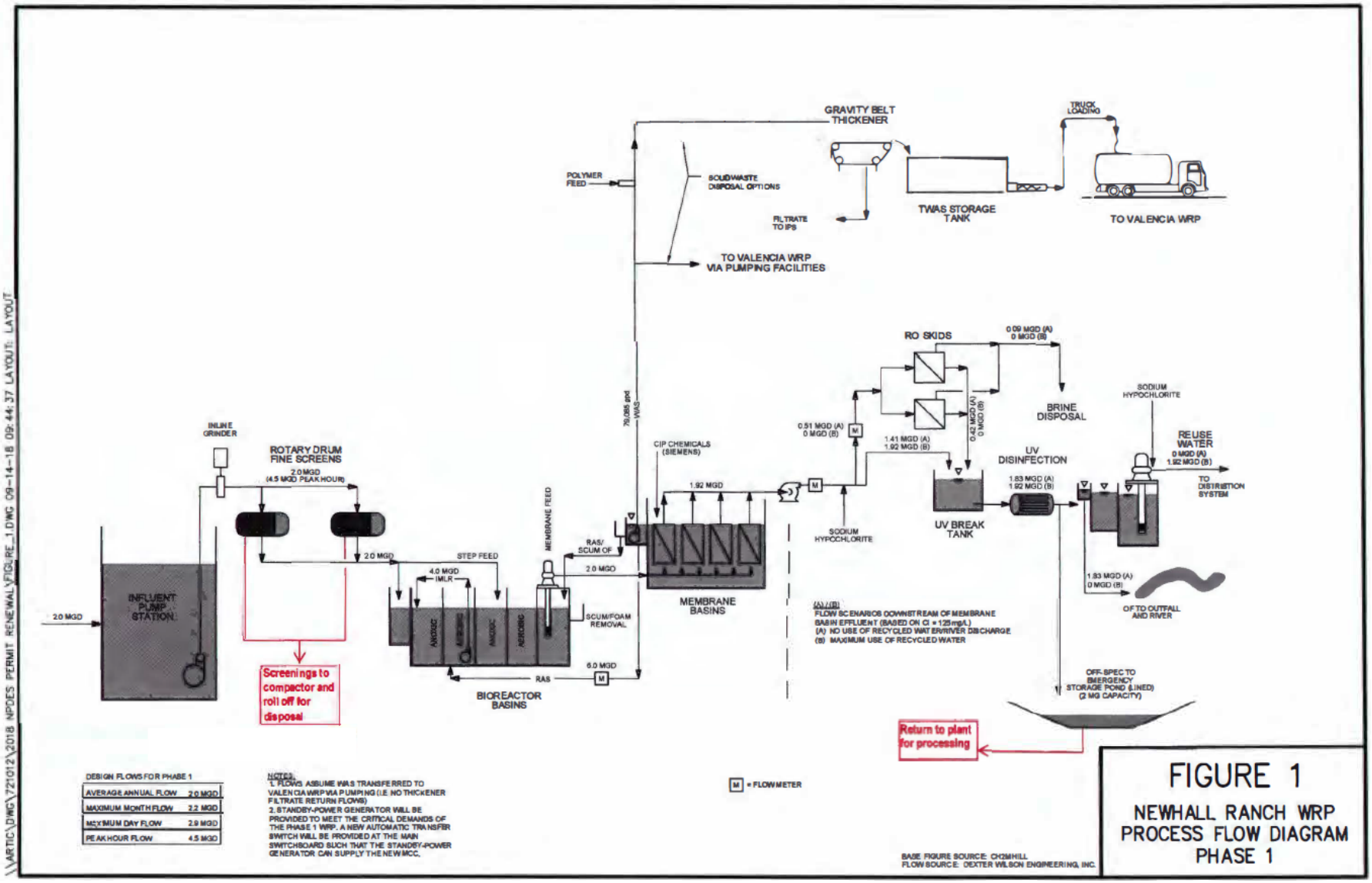


FIGURE 5
NEWHALL WRP SITE PLAN
2 MGD, PHASE 1

ATTACHMENT B5 – NEWHALL RANCH WRP: PHASE 3 SITE LAYOUT



ATTACHMENT C 1 – NEWHALL RANCH WRP PROCESS FLOW DIAGRAM



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 (Water Code), §§ 13261, 13263, 13264, 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 includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR § 122.41(e).)

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); Water Code, §§ 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); Water Code, §§ 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); Water Code, §§ 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); Water Code, §§ 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); Water Code, §§ 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, 2025, all notices submitted in compliance with this section must be submitted electronically by the Discharger to the Los Angeles Water Board and USEPA Region IX or initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 122.22 and part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by a particular Order or if required to do so by State law. (40 CFR § 122.41(m)(3)(i).)

b. **Unanticipated bypass.** The 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, 2025, all notices submitted in compliance with this section must be submitted electronically by the Discharger to the Los Angeles Water Board and USEPA or initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 122.22 and part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by a particular Order or if required to do so by State law. (40 CFR § 122.41(m)(3)(ii).)

1.8. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the 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.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance 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 when approved by the Los Angeles Water Board and the State Water Board, or required under 40 CFR chapter 1, subchapter N for the measured pollutant or pollutant parameter. In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 CFR §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

4. STANDARD PROVISIONS – RECORDS

4.1. The 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); Water Code, §§ 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., Regional Administrators of USEPA). (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. 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 to the Manager of the Watershed Regulatory Section of the Los Angeles Water Board at (213) 576-6616 and jeong-hee.lim@waterboards.ca.gov. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not

been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

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

As of December 21, 2025, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 The reports shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. The Los Angeles Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 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)(iii).)

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); Water Code 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, CI-9322

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 National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Los Angeles Water Board to establish monitoring, reporting, and recordkeeping requirements. 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. Results of monthly, quarterly, semiannual, and annual analyses shall be reported by the due date specified in Table E-9 of the MRP. The Discharger shall make every effort to schedule monitoring so the different seasons are represented in the quarterly and semiannual monitoring throughout the year.

1.2. Pollutants, except those analyzed in the field, shall be analyzed using the analytical methods described in 40 CFR parts 136.3, 136.4, and 136.5; or where no methods are specified for a given pollutant, by methods approved by the Los Angeles Water Board or the State Water Board.

1.3. **Laboratory Certification.** Laboratories analyzing samples shall be certified by the State Water Resources Control Board, Division of Drinking Water (DDW) Environmental Laboratory Accreditation Program (ELAP) in accordance with Water Code 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 monthly report.

1.5. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and ensure accuracy of measurements or shall ensure 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 “with the exception of field tests, all analyses were conducted at a laboratory certified for such analyses, under the Environmental Laboratory Accreditation Program (ELAP) through the State Water Resources Control Board, Division of Drinking Water; or, were approved by the Executive

Officer in accordance with current USEPA guideline procedures or as specified in this Monitoring and Reporting Program."

1.8. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), and the Reporting Level (RL) [the applicable minimum level (ML) or reported Minimum Level (RML)] for each pollutant. The MLs are those published by the State Water 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 Order 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 of the 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 Order in any of the following situations:

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

1.11.2. When the Discharger and the Los Angeles Water Board agree to include in the Order 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 of the SIP;

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 of the SIP and proposes an appropriate ML for the matrix; or,

1.11.5. When the Discharger uses a method, for 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 shall 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 total coliforms 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* and *Enterococcus* shall be those presented in Table 1A of 40 CFR part 136 or in the USEPA publication EPA 600/4-85/076, “Test Methods for *Escherichia coli* and *Enterococci* in Water By Membrane Filter Procedure,” or any improved method determined by the Los Angeles Water Board to be appropriate.

1.15. The Discharger shall ensure the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:

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

2. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
---	INF-001	The influent monitoring location shall be located at each point of inflow to the sewage treatment plant and located upstream of any in-plant return flows and/or where representative samples of the influent can be obtained.
001	EFF-001	The effluent monitoring location for all constituents shall be located downstream of any in-plant return flows and after the final disinfection process, where representative samples of the effluent from the Newhall Ranch WRP can be obtained. Latitude: 34.403166°, Longitude: -118.689667°
---	RSW-001U	This upstream receiving water monitoring location in the Santa Clara River is approximately 100 feet upstream of Discharge Point 001. Latitude 34.4031673°, Longitude -118.6894755°
---	RSW-002D	This downstream receiving water monitoring location in the Santa Clara River is approximately 300 feet downstream of Discharge Point 001. Latitude 34.4031107°, Longitude -118.6903682°
---	RSW-003D	This downstream receiving water monitoring location in the Santa Clara River is approximately 0.6 miles downstream of Discharge Point 001, accessible by Salt Creek Crossing. Latitude 34.40194444°, Longitude -118.70082778°
---	RGW-001	This proposed groundwater monitoring well will monitor the groundwater aquifer, approximately 3,900 feet in an easterly direction, upgradient of Discharge Point 001, at an existing well

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
---	RGW-002	This proposed groundwater monitoring well will monitor the groundwater aquifer, approximately 4,500 feet in a southwesterly direction, downgradient of Discharge Point 001, at an existing well, located north of the Santa Clara River
---	RGW-003	This proposed groundwater monitoring well will monitor the groundwater aquifer, approximately 3,500 feet in a westerly direction, downgradient of Discharge Point 001, at a newly installed well, located south of the Santa Clara River

The North latitude and West longitude information in Table E-1 are approximate for administrative purposes. A map of the receiving water locations and discharge points is included in Figure E-1 below.

Figure E-1. Map of Existing Receiving Surface Water Stations

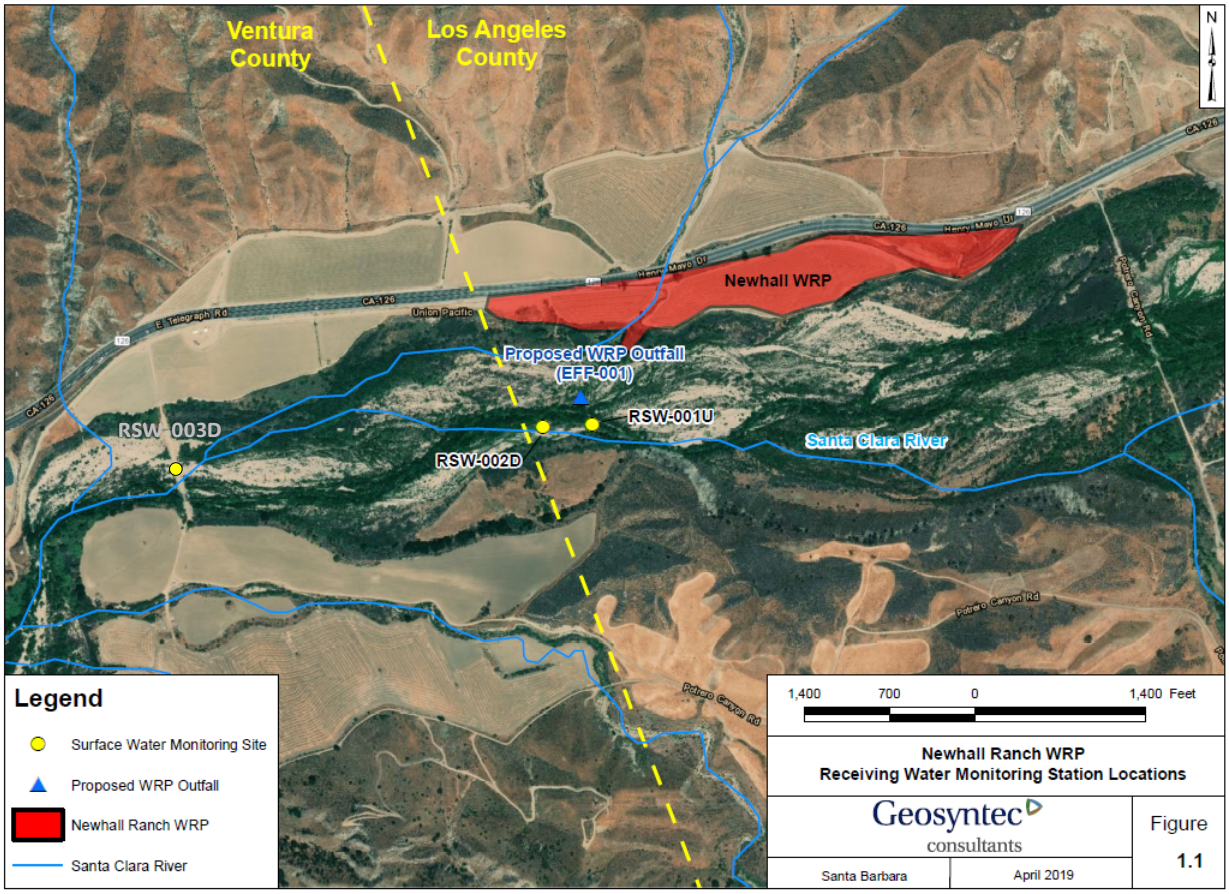
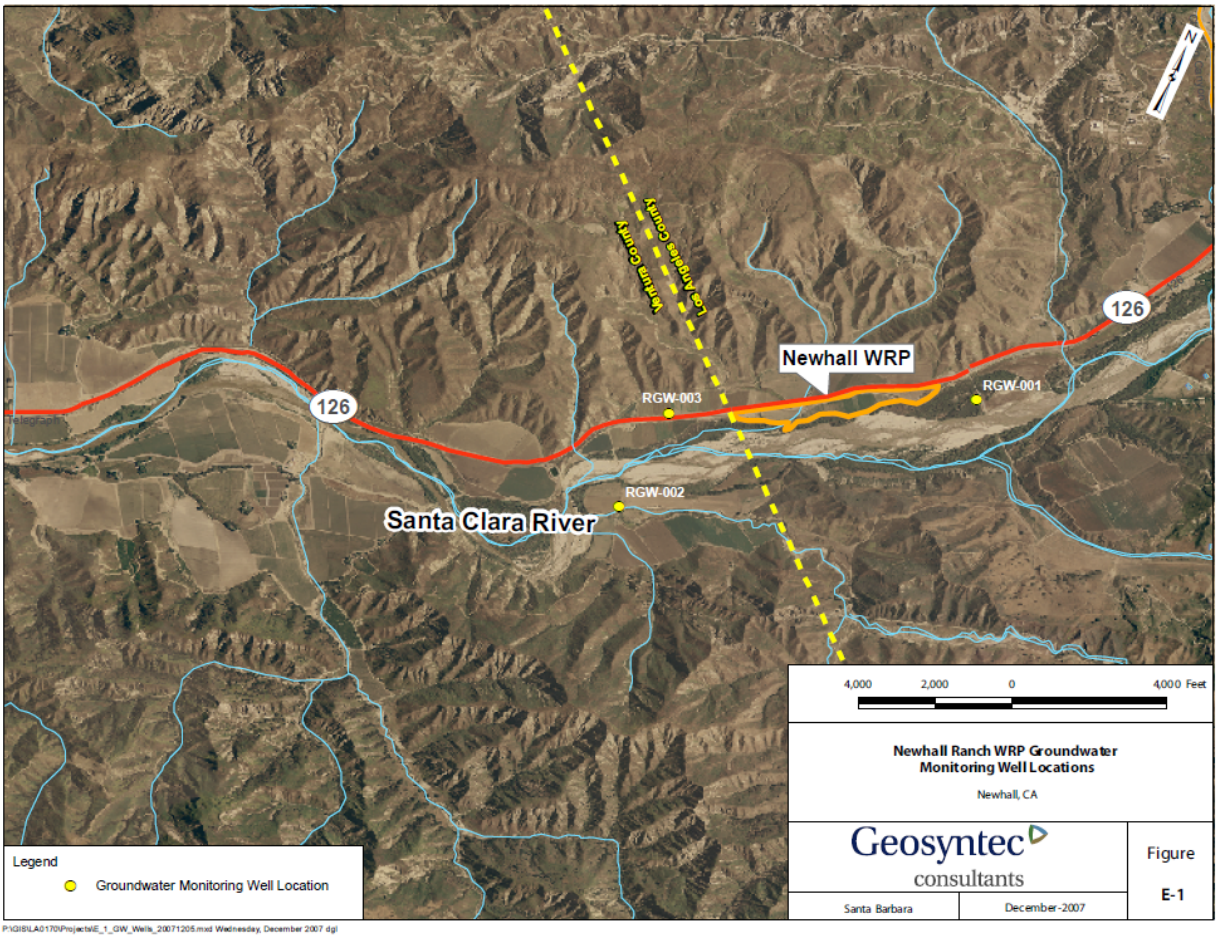


Figure E-2. Map of Proposed Groundwater Well Monitoring Stations



3. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to:

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

3.1 Monitoring Location INF-001

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

Table E-2. Influent Monitoring INF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	recorder	continuous	a
pH	pH unit	grab	weekly	--
Temperature	°F	grab	weekly	--

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Suspended Solids (TSS)	mg/L	24-hour composite	weekly	--
Biochemical Oxygen Demand (BOD_5 20°C)	mg/L	24-hour composite	weekly	--
Nitrite nitrogen	mg/L	24-hour composite	weekly	--
Nitrate nitrogen	mg/L	24-hour composite	weekly	--
Ammonia nitrogen	mg/L	24-hour composite	weekly	--
Total Kjeldahl nitrogen	mg/L	24-hour composite	weekly	--
Organic nitrogen	mg/L	calculated	weekly	--
Total nitrogen	mg/L	calculated	weekly	--
Total phosphorus	mg/L	24-hour composite	weekly	--
Orthophosphate-P	mg/L	24-hour composite	monthly	--
Chloride	mg/L	24-hour composite	monthly	--
Total dissolved solids	mg/L	24-hour composite	monthly	--
Sulfate	mg/L	24-hour composite	monthly	--
Boron	mg/L	24-hour composite	monthly	--
Hardness	mg/L	24-hour composite	monthly	--
Antimony	µg/L	24-hour composite	quarterly	--
Arsenic	µg/L	24-hour composite	quarterly	--
Cadmium	µg/L	24-hour composite	quarterly	--
Total chromium	µg/L	grab	quarterly	--
Chromium III	µg/L	calculated	quarterly	--
Chromium VI	µg/L	grab	quarterly	--
Copper	µg/L	24-hour composite	quarterly	--
Lead	µg/L	24-hour composite	quarterly	--
Mercury	µg/L	24-hour composite	quarterly	--
Nickel	µg/L	24-hour composite	quarterly	--
Selenium	µg/L	24-hour composite	monthly	--
Silver	µg/L	24-hour composite	quarterly	--
Thallium	µg/L	24-hour composite	quarterly	--
Zinc	µg/L	24-hour composite	quarterly	--
Cyanide	µg/L	grab	monthly	--
Aluminum	µg/L	24-hour composite	quarterly	--
Iron	µg/L	24-hour composite	monthly	--
Manganese	µg/L	24-hour composite	quarterly	--
Total trihalomethanes (TTHMs)	µg/L	calculated	monthly	--

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Bis(2-ethylhexyl)phthalate	µg/L	24-hour composite or grab	quarterly	d
PCBs as Aroclors	µg/L	24-hour composite	annually	b
PCBs as Congeners	pg/L	24-hour composite	annually	b
TCDD Equivalents	pg/L	Grab or 24-hour composite	semiannually	d
Remaining USEPA priority pollutants excluding asbestos	µg/L	24-hour composite; grab for VOCs	semiannually	c

Footnotes for Table E-2

a. Total daily flow and instantaneous peak daily flow (24-hr basis) shall be reported. The actual monitored flow shall be reported (not the maximum flow, i.e., design capacity).

b. PCBs as aroclors shall be analyzed using USEPA method 608.3. 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 608.3 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.

c. The list of priority pollutants is provided as Appendix A to 40 CFR part 423.

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

End of footnotes for Table E-2

4. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

- Determine compliance with NPDES permit conditions and water quality standards.
- Assess 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.

4.1 Monitoring Location EFF-001

The Discharger shall monitor the discharge of tertiary-treated effluent at EFF-001 as shown in Table E-3. If more than one analytical test method is listed for a given parameter, the Discharger must select a sufficiently sensitive method as defined in 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv).).

