CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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ORDER R4-2019-XXXX
NPDES NO. CA0064556

WASTE DISCHARGE REQUIREMENTS FOR THE NEWHALL RANCH SANITATION DISTRICT NEWHALL RANCH WATER RECLAMATION PLANT DISCHARGE TO THE SANTA CLARA RIVER VIA OUTFALL 001

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

Table 1. Discharger Information

Discharger/Permittee	Newhall Ranch Sanitation District (Discharger or Permittee) *
Facility Name	Newhall Ranch Water Reclamation Plant (Newhall Ranch WRP or Facility) and its associated wastewater collection system and outfall
Facility Address	Hwy 126 at the Los Angeles/ Ventura County Line
	Newhall, CA 91355
	Los Angeles County

Table 2. Discharge Location

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

Table 3. Administrative Information

This Order was adopted on:	March 14, 2019
This Order shall become effective on:	June 1, 2019
This Order shall expire on:	May 31, 2024
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	180 days prior to the Order expiration date
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Major

* Per Section 5.5 of the Joint Sewer Services Agreement (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 new plant.

I, Deborah J. Smith, 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.

_____
Deborah J. Smith, Executive Officer

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I. FACILITY INFORMATION

Information describing the Newhall Ranch Water Reclamation Plant (Newhall Ranch WRP or Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

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

A. 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 United States Environmental Protection Agency (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.

B. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through 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 and G through I are also incorporated into this Order.

C. Provisions and Requirements Implementing State Law. The provisions/requirements in subsection V.B implement state law only. These provisions/requirements are not mandated or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies available for NPDES violations.

D. Self-Regenerating Water Softeners. On December 8, 2016, the Regional 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.

E. Notification of Interested Persons. The Regional 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.

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F. Consideration of Public Comment. The Regional Water Board, in a public hearing, 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 this Order supersedes Order No. R4-2013-0180 except for enforcement purposes and in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for violations of the previous Order.

III. DISCHARGE PROHIBITIONS

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

B. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision I.G. of Attachment D, Standard Provisions.

C. The monthly average effluent dry weather discharge flow rate from the facility shall not exceed the 2 million gallons per day (MGD) design capacity.

D. The Permittee shall not cause degradation of any water resource, except as consistent with State Water Resources Control Board (State Water Board) Resolution No. 68-16.

E. 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.

F. The discharge of any substances in concentrations toxic to animals or plants is prohibited.

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

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, into the Santa Clara River, with compliance measured at Monitoring Location EFF-001 as described in the MRP, Attachment E:

Table 4. Effluent Limitations

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	3-Month Rolling Average
Biochemical Oxygen Demand ($BOD_5$20°C)	mg/L	20	30	45	--	--	--
	lbs/day[1]	330	500	750	--	--	--

[1] The mass emission rates 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. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	3-Month Rolling Average
Total Suspended Solids (TSS)	mg/L	15	40	45	--	--	--
	lbs/day[1]	250	670	750	--	--	--
Turbidity[2]	NTU	Average Daily 2[2]	--	5[2]	--	10[2]	--
pH	standard units	--	--	--	6.5	8.5	--
Total residual chlorine	mg/L	--	--	0.1	--	--	--
Temperature	°F	--	--	86[3]	--	--	--
Radioactivity[4]							
Combined Radium-226 and Radium 228	pCi/L	5[4]	--	--	--	--	--
Gross Alpha particle activity (excluding radon and uranium)	pCi/L	15[4]	--	--	--	--	--
Uranium	pCi/L	20[4]	--	--	--	--	--
Gross Beta/photon emitters	millirem/ year	4[4]	--	--	--	--	--
Strontium-90	pCi/L	8[4]	--	--	--	--	--
Tritium	pCi/L	20,000[4]	--	--	--	--	--
Total coliform[5]	MPN or CFU/100 mL	23[5]	2.2[5]	240[5]	--	--	--

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[2] 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 (NTUs) within a 24-hour period; (b) 5 NTUs more than 5 percent of the time (72 minutes) within a 24-hour period; and (c) 10 NTU at any time.

[3] The temperature of wastes discharged shall not exceed 86°F except as a result of external ambient temperature.

[4] The radioactivity of the wastes discharged 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.

[5] The wastes discharged to water courses shall at all times 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 in the disinfected effluent does not exceed a 7-day median of 2.2 Most Probable Number (MPN) or Colony Forming Unit (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

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	3-Month Rolling Average
E. coli[6]	MPN/ 100 mL	--	7-day Median 2.2[6]	235[6]	--	--	--
Removal Efficiency for BOD	%	≥85	--	--	--	--	--
Removal Efficiency for TSS	%	≥85	--	--	--	--	--
Oil and Grease	mg/L	10	--	15	--	--	--
	lbs/day[1]	170	--	250	--	--	--
Settleable Solids	ml/L	0.1	--	0.3	--	--	--
Total Dissolved Solids	mg/L	1,000	--	--	--	--	--
	lbs/day[1]	16,700	--	--	--	--	--
Sulfate	mg/L	400	--	--	--	--	--
	lbs/day[1]	6,700	--	--	--	--	--
Chloride	mg/L	--	--	--	--	--	100[7]
	lbs/day[1]	--	--	--	--	--	1,700
Boron	mg/L	1.5	--	--	--	--	--
	lbs/day[1]	25	--	--	--	--	--
MBAS	mg/L	0.5	--	--	--	--	--
	lbs/day[1]	8	--	--	--	--	--

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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.

6 The final effluent limitation for *Escherichia coli* (*E. coli*) is based on an Amendment to the Water Quality Control Plan – Los Angeles Region to Incorporate the TMDL for Indicator Bacteria in the Santa Clara River, adopted by the Regional Water Board on July 8, 2010 (Resolution No. R4-2010-006). The Santa Clara River Indicator Bacteria TMDL was approved by the State Water Board, OAL, and USEPA on October 4, 2011, December 19, 2011, and January 13, 2012, respectively. It became effective on March 21, 2012. The E. coli final effluent limitations are based on the final Waste Load Allocations (WLAs) for the Newhall Ranch WRP established in the Santa Clara River Indicator Bacteria TMDL as follows: a 7-day median of 2.2 MPN/100 mL and a daily maximum of 235 MPN/ 100 mL.

7 The final effluent limitation for chloride, expressed as a 3-month rolling average, is based on an *Amendment to the Basin Plan for the Los Angeles Region to Incorporate an Averaging Period for Chloride Water Quality Objectives in Reaches 4B, 5 and 6; Incorporate New Site Specific Objectives for Chloride in Reaches 5 and 6; and Revise the Total Maximum Daily Load for Chloride in the Upper Santa Clara River,* adopted by the Regional Water Board on October 9, 2014 (Resolution No. R4-2014-010). The State Water Board approved the Santa Clara River Chloride TMDL in Resolution No. 2014-0069. On March 18, 2015, and April 28, 2015, respectively, OAL and USEPA approved the *Santa Clara River Chloride TMDL,* and it became effective on April 28, 2015.

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	3-Month Rolling Average
Ammonia Nitrogen	mg/L	1.75[8]	--	5.2[9]	--	--	--
Nitrate + Nitrite (as N)	mg/L	5	--	--	--	--	--
	lbs/day[1]	80	--	--	--	--	--
Nitrite (as N)	mg/L	0.9	--	--	--	--	--
	lbs/day[1]	15	--	---	--	--	--
Copper	µg/L	11	--	34	--	--	--
	lbs/day[1]	0.18	--	0.57	--	--	--
Mercury[10]	µg/L	Annual Average 0.012	--	--	--	--	--
	lbs/day[1]	0.0002	--	--	--	--	--
Selenium	µg/L	4.5	--	6.8	--	--	--
	lbs/day[1]	0.08	--	0.11	--	--	--
Cyanide	µg/L	4.3	--	8.5	--	--	--
	lbs/day[1]	0.071	--	0.14	--	--	--
2,3,7,8-TCDD	pg/L	0.014	--	0.028	--	--	--
	lbs/day[2]	2.3×10^{-10}	--	4.7×10^{-10}	--	--	--
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--	--
	lbs/day[2]	0.07	--	--	--	--	--
Iron	µg/L	300	--	--	--	--	--
	lbs/day[2]	5	--	--	--	--	--
Total Trihalomethanes[11]	µg/L	80	--	--	--	--	--
	lbs/day[2]	1.3	--	--	--	--	--

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[8] This monthly average effluent limit is consistent with the 30-day average final WLA for ammonia as nitrogen, for discharges into Reach 7, as set forth in the *Amendment to the Water Quality Control Plan for the Los Angeles Region to include a TMDL for Nitrogen Compounds in the Santa Clara River,* adopted by the Regional Water Board on August 7, 2003 (Resolution No. 03-011).