Table E-3. Effluent Monitoring at EFF-001

Parameter	**Units**	**Sample Type**	**Minimum Sampling Frequency**	**Notes**
Total flow	mgd	recorder	continuous	a
Turbidity	NTU	Recorder	Continuous	a
Total residual chlorine	mg/L	recorder	continuous	b
Total residual chlorine	mg/L	grab	daily	c
Total coliform	MPN/100mL or CFU/100mL	grab	daily	d
E. coli	MPN/100mL or CFU/100mL	grab	daily	d
Temperature	°F	grab	daily	e and n
pH	pH units	grab	daily	e and n
Settleable solids	mL/L	grab	weekly	n
Total suspended solids (TSS)	mg/L	24-hour composite	daily	--
BOD_5 20°C	mg/L	24-hour composite	daily	--
Oil and grease	mg/L	grab	monthly	--
Dissolved oxygen	mg/L	grab	monthly	--
Total Dissolved Solids	mg/L	24-hour composite	monthly	--
Sulfate	mg/L	24-hour composite	monthly	--
Chloride	mg/L	24-hour composite	monthly	--
Fluoride	mg/L	24-hour composite	monthly	--
Boron	mg/L	24-hour composite	monthly	--
Ammonia Nitrogen	mg/L	24-hour composite	weekly	e
Nitrate nitrogen (as N)	mg/L	24-hour composite	weekly	e
Nitrite nitrogen (as N)	mg/L	24-hour composite	weekly	e
Nitrate + nitrite (as N)	mg/L	calculated	weekly	e
Total Kjeldahl nitrogen	mg/L	24-hour composite	weekly	e
Organic nitrogen	mg/L	calculated	weekly	e
Total nitrogen	mg/L	calculated	weekly	--

Parameter	**Units**	**Sample Type**	**Minimum Sampling Frequency**	**Notes**
Total phosphorus	mg/L	24-hour composite	weekly	--
Orthophosphate-P	mg/L	24-hour composite	monthly	--
Surfactants (MBAS)	mg/L	24-hour composite	monthly	--
Surfactants (CTAS)	mg/L	24-hour composite	monthly	--
Total hardness ($CaCO_3$)	mg/L	24-hour composite	monthly	--
Perchlorate	µg/L	grab	semiannually	i
1,4-Dioxane	µg/L	grab	annually	i
1,2,3-Trichloropropane	µg/L	grab	annually	i
Methyl tert-butyl-ether (MTBE)	µg/L	grab	annually	i
Antimony	µg/L	24-hour composite	quarterly	--
Arsenic	µg/L	24-hour composite	quarterly	--
Cadmium	µg/L	24-hour composite	quarterly	--
Chromium III	µg/L	calculated	quarterly	--
Chromium VI	µg/L	grab	quarterly	--
Total Chromium	µg/L	grab	quarterly	--
Copper	µg/L	24-hour composite	monthly	--
Lead	µg/L	24-hour composite	quarterly	--
Mercury	µg/L	24-hour composite	monthly	l
Nickel	µg/L	24-hour composite	quarterly	--
Selenium	µg/L	24-hour composite	monthly	--
Silver	µg/L	24-hour composite	quarterly	--
Thallium	µg/L	24-hour composite	quarterly	--
Zinc	µg/L	24-hour composite	quarterly	--
Cyanide	µg/L	grab	monthly	--
Aluminum	µg/L	24-hour composite	quarterly	--
Iron	µg/L	24-hour composite	monthly	--
Manganese	µg/L	24-hour composite	quarterly	--
Bis(2-ethylhexyl) phthalate	µg/L	grab or 24-hour composite	monthly	k
Bromoform	µg/L	grab	monthly	--
Chloroform	µg/L	grab	monthly	--
Dibromochloromethane	µg/L	grab	monthly	--
Dichlorobromomethane	µg/L	grab	monthly	--
Total Trihalomethanes	µg/L	grab/calculated sum	monthly	--

Parameter	**Units**	**Sample Type**	**Minimum Sampling Frequency**	**Notes**
TCDD equivalents	pg/L	grab or 24-hour composite	quarterly	k
PCBs as aroclors	µg/L	24-hour composite	annually	g
PCBs as congeners	pg/L	24-hour composite	annually	g
Diazinon	µg/L	24-hour composite	annually	--
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	24-hour composite	annually	--
2,4,5-TP (Silvex)	µg/L	24-hour composite	annually	--
Pesticides	µg/L	24-hour composite	annually	m
Per- and Poly-fluoroalkyl substances (PFAS)	ng/L	grab	quarterly	o
Chronic toxicity *Raphidocelis subcapitata* Growth endpoint	Pass or Fail (TST), % Effect	24-hour composite	monthly	f
Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 & uranium)	pCi/L	24-hour composite	semiannually	h
Remaining EPA priority pollutants excluding asbestos	µg/L	24-hour composite; grab for VOCs	semiannually	j

Footnotes for Table E-3

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

- Total flow – Total daily and peak daily flow (24-hr basis).
- Turbidity – Maximum daily value, total amount of time each day the turbidity exceeded 5 NTU, flow proportioned average daily value. A grab sample can be used to determine compliance with the 10 NTU limit. A flow-weighted 24-hour composite sample may be collected for turbidity in place of the recorder to determine the flow-proportioned average daily value.

b. Total residual chlorine shall be recorded continuously in the effluent and the following shall be reported: the maximum daily peak, minimum daily peak, and average daily values. The continuous monitoring data are not intended to be used for compliance determination purposes.

c. Daily grab samples for total residual chlorine shall be collected during peak flow Monday through Friday only, except for holidays. Analytical results of daily grab samples will be used

to determine compliance with total residual chlorine effluent limitation. Furthermore, additional monitoring requirements specified in section 4.2. of this MRP shall be followed.

d. Daily grab samples for total coliform and *E.coli* shall be collected Monday through Friday only, except for holidays. *E.coli* analysis shall be conducted only if the total coliform testing is positive. If the total coliform analysis results in no detection, a result of (<) the reporting limit for total coliform shall be reported for *E. coli*.

e. Nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, organic nitrogen, total Kjeldahl nitrogen, pH, and temperature sampling shall be conducted on the same day or as close to concurrently as possible.

f. The Discharger shall conduct whole effluent toxicity monitoring using the green algae *Raphidocelis subcapitata* (formerly known as *Selenastrum capricornutum*), as the test species until the first species sensitivity screening has been conducted, as outlined in section 5 of this MRP. The median monthly effluent limitation (MMEL) summary result shall be reported as “Pass” or “Fail” and the maximum daily single result shall be reported as “Pass” or “Fail” and “% Effect.” Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.

g. PCBs as aroclors shall be analyzed using USEPA method 608.3. 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 608.3 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. Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined radium-226 & 228 shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L. If radium-226 & 228 exceeds the stipulated criteria, analyze for tritium, strontium-90 and uranium. Although there is currently no ELAP accreditation available for some of the radiochemical methods described above using wastewater, the Discharger shall use an ELAP-accredited laboratory once ELAP accreditation becomes available for the method. The Discharger is required to monitor for those radiochemicals with test methods that can be performed by any commercially available laboratory.

i. 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 Permittee received ELAP certification to run USEPA method 624).

j. The list of priority pollutants is provided as Appendix A to 40 CFR part 423.

k. The 40 CFR Part 136 method for phthalate esters, including bis(2-ethylhexyl) phthalate, and TCDD equivalents requires samples to be collected in glass sample containers to avoid

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

l. USEPA Method 1631E, per 40 CFR part 136, with a quantification level lower than 0.5 ng/L, shall be used to analyze total mercury, unless another 40 CFR 136 method is sufficiently sensitive.

m. Pesticides are, for purposes of this order, those six constituents referred to in 40 CFR part 125.58(p) (demeton, guthion, malathion, methoxychlor, mirex, and parathion).

n. Daily grab samples shall be collected Monday through Friday only, except for holidays.

o. USEPA Method 1633 or other ELAP-accredited methodologies for the analysis of PFAS in wastewaters shall be used to meet the required reporting limit of 50 ng/L. The ELAP accredited method for each group of compounds will specify which specific analytes can be measured. All analytes that can be measured using the selected ELAP-accredited method shall be analyzed.

End of Footnotes for Table E-3

4.2 Total Residual Chlorine Additional Monitoring (when chlorination is used as a cleaning agent for the bioreactor membranes)

4.2.1. Continuous monitoring of total residual chlorine at the current location shall serve as an internal trigger for the increased grab sampling at effluent sampling points if either of the following occurs, except as noted in item 4.2.2 below:

a. Total residual chlorine concentration excursions of up to 0.3 mg/L lasting greater than 15 minutes; or

b. Total residual chlorine concentration peaks in excess of 0.3 mg/L lasting greater than 1 minute.

4.2.2. Additional grab samples need not be collected as required in section 4.2.1 of this MRP if it can be demonstrated that a stoichiometrically appropriate amount of dechlorination chemical has been added to effectively dechlorinate the effluent to 0.1 mg/L or less for peaks in excess of 0.3 mg/L lasting more than 1 minute, but not for more than five minutes.

5. CHRONIC WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

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

The aquatic 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 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 1002.0).

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

Until the Permittee completes the species sensitivity screening in section 5.4 of the MRP, the Permittee shall use the *Raphidocelis subcapitata* species to conduct chronic toxicity monitoring in the effluent and in the surface receiving water stations. This is appropriate because once the Newhall Ranch WRP is constructed, the Permittee plans on starting up the activated sludge basins with activated sludge from Valencia WRP. Since the Valencia WRP determined that the *Raphidocelis subcapitata* species was the most sensitive species with which to conduct the chronic toxicity testing for the Valencia WRP, Newhall Ranch WRP will start using the *Raphidocelis subcapitata* species until the results of the year-long species sensitivity screening become available.

5.4. Species Sensitivity Screening

The Permittee shall conduct a species sensitivity screening for chronic aquatic toxicity on effluent from the Newhall Ranch WRP prior to or within 18 months after the Newhall Ranch WRP begins discharging to the receiving water. For continuous dischargers, a species sensitivity screening includes four sets of tests completed in the span of one year, with one set collected in each of the four quarters. In each of the four sets, the 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 on a monthly frequency for the discharge during that given month. 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*. For non-continuous dischargers, a set of testing shall be conducted in each quarter in which there is expected to be at least 15 days of discharge. For non-continuous dischargers that discharge in only one quarter of the year in which there is expected to be

at least 15 days of discharge, two sets of testing shall be conducted within the same quarter.

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

5.5. Quality Assurance and Additional Requirements

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

5.5.1. The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, Table A-1 and Appendix B, Table B-1, and the procedures described in the *State Policy for Water Quality Control: Toxicity Provisions*. Attainment of the water quality objective is demonstrated by conducting chronic aquatic toxicity testing as described in Section III.B.2 of the Toxicity Provisions and rejecting the null hypothesis in accordance with the TST statistical approach described in Section III.B.3. of the Toxicity Provisions. The null hypothesis (H_o) 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. To comply with the Median Monthly Effluent Limit (MMEL) for chronic toxicity, up to three independent toxicity tests shall be conducted during a calendar month. If the initial toxicity test, conducted in a given month, results in "Fail" at the IWC, then the Discharger shall initiate up to two additional chronic aquatic toxicity tests in the

remainder of the month to determine compliance with the MMEL. If the second test conducted in the month is also a "Fail," then that constitutes a violation of the MMEL. However, if the second and third tests result in a "Pass" then the discharge is in compliance with the MMEL.

5.5.3. If the effluent toxicity test does not meet all test acceptability criteria (TAC) and all required test conditions specified in the referenced WET methods manual (*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 for TAC below)), then the Discharger must re-sample and re-test within 14 days. Deviations from recommended test conditions, 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), must be evaluated on a case-by-case basis to determine the validity of test results. The Discharger shall consider the degree of the deviation and the potential or observed impact of the deviation on the test results in consultation with Los Angeles Water Board staff before rejecting or accepting a test result as valid, and shall report the results of the validity determination with supporting evidence for that decision in their monthly report.

Table E-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, referenced above)	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, referenced above)	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 (Raphidocelis subcapitata)*, Growth Toxicity Test Method 1003.0. (Table 3 of Test Method, referenced above)	Mean cell density as 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. When preparing samples for toxicity testing, in addition to the required monitoring for conductivity, etc., it is recommended that total alkalinity and total hardness be measured in the undiluted effluent, receiving water, dilution water, and culture water

(following the WET methods manual), as well as the major geochemical ions (see Mount et al., 2018).

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

5.5.7. The Discharger shall perform toxicity tests on effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the Monitoring and Reporting Program and the rationale is explained in the Fact Sheet (Attachment F).

5.6. Preparation of an Initial Investigation TRE Work Plan

The 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 within 90 days of the effective date of this Order. 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 the most current version, or USEPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, April 1989). At a minimum, the TRE Work Plan must contain the provisions in Attachment G. This work plan shall describe the steps that the 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. Toxicity Reduction Evaluation (TRE) Process

A TRE is required for the effluent when toxicity is persistent in the effluent: if the Discharger has any combination of two or more MDEL or MMEL violations within a single calendar month or within two successive calendar months. In addition, if other information indicates toxicity (e.g., results of additional monitoring, results of monitoring at a higher concentration than the IWC, fish kills, intermittent recurring toxicity), the Executive Officer of the Los Angeles Water Board may require a TRE. The discharger shall conduct a TRE in accordance with a TRE Work Plan approved by Los Angeles Water Board. Routine effluent monitoring shall continue during the TRE process 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. If the most sensitive species is *Ceriodaphnia dubia*, during the TRE process, the major ions (sodium (Na^+), potassium (K^+), calcium (Ca^{2+}), magnesium (Mg^{2+}), bromide (Br^-), chloride (Cl^-), sulfate (SO_4^{2-}), and

bicarbonate (HCO_3^-)/ carbonate (CO_3^{2-})), shall be analyzed for in effluent IWC, dilution water, and culture water used for toxicity testing. Those results shall be reported in the corresponding monitoring report.

5.7.1. **Preparation and Implementation of Detailed TRE Work Plan.** The Discharger shall immediately initiate a TRE using, according to the type of treatment facility, USEPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) or USEPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, April 1989) and, within 30 days of TRE initiation, 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.

5.7.2. **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).

5.7.3. The Discharger shall consider source control, pollution prevention, and stormwater control when conducting a TRE. 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.

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

5.7.5. The Los Angeles Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. However, the TRE shall be carried out in accordance with the Executive Officer-approved TRE Work Plan.

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

5.8. 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:

5.8.1. The valid toxicity test results for the TST statistical approach, reported as “Pass” or “Fail” and “Percent Effect” at the chronic toxicity IWC for the discharge, using *Raphidocelis subcapitata* until the most sensitive species is determined from the first species sensitivity screening using the Newhall Ranch WRP effluent. 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-9.

5.8.2. A summary of water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, total hardness, salinity, chlorine, ammonia).

5.8.3. 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.

5.8.4. 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.

5.8.5. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.

5.8.6. 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.

5.8.7. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon request from the Los Angeles Water Board Assistant Executive Officer or the Executive Officer.

5.9. Ammonia Removal

5.9.1. 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 steps may be used to demonstrate that the toxicity is caused by ammonia, and not other toxicants, before the Executive Officer would allow for control of pH in the test.

a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.

c. Conduct graduated pH tests as specified in the 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.

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

5.10. Chlorine Removal

Except with prior approval from the Executive Officer of the Los Angeles Water Board, chlorine shall not be removed from bioassay samples. However, chlorine may be removed from the facility's effluent bioassay samples in the laboratory when the recycled water demand is high and there is no effluent water available for sampling over the weir after the dechlorination process.

6. LAND DISCHARGE MONITORING REQUIREMENTS (NOT APPLICABLE)

7. RECYCLING MONITORING REQUIREMENTS (NOT APPLICABLE)

8. RECEIVING WATER MONITORING REQUIREMENTS

8.1. Surface Water Monitoring

8.1.1. Monitoring Location – RSW-001U, RSW-002D, and RSW-003D

The following analyses shall be conducted on grab samples obtained from the Santa Clara River at monitoring location RSW-001U, located upstream of the Newhall Ranch WRP discharge point, and at RSW-002D, located downstream of the Newhall Ranch WRP discharge point. If station RSW-002D is inaccessible, then the downstream receiving water analysis shall be conducted on grab samples obtained from the Santa Clara River at monitoring location RSW-003D.

Table E-5. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Total flow	cfs	Flow meter	monthly	k and l
Turbidity	NTU	grab	monthly	k
Total residual chlorine	mg/L	grab	monthly	k
Temperature	°F	grab	monthly	a and k

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
pH	pH units	grab	monthly	a and k
Dissolved oxygen	mg/L	grab	monthly	k
E. coli	MPN/100mL or CFU/100mL	grab	monthly	k
Settleable solids	mL/L	grab	monthly	k
Total Suspended Solids (TSS)	mg/L	grab	monthly	k
BOD_5 20°C	mg/L	grab	monthly	k
Total organic carbon	mg/L	grab	monthly	k
Oil and grease	mg/L	grab	monthly	k
Total hardness ($CaCO_3$)	mg/L	grab	monthly	k
Conductivity	µmho/cm	grab	monthly	k
Total Dissolved Solids	mg/L	grab	monthly	k
Sulfate	mg/L	grab	monthly	k
Chloride	mg/L	grab	monthly	k
Boron	mg/L	grab	monthly	k
Fluoride	mg/L	grab	monthly	k
Chemical oxygen demand	mg/L	grab	monthly	k
Ammonia Nitrogen	mg/L	grab	monthly	a, k and b
Nitrite nitrogen	mg/L	grab	monthly	a, k and b
Nitrate nitrogen	mg/L	grab	monthly	a, k and b
Nitrate + Nitrite (as nitrogen)	mg/L	calculated	monthly	a, k and b
Organic nitrogen	mg/L	calculated	monthly	a and k
Total nitrogen	mg/L	calculated	monthly	k
Total Kjeldahl Nitrogen (TKN)	mg/L	grab	monthly	a and k
Total phosphorus	mg/L	grab	monthly	k
Orthophosphate-P	mg/L	grab	monthly	k
Surfactants (MBAS)	mg/L	grab	monthly	k
Surfactants (CTAS)	mg/L	grab	monthly	k
Chronic toxicity *Raphidocelis subcapitata* Growth endpoint	Pass or Fail (TST), % Effect	grab	monthly	c and k
Diazinon	µg/L	grab	annually	---

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Perchlorate	µg/L	grab	annually	d
Methyl tert-butyl-ether (MTBE)	µg/L	grab	annually	d
1,4-Dioxane	µg/L	grab	annually	d
1,2,3-Trichloropropane	µg/L	grab	annually	d
Pesticides	µg/L	grab	annually	g
PCBs as aroclors	µg/L	grab	annually	e
PCBs as congeners	pg/L	grab	annually	e
Antimony	µg/L	grab	monthly	k
Arsenic	µg/L	grab	monthly	k
Cadmium	µg/L	grab	monthly	k
Chromium III	µg/L	grab	monthly	k
Chromium VI	µg/L	grab	monthly	k
Copper	µg/L	grab	quarterly	---
Lead	µg/L	grab	monthly	k
Mercury	µg/L	grab	quarterly	h
Nickel	µg/L	grab	monthly	k
Selenium	µg/L	grab	monthly	k
Silver	µg/L	grab	monthly	k
Zinc	µg/L	grab	monthly	k
Cyanide	µg/L	grab	monthly	k
Aluminum	µg/L	grab	monthly	k
Iron	µg/L	grab	monthly	k
Manganese	µg/L	grab	monthly	k
Bromoform	µg/L	grab	monthly	k
Chloroform	µg/L	grab	monthly	k
Dibromochloromethane	µg/L	grab	monthly	k
Dichlorobromomethane	µg/L	grab	monthly	k
Total trihalomethanes	µg/L	grab/ calculated sum	monthly	k
Bis(2-ethylhexyl) phthalate	µg/L	grab	quarterly	i
TCDD equivalents	pg/L	grab	quarterly	i

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 & uranium)	pCi/L	grab	semiannually	j
Remaining USEPA priority pollutants excluding asbestos	µg/L	grab	semiannually	f

Footnotes for Table E-5

a. Nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, organic nitrogen, total Kjeldahl nitrogen, pH, and temperature sampling shall be conducted on the same day or as close to concurrently as possible.

b. Chapter 7-8 of the Basin Plan requires weekly receiving water monitoring to ensure compliance with the water quality objective. The frequency of monitoring may be re-evaluated at the conclusion of the third year of confirmatory receiving water monitoring described in section 8.3 of this MRP.

c. The Discharger shall conduct toxicity testing using *Raphidocelis subcapitata* (formerly known as *Selenastrum capricornutum*) as the test species until the first species sensitivity screening has been conducted, as outlined in Section 5 of this MRP. The median monthly effluent limitation (MMEL) summary result shall be reported as “Pass” or “Fail” and the maximum daily single result shall be reported as “Pass or Fail” with a “% Effect.” Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.

d. 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).

e. PCBs as aroclors shall be analyzed using USEPA method 608.3. 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 608.3 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.

f. The list of priority pollutants is provided as Appendix A to 40 CFR Part 423.

g. Pesticides are, for purposes of this order, those six constituents referred to in 40 CFR part 125.58(p) (demeton, guthion, malathion, methoxychlor, mirex, and parathion).

h. USEPA Method 1631E, per 40 CFR part 136, with a quantification level lower than 0.5 ng/L, shall be used to analyze total mercury, unless another 40 CFR 136 method is sufficiently sensitive.