[9] This daily maximum effluent limit is consistent with the one-hour final WLA for ammonia as nitrogen, for discharges into Reach 7, as set forth in Resolution No. 03-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to include a TMDL for Nitrogen Compounds in the Santa Clara River,* adopted by the Regional Water Board on August 7, 2003.

[10] The mercury final effluent limitations are based on the statewide Inland Surface Waters Enclosed Bays and Estuaries (ISWEBE) Plan as amended in State Water Board Resolution No. 2017-0027, *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).

[11] Total trihalomethanes is the sum of concentrations of the trihalomethane compounds: bromodichloromethane, bromoform, chloroform, and dibromochloromethane.

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Maximum Daily	Instanta-neous Minimum	Instanta-neous Maximum	3-Month Rolling Average
Chronic Toxicity[12,13]	Pass or Fail, % Effect (Test of Significant Toxicity, (TST))	Pass[14]	--	Pass or % Effect <50	--	--	--

2. Interim Effluent Limitations– Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications

The Discharger plans to use up to 478 acre-feet per month (February through November) and up to 340 acre-feet per month (December and January) of tertiary-treated effluent for landscape irrigation and other uses. However, when the demand for recycled water is low, Newhall Ranch WRP will discharge to the Santa Clara River. Prior to use of the treated effluent for recycling, the Discharger must submit a Notice of Intent to obtain coverage under the State Water Board's General Order WQ 2016-0068-DDW for *Water Reclamation Requirements for Recycled Water Use* (General WRR) and submit an engineering report to the State Water Board Division of Drinking Water (DDW), after the Newhall Ranch WRP treatment design is complete. The production, distribution, and reuse of recycled water for direct, non-potable applications would be regulated under the State Water Board's General WRR. In times when the demand for recycled water exceeds what the Newhall Ranch WRP can provide, water from Valencia Water Company will be used to supplement the recycled water supply so that the recycled water customers do not experience a shortage in service.

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[12] The median monthly effluent limitation (MMEL) shall be reported as "Pass" or "Fail." The maximum daily effluent limitation (MDEL) shall be reported as "Pass" or "Fail" and "% Effect." The MMEL for chronic toxicity shall only apply when there is a discharge on more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests may be conducted when one toxicity test results in "Fail."

[13] A numeric WQBEL is established because effluent data showed that there is reasonable potential for the Newhall Ranch WRP effluent to cause or contribute to an exceedance of the chronic toxicity water quality objective based on the Valencia WRP effluent data. The Chronic Toxicity final effluent limitation is protective of both the numeric acute toxicity and the narrative toxicity Basin Plan water quality objectives. These final effluent limitations will be implemented using the *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (USEPA 2002, EPA-821-R-02-013), current USEPA guidance in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June /2010)* and *EPA Regions 8, 9, and 10 Toxicity Training Tool (January 2010), http://www2.epa.gov/region8/epa-regions-8-9-and-10-toxicity-training-tool-january-2010*.

[14] This is a Median Monthly Effluent Limitation.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives (WQOs) contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in Santa Clara River:

1. For waters designated with a warm freshwater habitat (WARM) beneficial use, the temperature of the receiving water at any time or place and within any given 24-hour period shall not be altered by more than 5°F above the natural temperature and shall not be raised above 86°F due to the discharge of effluent at the receiving water station located downstream of the discharge. Natural conditions shall be determined on a case-by-case basis.

   If the receiving water temperature, downstream of the discharge, exceeds 86°F as a result of the following:

   a. High temperature in the ambient air; or,

   b. High temperature in the receiving water upstream of the discharge,

   then the exceedance shall not be considered a violation.

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.

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

4. The total residual chlorine shall not exceed 0.1 mg/L in the receiving waters and shall not persist in the receiving water at any concentration that causes impairment of beneficial uses as a result of wastes discharged.