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

j. Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined radium-226 & 228 shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L. If radium-226 & 228 exceeds the stipulated criteria, analyze for tritium, strontium-90 and uranium. Although there is currently no ELAP accreditation available for some of the radiochemical methods described above using wastewater, the Discharger shall use an ELAP-accredited laboratory once ELAP accreditation becomes available for the method. The Discharger is required to monitor for those radiochemicals with test methods that can be performed by any commercially available laboratory.

k. Ordinarily, receiving surface water samples are not required to be collected during months in which there is no discharge to the Santa Clara River. However, the Newhall Ranch WRP has not been constructed yet. In the absence of effluent data from the Newhall Ranch WRP, receiving water data will be needed to conduct future reasonable potential analyses. Therefore, until the Newhall Ranch WRP is constructed, quarterly (four samples per year) receiving surface water samples shall be collected for each constituent with a monthly monitoring frequency, to evaluate potential seasonal differences in the receiving water. All other receiving surface water constituents shall be sampled at the frequency specified in Table E-5, even before discharge occurs.

l. If the flow measurement cannot be obtained with a flow meter because the receiving surface water is inaccessible due to safety concerns, a qualitative observation shall be recorded and a quantitative flow measurement shall be conducted at RSW-003D, if the monitoring location is accessible and safe.

End of Footnotes for Table E-5

8.1.2. At the time of sampling, the following observations shall be made at all stations and a log shall be maintained thereof:

a. Measurement of flow

b. Odor of water

c. Color of water

d. Occurrence of significant storm runoff (flowing into the river)

e. Presence of floating solids (type)

f. Presence of any sludge banks or deposits, grease, oil, foam, or visible solids of waste origin

g. Presence of any aquatic plant growth, sessile or floating

h. Any unusual occurrence

i. Users of water in river (i.e. people washing, swimming, and playing in the river)

j. Non-contact users (i.e. bikers, joggers, etc.), and

k. Wildlife (i.e. fish, birds, mammals, reptiles, estimated amount of vegetation).

8.1.3. The time, date, and weather conditions at the time of sampling shall be reported.

8.1.4. The color of the effluent shall be contrasted with that of the receiving water and reported descriptively.

8.1.5. Receiving surface water samples shall not be collected during or within 48-hours following the flow of rainwater runoff into the Santa Clara River or during adverse flow conditions, unless it is safe to do so.

8.1.6. The results of receiving surface water monitoring and observations shall be submitted with the effluent monitoring reports.

8.2. Groundwater Monitoring

8.2.1. Monitoring Location – RGW-001, RGW-002, and RGW-003

The following analyses shall be conducted for three years (in 2025, 2027, and 2029) on grab samples obtained from the groundwater aquifer at monitoring location RGW-001U (upgradient well), RGW-002 (downgradient well), and RGW-003 (downgradient well):

Table E-6. Groundwater Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Water Level Elevations	feet	--	quarterly	a, b, and c
pH	pH units	grab	quarterly	a and c
Temperature	°F	grab	quarterly	a and c
Dissolved oxygen	mg/L	grab	quarterly	a and c
Nitrite nitrogen	mg/L	grab	quarterly	a and c
Nitrate nitrogen	mg/L	grab	quarterly	a and c
Organic nitrogen	mg/L	grab	quarterly	a and c
Total nitrogen	mg/L	grab	quarterly	a and c
Total phosphorus	mg/L	grab	quarterly	a and c

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Orthophosphate-P	mg/L	grab	quarterly	a and c
Conductivity	µmho/cm	grab	quarterly	a and c
Total hardness ($CaCO_3$)	mg/L	grab	quarterly	a and c
Total dissolved solids	mg/L	grab	quarterly	a and c
Chloride	mg/L	grab	quarterly	a and c
Sulfate	mg/L	grab	quarterly	a and c
Boron	mg/L	grab	quarterly	a and c
Selenium	µg/L	grab	quarterly	a and c
Cyanide	µg/L	grab	quarterly	a and c
Aluminum	µg/L	grab	quarterly	a and c
Iron	µg/L	grab	quarterly	a and c
TTHMs	µg/L	grab	quarterly	a and c
USEPA Priority pollutants excluding asbestos	µg/L	grab	semiannually	a and c
MTBE	µg/L	grab	semiannually	b and c
Perchlorate	µg/L	grab	semiannually	b and c
1,4-Dioxane	µg/L	grab	semiannually	b and c
1,2,3-Trichloropropane	µg/L	grab	semiannually	b and c
Per- and Poly-fluoroalkyl substances (PFAS)	ng/L	grab	semiannually	c and d

Footnotes for Table E-6

a. Water level elevations shall be reported to the nearest 0.1 ft and referenced to mean sea level.

b. 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 Permittee received ELAP certification to run USEPA method 624).

c. Ordinarily, receiving groundwater samples do not need to be collected during months in which there is no discharge to the Santa Clara River. However, the Newhall Ranch WRP is tentatively scheduled to be constructed in 2028. In the absence of effluent data from the Newhall Ranch WRP, receiving groundwater data will be needed to conduct future reasonable potential analyses. Therefore, all the receiving groundwater constituents shall be sampled at the frequency specified in Section 8.2.1 and Table E-6, even before discharge occurs.

d. USEPA Method 1633 or other ELAP-accredited methodologies for the analysis of PFAS in wastewaters shall be used to meet the required reporting limit of 50 ng/L. The ELAP accredited method for each group of compounds will specify which specific analytes can be measured. All analytes that can be measured using the selected ELAP-accredited method shall be analyzed.

End of Footnotes for Table E-6

9. OTHER MONITORING REQUIREMENTS

9.1. Watershed Monitoring

9.1.1. The goals of the Watershed-wide Monitoring Program for the Santa Clara River Watershed are to evaluate and assess:

a. compliance with receiving water quality objectives;

b. trends in surface water quality;

c. impacts to beneficial uses;

d. data needs for modeling contaminants of concern;

e. water quality including seasonal variation of surface waters within the watershed;

f. the health of the biological community;

g. whether the goals of the TMDLs for the Santa Clara River are being attained; and

h. mixing dynamics of effluent and receiving waters.

9.1.2. To achieve the goals of the Watershed-wide Monitoring Program, the Permittee shall undertake the responsibilities delineated under an approved watershed-wide monitoring plan in the implementation of the Watershed-wide Monitoring Program for the Santa Clara River (Santa Clara River Watershed Monitoring Program or SCRWWMP), which was approved by the Los Angeles Water Board on July 3, 2012.

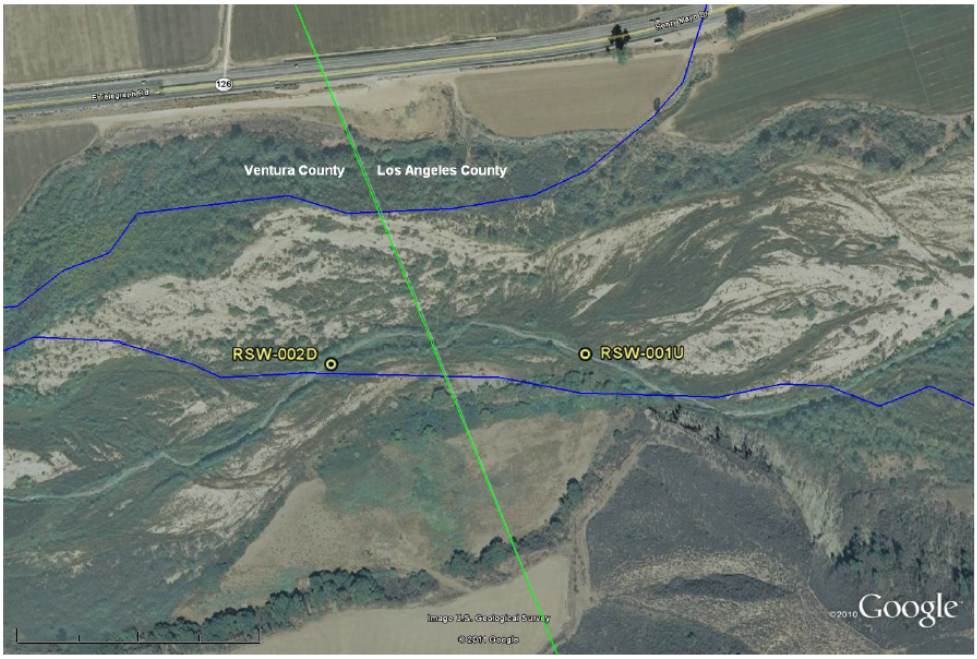
9.1.3. Bioassessment Monitoring Program

In coordination with interested stakeholders in the Santa Clara River Watershed, the Discharger shall conduct annual instream bioassessment monitoring in the spring/summer (unless an alternate sampling period is approved by the Executive Officer) and include an analysis of the community structure of the instream macroinvertebrate assemblages, the community structure of the instream algal assemblages, chlorophyll a and biomass for instream algae, and physical habitat assessment at the random monitoring stations designated by the Santa Clara River Watershed Monitoring Program. The locations of the bioassessment monitoring stations are listed in Table E-7 and depicted in Figure E-3. Over time, bioassessment monitoring will provide a measure of the physical condition of the water body and the integrity of its biological communities.

Table E-7. Bioassessment Monitoring Stations

#	Station ID	Station Description	Sub-region	Latitude (N)	Longitude (W)
1	RSW-002D	Santa Clara River	Receiving water	34.4031107°	-118. 6903682°
2	RSW-001U	Santa Clara River	Receiving water	34.4031673°	-118. 6894755°

Figure E-3. Map of Bioassessment Monitoring Sampling Locations



a. This program shall be implemented by appropriately trained staff. Alternatively, a professional subcontractor qualified to conduct bioassessments may be selected to perform the bioassessment work for the Discharger. Analyses of the results of the bioassessment monitoring program, along with photographs of the monitoring site locations taken during sample collection, shall be submitted in the corresponding annual report. If another stakeholder or interested party in the watershed subcontracts a qualified professional to conduct bioassessment monitoring during the same season and at the same location as specified in the MRP, then the Discharger may, in lieu of duplicative sampling, submit the data, a report interpreting the data, photographs of the site, and related QA/QC documentation in the corresponding annual report.

b. The Discharger must provide a copy of their Standard Operation Procedures (SOPs) for the Bioassessment Monitoring Program to the Los Angeles Water Board upon request. The document must contain step-by-step field, laboratory, data entry, and related QA/QC procedures. The SOP must also include specific information about each bioassessment program including: assessment program description, its organization and the responsibilities of all its personnel;

assessment project description and objectives; qualifications of all personnel; and the type of training each member has received.

c. Field sampling must conform to the SOP established in the Surface Water Ambient Monitoring Program's (SWAMP) *Standard Operating Procedures for the Collection of Field Data for Bioassessment of California Wadeable Streams: Benthic Macroinvertebrates, Algae and Physical Habitat*. Field crews shall be trained on aspects of the protocol and appropriate safety issues. All field data and sample Chain of Custody (COC) forms must be examined for completion and gross errors. Field inspections shall be planned with random visits and shall be performed by the Discharger or an independent auditor. These visits shall report on all aspects of the field procedure with corrective action occurring immediately.

d. A taxonomic identification laboratory shall process the biological samples that usually consist of subsampling organisms, enumerating and identifying taxonomic groups and entering the information into an electronic format. The Los Angeles Water Board may require QA/QC documents from the taxonomic laboratories and examine their records regularly. Intra-laboratory QA/QC for subsampling, taxonomic validation and corrective actions shall be conducted and documented. Biological laboratories shall also maintain reference collections, vouchered specimens (the Discharger may request the return of their sample voucher collections) and remnant collections. The laboratory should participate in an (external) laboratory taxonomic validation program at a recommended level of 10% or 20%. External QA/QC may be arranged through the California Department of Fish and Wildlife's Aquatic Bioassessment Laboratory located in Rancho Cordova, California.

e. The Executive Officer of the Los Angeles Water Board may modify the Monitoring and Reporting Program to accommodate the watershed-wide monitoring.

9.2. Tertiary Filter Treatment Bypasses

9.2.1. 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.

9.2.2. The Discharger shall maintain a 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.

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

9.2.4. 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.

9.3. Monitoring of Volumetric Data for Wastewater and Recycled Water

The Discharger shall monitor the following:

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

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

9.3.3. Discharge: The 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.

9.3.4. Reuse: The monthly volume of recycled water distributed, and annual volume of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, Title 22 in each of the use categories specified in Section 3.2.4 of the Recycled Water Policy.

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, all excursions of effluent limitations, and other noncompliance issues, including, but not limited to a report of any odor complaints that demonstrate noncompliance with odor prohibitions (section 6.1.2.b), a report of any power outage or use or failure of alternate power source (section 6.3.4), and the resolution of any non-compliance.

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 when there are planned service interruptions for electronic submittals.

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 monthly, quarterly, semiannual, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger samples and performs analyses more frequently than required by this Order (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this MRP using approved analytical methods, the results of this monitoring shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with the limitations set forth in this Order.

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

Table E-8. Monitoring Periods and Reporting Schedule

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

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Annually	January 1 following (or on) Order effective date	January 1 through December 31	April 30
Annually (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 Section 7 of the Order. 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 AMEL, AWEL, or MDEL for priority pollutants and more than one sample result is available, the Permittee shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Permittee shall

compute the median in place of the arithmetic mean in accordance with the following procedure:

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

b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both 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 the 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 submittals is available on 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 compliance schedule, special studies, chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – Section 6.3 in the Order. The Discharger shall submit reports in compliance with SMR reporting requirements described in subsection 10.2. above.

10.4.2. Annual Summary Report

By April 30th of each year, the Discharger shall submit an annual summary report containing a discussion of the previous year's influent/effluent analytical results and receiving water monitoring data. The annual summary report shall contain an

overview of any plans for upgrades to the treatment plant's collection system, the treatment processes, or the outfall system. The Discharger shall submit an annual summary 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 reasonable potential was triggered for pollutants which do not have a final effluent limitation in the NPDES permit. This section shall contain the following statement: "The analytical results for this sampling period did/ did not trigger reasonable potential." If reasonable potential was triggered, then the following information shall also be provided:

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

b. The 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 Order, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

10.4.4. The Discharger shall 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 shall:

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

b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.

c. Describe facilities and procedures needed for effective preventive and contingency plans.

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

10.4.5. Climate Change Effects Vulnerability Assessment and Mitigation Plan

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

10.4.6. 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 the site-specific global identification number NPD100056598, assigned to Newhall Ranch WRP. The annual volumetric report shall include information specified in section 9.3, above. A report upload confirmation from the GeoTracker data system, or other indication of completed submittals, shall be included in the annual summary report and uploaded to CIWQS, by the report due date to demonstrate compliance with this reporting requirement.

10.4.7. Annual Pretreatment Reporting – Not Applicable

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

ATTACHMENT F– FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

1. DISCHARGER INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4A190118001
Discharger	Newhall Ranch Sanitation District
Name of Facility	Newhall Ranch Water Reclamation Plant (Newhall Ranch WRP) and its associated wastewater collection system and outfall
Facility Address	Hwy 126 at the Los Angeles/ Ventura County Line
Facility Contact, Title and Phone	Erika Bensch, Reuse & Compliance Manager (562) 908-4288 x 2801
Authorized Person to Sign and Submit Reports	Erika Bensch, Reuse & Compliance Manager (562) 908-4288 x 2801
Mailing Address	1955 Workman Mill Road, Whittier, CA 90601
Billing Address	Same as above
Type of Facility	Publicly-Owned Treatment Works (POTW)
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	No
Recycling Requirements	Not Applicable
Facility Permitted Flow	2 Million Gallons per Day (MGD)
Facility Design Flow	2 MGD
Watershed	Santa Clara River Watershed
Receiving Waters	Santa Clara River – Reach 5
Receiving Water Type	Inland surface water

1.1. On February 7, 2024, Newhall Ranch Sanitation District (hereinafter Discharger, Permittee, or Newhall Ranch SD) submitted a Report of Waste Discharge (ROWD) and applied for renewal of the Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit for the Newhall Ranch WRP, which has yet to be constructed. Newhall Land and Farming Company, a California Limited partnership and a wholly-owned subsidiary of Five Point Holdings, LLC, owns the land where the Newhall Ranch WRP will be built. There was no change in property ownership when Newhall Land and Farming Company was absorbed by Five Point Holdings, LLC. The Permittee will own a Publicly-Owned Treatment Works (POTW) comprised of the Newhall Ranch Water Reclamation Plant (hereinafter Facility or Newhall Ranch WRP) and its associated wastewater collection system and outfall. Santa Clarita Valley Sanitation District (SCVSD) will operate the Facility.

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 Permittee herein.

1.2. Newhall Land and Farming Company initially submitted an ROWD on April 23, 2004, and applied for an NPDES permit to discharge of up to 2.0 mgd of tertiary-treated wastewater from the Newhall Ranch WRP, a new POTW that that is planned for construction to treat the sewage generated by the inhabitants within the Newhall Ranch Specific Plan area, a new housing development that would be constructed in phases. The initial phases approved for development include Landmark Village and Mission Village.

1.2.1. **Construction status**. The Newhall Ranch Specific Plan allows for up to 20,885 residential units and approximately 5.5 million square feet of commercial uses to be built in phases in accordance with market conditions. It is anticipated that full build-out could take 25 years. The Newhall Ranch WRP is planned to be built in phases with a tentative first phase capacity of 2.0 MGD, an interim phase to 4.0 MGD as dictated by market conditions, and a later phase that would bring capacity to 6.8 MGD. Phase 1 would serve a population of 17,650, Phase 2 would serve an additional 17,650, and Phase 3 would serve an additional 24,700. As part of the approval process for Mission Village and Landmark Village, the County of Los Angeles Department of Regional Planning (the County) imposed Mission Village Conditional Use Permit ("CUP") Condition No. 77 and Vesting Tentative Tract Map ("VTTM") Condition No. 59, as well as Landmark Village CUP Condition No. 90 and VTTM Condition No. 53, (collectively, the "County Conditions") that obligate Newhall to construct the Newhall Ranch Water WRP prior to the 6,000th equivalent dwelling unit within the Newhall Ranch Specific Plan, as determined by SCVSD. On January 9, 2002, County Sanitation Districts of Los Angeles County (LACSD) and Newhall Land and Farming Company entered into an Interconnection Agreement. With certain conditions, a term of this agreement allows for the sewage generated by the first 6,000 dwelling units of Newhall Ranch to be temporarily treated at the Valencia Water Reclamation Plant (Valencia WRP), until the Newhall Ranch WRP is constructed. Home construction has begun in the Mission Village development. As of February 2024, 1,141 homes have been built and are currently occupied. They generate approximately 0.207 MGD of sewage.

1.2.2. **Agreements**. The Interconnection Agreement specifies that Newhall Land and Farming will design, fund, and construct all sewers, pumping plants, or force mains required to convey any flow generated within Newhall Ranch to the Valencia WRP. Newhall has designed, funded, and constructed the sewer lines required to convey the sewage generated by the 1,141 homes in the Newhall Ranch Specific Plan area to the Valencia WRP. Newhall Land and Farming applied to the Local Agency Formation Commission for Los Angeles County (LAFCO) requesting the formation of a new sanitation district. Subsequently, on July 27, 2006, the Newhall Ranch Sanitation District (Newhall Ranch SD or Discharger) was formed. On January 18, 2011, the Los Angeles County Board of Supervisors confirmed formation of the Newhall Ranch Sanitation District. The Los Angeles County Board of Supervisors serves as the Board of Directors for the Newhall Ranch SD, and the Los Angeles Department of Public Works (LADPW) used to serve as the acting staff.
On September 6, 2007, the Los Angeles Water Board adopted Order No. R4-2007-0046, which served as the first NPDES permit and WDRs for the Newhall Ranch SD's Newhall Ranch WRP. At that time, Newhall Land and Farming Company owned the land where the Newhall Ranch WRP was planned to be built. Due to a downturn in the housing market, construction on Landmark Village, Mission Village, and Newhall Ranch WRP were never initiated during the permit cycle.

On December 5, 2013, the Los Angeles Water Board adopted Order No. R4-2013-0180, which served to renew the WDRs and NPDES permit for the Newhall Ranch WRP. However, due to litigation issues, the construction schedule was delayed and construction of Landmark Village, Mission Village, and the Newhall Ranch WRP was never initiated during the permit cycle.

On December 12, 2017, Newhall Ranch SD entered into a Joint Sewer Services Agreement (JSSA) with SCVSD, formerly referred to as the Los Angeles County Sanitation Districts Nos. 26 and 32 of Los Angeles County. According to Section 5.5 of the JSSA, Newhall Ranch SD will own, operate, and maintain the Newhall Ranch WRP after the Newhall Land and Farming Company designs, funds, constructs, and successfully starts operation of the Newhall Ranch WRP. The terms and conditions contained in the JSSA supersede many of the terms and conditions which had been contained in the *Interconnection Agreement* dated January 9, 2002. In March 2014, SCVSD replaced LADPW as staff to Newhall Ranch SD.

Newhall Ranch SD has prepared an interim sewer service plan, titled Mission and Landmark Villages Pump back Plan of Sewer Service, dated February 9, 2024, (the "Service Plan"), which SCVSD's staff has reviewed and determined to be acceptable, to meet the sewerage service requirements for the Newhall Ranch Specific Plan area until the Newhall Ranch WRP is operational and necessary related sewerage facilities in accordance with the Newhall Ranch Engineer's Report, dated November 2018.

On June 17, 2024, SCVSD and Newhall Land and Farming Company entered into a Land Transfer Agreement pursuant to which Newhall Land and Farming Company has agreed to convey to SCVSD approximately 12.9 acres of property near the Valencia WRP that will enhance the Valencia WRP's ability to provide sewer

service as well as address future treatment needs that may not otherwise be possible within the existing site. Further, Newhall Land and Farming Company has agreed to fund up to $600,000 toward the cost of a study to be completed by SCVSD to evaluate the long-term wastewater treatment facility needs of SCVSD.

Subsequently, SCVSD and Newhall Ranch SD amended the JSSA to eliminate the Interim Milestones.

On June 25, 2024, Newhall Ranch SD sought the Los Angeles County Department of Regional Planning's determination that the Interim Milestones, which includes construction of the Newhall Ranch WRP prior to Newhall Land and Farming Company obtaining building permit(s) that would result in exceeding 4,000 equivalent dwelling units, are deemed satisfied and no further action by Newhall Land and Farming Company is required with respect to the Interim Milestones. In their response letter dated September 18, 2024, Regional Planning deferred such determination to the Los Angeles County Department of Public Works (Public Works). Subsequently, on October 3, 2024, Public Works determined that the Interim Milestones are deemed satisfied and no further action by Newhall Land and Farming Company is required with respect to the Interim Milestones.

1.2.3. **Interim Demineralization Facility.** Newhall Land and Farming Company constructed the Interim Demineralization Facility, with a design capacity of 0.321 MGD, on an easement property that is surrounded by the Valencia WRP (See Attachment B2). This temporary package plant is operating to remove a portion of the chloride load contribution from the Newhall Ranch development, until the Newhall Ranch WRP is built. Newhall Land and Farming Company also constructed sewers, pumping plants, and force mains required to convey any flow generated from the Newhall Ranch development to be treated at the Valencia WRP; and the pipelines necessary to convey the demineralized treated effluent, also known as permeate, from the Interim Demineralization Facility back to the Valencia WRP's sewer system, under Santa Clarita Valley Sanitation District's pretreatment program's Industrial Waste Permit No. 22746. On April 23, 2024, Newhall Land and Farming Company's consultant indicated that the 118 mg/L chloride concentrations in the influent would be treated to concentrations of 6 mg/L of chloride in the permeate leaving the interim demineralization facility. (Attachment B2 provides an aerial view of the location of the Interim Demineralization Facility and an overview of the flows in and out of the Interim Demineralization Facility). Brine from the Interim Demineralization Facility is trucked to the A.K. Warren Water Resource Facility, formerly referred to as the Joint Water Pollution Control Plant. Newhall Land and Farming Company is required to provide similar levels of treatment for flows generated from the Landmark Village development once construction is initiated. This interim wastewater treatment scenario is described in further detail in a separate Los Angeles Water Board Order No. R4-2012-0139, Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements (WDRs) for Newhall Land and Farming Company (File No. 11-168), adopted by the Los Angeles Water Board on September 14, 2012. Order No. R4-2012-0139 requires that:

> "For purposes of further treating wastewater (to a chloride level of 100 mg/L or less for up to 6,000 equivalent dwelling units) from Newhall Ranch that will be sent to the Valencia WRP, Newhall Land, or its successor, shall complete construction of interim chloride and demineralization facilities to the satisfaction of the Regional Board prior to discharging sewage from Newhall Land to the Valencia WRP or other publicly owned treatment works. The interim chloride and demineralization facilities shall be sufficient to ensure that any wastewater discharge attributable to Newhall Ranch does not result in discharge to the Santa Clara River of effluent containing chloride in concentrations exceeding 100 mg/L. If sewage from Newhall Land does not already meet the chloride limit of 100 mg/L, an equivalent volume of effluent shall be removed from the combined Newhall/Valencia partially treated waste stream and shall be treated at the interim chloride and demineralization facility to meet 100 mg/L chloride prior to discharge."

1.3. The Newhall Ranch WRP will discharge treated effluent to the Santa Clara River, a water of the United States and of the State. The Discharger was previously regulated by Order No. R4-2019-0077 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0064556, adopted on June 13, 2019 and which expired on August 31, 2024. Attachment B1 provides a topographic map of the area around the Facility.

1.4. 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 February 7, 2024. Supplemental information was requested on March 11, March 28, and April 3, 2024 and it was received on March 22, April 11, and April 23, 2024, respectively. The application was deemed complete on May 3, 2024. A site visit was conducted in October 2024, to observe operations and collect additional data to develop permit limitations and conditions. The terms and conditions of the previous Order have been automatically continued and remain in effect until new WDRs and an NPDES permit are adopted pursuant to this Order. Attachment B3 shows the Joint Administrative Agreement Structure between Newhall Ranch SD and the other sanitation districts. Attachment B4 shows the proposed site layout for Phase 1 at 2 MGD design capacity. Attachment B5 shows the possible site layout if the Newhall Ranch WRP was designed for a 6.9 MGD capacity. Attachment C1 provides the flow schematic of the Facility.

2. FACILITY DESCRIPTION

2.1. Description of Wastewater and Biosolids Treatment and Controls

2.1.1. The Newhall Ranch WRP will be a tertiary wastewater treatment facility with a dry weather design capacity of 2.0 MGD. Phase 1 of the POTW is expected to serve an estimated population of 17,650. Untreated wastewater will be collected from the new housing developments and commercial sites located within the Newhall Ranch Specific Plan area. Treatment at the Newhall Ranch WRP will consist of screening for removal of large solids, activated sludge biological treatment with membrane

bioreactors, nitrification and denitrification, partial reverse osmosis (or equivalent demineralization), and ultraviolet light (UV) disinfection. Wastewater may be discharged intermittently from Discharge Point 001 to the Santa Clara River, a water of the United States, when the demand for recycled water is low. Newhall Ranch SD initially proposed to have a diffuser at Discharge Point 001; however, the design drawing of the whole treatment plant prepared by Pacific Advanced Civil Engineering indicated that the detailed drawings of the sewer outfall pipe, its slope, the trail finish grade above the pipe, and the rip rap around the outfall will be planned by others. Newhall Ranch SD is currently reviewing the need for a diffuser and its configuration, so a contractor has not yet been selected to complete the final design of the diffuser. Two options are depicted in the Process Flow Diagram for solids processing at the plant. Sewage solids separated from the wastewater will either be dewatered with a belt thickener and trucked to the Valencia WRP or pumped through a pipe to the Valencia WRP for processing, where treatment and disposal will occur, regulated under Valencia WRP's NPDES permit (NPDES No. CA0054216).

2.1.2. The following are brief descriptions of the major unit processes, operations, and/or equipment, based on the ROWD submittal and the Preliminary Design Report prepared by CH2MHill in 2003. The design of the Facility is scheduled to be complete by 2028 and the schedule for planned changes are discussed in section 2.5.

2.1.2.1. **Influent grinding.** Solids such as paper and rags would be ground prior to entering the treatment process to prevent entangling of these solids in the mechanical parts of the treatment chain.

2.1.2.2. **Grit removal and screening.** Rotating drum fine screens will be utilized to remove particulate matter that is larger than 1 millimeter (a requirement of the membrane manufacturer). Grit, which consists of a wide assortment of inorganic solids such as pebbles, sand, silt, egg shells, glass, and metal fragments will be removed by settling. Rags and plastics will be removed by screening. This material will be collected and disposed of in a landfill.

2.1.2.3. **Step Feed Activated Sludge (SFAS).** Biological treatment using SFAS with nitrification and denitrification will be used to remove nitrogen from the wastewater. The SFAS system will consist of two anoxic zones and two aerobic zones. Aeration in the aerobic zone provides oxygen for living microorganisms that are produced and maintained to breakdown and consume the organic material, such as ammonia, in the incoming wastewater. The mixture of wastewater with such microorganisms is known as mixed liquor. In the anoxic zone, denitrification is accomplished biologically, by anaerobic microorganisms that consume organic matter in the wastewater and reduce nitrates to nitrogen gas.

2.1.2.4. **Membrane Bioreactor (MBR) filtration.** A suspended growth biological reactor that utilizes ultrafiltration membranes will be used as a secondary treatment process, to reduce the organic content and particulate matter in the wastewater, and achieve clarification/filtration. The ultrafiltration membrane system is immersed in the aeration tank and filtration is achieved by drawing water through

the membrane surface under a vacuum produced by suction permeate pumps. In effect, the membrane system replaces the function of the secondary clarifiers and granular media filtration system. The membrane has a maximum pore size of 0.2 microns with an average pore size of 0.07 microns, placing it almost in the ultrafiltration range. Ultrafiltration membranes will be installed in separate aerated tanks at the end of the SFAS system.

2.1.2.5. **Reverse Osmosis (RO).** Reverse osmosis treatment is proposed for a portion of the MBR treated effluent at the Newhall Ranch WRP to achieve chloride reduction. The permeate will be blended with MBR effluent that has not been treated by RO to achieve the desired final effluent chloride concentration. RO is expected to reduce the chloride levels in the RO-treated portion of the effluent by approximately 95%. During the 2019 permit renewal process, brine disposal was contemplated in one of two ways: by deep well injection (through a separate USEPA Underground Injection Control (UIC) permit No. R9UIC-CA1-FY11-4 obtained in 2013) or by trucking it to the Joint Water Pollution Control Plant (currently known as the A.K. Warren Water Resource Facility) for treatment and ocean disposal. However, USEPA UIC permit No. R9UIC-CA1-FY11-4 expired on November 11, 2023, and is no longer in effect. Dexter Wilson Engineering, Inc., prepared the *Newhall Ranch Sanitation District Engineer's Report* (Job No. 721-012), dated November 2018, indicating that deep well injection is no longer the most cost-effective method of brine disposal and that the currently preferred brine disposal method in the region is to concentrate brine and truck to a suitable disposal location, as is the current case from the new Valencia WRP Advanced Water Treatment (AWT) facilities. Newhall Ranch SD indicated, in supplemental information submitted with the 2024 ROWD, that it is possible that during design/construction of the Newhall Ranch WRP (or at another future point in time), the feasibility of the brine disposal alternative through a Class I UIC permit may be reconsidered. As identified in the November 2018 Newhall Ranch SD Engineer's Report, Newhall Ranch SD's currently preferred brine disposal method in the region is to concentrate brine and truck to a suitable disposal location.

2.1.2.6. **Flow Equalization.** Flow equalization will be provided in the Newhall Ranch WRP through in-tank equalization and an onsite storage pond (with a 0.8 mgd holding capacity). In-tank equalization will be achieved by providing 6 feet of freeboard in the membrane bioreactor tank, which is four feet of additional freeboard, beyond the necessary 2-foot freeboard required. This allows for adjustments of flow within the plant throughout the day, during peak flow conditions, and during storm events. Once the storm event/ peak flow conditions have subsided, the overflow stored in the pond will be pumped back to the plant headworks for treatment.

2.1.2.7. **Ultraviolet (UV) disinfection.** Irradiation with UV light will be used as the method of disinfection at the Newhall Ranch WRP. Although it provides no residual, this method is effective in inactivating both bacteria and viruses. When applied to low-turbidity water, it has been proven to be effective. UV spans wavelengths from 2000-3900 angstroms. The most effective band for disinfection is in the shorter range of 2000-3000 angstroms.

2.1.2.8. **Chlorination.** Sodium hypochlorite will be used as a cleaning agent for the bioreactor membranes.

2.1.2.9. **Solids handling.** Grit and bar screenings will be hauled off-site for disposal in a landfill. Sludge may be disposed of using one of two options: transporting the wet sludge to the Valencia WRP in a pipeline during initial phases of the Newhall Ranch WRP, or trucking the dewatered sludge from a gravity belt thickener to the Valencia WRP during later phases of construction.

2.1.3. **Water Reclamation**

The Discharger plans to recycle up to 478 acre-feet per month (during February through November) and up to 340 acre-feet per month (during December through January) of its tertiary-treated effluent for landscape irrigation every year. When the demand for recycled water is low, Newhall Ranch WRP will discharge the excess tertiary-treated effluent to the Santa Clara River. When the demand for recycled water exceeds what the Newhall Ranch WRP can provide, Newhall Ranch SD plans on using water from the Santa Clarita Valley Water Agency to supplement the recycled water supply, so that the recycled water customers do not experience a shortage in service. The distribution and reuse of recycled water for direct, non-potable applications would be regulated under the State Water Board's General Order WQ 2016-0068-DDW for *Water Reclamation Requirements for Recycled Water Use* (General WRR). However, after the Newhall Ranch WRP treatment design is complete, but prior to using of the treated effluent for recycling, the Discharger must submit an engineering report to the State Water Board Division of Drinking Water (DDW) for approval and must submit a Notice of Intent (NOI) to the Los Angeles Water Board to obtain coverage under the State Water Board's General WRR.

2.2. Discharge Points and Receiving Waters

2.2.1. The Newhall Ranch WRP will discharge tertiary-treated wastewater to Reach 5 of the Santa Clara River, a water of the United States, which is considered the immediate downstream receiving water. In addition to impacting Reach 5, the discharge will also impact all other downstream reaches of the Santa Clara River since they are all hydraulically connected. As described above, Newhall Ranch SD plans on applying for separate Water Reclamation Requirements to recycle tertiary-treated effluent. The remaining treated effluent that is not recycled will be discharged from the plant to surface waters at the following discharge point.

Discharge Point 001: Discharge to Santa Clara River, approximately 1,300 feet southwest of the intersection of Barranca Drive and Highway 126 (Henry Mayo Drive) (approximate coordinates: Latitude 34.40316667º, Longitude 119.689667º).

2.2.2. The Santa Clara River is part of the Santa Clara River Watershed and is the largest river system in the Los Angeles Region that remains in a relatively natural state. It is a natural meandering river near the point of discharge. Like most areas in southern California, the Santa Clara River watershed has been subjected to significant land use and flow modifications due to urban development and agricultural practices. However, compared to other watersheds in southern California, the Santa Clara

River still retains many forested areas and relatively undisturbed tributaries, and has important biological resources, including the endangered steelhead trout and stickleback. The mountains are composed of marine and terrestrial sedimentary and volcanic rocks. The basins are filled with a mixture of deposits of sands, silts and clays interspersed throughout the region, representing the exposure of several of the underlying formations.

2.3. Summary of Existing Requirements and SMR Data

Effluent limitations contained in the previous Order No. R4-2019-0077 are as follows. However, there are no representative effluent monitoring data at EFF-001, for discharges from Discharge Point 001, from the term of the previous Order from September 2019 to April 2024, because the Newhall Ranch WRP has not been constructed.

Table F-2. Historic Effluent Limitations and Monitoring Data at EFF-001

Parameter	Units	Current AMEL	Current AWEL	Current MDEL	Highest Avg. Monthly Conc.	Highest Avg. Weekly Conc.	Max. Daily Conc.	Notes
$BOD_5$20°C	mg/L	20	30	45	---	---	---	---
Total Suspended Solids (TSS)	mg/L	15	40	45	---	---	---	---
$BOD_5$20°C Removal Efficiency	%	85	---	---	---	---	---	---
TSS Removal Efficiency	%	85	---	---	---	---	---	---
Turbidity	NTU	2	5	10	---	---	---	a
pH	Std units	---	---	6.5 - 8.5	---	---	---	---
Temperature	°F	---	---	86	---	---	---	---
Oil and Grease	mg/L	10	---	15	---	---	---	---
Settleable Solids	mL/L	0.1	---	0.3	---	---	---	---
Combined Radium-226 and Radium 228	pCi/L	5	---	---	---	---	---	---
Gross Alpha particle activity (excluding radon and uranium)	pCi/L	15	---	---	---	---	---	---

Parameter	Units	Current AMEL	Current AWEL	Current MDEL	Highest Avg. Monthly Conc.	Highest Avg. Weekly Conc.	Max. Daily Conc.	Notes
Uranium	pCi/L	20	---	---	---	---	---	---
Gross Beta/photon emitters	Millirem/ year	4	---	---	---	---	---	---
Strontium-90	pCi/L	8	---	---	---	---	---	---
Tritium	pCi/L	20,000	---	---	---	---	---	---
Total Coliform	MPN/100 mL	23	2.2	240	---	---	---	---
E. coli	MPN/100 mL	126	2.2	235	---	---	---	---
Total Residual Chlorine	mg/L	---	---	0.1	---	---	---	---
Total Dissolved Solids	mg/L	1,000	---	---	---	---	---	---
MBAS	mg/L	0.5	---	---	---	---	---	---
Chloride	mg/L	100	---	---	---	---	---	b
Sulfate	mg/L	400	---	---	---	---	---	---
Boron	mg/L	1.5	---	---	---	---	---	---
MBAS	mg/L	0.5	---	---	---	---	---	---
Nitrite (as N)	mg/L	0.9	---	---	---	---	---	---
Nitrate plus Nitrite as Nitrogen	mg/L	5	---	---	---	---	---	---
Ammonia Nitrogen (as N)	mg/L	1.75	---	5.2	---	---	---	---
Copper	µg/L	11	---	34	---	---	---	---

Parameter	Units	Current AMEL	Current AWEL	Current MDEL	Highest Avg. Monthly Conc.	Highest Avg. Weekly Conc.	Max. Daily Conc.	Notes
Cyanide	µg/L	4.3	---	8.5	---	---	---	---
Selenium	µg/L	4.5	---	6.8	---	---	---	---
2,3,7,8-TCDD (Dioxin)	µg/L	0.014	--	0.028	---	---	---	---
Bis(2-Ethylhexyl) Phthalate	µg/L	4	---	---	---	---	---	---
Iron	µg/L	300	---	---	---	---	---	---
Total trihalomethanes	µg/L	80	---	---	---	---	---	---
Chronic Toxicity	Pass or Fail, % Effect (TST)	Pass	---	Pass or % Effect < 50	---	---	---	c

Footnotes for Table F-2

a. The turbidity of the treated wastewater shall 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.

b. The final effluent limitation for chloride is expressed as a 3-month rolling average, consistent with the WLA for the Newhall Ranch WRP contained in Chapter 7-6 of the Basin Plan.

c. The effluent limitations for chronic toxicity are expressed as a Maximum Daily Effluent Limitation and as a Median Monthly Effluent Limitation (not an Average Monthly Effluent Limitation).

2.4. Compliance Summary

The Newhall Ranch WRP is not operational because it has not been constructed. Therefore, no exceedances of the final effluent limitations in Order R4-2019-0077 have occurred during the period between September 2019 to April 2024. However, Newhall Ranch WRP had four incomplete electronic self-monitoring reports (e-SMRs) on the CIWQS database when it did not submit receiving water data on time. The deficiencies and the corrective actions taken by the Discharger are described in the table below.

Table F-3. Summary Table of Deficiencies

Date	Pollutant	Receiving Water Station	Corrective Action
02/06/2020	TCDD equivalents	RSW-001U	A make-up sample was collected in May 2020 and was analyzed.
08/31/2021	$BOD_5 20^oC$	RSW-001U	Lab analyst failed to read results within incubation period. However, a make-up sample was collected in September 2021 and was analyzed.
08/31/2021	$BOD_5 20^oC$	RSW-002D	Lab analyst failed to read results within incubation period. However, a make-up sample was collected in September 2021 and was analyzed. As a corrective measure, to prevent this from happening in the future, lab staff will double check the calendar dates to ensure samples are analyzed on the correct date.
02/24/2022	MBAS	RSW-001U & RSW-002D	The data integrity issue was addressed by purchasing a spectrophotometer that has a reading log, requiring lab staff to adhere to standard operating procedures, and assigning additional lab staff to oversee lab activities.