5. The *Escherichia coli* (E. coli) concentration in the receiving water shall not exceed the following, as a result of wastes discharged:

   a. Geometric Mean Limits

      E. coli density shall not exceed 126/100 mL.

   b. Single Sample Limits

      E. coli density shall not exceed 235/100 mL.

   The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than five samples equally spaced over a 30-day period).

6. 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%.

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7. 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.
8. 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.
9. The concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses as a result of wastes discharged.
10. The wastes discharged shall not contain substances that result in increases in BOD, which adversely affect the beneficial uses of the receiving waters.
11. The 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.
12. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions as a result of wastes discharged.
13. The wastes discharged shall not cause the receiving waters to contain any substance in concentrations that adversely affect any designated beneficial use.
14. The wastes discharged shall not alter the natural taste, odor, or color of fish, shellfish, or other surface water resources used for human consumption.
15. The wastes discharged shall not result in problems due to breeding of mosquitoes, gnats, black flies, midges, or other pests.
16. The wastes discharged shall not result in visible floating particulates, foams, or oil and grease in the receiving waters.
17. The wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; or cause aesthetically undesirable discoloration of the receiving waters.
18. No physical evidence of wastes discharged shall be visible at any time in the water or on beaches, shores, rocks, or structures.
19. 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 wastes discharged.
20. 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.
21. 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.
22. Ammonia shall not be present at levels that, when oxidized to nitrate, pose a threat to groundwater quality.

23. Chronic Toxicity Narrative Receiving Water Quality Objective

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

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

    c. If the chronic toxicity median monthly threshold at the immediate downstream receiving water location is not met and the toxicity cannot be attributed to upstream toxicity, as assessed by the Permittee, then the Permittee shall initiate accelerated monitoring according to Attachment E – MRP section V.A.7.

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

24. The wastes discharged shall not cause the ammonia water quality objective in the Basin Plan to be exceeded in the receiving waters. Compliance with the ammonia water quality objectives shall be determined by comparing the receiving water ammonia concentration to the ammonia water quality objective in the Basin Plan. The ammonia water quality objective can also be calculated using the pH and temperature of the receiving water at the time of collection of the ammonia sample.

B. Groundwater Limitations

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

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D.

2. **Regional Water Board Standard Provisions**. The Permittee shall comply with the following provisions. In the event that 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, as determined by the Regional 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 recurrence interval of once in 100 years.

    d. Collection, treatment, and disposal systems shall be operated in a manner that precludes 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 Regional 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 Permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 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 storm water to storm drain systems or other water courses under their jurisdiction, including applicable requirements in municipal storm water management programs developed to comply with NPDES permits issued by the Regional 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 Permittee 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 facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this 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. 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 of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.

m. A copy of these waste discharge specifications shall be maintained at the discharge Facility so as to be available at all times to operating personnel.

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

o. The Permittee shall file with the Regional 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.

p. In the event of any change in name, ownership, or control of these waste disposal facilities, the Permittee shall notify the Regional 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 Regional Water Board, 30 days prior to taking effect.

q. 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.

r. The Permittee 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.

s. 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 Permittee to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Permittee to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

t. Water Code section 13385(h)(i) requires the Regional 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 part 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.”

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

v. 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.

w. 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.

x. In the event the Permittee does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order that may endanger health or the environment, the Permittee shall notify the Chief of the Watershed Regulatory Section at the Regional Water Board by telephone (213) 620-2083 or by fax at (213) 576-6660 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing to the Regional Water Board within five days, unless the Regional 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.

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

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 Permittee 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 40 CFR parts 122 and 124 to include requirements for the implementation of a watershed protection management approach.

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

e. This Order may also be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR 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 Permittee 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 Regional 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. The waste discharged shall not cause a violation of any applicable water quality standard for receiving waters. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments, thereto, the Regional Water Board will revise and modify this Order in accordance with such standards.

i. This Order may be reopened and modified, to add or revise effluent limitations as a result of future Basin Plan Amendments, such as an update of a water quality objective, or the adoption or revision of any of the Santa Clara River Total Maximum Daily Loads (TMDLs).

j. This Order may be reopened and modified, to revise effluent limitations as a result of the delisting of a pollutant from the 303(d) list.

k. This Order will be reopened and modified to revise any or all of the chronic toxicity testing provisions and effluent limitations, to the extent necessary, to be consistent with any Toxicity Provisions that are subsequently adopted by the State Water Board promptly after USEPA approval of such Provisions.

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

m. 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 Regional 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.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. **Special Study for Constituents of Emerging Concern (CECs)**

i. CEC Monitoring Requirement in the Effluent

(1) The Discharger shall conduct a special study to investigate the CECs in the effluent discharge. Within 90 days of the first year of operation, the Discharger shall submit to the Executive Officer a CEC special study work plan for approval. Upon approval, the Discharger shall implement the work plan.

(2) The Discharger shall follow the requirements of the work plan as discussed in the MRP and the Fact Sheet.

b. Toxicity Reduction Requirements

The Permittee shall prepare and submit a copy of the Permittee's initial investigation Toxicity Reduction Evaluation (TRE) workplan before May 31, 2023 (one year prior to the permit expiration date), in accordance with Monitoring and Reporting Program section V.A.6.

c. **Treatment Plant Capacity**

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

i. The average daily flow for the month, the date on which the peak flow occurred, the rate of that peak flow, and the total flow for the day.

ii. The best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the facilities.

iii. A schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

This requirement is applicable to those facilities which have not reached 75 percent of capacity as of the effective date of this Order. For those facilities that have reached 75 percent of capacity by that date but for which no such report has been previously submitted, such a report shall be filed within 90 days of the issuance of this Order.

d. **Water Recycling**. In accordance with statewide policies concerning water reclamation, this Regional Water Board strongly encourages, wherever practical, water recycling, water conservation, and use of stormwater and dry-weather urban runoff. The Discharger is planning to maximize the use of recycled water. The Discharger shall submit a report one year following start-up operation of the Newhall Ranch WRP describing their recycling water plan.

3. Best Management Practices and Pollution Prevention

a. **Storm Water Pollution Prevention Plan (SWPPP) – (Not Applicable)**

Storm water is regulated under a separate Order. However, Newhall Land and Farming proposes to size low impact development project design features to retain the volume of runoff produced from a 0.75-inch storm event and to reduce the percentage of effective impervious area to five percent or less of the total project area within the Newhall Ranch Specific Plan including the WRP's footprint.

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b. **Spill Clean-up Contingency Plan (SCCP)**

Within 90 days of the effective date of this Order, the Permittee is required to submit a SCCP, which describes the activities and protocols to address clean-up of spills, overflows, and bypasses of untreated or partially treated wastewater from the Permittee's collection system or treatment facilities that reach water bodies, including dry channels and beach sands. At a minimum, the plan shall include sections on spill clean-up and containment measures, public notification, and monitoring. The Permittee shall review and amend the plan as appropriate after each spill from the Facility or in the service area of the Facility. The Permittee 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 X.B.4 describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a reported 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 Permittee shall develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL; sample results from analytical methods more sensitive than those methods required by this Order; presence of whole effluent toxicity; health advisories for fish consumption; or, results of benthic or aquatic organism tissue sampling) that a pollutant is present in the effluent above an effluent limitation and either of the following is true:

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

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

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 Regional 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 Regional Water Board:

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

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

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

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

v. An annual status report that shall be sent to the Regional Water Board including:

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

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

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

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

4. Construction, Operation and Maintenance Specifications

a. 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).

b. The Permittee 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, 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.

c. The Permittee 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.

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

a. **Biosolids Disposal Requirements**

i. All biosolids generated at the wastewater treatment plant must be disposed of, treated, or applied to land in accordance with federal regulations contained in 40 CFR part 503. These requirements are enforceable by USEPA.

i. The Permittee shall ensure compliance with the requirements in State Water Board Order No. 2004-12-DWQ, *General WDRs for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities* for those sites receiving the Permittee's biosolids which a Regional Water Board has placed under this general order, and with the requirements in individual WDRs issued by a Regional Water Board for sites receiving the Permittee's biosolids.

b. **Pretreatment Requirements - (NOT APPLICABLE)**

These provisions are not applicable until such time as a Pretreatment Program is required by the Board.