2.5. Planned Changes

Construction of the Newhall Ranch WRP will be completed on or before the date that the 6,000th equivalent dwelling unit is completed to treat the sewage generated by the inhabitants of the Newhall Ranch Development community.

The following table summarizes the construction schedule:

Table F-4: Summary of Capital Improvement Projects

Project Name	End Date
Prepare design plans for initial development units	Ongoing/ Complete
NRWRP Improvement Plant Design Completion	2027 - 2028
Estimated Commencement of Construction of Newhall Ranch WRP	2028
Estimated Start-up Newhall Ranch WRP	2030

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

3.1. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge locations described in Table 2 subject to the WDRs in this Order.

3.2. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is not subject to the provisions of CEQA (Public Resources Code, section 21000 and following).

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 WQOs, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan.

Beneficial uses applicable to the relevant reaches of the Santa Clara River are as follows:

Table F-5A. Basin Plan Beneficial Uses and Features – Surface Waters

Discharge Point	Watershed Boundary Dataset (WDD) Number	Receiving Water Name	Beneficial Use(s)
001	180701020403 (formerly Calwater Hydro Unit 403.51)	Santa Clara River Reach 5	**Existing**: Industrial service supply (IND); industrial process supply (PROC); agricultural supply (AGR); groundwater recharge (GWR); freshwater replenishment (FRSH); water contact recreation (REC1); non-contact water recreation (REC2); warm freshwater habitat (WARM); wildlife habitat (WILD); preservation or rare, threatened or endangered species (RARE); and wetland habitat (WET). **Potential**: municipal and domestic supply (MUN, note a)
001	HUC 180701020403 (formerly Calwater Hydro Unit 403.41)	Santa Clara River Reach 4B	**Existing:** IND, PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; WET; and migration of aquatic organisms (MIGR). **Potential:** MUN (note a)
001	HUC 180701020802 (formerly Calwater Hydro Unit 403.41)	Santa Clara River Reach 4A	**Existing:** IND, PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; MIGR; and, WET. **Potential:** MUN (note a)
001	180701020802 (formerly Calwater Hydro Unit 403.31)	Santa Clara River Reach 3	**Existing:** IND, PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; MIGR; and WET. **Potential:** MUN (note a)
001	180701020903 (formerly Calwater Hydro Unit 403.21)	Santa Clara River	**Existing:** IND, PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; MIGR; and WET. **Potential:** MUN (note a)

Discharge Point	Watershed Boundary Dataset (WDD) Number	Receiving Water Name	Beneficial Use(s)
001	180701020904 (formerly Calwater Hydro Unit 403.11)	Santa Clara River Reach 2	**Existing:** IND, PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; MIGR; WET; and Coldwater Habitat (COLD). **Potential:** MUN (note a)
001	180701020904 (formerly Calwater Hydro Unit 405.11)	Santa Clara River Estuary	**Existing:** Navigation (Nav), REC1; REC2; commercial and sport fishing (COMM); estuarine habitat (EST); marine habitat (MAR); WILD; RARE; MIGR; WET; and spawning reproduction, and/or early development (SPWN).

Footnotes for Table F-5

a. The potential municipal and domestic supply (p*MUN) beneficial use for the water body is consistent with the Sources of Drinking Water Policy (page 5-13 of the Basin Plan). However, the Los Angeles Water Board has only conditionally designated the MUN beneficial use. Therefore, the Los Angeles Water Board is not establishing effluent limitations based on the potential MUN designation at this time.

End of footnotes for Table F-5

Beneficial uses of groundwater applicable to the relevant reaches of the Santa Clara River are as follows:

Table F-5B. Basin Plan Beneficial Uses – Groundwater Basin

Receiving Water Name	MUN	IND	PROC	AGR	AQUA
Santa Clara River Valley (DWR Basin 4-4)	---	---	---	---	---
Bouquet & San Francisquito Canyons (DWR Basin 4-4.07)	Existing	Existing	Existing	Existing	---
Castaic Valley (DWR Basin 4-4.07)	Existing	Existing	Existing	Existing	---
Saugus Aquifer (DWR Basin 4-4.07)	Existing	---	---	---	---
Piru Basin	---	---	---	---	---
Upper Area (above Lake Piru) (DWR Basin 4-4.06)	Potential	Existing	Existing	Existing	---

Receiving Water Name	MUN	IND	PROC	AGR	AQUA
Lower area east of Piru Creek (DWR Basin 4-4.06)	Existing	Existing	Existing	Existing	---
Lower area west of Piru Creek (DWR Basin 4-4.06)	Existing	Existing	Existing	Existing	---

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. This Order implements the NTR and CTR.

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. Compliance Schedule Policy. On April 15, 2008, the State Water Board adopted Resolution Number 2008-0025, *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits* (Compliance Schedule Policy). The Compliance Schedule Policy became effective on December 17, 2008. The Compliance Schedule Policy is a statewide water quality control policy that authorizes compliance schedules in NPDES permits that implement CWA section 301(b)(1)(C). The Compliance Schedule Policy supersedes all existing provisions authorizing NPDES compliance schedules with the exception of: (1) existing compliance schedule provisions in Total Maximum Daily Load (TMDL) implementation plans in Regional Water Quality Control Plans; and (2) the provisions authorizing compliance schedules for California Toxics Rule criteria in the SIP. However, this Discharger is not eligible for a compliance schedule under the Compliance Schedule Policy because it is a new discharge and does not meet the requirements specified in the policy.

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

sanitary purposes. This Order implements this policy by ensuring the discharge meets requirements protective of the beneficial uses of the receiving waters.

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

3.3.7. 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, to comply with federal anti-backsliding requirements, this Order contains effluent limitations that are more stringent than the minimum federal technology-based requirements that are carried over from the previous Order.

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 statewide water quality control plans were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any WQOs and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR section 131.21(c)(1). 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.

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

federal antidegradation policies. The permitted discharge and this Order are consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16, as discussed in section 4.4.2 of the Fact Sheet.

3.3.9. 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 the anti-backsliding provisions by ensuring the effluent limitations are as stringent as those in the previous Order, unless one of the exceptions applies.

3.3.10. Endangered Species Act Requirements. This Order prohibits any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (ESA) (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 USC §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable ESA.

3.3.11. 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.

3.3.12. Water Recycling. In accordance with statewide policies concerning water reclamation (See, e.g., Water Code sections 13000 and 13550-13557, State Water Board Resolution Number 77-1 (*Policy with Respect to Water Reclamation in California*), and State Water Board Resolution Numbers 2009-0011, 2013-0003, and 2018-0057 (*Water Quality Control Policy for Recycled Water* (Recycled Water Policy)), the Los Angeles Water Board strongly encourages, wherever practicable, water recycling, water conservation, and use of stormwater and dry-weather urban runoff. The State Water Board adopted the Recycled Water Policy on February 3, 2009, and amended it most recently on December 11, 2018. The most recent amendments became effective on April 8, 2019. This Order implements the Recycled Water Policy by requiring annual reports of influent, wastewater produced, and effluent volumes, including treatment level, discharge type, and categories of reuse. These requirements are described in section 4.7.2. of this Fact Sheet.

This permit also requires the Permittee to investigate the feasibility of recycling, conservation, and/or alternative disposal methods for wastewater (such as groundwater injection), and/or capture and treatment of dry-weather urban runoff and stormwater. This requirement is described in section 4.7.1. of this Fact Sheet.

3.3.13. Monitoring and Reporting. 40 CFR section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code section 13383 authorizes the Los Angeles Water Board to require technical

and monitoring reports for discharges and proposed discharges. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and state requirements. This MRP is provided in Attachment E.

3.3.14. Sewage Sludge and Biosolids Requirements.

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

3.3.15. Pretreatment Requirements. The application of pretreatment requirements is monitored by the Discharger and the Order will be reopened when additional pretreatment requirements are determined to be applicable to the discharge.

3.3.16. 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 Number 2017-0027, which was approved by the Office of Administrative Law (OAL) on June 28, 2017, and became effective upon USEPA approval on July 14, 2017. The Mercury Provisions establish one narrative and four numeric water quality objectives for mercury and three new beneficial use definitions, implemented through NPDES permits issued pursuant to CWA section 402, waste discharge requirements, or waivers of waste discharge requirements. The Mercury Provisions include implementation provisions for individual non-stormwater NPDES permits for municipal and industrial dischargers; stormwater discharges including MS4 discharges and discharges regulated by *General Permit for Storm Water Discharges Associated with Industrial Activities* (NPDES No. CAS000001); mine site remediation; nonpoint source discharges; dredging activities; and wetland projects.

The Mercury Provisions contain provisions that apply to POTWs and individual industrial discharges. The Mercury Provisions convert 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 in Mercury Provisions (See Section 4.3.3 of Fact Sheet for RPA SIP procedures).

3.3.17. Bacteria Provisions. The State Water Board adopted the *Bacteria Provisions and Water Quality Standards Variance Policy* (Bacteria Provisions) through Resolution Number 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. The *E. coli* water quality objectives established in the Bacteria Provisions 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 site-specific numeric water quality objectives for bacteria. Where there is a TMDL to implement prior bacteria objectives, the TMDL remains in effect.

3.3.18. Toxicity Provisions. Beginning in May 2013, the Los Angeles Water Board began implementing in NPDES permits for POTWs and industrial facilities numeric water quality objectives for both acute and chronic toxicity, using the Test of Significant Toxicity (TST), and a program of implementation to control toxicity. As explained later in the Fact Sheet, this approach is a preferred statistical method because it provides a higher confidence in results classifying in-waste stream concentrations as toxic or non-toxic and it is supported by USEPA. This methodology is used in Order No. R4-2019-0077 and is carried over into this Order.

On December 1, 2020, the State Water Board adopted statewide numeric water quality objectives for both acute and chronic toxicity, using the TST, and a program of implementation to control toxicity, which are collectively known as the Toxicity Provisions. On October 5, 2021, the State Water Board adopted a resolution confirming that the Toxicity Provisions were adopted as a State Policy for Water Quality Control, for all inland surface waters, enclosed bays, estuaries, and coastal lagoons of the state, regardless of their status as waters of the United States. The Toxicity Provisions establish a uniform regulatory approach to provide consistent protection of aquatic life beneficial uses and protect aquatic habitats and life from the effects of known and unknown toxicants. The Toxicity Provisions were approved by OAL on April 25, 2022, and by USEPA on May 1, 2023. Portions of the Toxicity Provisions applicable to this Order went into effect upon approval by OAL, and the Toxicity Provisions in their entirety went into effect upon approval by the USEPA. The toxicity requirements in this Order are consistent with the Toxicity Provisions.

3.3.19. Self-Regenerating Water Softeners. On December 8, 2016, the Los Angeles Water Board adopted a Basin Plan Amendment to incorporate stakeholder-developed Groundwater Quality Management Measures for Salts and Nutrients (SNMP) in the Upper Santa Clara River Groundwater Basin. The purpose of the SNMP is to enhance the protection of beneficial uses in the East Subbasin and allow for long-term sustainability of groundwater quality and resources consistent with the Basin Plan. The SNMP Final Report, dated October 25, 2016, prepared by Geoscience, identifies self-regenerating water softeners as one of the principal sources of chloride to the sewage system. The control of residential use of self-regenerating water softeners will contribute to the achievement of the water quality objectives set forth in the Basin Plan. This finding is based on evidence in the record demonstrating that salinity input from residential use of self-regenerating water softeners is a significant source of controllable chloride within Newhall Ranch Sanitation District's sewer system and that significant adverse regional economic impacts will result if residential use of self-regenerating water softeners is not controlled. The salt and nutrient management plan was based on evidence in the record for the Basin Plan amendment demonstrating that managing salinity inputs in this manner would ensure attainment of water quality objectives and protection of beneficial uses.

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

The State Water Board adopted the 2020-2022 California Integrated Report based on a compilation of the Los Angeles Water Boards' Integrated Reports. These Integrated Reports contain 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 January 19, 2022, the State Water Board approved the CWA Section 303(d) List portion of the State's 2020-2022 Integrated Report (State Water Board Resolution No. 2022-0006). On May 11, 2022, the USEPA approved California's 2020-2022 Integrated Report. The CWA section 303(d) List can be found at the following link: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.

The Santa Clara River is on the 303(d) list. The following are the identified pollutants impacting the receiving water:

Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99 Bridge) – (Waterbody ID CAR4035100019990203102901)

Pollutant: chloride (5B), indicator bacteria (5B), iron (5A), trash (5C)

Santa Clara River Reach 3 (Freeman Diversion to A Street.) – (Waterbody ID CAR4032100019990203101738)

Pollutants: chloride (5B), indicator bacteria (5B), selenium (5A), total dissolved solids (5A), toxicity (5A), trash (5C)

Santa Clara River Reach 1 (Estuary to Hwy 101 Bridge) – (Waterbody ID CAR4031100019980917095027)

Pollutants: Dissolved oxygen (5A), pH (5A), toxicity (5A), trash (5C)

Santa Clara River Estuary – (Waterbody ID CAE4031100020000229171211)

Pollutants: Ammonia (5A), ChemA (5B), indicator bacteria (5B), toxaphene (5B), toxicity (5A)

The TMDL status for each pollutant is indicated by a number five and a letter in parenthesis, where 5A = TMDL required list; 5B = being addressed by USEPA approved TMDL; and 5C = being addressed by action other than TMDL.

The requirements in this Order address each of these impairments.

3.5. Other Plans, Polices and Regulations

3.5.1. Climate Change Adaptation and Mitigation

On March 7, 2017, the State Water Board adopted a resolution responding to the challenges posed by climate change and requiring a proactive approach to climate change in all State Water Board actions, including drinking water regulation, water quality protection, and financial assistance (State Water Board Resolution No. 2017-0012). The Los Angeles Water Board also 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" (Los Angeles Water Board 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 additional steps, including the identification of potential regulatory adaptation and mitigation measures that could be implemented on a short-term and long-term basis by each of the Los Angeles Water Board's programs to mitigate the effects of climate change on water resources and associated beneficial uses where possible. This kind of study and management is an important part of planning for the future, as "[m]unicipalities across the country are facing the challenging obligation to manage their aging sewer and stormwater systems at a time of urban population growth, more stringent water quality protection requirements, and increased exposure to climate change-related risks." USEPA, *Asset Management: Incorporating Asset Management Planning Provisions into NPDES Permits* (December 2014).

This Order contains provisions to require planning and actions to address climate change impacts in furtherance of both the State and Los Angeles Water Boards' resolutions, including a requirement to submit a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan).

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

3.5.2. Sources of Drinking Water Policy. On May 19, 1988, the State Water Board adopted Resolution Number 88-63, *Sources of Drinking Water Policy* (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 Number 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)*. This permit is consistent with the SODW policy and the Basin Plan because the permit establishes requirements to protect the designated MUN beneficial use.

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. Certain water quality objectives established in the Basin Plan (Chapter 3) incorporate Title 22 primary

MCLs by reference. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect. Title 22 primary MCLs have also been used as bases for effluent limitations in WDRs and NPDES permits to protect the groundwater recharge (GWR) beneficial use. Also, the Basin Plan specifies that "Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Since reaches downstream of the discharge have designated GWR beneficial use, this Order establishes effluent limitations based on primary MCLs of CCR Title 22 to protect GWR beneficial use of the surface water, which is intended to protect groundwater quality where surface water recharges groundwater.

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. Stormwater. CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for stormwater discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR § 122.26, establishing requirements for stormwater discharges under an NPDES program. To facilitate compliance with federal regulations, in November 1991, the State Water Board issued a statewide general permit, *General Permit for Storm Water Discharges Associated with Industrial Activities* (*IGP*, Order Number 2014-0057-DWQ amended by Order 2015-0122-DWQ and Order 2018-0028-DWQ, NPDES No. CAS000001). Order Number 2014-0057-DWQ has been amended and reissued several times since 1991, and most recently on November 6, 2018. The latest amendment became effective on July 1, 2020.

Once constructed, Newhall Ranch SD will be required to file a Notice of Intent to comply with the requirements of the State Water Board's *IGP*, develop a Stormwater Pollution Prevention Plan (SWPPP), and implement a SWPPP to comply with the State Water Board's General NPDES permit Number CAS000001.

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 USC §§ 1311 and 1342). On December 6, 2022, the State Water Board issued the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS WDRs, State Water Board Order No. WQ 2022-0103-DWQ). Order No. WQ 2022-0103-DWQ supersedes the previous SSS WDRs (Order 2006-0003-DWQ and its subsequent amendments). Entities enrolled in the SSS WDRs must comply with requirements to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database. The Permittee enrolled in the SSS WDRs in December 2021, and the Permittee's collections system is now regulated under the SSS WDRs.

In addition to the provisions in the SSS WDRs regulating the Permittee's collection system, this Order regulates the Facility and contains requirements pertaining to the Permittee's collection system. 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 the provisions in this Order and the SSS WDRs requirements related to the collection systems. The requirements of the SSS WDRs are considered the minimum thresholds. To encourage efficiency, the Los Angeles Water Board will accept the documentation prepared by the Permittee to comply with the SSS WDRs as satisfying the requirements in sections 6.3.3.b, 6.3.4, and 6.3.6 of this Order, provided the documentation addresses the more stringent requirements in this Order and is submitted with the routine NPDES monitoring report. Pursuant to section 6.2 of the SSS WDRs, Order No. WQ 2022-0103-DWQ, the provisions of this Order supersede the SSS WDRs, for all purposes, including enforcement, to the extent the requirements may be deemed duplicative. The requirements of this Order are more stringent than the SSS WDRs because in addition to the SSS WDRs requirements, this Order requires water quality monitoring of the receiving water when a spill reaches the surface water.

3.5.7. Watershed Management. The Los Angeles Water Board has been implementing a Watershed Management Approach (WMA) to address water quality protection in the Los Angeles Region. 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.

This Order fosters the implementation of this approach by protecting beneficial uses in the watershed and requiring the Permittee to participate with other stakeholders, in the development and implementation of a watershed-wide monitoring program. The Monitoring and Reporting Program (Attachment E) requires the Permittee to undertake the responsibilities delineated under an approved watershed-wide monitoring plan in the implementation of the Watershed-wide Monitoring Program for the Santa Clara River, which was approved by the Los Angeles Water Board on August 8, 2008.

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 these impaired water bodies so that the waterbody will meet water quality standards. The following TMDLs established in the Basin Plan are applicable to this Order.

a. Upper Santa Clara River Chloride TMDL – The *Upper Santa Clara River Chloride TMDL* is in Basin Plan Chapter 7-6 and assigns waste load allocations (WLAs) for

chloride to the Saugus WRP, Valencia WRP, and other NPDES discharges, such as the Newall Ranch WRP.

b. Santa Clara River Nitrogen Compounds TMDL - The *Santa Clara River Nitrogen Compounds TMDL* is in Chapter 7-9 of the Basin Plan and assigns WLAs for ammonia as nitrogen, nitrate as nitrogen, nitrite as nitrogen, and nitrate plus nitrite as nitrogen based on whether the source is a "major point source" or "minor point source." The Saugus WRP, Valencia WRP, Fillmore POTW, and Santa Paula POTW are listed as major point sources. The Future Growth section of the Santa Clara River Nitrogen Compounds TMDL discusses construction of an additional water reclamation plant in response to urban growth in the upper watershed and that WLAs will be developed as required. The Newhall Ranch WRP is this water reclamation plant, but facility-specific WLAs have not yet been assigned. Therefore, the WLAs for ammonia nitrogen for minor point sources have been used to develop effluent limitations for nitrogen compounds for the Newhall Ranch WRP.

c. Santa Clara River Estuary and Reaches 3, 5, 6 and 7 Indicator Bacteria TMDL - The *Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL* is in Chapter 7-36 of the Basin Plan contains WLAs for Newhall Ranch WRP, which are set equal to a 7-day median of 2.2 MPN/100 mL of *E. coli* and a daily max of 235 MPN/100mL of *E. coli* to ensure zero days of allowable exceedances. No exceedances of the geometric mean TMDL numeric target of 126/100 mL for *E. coli* are permitted within the month. Effluent limitations for *E. coli* are established in this permit and are consistent with the TMDL.

3.5.9. Environmental Justice and Advancing Racial Equity. The Los Angeles Water Board must make findings when issuing or reissuing individual waste discharge requirements that regulate an activity or a facility that may have water quality impacts on disadvantaged or tribal communities, and that includes a time schedule in accordance with Water Code section 13263, subdivision (c), for achieving an applicable water quality objective, an alternative compliance path that allows time to come into compliance with water quality objectives, or a water quality variance. Under Water Code section 13149.2, subdivision (c), for permit reissuances, "the finding may be limited to considerations related to any changes to the requirements of the prior waste discharge requirements…" Water Code section 189.7 requires the Los Angeles Water Board to conduct outreach in disadvantaged and/or tribal communities when considering proposed discharges of waste that may have disproportionate impacts on water quality in those communities. The Los Angeles Water Board has therefore conducted outreach consistent with Water Code section 189.7 by reaching out to tribal communities about this Order. The Los Angeles Water Board reviewed readily available information and any information raised to the Board by interested persons concerning anticipated water quality impacts resulting from adoption of this Order. Additionally, the Board has considered any environmental justice concerns within the Board's authority and by any interested persons regarding those impacts. The Los Angeles Water Board is committed to developing and implementing policies and programs to advance racial equity and environmental justice so that race can no longer be used to predict life outcomes, and outcomes for all groups are improved.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source 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 NPDES 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. Where numeric water quality objectives have not been established, 40 CFR § 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); proposed State criteria, or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or an indicator parameter may be established.

The variety of potential pollutants found in the Facility discharge 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 for toxicity.

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 Point 001. 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," which 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.

$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 of dissolved oxygen. As organic degradation occurs, 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 oxygen deficient. 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. Total Suspended Solids is a measure of the weight of solids remaining after a well-mixed sample is filtered through a standard glass filter and the suspended portion is dried. Suspended solids reduce light penetration, thereby limiting the growth of aquatic plants and algae. High suspended solids may also clog fish gills and cause the surface water to increase in temperature, causing additional stress to aquatic organisms.

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 Newhall Ranch WRP will provide tertiary treatment to remove additional solids, which results in lower levels of BOD and TSS in the effluent than is required by the secondary treatment standards. Since the Newhall Ranch WRP will provide tertiary treatment, the BOD and TSS limits in the Order are more stringent than those required in the secondary treatment rule and are based on Best Professional Judgment (BPJ) pursuant to 40 CFR § 125.3 subds. (c) and (d)(2). The TBELs contained in this Order are similar to those contained in NPDES permits for similar facilities, based on the treatment level attainable 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. Further, mass-based effluent limitations are based on a design flow rate of 2 MGD (40 CFR § 122.45(b)(1), (f)). These TBELs were all included in the previous Order (Order No. R4-2019-0077) and as a new facility, the Newhall Ranch WRP will be designed to meet both limits (monthly average and the daily maximum), for both BOD and TSS. Accordingly, these limits are carried over in this Order.

In addition to mass-based and concentration-based effluent limitations for BOD and TSS, this Order also establishes 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.

The following table summarizes the TBELs applicable to the Facility:

Table F-6. Summary of TBELs

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Notes
$BOD_5$20°C	mg/L	20	30	45	---
$BOD_5$20°C	lbs/day	330	500	750	a
TSS	mg/L	15	40	45	---
TSS	lbs/day	250	670	750	a
Removal Efficiency for BOD and TSS	%	≥85	---	---	---

Footnotes for Table F-6

a. The mass-based effluent limitations are based on the plant design flow rate of 2 MGD and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

End of Footnotes for Table F-6

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 NPDES 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 necessary to meet applicable water quality standards. The rationale for these requirements is discussed beginning in section 4.3.2. of this Fact Sheet.

40 CFR section 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, 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). WQBELs must also be consistent with the assumptions and requirements of applicable TMDL WLAs approved by USEPA. (33 USC § 1313(d); 40 CFR §§ 122.44(d)(vii)(B) and 130.7.)

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 the Santa Clara River affected by the discharge have been described previously in this Fact Sheet. The Basin Plan narrative and numeric WQOs applicable to the receiving water as described below:

a. pH

The Basin Plan water quality objective for pH (page 3-40) provides: “the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge.” The secondary treatment standards in 40 CFR § 133.102(c) require that 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 limitations for pH in this Order are more stringent than the secondary treatment standards in 40 CFR because they are equivalent to the Basin Plan water quality objectives. These effluent limitations have been carried over from the previous Order (Order No. R4-2019-0077).

b. Settleable Solids

The effluent limits for settleable solids are based on the Basin Plan (page 3-44) narrative WQO: “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 a 7-day average effluent limitation, because short-term spikes of settleable solid levels that would be permissible under a 7-day average scheme would not be adequately protective of all beneficial uses. The monthly average and daily maximum effluent limits were both included in the previous Order (Order No. R4-2019-0077) and as a new facility, the Newhall Ranch WRP is expected to meet both effluent limits.

c. Oil and Grease

The limits for oil and grease 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 effluent limits are empirically based on concentrations at which an oily sheen becomes visible in water. It is impracticable to use a 7-day average effluent limitation, because spikes that occur under a 7-day average scheme could cause a visible oil sheen. A 7-day average scheme would not be sufficiently protective of

beneficial uses, and therefore a maximum daily effluent limit and average monthly effluent limits were used. Both effluent limits were included in the previous Order (Order Number R4-2019-0077) and as a new facility, the Newhall Ranch WRP is expected to meet both limits.

d. Residual Chlorine

The effluent limit for residual chlorine is a maximum daily effluent limit of 0.1 mg/L, and it 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 effluent limitation, because it is not as protective of beneficial uses as a daily maximum effluent limitation. These effluent limitations have been carried over from the previous Order (Order Number R4-2019-0077).

e. TDS, Sulfate, and Boron

The effluent limitations for TDS, sulfate, and boron are based on the Basin Plan Water Quality Objectives for the Santa Clara River (between West Pier 99 and Blue Cut Gaging Station). The TDS objective is 1,000 mg/L, sulfate is 400 mg/L, and boron is 1.5 mg/L. It is practicable to express these limits as monthly averages since they are not expected to cause acute effects on beneficial uses.

f. Chloride

The chloride concentration-based effluent limitation is based on the waste load allocation assigned to point sources other than the Saugus and Valencia Water Reclamation Plants in the TMDL for Chloride in the Upper Santa Clara River, Basin Plan Chapter 7-6. The applicable WLA is “100 mg/L as a 3-month rolling average.”

g. Methylene Blue Activated Substances (MBAS)

Chapter 3 of the Basin Plan includes narrative surface water quality prohibitions on taste and odor-producing substances, foams, and scum that cause nuisance or adversely affect beneficial uses. The numeric effluent limitation for MBAS is equivalent to the water quality objective for MBAS of 0.5 mg/L for waters designated for municipal and domestic use (MUN) in Chapter 3 of the Basin Plan. The Santa Clara River is unlined at the point of discharge and in several reaches downstream of the point of wastewater discharge. These reaches of the Santa Clara River are impacted by the discharge from the Facility and are also designated with a groundwater recharge (GWR) beneficial use. The effluent limitation for MBAS is based in the Basin Plan Water Quality Objective and is included in this Order to protect the existing GWR beneficial use of the surface water and the MUN beneficial use of the groundwater basins listed in Table F5-B that are being recharged.

h. Nitrate and Nitrite as Nitrogen

Chapter 3 of the Basin Plan provides a 5 mg/L water quality objective for nitrate plus nitrite as nitrogen, in Table 3-10, on page 3-35, for beneficial use protection in the reaches of the Santa Clara River impacted by the discharge. Chapter 3 of the Basin plan also includes water quality objectives for surface waters within the Los Angeles

region for nitrate as nitrogen, nitrite as nitrogen, and nitrate plus nitrite as nitrogen of 10 mg/L, 1 mg/L, and 10 mg/L, respectively.

No WLAs are included in Chapter 7-9 of the Basin Plan for minor dischargers for nitrite as nitrogen, however, the nitrite as nitrogen WLA for the Valencia WRP is 0.9 mg/L, which is equal to the Basin Plan WQO minus a 10% margin of safety factor, according to the TMDL staff report. Since the Newhall Ranch WRP is downstream of the Valencia WRP, the 0.9 mg/L WLA will serve as the basis for the nitrite limit for Newhall Ranch WRP. The WLA for nitrate plus nitrite as nitrogen in Chapter 7-9 of the Basin Plan for minor dischargers is less stringent than the reach-specific water quality objective in Table 3-10 of the Basin Plan, so the more stringent reach-specific water quality objective for nitrate plus nitrite is used as the basis for the effluent limitation.

Under the Santa Clara River Nitrogen TMDL, the nitrate plus nitrite as nitrogen WLA for discharge from the Newhall Ranch WRP is the reach-specific water quality objective of 5 mg/L in Table 3-10 of the Basin Plan. The effluent limitation for nitrite as nitrogen is equal to the 1 mg/L water quality objective for nitrite as nitrogen, minus a 10% margin of safety factor, as described in the TMDL for other dischargers in the reach, resulting in 0.9 mg/L, which coincides with the WLA for nitrite as nitrogen assigned to the other four POTWs in the watershed. These effluent limitations are also carried over and are equal to the final effluent limitations contained in NPDES Order No. R4-2019-0077 for the Newhall Ranch WRP. Since the water quality objective for nitrate as nitrogen region-wide is less stringent than the reach-specific water quality objective for nitrate plus nitrite as nitrogen, no effluent limitation is included in this Order for nitrate as nitrogen.

i. Total Ammonia

i. Water Quality Objectives

The Santa Clara River Nitrogen TMDL in Chapter 7-9 of the Basin Plan applies to the Facility but does not assign it ammonia as nitrogen WLAs. As described in Section 3.5.8.b of this Fact Sheet, it is appropriate to use the WLAs for ammonia nitrogen for minor point sources to develop effluent limitations for nitrogen compounds for the Newhall Ranch WRP.

For minor point sources discharging into the immediate downstream receiving water, the TMDL establishes a thirty-day average WLA for ammonia as nitrogen of 1.75 mg/L and a one-hour WLA for ammonia as nitrogen of 5.2 mg/L.

The concentration-based and mass-based ammonia nitrogen effluent limitations are tabulated below:

Table F-7. Summary of Ammonia Effluent Limitations for 001

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily
Ammonia Nitrogen	mg/L	1.75	---	5.2
Ammonia Nitrogen	lbs/day	29	---	87

j. Bacteria Indicators (Total Coliform and *E. coli*)

Title 22 of the California Code of Regulations includes the following total coliform requirements for disinfected tertiary recycled water for human health protection:

i. The 7-day median number of total coliform bacteria must not exceed a Most Probable Number (MPN) or Colony Forming Units (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.

The effluent limits for total coliform in the Order are equivalent to the total coliform requirements above for disinfected tertiary recycled water and must be met at the point of the treatment train immediately following disinfection, as a measure of the effectiveness of the disinfection process. These limitations meet requirements of the Bacteria Provisions which allow existing, more stringent limitations to be used in lieu of the statewide limitations.

In addition to total coliform, this Order also establishes effluent limitations for *E. coli*, implementing WLAs assigned to the Facility in the Santa Clara Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL, in Chapter 7-36 of the Basin Plan. The effluent limitations in this Order are also consistent with Chapter 7-36 of the Basin Plan because although the Basin Plan contains an applicable *E. coli* WLA for the Newhall Ranch WRP, the Basin Plan also allows the use of existing, more stringent limitations. Therefore, the limitations based on the Bacteria Provisions are not used in this Order, and the Title 22 based effluent limitations are retained. In addition, USEPA states in its document “NPDES Water Quality Based Permit Limits for Recreational Water Quality Criteria (2015)” that it expects the direct application of criteria values at the end-of-pipe approach 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 Bacteria Provisions, additional receiving water limitations are not established.

k. 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.

The previous Order (Order Number R4-2019-0077) contained 86°F as a temperature effluent limitation based on a white paper addressing temperature in estuarine environments. However, the white paper is not relevant to freshwater inland surface waters, which is the receiving water here, and continued reliance on the white paper to establish the temperature effluent limitation for the Newhall Ranch WRP may not result in compliance with the temperature water quality objective. This Order revises the temperature effluent limitation to 80ºF to be consistent with the temperature water quality objectives in the Basin Plan, which is a new interpretation compared to the previous order. This revised temperature effluent limitation helps the receiving water achieve the temperature water quality objective and ensures protection of the beneficial uses of the receiving water.

Since the Newhall Ranch WRP has not been constructed, there is no effluent temperature data available.

l. Turbidity

The effluent limitation for turbidity is based on the Basin Plan (page 3-46) and section 60301.320 of Title 22, chapter 3, “Filtered Wastewater” of the CCR, which limit turbidity as follows: “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.” These effluent limitations have been carried over from the previous Order (Order No. R4-2019-0077).

m. Radioactivity

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 Water Code 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.” In addition to the narrative prohibition on radioactive substances, numeric effluent limitations for radioactivity are included in this Order based on Title 22 CCR, Chapter 15, Article 5, sections 64442 and 64443. The effluent limits for radioactivity are also based on the Basin Plan’s prohibition of concentrations of chemical constituents in amounts that adversely affect any designated beneficial use. Therefore, this Order retains the narrative prohibition in addition to numeric limitations for radioactive substances to protect the GWR beneficial use of surface water.

n. Iron

The Gold Book contains criteria for iron: 300 µg/L for the protection of domestic water supply and of 1,000 µg/L for the protection of freshwater aquatic life. The secondary MCL for iron is also 300 µg/L. Since the discharge had reasonable potential to cause or contribute to an exceedance, a limit for iron based on the 300 µg/L criterion is prescribed for the protection of the GWR beneficial use in the surface water and for the protection of MUN beneficial use in the underlying groundwater basins. This effluent limitation is being carried over from the previous Order (Order No. R4-2019-0077).

o. Total trihalomethanes (TTHMs)

Total trihalomethanes means the sum of the concentrations in milligrams per liter (mg/L) of the trihalomethane compounds (bromodichloromethane, bromoform, chloroform, and dibromochloromethane). TTHMs are chlorine disinfection byproducts. The Newhall Ranch WRP has reasonable potential to cause or contribute to an exceedance of the TTHMs MCL of 80 µg/L according to the USEPA's *Technical Support Document For Water Quality-based Toxics Control* (TSD) calculated RPA procedure. This effluent limitation is being carried over from the previous Order (Order No. R4-2019-0077).

p. Mercury

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 the Santa Clara River, which is a flowing water body, is 12 ng/L total mercury. The annual averages of receiving water sample testing results ranged from 1.04 ng/L to 2.6 ng/L during the monitoring period from September 2019 to November 2023. According to the Mercury Provisions, a water quality-based effluent limitation is not required unless the highest observed annual average effluent mercury concentration is greater than the applicable objective (water column concentration, 12 ng/L). There are no effluent mercury data available because the Newhall Ranch WRP has not been built. Since the receiving water data indicated that there is no reasonable potential to cause or contribute to an excursion above the water quality standard, no effluent limitations for mercury are established in this Order. However, monitoring requirements for mercury in the effluent and receiving water are included in Attachment E with the new detection limit of 0.5 ng/L, which the Mercury Provisions specify as a quantification limit for the water samples.

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 TSD also specifies procedures to conduct reasonable potential analyses for toxic substances. The USEPA NPDES Permit Writer's Manual specifies procedures to conduct reasonable potential analyses for non-priority pollutants.

4.3.4. Determining the Need for WQBELs

a. Reasonable Potential Based on Impaired Waters & TMDLs

The Santa Clara River is impaired for several pollutants along the downstream reaches of the outfall. The pollutants causing the impairments are identified on the CWA section 303(d) list and are included in section 3.4 of this Fact Sheet. The NPDES regulations at § 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. Similarly, the SIP at Section 1.3 recognizes that a separate reasonable potential analysis at the permitting stage is not necessary if a TMDL has been developed. Thus, effluent limitations have been established for any pollutant for which a WLA has been established in the Basin Plan for the permitted facility through a TMDL. The following pollutants have effluent limitations based on WLAs established in the Basin Plan: chloride (Chapter 7-6 of the Basin Plan); ammonia-nitrogen, nitrite-nitrogen, (Chapter 7-9 of the Basin Plan); and, indicator bacteria (Chapter 7-36 of the Basin Plan).b. Reasonable Potential Based on Valencia WRP Data

Because the Facility has not yet been constructed, the reasonable potential analysis for this Order was not conducted using effluent data from the Facility. Instead, the Los Angeles Water Board analyzed effluent data from the Valencia WRP (a nearby and similar facility) to determine if a pollutant in the Newhall Ranch WRP discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard since the Valencia WRP activated sludge will be used to start up the Newhall Ranch WRP and both facilities will have similar processes and are located in the same geographical area. In accordance with Section 1.3 of the SIP, and noting the exceptions above, the Los Angeles Water Board conducted an RPA for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the Order. 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 Permittee. The monitoring data for the Valencia WRP cover the period from September 2019 to April 2024.

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 tiers that trigger reasonable potential:

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

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

Tier 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 insufficient, 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 may be reopened for appropriate modification per section 6.3.1.d of the Order.

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. The CTR specifies numeric objectives for toxic substances and the SIP includes the procedures used to conduct a reasonable potential analysis (RPA) and to determine the need for effluent limitations for priority pollutants. The USEPA TSD and the USEPA NPDES Permit Writer's Manual also specify procedures to conduct reasonable potential analyses for pollutants that are not priority pollutants. The TSD RPA may also be used for pollutants that have non-CTR based water quality objectives. Based on receiving water conditions, effluent concentrations from the Valencia WRP, presence of endangered and threatened species inhabiting the receiving water, and absence of any effluent data from the Newhall Ranch WRP, the RPA indicates that effluent limits are needed for Discharge Point 001 for copper, selenium, cyanide, bis(2-ethylhexyl) phthalate, 2,3,7,8-TCDD, iron, and total trihalomethanes (TTHMs). The TSD RPA procedure uses non-CTR WQOs, the coefficient of variation, the number of data points collected, and a formula to project an estimated concentration. If the projected concentration exceeds the WQO, then the pollutant has RP to exceed the WQO based on the TSD RPA calculated procedure.

The following table summarizes results from the RPA conducted for the Newhall Ranch WRP utilizing effluent data from the Valencia WRP's EFF-001 and receiving water data from Newhall Ranch WRP's upstream receiving water station RSW-001U:

Table F-8. Summary of Reasonable Potential Analysis Using Data from Valencia WRP

CTR No.	Constituent	Applicable Water Quality Criteria (C) µg/L	Max Effluent Conc. (MEC) µg/L	Maximum Detected Receiving Water Conc.(B) µg/L	RPA Result – Need Limitation?	Reason
6	Copper	25	2.74	3.79	Yes	Tier 3 – Other info, existing limit
10	Selenium	5	0.5	1.49	Yes	Tier 3 – Other Info. Existing limit Valencia WRP

CTR No.	Constituent	Applicable Water Quality Criteria (C) µg/L	Max Effluent Conc. (MEC) µg/L	Maximum Detected Receiving Water Conc.(B) µg/L	RPA Result – Need Limitation?	Reason
14	Cyanide	5.2	6.33	3.16	Yes	MEC > C
16	2,3,7,8-TCDD	1.4×10^{-8}	2.1×10^{-6}	4.8×10^{-7}	Yes	MEC > C
68	Bis(2-ethylhexyl) phthalate	4	<0.55	<1	Yes	Tier 3 – Other info, existing limit
	Iron	300	180	3,290	Yes	B > C
	TTHMs	80	54.9	<0.5	Yes	Existing limit &TSD (note a)

Footnotes for Table F-8

a. The TSD RPA procedure uses non-CTR WQOs, the coefficient of variation, the number of data points collected, and a formula to project an estimated concentration. If the projected concentration exceeds the WQO, then the pollutant has RP to exceed the WQO based on the TSD RPA calculated procedure.

End of Footnotes for Table F-8

c. Reasonable Potential Based on Facility Type Without Data

The USEPA NPDES Permit Writer's Manual also specifies that reasonable potential analyses may be conducted through a qualitative assessment process by considering similar facility operational or discharge characteristics, such as type of industry, POTW treatment system, compliance history, species sensitivity data, in-stream data, adopted water quality criteria, designated uses, dilution information, or critical receiving water flows, such as establishing WQBELS for pathogens in POTW permits that discharge to contact recreation waters. Because the Facility has yet to be constructed, the reasonable potential analysis for the following pollutants was conducted based on facility type:

i. **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. Acidic and basic chemicals commonly flushed down the drain by residential or commercial properties may alter the pH of the POTW influent, therefore the facility has reasonable potential to cause or contribute to an exceedance of the WQO. The numeric effluent limits for pH are included in this Order are identical to those found in the NPDES permit for the Valencia WRP.

ii. **Settleable Solids** – Excessive deposition of sediments can destroy spawning habitat, blanket benthic (bottom dwelling) organisms, and abrade the gills of larval fish. Municipal waste commonly contains settleable solids, therefore the facility has reasonable potential to cause or contribute to an exceedance of the settleable solids water quality objective. Numeric effluent limits for settleable solids are included in this Order equivalent to those found in the NPDES permit for the Valencia WRP.

iii. **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, potentially 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. Municipal waste commonly contains oil and grease because food preparation occurs at households and commercial restaurants. Even when establishments have grease traps or clarifiers in place to prevent oil and grease from being discharged to the sewer, they may not be properly maintained and may cause oil and grease to pass through to the POTW. Oil and grease also builds up in sewer lines and can cause severe blockages that could result in sewage spills. Since the facility is likely to receive sewage containing oil and grease, oil and grease can impact aquatic organisms, and oil and grease can cause significant issues in a sewer system, the facility has reasonable potential to cause or contribute to an exceedance of the oil and grease narrative water quality objective. Therefore, numeric effluent limits for oil and grease are included in this Order identical to those found in the NPDES permit for the Valencia WRP.

iv. **Residual Chlorine** – Disinfection of wastewaters with chlorine produces a residual and therefore, it is expected to be in the Facility effluent. Chlorine is very toxic to aquatic life and short-term exposures of chlorine may cause fish kills. Information provided in the ROWD indicates that chlorine will be used as a cleaning agent for the bioreactor membranes, so the discharge has reasonable potential to contribute to an exceedance of the water quality objective for residual chlorine based on operational characteristics, therefore numeric effluent limits for total residual chlorine are included in this Order identical to those found in the NPDES permit for the Valencia WRP.

v. **TDS, Sulfate, Boron** - Effluent limitations based upon the Basin Plan WQOs have been included in this Order because these constituents have historically been present in potable water in this region, which is the supply source of the wastewater entering the treatment plant. They may be present in concentrations which meet California drinking water standards but exceed the Basin Plan WQOs. Therefore, limitations are warranted to protect the beneficial uses of the receiving water. Numeric effluent limits for TDS, Sulfate, and Boron are included in this Order equivalent to those found in the NPDES permit for the Valencia WRP.

vi. **MBAS** – Municipal waste typically contains surfactants because residential and commercial properties use soaps and detergents to bathe, wash dishes, and do laundry. MBAS are an indicator of the presence of surfactants. When effluent data is unavailable or insufficient, section 1.3, Step 7 of the SIP lists the type of information that can be used to determine whether a water quality-based effluent

limit is appropriate to protect beneficial uses. Page 7 of the SIP states, “Information that may be used to aid in determining if a water quality-based effluent limitation is required includes: the facility type, the discharge type, solids loading analysis, lack of dilution, history of compliance problems, potential toxic impact of discharge, fish tissue residue data, water quality beneficial uses of the receiving water, CWA 303(d) listing of the pollutant, the presence of endangered or threatened species or critical habitat, and other information.” USEPA has also stated that foaming is a characteristic of water which has been contaminated by the presence of detergents and similar substances. (44 Fed. Reg. 53465, 53467 (Sept. 13, 1979)). Given the nature of the Facility, which will accept domestic wastewater into the sewer system and treatment plant, and the characteristics of the pollutants discharged, the discharge has reasonable potential to exceed the numeric MBAS WQO and the narrative WQO for the prohibition of floating material such as foams and scums. Therefore, the effluent limitation for MBAS in the previous Order (Order No. R4-2019-0077) is carried over into this Order. The MBAS limit is equivalent to the limit found in the NPDES permit for the Valencia WRP. The MBAS effluent limit also protects the recreational, aquatic life, and wildlife beneficial uses of the surface receiving water downstream of the discharge against foam and implements the Basin Plan WQO for floating material.

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.

vii. **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 and can reduce the effectiveness of disinfection. Improper operation and maintenance of a wastewater treatment plant can also lead to turbid water that is not properly disinfected. The facility has reasonable potential to cause or contribute to an exceedance since turbidity is a common characteristic of wastewater and due to its potential to impact water quality, therefore numeric limits for turbidity are included in this Order equivalent to those in the NPDES permit for the Valencia WRP.

viii. **Radioactivity** - Radioactive substances are generally present in natural waters in extremely low concentrations and municipal waste contains some levels of radionuclides, therefore the facility has reasonable potential to cause or contribute to an exceedance of the radioactivity water quality objective. Numeric effluent limits for radioactivity are included in this Order equivalent to those found in the NPDES permit for the Valencia WRP.

ix. **Temperature** -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.

1. 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).
2. 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.
3. 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.

Pumps and other machinery at the POTW can emit heat from the daily operation and environmental conditions can transfer that heat to the effluent as it flows through the various treatment processes, elevating the temperature of the water during treatment. Since effluent temperature can impact the environment and the Facility is expected to discharge elevated temperature waste, the Facility has reasonable potential to exceed the water quality objective for temperature. Numeric effluent limits for temperature are included in this Order equivalent to those found in the NPDES permit for the Valencia WRP.

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. 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 states, “For this method only, maximum daily effluent limitations shall be used for publicly-owned treatment works (POTWs) in place of average weekly limitations.”

Sample calculation for cyanide (RP for Discharge Point 001):

Step 1: Identify applicable water quality criteria.

From California Toxics Rule (CTR), we can obtain the freshwater aquatic life and human health criteria.

Freshwater Aquatic Life Criteria:

Criterion Maximum Concentration (CMC) = 22 µg/L (CTR page 31712, column B1)
Criterion Continuous Concentration (CCC) = 5.2 µg/L (CTR page 31712, column B2)
Human Health Criteria for Organisms only = 220,000 µg/L (CTR page 31712, column D2).

Step 2: Calculate effluent concentration allowance (ECA)

ECA = Aquatic life and human health criteria in CTR, since no dilution is allowed.

ECA Acute = 22 µg/L

ECA Chronic = 5.2 µg/L

ECA Human Health = 220,000 µg/L

Step 3: Determine long-term average (LTA) discharge condition for each ECA based on aquatic life

Calculate CV:

CV = Standard Deviation/Mean = 1.33/2.9= 0.5

Find the ECA Multipliers from SIP Table 1 (page 9), or by calculating them using equations on SIP page 8. If samples are collected 4 times a month or less, then n=4. Using n=4 and a CV of 0.8, the ECA multipliers and LTA are as follows:

ECA $\text{Multiplier}_{acute99}$ = 0.373 and

ECA $\text{Multiplier}_{chronic99}$ = 0.581

LTA_{acute} = ECA acute x ECA Multiplier acute = 22 x 0.373 µg/L = 8.206

$LTA_{chronic}$ = ECA chronic x ECA Multiplier chronic = 5.2 x 0.581 = 3.0212

Step 4: Select the lowest LTA derived in Step 3

In this case, the lowest LTA is 3.0212.

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

AMEL multiplier_{95} = 1.455 & MDEL multiplier_{99} = 2.68

$AMEL_{aquatic\ life}$ = LTA * AMEL multiplier_{95} = 3.02 x 1.455 = 4.40

$MDEL_{aquatic\ life}$ = LTA * $MDEL\ multiplier_{99}$ = 3.02 x 2.68 = 8.10

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

Find factors. Given CV = 0.5 and n = 4.

MDEL/AMEL multiplier = 1.84

$AMEL_{human\ health}$ = ECA human health = 220,000 µg/L

$MDEL_{human\ health}$ = ECA human health x MDEL/AMEL multiplier

= 220,000 µg/L x 1.84 = 404,800 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 = 4.4 µg/L (based on aquatic life protection)

Lowest MDEL = 8.1 µg/L (based on aquatic life protection)

The lowest AMEL and MDEL, based on aquatic life, are applied as effluent limitations; however, since the calculated 4.4 µg/L AMEL is less stringent than the 4.3 µg/L AMEL in the 2019 Order, the effluent limitation from the previous Order has been retained due to antibacksliding.

c. TSD Limit Procedure

When the TSD is used to determine RPA, the WQO is not translated using multiplying factors. Instead, the WQO is applied as the average monthly effluent limitation.

d. Impracticability Analysis

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

As stated by USEPA in its long-standing guidance for developing WQBELs, average limitations alone are not practical for limiting acute, chronic, and human health toxic effects. (See, Section 5.2.3 of USEPA's *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001, March 1991)).

For example, a POTW sampling for a toxicant to evaluate compliance with a 7-day average limitation could fully comply with this average limit, but still be discharging toxic effluent on one, two, three, or up to four of these seven days and not be meeting 1-hour average acute criteria or 4-day average chronic criteria. Similarly, a 7-day average alone would not protect one, two, three, or four days of discharging pollutants in excess of the acute and chronic criteria.

For these reasons, USEPA recommends daily maximum and 30-day average limits for regulating toxics in all NPDES discharges. For the purposes of protecting the acute effects of discharges containing toxicants, daily maximum effluent limitations have been established in this NPDES permit for certain priority pollutants. Thirty-day

(or monthly) average effluent limitations have been established for priority pollutants that cause chronic or long-term impacts because they are carcinogenic, bioaccumulative, and/or endocrine disruptors.

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 their 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 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-based effluent limits for some constituents. The mass-based limits are based on the design capacity.

Table F-9. Summary of WQBELs for Discharge Point 001

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Notes
Oil and grease	mg/L	10	---	15	---
Oil and grease	lbs/day	170	---	250	---
Total residual chlorine	mg/L	---	---	0.1	---
Total coliform	CFU/ 100mL	23	2.2	240	e
E. coli	CFU/100 mL	126	2.2	235	f
Turbidity	NTU	2	5	10	g
Radioactivity	---	---	---	---	---
Combined Radium-226 and Radium-228	pCi/L	5	---	---	---
Gross Alpha particle activity (excluding radon and uranium)	pCi/L	15	---	---	---
Uranium	pCi/L	20	---	---	---
Gross Beta/photon emitters	millirem/ year	4	---	---	---
Strontium-90	pCi/L	8	---	---	---
Tritium	pCi/L	20,000	---	---	---
Chloride	mg/L	100	---	---	b
Chloride	lbs/day	1,700	---	---	a
Total Dissolved Solids	mg/L	1,000	---	---	---
Total Dissolved Solids	lbs/day	16,700	---	---	a
Sulfate	mg/L	400	---	---	---

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Notes
Sulfate	lbs/day	6,700	---	---	a
Boron	mg/L	1.5	---	---	---
Boron	lbs/day	25	---	---	a
MBAS	mg/L	0.5	---	---	---
MBAS	lbs/day	8	---	---	a
Nitrite (as N)	mg/L	0.9	---	---	---
Nitrite (as N)	lbs/day	15	---	---	a
Nitrate + Nitrite (as N)	mg/L	5	---	---	---
Nitrate + Nitrite (as N)	lbs/day	80	---	---	a
Ammonia Nitrogen	mg/L	1.75	---	5.2	---
Ammonia Nitrogen	lbs/day	29	---	87	a
Copper	µg/L	11	--	34	---
Copper	lbs/day	0.18	--	0.57	a
Selenium	µg/L	4.5	---	6.8	---
Selenium	lbs/day	0.08	---	0.11	a
Cyanide	µg/L	4.3	---	8.1	---
Cyanide	lbs/day	0.071	---	0.14	a
2,3,7,8-TCDD (Dioxin)	pg/L	0.014	---	0.028	---
2,3,7,8-TCDD (Dioxin)	lbs/day	2.3×10^{-10}	---	4.7×10^{-10}	a
Bis(2-ethylhexyl) phthalate	µg/L	4	---	---	---
Bis(2-ethylhexyl) phthalate	lbs/day	0.07	---	---	a
Iron	µg/L	300	---	---	---
Iron	lbs/day	5	---	---	a
Total trihalomethanes (TTHMs)	µg/L	80	---	---	---
TTHMs	lbs/day	1.3	---	---	a
Chronic Toxicity *Raphidocelis subcapitata Growth* endpoint	Pass or Fail (TST), % Effect	Pass	---	Pass or % Effect <50 (growth endpoint)	c, d

Footnotes for Table F-9

a. The mass-based effluent limitations are based on the plant design flow rate of 2 MGD and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

b. The final effluent limitation for chloride is expressed as a 3-month rolling average, consistent with the WLA for the Newhall Ranch WRP contained in Chapter 7-6 of the Basin Plan.

c. The effluent limitations for chronic toxicity are expressed as a Maximum Daily Effluent Limitation and as a Median Monthly Effluent Limitation (not an Average Monthly Effluent Limitation).

d. The effluent limitation shall be applicable to the *Raphidocelis subcapitata* (formerly known as *Selenastrum capricornutum*) test until the Discharger completes the first species sensitivity screening for the Newhall Ranch WRP. The effluent limitation shall then be applicable to the most sensitive species determined from the first species sensitivity screening.
e. The wastes discharged to water courses shall 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. The final effluent limitations for *Escherichia coli* (*E.coli*) are based on the Waste Load Allocations (WLAs) for the Newhall Ranch WRP, contained in Chapter 7-36 of the Basin Plan. The waste discharged shall meet the following effluent limits: 7-day median of 2.2 MPN/100 mL of *E. coli*, a daily maximum of 235 MPN/100mL and a geometric mean limit of 126/100 mL for *E. coli* are permitted within the month.
g. The turbidity of the treated wastewater shall 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.

End Footnotes for Table F-9

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 the concentration increases.

Section III.C.3 of the Toxicity Provisions states:

> “Except for POTW dischargers that are authorized to discharge at a rate equal to or greater than 5.0 million gallons per day (MGD) and are required to have a pretreatment program by the terms of 40 CFR § 403.8(a) (effective January 1, 2020), all Non-stormwater Dischargers shall conduct a Reasonable Potential analysis for chronic aquatic toxicity, pursuant to the procedures specified in Section III.C.3.c, for review and approval by the Permitting Authority. A Reasonable Potential analysis for chronic aquatic toxicity is not required for POTW dischargers that are authorized to discharge at a rate equal to or greater than 5.0 MGD and are

required to have a pretreatment program by the terms of 40 CFR § 403.8(a) (effective January 1, 2020), because the Permitting Authority shall include an effluent limitation for these dischargers pursuant to Section III.C.5."

Section III.C.3.c.ii. of the Toxicity Provisions authorizes the permitting authority to use non-facility specific monitoring data and other information to determine reasonable potential, consistent with 40 CFR 122.44(d)(1)(ii), for non-stormwater NPDES dischargers that do not have an effluent discharge prior to permit issuance, reissuance, renewal or reopening (if the permit reopening is to address toxicity requirements) that is representative of the quality of the proposed discharge. That information includes, but is not limited to: fish die off observations, data using a different concentration than the instream waste concentration (IWC), lack of available dilution, water quality and beneficial uses of the receiving water, the presence of endangered or threatened species or critical habitat, or existing data on toxic pollutants, to determine if there is reasonable potential to cause or contribute to an excursion above the aquatic toxicity water quality objectives.

The Los Angeles Water Board evaluated non-facility specific monitoring data and determined that the Newhall Ranch WRP has reasonable potential to cause or contribute to an exceedance of the chronic toxicity water quality objective in accordance with section III.C.3.c.ii. of the Toxicity Provisions. Since most of the surface water flow in the Santa Clara River in the vicinity of the proposed discharge location of the Newhall Ranch WRP comes from the upstream Valencia WRP's treated effluent discharge, there is a lack of available dilution in the Santa Clara River. In addition, endangered and threatened species inhabit the reaches of the Santa Clara River impacted by the discharge, including the federally endangered unarmored threespine stickleback, the federally-threatened Santa Ana sucker, and the arroyo chub, which is a species of concern for the state of California. Newhall Ranch SD will use activated sludge from the Valencia WRP to seed the Newhall Ranch WRP at start-up. Since the Valencia WRP had two effluent chronic toxicity MMEL exceedances for the reproduction endpoint using the *Ceriodaphnia dubia* species on November 28, 2015 and December 17, 2015, (as referenced in section 2.4 of the fact sheet for the Valencia WRP Order No. R4-2022-0174) the Newhall Ranch WRP has reasonable potential to exceed the water quality objective for the chronic toxicity effluent limitation. The chronic toxicity exceedances were intermittent and SCVSD was unable to determine the cause of the toxicity. Considering the lack of available dilution in the stream, the presence of endangered and threatened species, and the toxicity exceedances that have occurred from the POTW donating activated sludge, the Newhall Ranch WRP has reasonable potential to contribute to an exceedance of the chronic toxicity water quality objective. As such, this Order contains chronic toxicity effluent limitations, consistent with the Toxicity Provisions.

Compliance with the chronic toxicity requirement contained in this Order shall be determined in accordance with section 7.10. of this Order. This Order contains a reopener to allow the Los Angeles Water Board to modify the Order, if necessary, to make it consistent with any new policy, law, or regulation.

For this Order, chronic toxicity in the discharge is evaluated using the Test of Significant Toxicity (TST) hypothesis testing approach, consistent with the Toxicity Provisions. Section III.C.5.c of the Toxicity Provisions includes the following chronic aquatic toxicity MDEL for non-stormwater dischargers:

> "No {Most sensitive species} chronic aquatic toxicity test shall result in a "fail" at the IWC for the sub-lethal endpoint measured in the test and a Percent Effect for the survival endpoint greater than or equal to 50 percent."

Section III.C.5.d of the Toxicity Provisions includes the following chronic aquatic toxicity MMEL:

> "No {Most sensitive species} chronic aquatic toxicity test shall result in a "fail" at the IWC for the sub-lethal endpoint measured in the test and a Percent Effect for the survival endpoint greater than or equal to 50 percent."

Consistent with the Toxicity Provisions, chronic toxicity effluent limitations in this Order are expressed as "Pass" for the median monthly effluent limitation (MMEL) and "Pass" and "<50% Effect" for each maximum daily effluent limitation (MDEL) individual result. The chronic toxicity effluent limitations are as stringent as necessary to protect the statewide water quality objective for aquatic chronic toxicity.

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 section 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 permit, Order No. R4-2019-0077.

4.4.2. Antidegradation Policies

40 CFR § 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. On October 28, 1968, the State Water Board established California's antidegradation policy when it adopted Resolution No. 68-16, *Statement of Policy with Respect to Maintaining the Quality of the Waters of the State*. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The State Water Board has, in State Water Board Order No. 86-17 and an October 7, 1987 guidance memorandum, interpreted Resolution No. 68-16 to be fully consistent with the federal antidegradation policy contained in 40 CFR section 131.12. Similarly, CWA section 303(d)(4)(B) and 40 CFR section 131.12 require that all permitting actions be consistent with the federal antidegradation policy. Together, the state and federal antidegradation policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. The Los Angeles Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies.

The renewal of this Order is consistent with the anti-degradation policy because it is not expected to allow degradation of receiving water quality. This Order requires the discharge to meet the applicable water quality objectives, does not authorize their exceedance, and is therefore not expected to degrade the receiving water or impact beneficial uses.

4.4.3. Stringency of Requirements for Individual Pollutants

The final effluent limits in this Order are 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 or established (in the case of CTR criteria) 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 and SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and WQOs contained in the Basin Plan or statewide water quality control plans 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 131.21I(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-10. Summary of Final Effluent Limitations for Discharge Point 001

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Basis	Notes
$BOD_5 20^oC$	mg/L	20	30	45	Existing/ Tertiary Treatment	---
$BOD_5 20^oC$	lbs/day	330	500	750	Existing/ Tertiary Treatment	a
TSS	mg/L	15	40	45	Existing/ Tertiary Treatment	---

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Basis	Notes
TSS	lbs/day	250	670	750	Existing/ Tertiary Treatment	a
Removal Efficiency for BOD and TSS	%	≥85	---	---	Existing Secondary Treatment	---
pH	Standard Units	---	---	6.5-8.5	Existing/ Basin Plan	b
Temperature	°F	---	---	80	Basin Plan	---
Oil and Grease	mg/L	10	---	15	Existing/ Basin Plan	---
Oil and Grease	lbs/day	170	---	250	Basin Plan	a
Settleable Solids	ml/L	0.1	---	0.3	Existing/ Basin Plan	---
Total Residual Chlorine	mg/L	---	---	0.1	Existing/ Basin Plan	---
Total Residual Chlorine	lbs/day	1.7	---	---	Calculated	---
Total Coliform	CFU/ 100mL	23	2.2	240	Existing/ Title 22	c
E. coli	CFU/100 mL	126	2.2	235	Existing/ TMDL	d
Turbidity	NTU	2	5	10	Existing/ Title 22	e
Radioactivity	---	---	---	---	---	f
Combined Radium-226 and Radium-228	pCi/L	5	---	---	Existing/ Title 22	f
Gross Alpha particle activity (excluding radon and uranium)	pCi/L	15	---	---	Existing/ Title 22	f
Uranium	pCi/L	20	---	---	Existing/ Title 22	f
Gross Beta/photon emitters	millirem/ year	4	---	---	Existing/ Title 22	f
Strontium-90	pCi/L	8	---	---	Existing/ Title 22	f
Tritium	pCi/L	20,000	---	---	Existing/ Title 22	f
Chloride	mg/L	100	---	---	Existing/ Chloride TMDL	g

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Basis	Notes
Chloride	lbs/day	1,700	---	---	Existing	a
Total Dissolved Solids	mg/L	1,000	---	---	Existing/ Basin Plan	---
Total Dissolved Solids	lbs/day	16,700	---	---	Existing/ Basin Plan	a
Sulfate	mg/L	400	---	---	Existing/ Basin Plan	---
Sulfate	lbs/day	6,700	---	---	Existing/ Basin Plan	a
Boron	mg/L	1.5	---	---	Existing/ Basin Plan	---
Boron	lbs/day	25	---	---	Existing/ Basin Plan	a
Copper	µg/L	11	--	34	Existing/ CTR	---
Copper	lbs/day	0.18	--	0.57	Existing	a
MBAS	mg/L	0.5	---	---	Existing/ Basin Plan	---
MBAS	lbs/day	8	---	---	Existing/ Basin Plan	a
Nitrite (as N)	mg/L	0.9	---	---	Existing/ Nitrogen Compound TMDL	h
Nitrite (as N)	lbs/day	15	---	---	Existing	a
Nitrate + Nitrite (as N)	mg/L	5	---	---	Existing/ Basin Plan	h
Nitrate + Nitrite (as N)	lbs/day	80	---	---	Existing	a
Ammonia Nitrogen	mg/L	1.75	---	5.2	Existing/ Nitrogen Compound TMDL	h
Ammonia Nitrogen	lbs/day	29	---	86	Calculated	---
Selenium	µg/L	4.5	---	6.8	Existing/ CTR	---
Selenium	lbs/day	0.08	---	0.11	Existing	a
Cyanide	µg/L	4.3	---	8.1	SIP CTR	---
Cyanide	lbs/day	0.071	---	0.14	Existing	a
2,3,7,8-TCDD	pg/L	0.014	---	0.028	Existing/ CTR	---

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Basis	Notes
2,3,7,8-TCDD	lbs/day	2.3×10^{-10}	---	4.7×10^{-10}	Existing	a
Bis(2-ethylhexyl) Phthalate	µg/L	4	---	---	Existing	---
Bis(2-ethylhexyl) Phthalate	lbs/day	0.07	---	---	Existing	a
Iron	µg/L	300	---	---	Existing/ Basin Plan/ Title 22	---
Iron	lbs/day	5	---	---	Existing	a
TTHMs	µg/L	80	---	---	Existing/ Basin Plan/ Title 22	---
TTHMs	lbs/day	1.3	---	---	Existing	a
Chronic Toxicity *Raphidocelis subcapitata* Growth endpoint	Pass or Fail (TST), % Effect	Pass	---	Pass or % Effect < 50 (growth endpoint)	Existing & Toxicity Provisions	i, j

Footnotes for Table F-10

a. The mass-based effluent limitations are based on the plant design flow rate of 2 MGD and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

b. The effluent values for pH shall be maintained within the limits of 6.5 (instantaneous minimum) and 8.5 (instantaneous maximum).

c. 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 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.

d. The effluent limitation for *Escherichia coli* (*E. coli*) is consistent with the waste load allocation (WLA) set forth in the Santa Clara River Estuary and Reaches 3, 5, 6 and 7 Indicator Bacteria TMDL, in Chapter 7-36 of the Basin Plan.

e. 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.

f. The radioactivity final effluent limitations are derived from Title 22, chapter 15, article 5, sections 64442 and 64443, of the California Code of Regulations (CCR). The incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.

g. The effluent limitation for chloride is expressed as a rolling 3-month average, consistent with the applicable waste load allocation (WLA) contained in the Upper Santa Clara River Chloride TMDL in Chapter 7-6 of the Basin Plan.

h. The effluent limitations for ammonia as nitrogen and nitrite as nitrogen are based on the WLAs contained in the Santa Clara River Nitrogen Compounds TMDL in Chapter 7-9 of the Basin Plan.

i. The effluent limitations for chronic toxicity are expressed as a Maximum Daily Effluent Limitation and as a Median Monthly Effluent Limitation (not an Average Monthly Effluent Limitation).

j. The effluent limitation shall be applicable to the *Raphidocelis subcapitata* (formerly known as *Selenastrum capricornutum*) test until the Discharger completes the first species sensitivity screening for the Newhall Ranch WRP. The effluent limitation shall then be applicable to the most sensitive species determined from the first species sensitivity screening.

End of Footnotes for Table F-10

4.5. Interim Effluent Limitations – Not Applicable

4.6. Land Discharge Specifications – Not Applicable

4.7. Recycling Specifications

4.7.1. Recycled Water Feasibility Investigation

In accordance with statewide statutes and policies concerning water reclamation, (e.g., CWC sections 13000 and 13550-13557, State Water Board Resolution Number 77-1 (Policy with Respect to Water Reclamation in California), and the Recycled Water Policy), the Los Angeles Water Board strongly encourages, wherever practicable, water recycling, water conservation, and use of stormwater and dry-weather urban runoff. This Order requires the Discharger to investigate the feasibility of recycling, conservation, and/or alternative disposal methods of wastewater (such as groundwater injection), and /or the use of stormwater and dry weather runoff.

4.7.2. Volumetric Reporting

The Recycled Water Policy requires wastewater and recycled water dischargers to annually report monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. As applicable, dischargers are additionally required to annually report recycled water use by volume and the category of reuse. 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 including the volumetric monitoring and reporting requirements in accordance with section 3 of the Recycled Water Policy (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf) in Sections 9.3 and 10.4.12. of the MRP in this Order.

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

5.1. Surface Water

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

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.

40 CFR sections 122.41(a)(1) and (b) through (n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in 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, new information based on the results of special studies conducted as required by this Order, 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 to regulate the discharge of waste to maintain high quality waters of the state. The Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. If the Discharger increases the plant's capacity, this provision requires the Discharger to clarify that it has increased plant

capacity though the addition of new treatment system(s) to obtain revised 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 being implemented to increase the plant's capacity. This provision requires the Discharger to submit a report to the Los Angeles Water Board including the information included in this section for approval.

b. Operations Plan for Proposed Expansion. This provision is based on section 13385(j)(1)(D) of the Water Code and allows a 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 the Facility's increasing hydraulic capacity and growth in the service area.

6.2.3. Best Management Practices and Pollution Prevention

a. 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

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

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

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

b. Pretreatment Requirements. During the term of the Order, the Facility's design capacity is less than 5.0 MGD and it will not have any industrial users (Phase 1). Therefore, a Pretreatment Program is not required for the Newhall Ranch WRP at this time. In the future, should conditions change, the permit may be reopened to include pretreatment requirements consistent with applicable effluent limitations, national standards of performance, and toxic and performance effluent standards established pursuant to sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, 404, 405, and 501 of the CWA, and amendments thereto.

c. Filter Bypass Requirements. Conditions pertaining to bypass are contained in Attachment D, Section 1. Standard Provisions – Permit Compliance, subsection 1.7. 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 as a necessary means to avoid loss of life, personal injury or severe property damage. There are no feasible alternatives to this diversion. These anticipated discharges are approved under the bypass conditions when all storage has been utilized and the resulting combined discharge of fully treated (tertiary) and partially treated (secondary) wastewater complies with the effluent and receiving water limitations in this Order. The ROWD and additional information submitted constitutes notice of these anticipated bypasses.

d. Spill Reporting Requirements. This Order establishes a reporting protocol for how different types of spills, overflow or bypasses of raw or partially treated sewage from its collection system or treatment plant covered by this Order shall be reported to regulatory agencies.

Entities enrolled in the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order WQ 2022-0103-DWQ, (SSS WDRs) must develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions. Furthermore, the SSS WDRs contain requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows.

The Discharger is enrolled in the SSS WDRs and must comply with both the SSS WDRs and this Order. 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 and certain other entities 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 recreational areas 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.

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

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 section 13383 also authorizes the Los Angeles Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP) in Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP 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.
- As a requirement of the PMP.

7.2. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges to evaluate compliance with Order conditions. Monitoring requirements are included 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 most 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, violations, and routine monitoring data in accordance with NPDES regulations, the Water Code, and Los Angeles Water Board policies. The MRP also contains sampling program specifics 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, 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 described in the MRP and as required in the SIP. Semi-annual effluent priority pollutant monitoring is required to compare results to influent monitoring results, calculate percent removal of the POTW, and in accordance with future Pretreatment requirements.

The proposed monitoring requirements for PFAS compounds are consistent with USEPA's PFAS Action Plan (dated February 2019) https://www.epa.gov/sites/default/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf, PFAS Strategic Roadmap (October 2021) (https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf) that describe that USEPA's goals of reducing PFAS discharges to waterways, and USEPA's memo dated December 5, 2022 (https://www.epa.gov/system/files/documents/2022-12/NPDES_PFAS_State%20Memo_December_2022.pdf) updating guidance for addressing PFAS discharges in NPDES permits and/or in pretreatment programs.

The accelerated chronic toxicity monitoring, which in the past, served as an indicator of persistent toxicity, is not included in this Order to allow the Discharger to initiate a Toxicity Reduction Evaluation (TRE) sooner than was possible in the prior Order. On occasions when the toxicity was intermittent, the accelerated monitoring step delayed the initiation of the TRE, such that when the TRE was initiated, the effluent no longer exhibited toxicity, and subsequently, the cause of toxicity could not be identified. In this Order, a TRE is required to be initiated following two consecutive chronic toxicity effluent limitation violations, consistent with the Toxicity Provisions.

Monitoring frequency for the constituents is based on exercising the need to: establish a baseline for first-time dischargers, demonstrate the Facility is operating properly, collect data to assess current levels of impairment in surface waters, demonstrate compliance with water quality objectives, establish consistent requirements for the similar facilities, and the following criteria:

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

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

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

Table F-11. Effluent Monitoring Frequency Comparison

Parameter	Monitoring Frequency (2019 Order)	Monitoring Frequency (2024 Order)
Total waste flow	Continuous	No change
Total residual chlorine	Continuous and Daily	No change
Turbidity	Continuous	No change
Total coliform	Daily	No change
E.coli	Daily	No change
Temperature	Daily	No change

Parameter	Monitoring Frequency (2019 Order)	Monitoring Frequency (2024 Order)
pH	Daily	No change
Settleable solids	Weekly	No change
Total suspended solids	Weekly	daily
$BOD_5$20°C	Weekly	daily
Oil and grease	Monthly	No change
Dissolved oxygen	Monthly	No change
Total Dissolved Solids	Monthly	No change
Sulfate	Monthly	No change
Chloride	Monthly	No change
Boron	Monthly	No change
Fluoride	---	Monthly
Ammonia nitrogen	Weekly	No change
Nitrite nitrogen	Weekly	No change
Nitrate nitrogen	Weekly	No change
Total Nitrogen	Weekly	No change
Organic Nitrogen	Weekly	No change
Total phosphorus	Weekly	No change
Orthophosphate-P	Monthly	No change
Surfactants (MBAS)	Monthly	No change
Surfactants (CTAS)	Monthly	No change
Total Hardness ($CaCO_3$)	Weekly	Monthly
Chronic toxicity	Monthly	No change
Radioactivity	Semiannually	No change
Antimony	Quarterly	No change
Arsenic	Quarterly	No change
Cadmium	Quarterly	No change
Chromium III	Quarterly	No change
Chromium VI	Quarterly	No change
Total chromium	Quarterly	No change
Copper	Monthly	No change
Lead	Quarterly	No change
Mercury	Monthly	No change
Nickel	Quarterly	No change
Selenium	Monthly	No change
Silver	Quarterly	No change
Thallium	Quarterly	No change

Parameter	Monitoring Frequency (2019 Order)	Monitoring Frequency (2024 Order)
Zinc	Quarterly	No change
Cyanide	Monthly	No change
Iron	Monthly	No change
Aluminum	Quarterly	No change
Total trihalomethanes (TTHMs)	Quarterly	Monthly
Manganese	Quarterly	No change
p-dichlorobenzene	Quarterly	Semiannually
Bis(2-ethylhexyl) phthalate	Monthly	No change
Acrylonitrile	Quarterly	Semiannually
Lindane (Gamma-BHC)	Quarterly	Semiannually
4,4-DDE	Quarterly	Semiannually
TCDD Equivalents	Quarterly	No change
diazinon	---	annually
2,4-dichlorophenoxyacetic acid (2,4-D)	---	annually
2,4,5-TP (silvex)	---	annually
pesticides	---	annually
Perchlorate	Semiannually	No change
1,4-Dioxane	Semiannually	annually
1,2,3-Trichloropropane	Semiannually	annually
Methyl tert-butyl-ether (MTBE)	Semiannually	annually
PCBs as aroclors	Annually	No change
PCBs as congeners	Annually	No change
Aluminum	Quarterly	No change
Manganese	---	Quarterly
Remaining USEPA priority pollutants excluding asbestos	Semiannually	No Change
PFAS	---	Quarterly

This Order has maintained the same monitoring frequency in the previous permit for most constituents. However, the frequency of monitoring was reduced for pollutants that were not detected or detected at low concentrations in the Valencia WRP effluent and monitoring for six new pollutants was added to establish a baseline. The frequency of monitoring was reduced from weekly to monthly for hardness because monthly data generates sufficient data to calculate the hardness-specific metals CTR criteria. The frequency of monitoring was reduced from quarterly to semiannually for p-dichlorobenzene, acrylonitrile, lindane, and 4,4-DDE because they were detected below the detection limit in the receiving water and the facility will not have any industrial

dischargers. The frequency of monitoring was reduced from semiannually to annually for 1,4-dioxane, 1,2,3-trichloropropane, and MTBE because they were not detected in the receiving water. The frequency of monitoring was increased from weekly to daily for BOD and TSS because the newly constructed plant will need to demonstrate that it can meet the technology-based secondary treatment requirements for POTWs. Frequency of monitoring was increased from quarterly to monthly for total trihalomethanes because the Facility has reasonable potential to cause or contribute to an exceedance of the water quality objective. Fluoride, aluminum, manganese, and PFAS quarterly monitoring requirements were added because the 2019 Order did not contain monitoring requirements for those constituents, but monitoring data is necessary to assess compliance with the applicable water quality objectives and to conduct future reasonable potential analyses for the next permit renewal cycle. Annual monitoring was added for 2,4-dichlorophenoxyacetic acid (2,4-D), diazinon, pesticides, and 2,4,5-TP(silvex) to assess compliance with the water quality objectives for each pollutant and to collect baseline monitoring results. The new quarterly PFAS monitoring requirement is consistent with USEPA's PFAS Action Plan.

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 the concentration increases. For this permit, chronic toxicity in the discharge is evaluated using USEPA's 2010 TST hypothesis testing statistical approach, and is expressed as "Pass" or "Fail" for the median monthly summary results and "Pass" or "Fail" and "Percent Effect" for each individual chronic toxicity result. The chronic toxicity effluent limitations are as stringent as necessary to protect the statewide Water Quality Objective for aquatic chronic toxicity and to implement the Toxicity Provisions. Additional rationale for WET is included 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

Groundwater monitoring is required to establish baseline groundwater conditions prior to the construction of the Newhall Ranch WRP and to detect impacts to the groundwater basin downgradient of the Newhall Ranch WRP's discharge (once constructed and in operation) into the Santa Clara River. The Upper Santa Clara River Chloride TMDL requires trend monitoring to ensure that water quality objectives and waste load allocations are being met, downstream surface water quality is not degraded, and groundwater is not degraded. A network of three groundwater wells with multiple screens will evaluate impacts to groundwater. The monitoring schedule extends beyond the final implementation deadline of the Upper Santa Clara River

Chloride TMDL to support continual evaluation of impacts of compliance measures to surface water and groundwater quality.

7.5. Other Monitoring Requirements

7.5.1. Watershed and Bioassessment Monitoring

The goals of the watershed-wide monitoring program, including the bioassessment monitoring, for the Santa Clara River Watershed are to:

a. Determine compliance with receiving water limits;

b. Evaluate progress in achieving numeric targets and waste load allocations in the TMDLs applicable to the Santa Clara River and its tributaries;

c. Monitor trends in surface water quality;

d. Ensure protection of beneficial uses;

e. Provide data for modeling contaminants of concern;

f. Characterize water quality including seasonal variation of surface waters within the watershed;

g. Assess the health of the biological community; and

h. Determine mixing dynamics of effluent and receiving waters.

7.5.2. 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.

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

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

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

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

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 of the Fact Sheet. The Los Angeles Water Board has taken this factor into account in establishing effluent limitations in the Order as well as the requirement set forth in section 4.3 of the Order. The Recycled Water Feasibility Investigation will not affect the past or present beneficial uses of water, but it could affect the future beneficial uses of water. Should the Discharger be required to implement actions based on the feasibility investigation, any recycled water that may be produced will have to meet all legal requirements, including those set forth in Title 22 to protect future beneficial uses. The requirements herein protect the past, present and probable future beneficial uses of the water.

8.3. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto: The environmental characteristics of this watershed are discussed in the Basin Plan, the Region's Watershed Management Initiative Chapter, as well as available in State of the Watershed reports and the State's CWA Section 303(d) List of impaired waters. The environmental characteristics of the hydrographic unit, including the quality of available recycled water that may be produced as a result of the feasibility investigation, will be improved by compliance with the requirements of this Order. Additional information on the Santa Clara River Watershed is available at

https://www.waterboards.ca.gov/losangeles/water_issues/program/regional_program/Water_Quality_and_Watersheds/ws_santaclara.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 water quality standards

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

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

8.6. Need for developing housing within the region: The Los Angeles Water Board does not anticipate that the state law requirements will adversely impact the need for housing in the area. The region generally relies on imported water to meet many of its water resource needs. Imported water makes up a vast majority of the region's water supply, with local groundwater, local surface water, and reclaimed water making up the remaining amount. This Order helps address the need for housing by controlling pollutants in discharges, which will improve the quality of local surface and ground water, as well as water available for recycling and reuse. This in turn may reduce the demand for imported water, thereby increasing the region's capacity to support continued housing development. A reliable water supply for future housing development is required by law, and with less imported water available to guarantee this reliability, an increase in local supply is necessary. Therefore, the potential for developing housing in the area will be facilitated by the conservation of water, or reuse or the production of, recycled water that may result from the feasibility investigation.

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

9. PUBLIC PARTICIPATION

The Los Angeles Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the Newhall Ranch 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 Persons

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, and the public notice, the fact sheet, and the draft order were posted on the Los Angeles Water Board's home page at Tentative Orders / Permits | Los Angeles Regional Water Quality Control Board (ca.gov) (https://www.waterboards.ca.gov/losangeles/board_decisions/tentative_orderders/index.html) under the "Individual NPDES" heading. Permittee notification was provided by posting one copy of the notice at the front entrance of the Los Angeles County Sanitation Districts Office located at 1955 Workman Mill Road, Whittier, CA 90601; a second copy of said notice at the Valencia Library bulletin board, located at 23743 Valencia Boulevard, Valencia, CA 91355; a third copy of said notice on laminated pages attached to the fence at the proposed discharge property, Assessor Parcel Number (APN) 2826-001-034 facing Highway SR-126; a fourth copy of said notice at the Castaic Library bulletin board, located at 27971 Sloan Canyon Road, Castaic, CA 91384; and a fifth copy of said notice at the Castaic Library public document review shelf. In addition, interested agencies and persons are notified through a transmittal email to the Discharger, being included in the email transaction, for the Los Angeles Water Board's intention to prescribe WDRs for the discharge.

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

9.2. Written Comments

Interested persons were invited to submit written comments concerning the 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 veronica.cuevas@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 October 16, 2024.** Pursuant to section 648.4, title 23 of the California Code of Regulations, written comments or evidence submitted after the comment deadline will not be allowed or accepted into the Administrative Record without a showing of good cause for the delay, and in no event if any party or the Board would be unduly prejudiced by the late submittal including if staff or the Board would not have an adequate opportunity to review, consider, and respond to the comments or evidence. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar and approved without oral testimony.

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: December 19, 2024
Time: 09:00 a.m.
Location: 320 W. 4th Street, Carmel Room
Los Angeles, California 90013

A virtual platform is also available for those who want to join online. Please follow the directions provided in the agenda to participate in the meeting through the virtual platform.

Additional information about the location of the hearing and options for participating will be available 10 days before the hearing. Any person desiring to receive future notices about any proposed Board action regarding this Discharger, please contact Veronica Cuevas at veronica.cuevas@waterboards.ca.gov to be included on the e-mail list.

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

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

Filing a petition does not automatically stay any of the requirements of this Order.

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 below by appointment between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Water Board at the address below or by calling (213) 576-6600.

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

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 Veronica Cuevas at (213) 576-6656 or via email at veronica.cuevas@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