i. This Order does not include any requirements for a Pretreatment Program because the discharge is less than 2.0 mgd and because the POTW currently does not have any significant industrial users (SIUs). In the future, as specified under section VI.C.5.b. the Discharger will be required to develop a Pretreatment Program to implement it and to enforce it, in its entire service area. Section 3.5 of the Joint Services Agreement between Newhall Ranch SD and SCVSD specifies that Newhall Ranch SD shall adopt a Wastewater Ordinance prior to the first home being built in the Newhall Ranch.

ii. Applications for renewal or modification of this Order must contain information about industrial discharges to the POTW pursuant to 40 CFR part 122.21(j)(6). Pursuant to 40 CFR part 122.42(b) and provision VII.A of Attachment D, Standard Provisions, of this Order, the Discharger shall provide adequate notice of any new introduction of pollutants or substantial change in the volume or character of pollutants from industrial discharges which were not included in the permit application.

iii. Pursuant to 40 CFR part 122.44(j)(1), the Permittee shall annually identify and report, in terms of character and volume of pollutants, any Significant Industrial Users discharging to the POTW subject to Pretreatment Standards under section 307(b) of the CWA and 40 CFR part 403.

iv. Once an approved Pretreatment Program has been developed, the Discharger shall evaluate whether its pretreatment local limits are adequate to meet the requirements of this Order. If the Newhall Ranch WRP becomes interconnected with SCVSD, then the Discharger will consider, in the development of local limits, the effluent limitations contained in these Orders, and other relevant factors due to the interconnectedness of the system and protection of the upstream plants. One year prior to increasing the design capacity to 5.0 MGD or prior to having a SIU discharge into the treatment plant's collection system, the Discharger shall submit to the Regional Water Board their proposed Pretreatment Program and the results of the evaluation indicating whether local limits are needed. Any revised local limits shall be submitted to the Regional Water Board for approval under 40 CFR part 403.18. In addition, the Discharger shall consider collection system overflow protection from such constituents as oil and grease, etc. Lack of adequate local limits shall not be a defense against liability for violations of effluent limitations and overflow prevention requirements contained in this Order.

v. Any change to the Pretreatment Program shall be reported to the Regional Water Board in writing and shall not become effective until approved by the Executive Officer in accordance with procedures established in 40 CFR part 403.18.

vi. The Discharger shall enforce the requirements promulgated under sections 307(b), 307(c), 307(d), and 402(b) of the CWA with timely, appropriate, and effective enforcement actions. The Discharger shall require industrial users to comply with Federal Categorical Standards and shall initiate enforcement actions against those users who do not comply with the standards. The Discharger shall require industrial users subject to the Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

vii. The Discharger shall perform the pretreatment functions as required in Federal Regulations 40 CFR part 403 including, but not limited to:

1. Implement the necessary legal authorities as provided in 40 CFR part 403.8(f)(1);

2. Enforce the pretreatment requirements under 40 CFR part 403.5 and 403.6;

3. Implement the programmatic functions as provided in 40 CFR part 403.8(f)(2); and

4. Provide the requisite funding of personnel to implement the Pretreatment Program as provided in 40 CFR part 403.8(f)(3).

viii. The Discharger shall submit annual reports to the Regional Water Board, with copies to the State Water Board, and USEPA Region 9, describing the Discharger's pretreatment activities over the period. The annual reports shall contain, but not be limited to, the information required in the attached *Pretreatment Reporting Requirements* (**Attachment I**), or an approved revised version thereof. If the Discharger is not in compliance with any conditions or requirements of this Order, the Discharger shall include the reasons for noncompliance and shall state how and when the Discharger will comply with such conditions and requirements.

ix. The Discharger shall be responsible and liable for the performance of all control authority pretreatment requirements contained in 40 CFR part 403, including subsequent regulatory revisions thereof. Where 40 CFR part 403 or subsequent revision places mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall complete the required actions within six months from the effective date of this Order or the effective date of 40 CFR part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the Regional Water Board, USEPA, or other appropriate parties, as provided in the Federal Clean Water Act. The Regional Water Board or USEPA may initiate enforcement action against an industrial user for noncompliance with acceptable standards and requirements as provided in the Federal Clean Water Act and/or the Water Code.

x. The Permittee shall comply with requirements contained in Attachment I – Pretreatment Reporting Requirements.

c. **Collection System Requirements**

i. The Permittee's collection system is part of the system that is subject to this Order. As such, the Permittee must properly operate and maintain its collection system (40 CFR part 122.41(e)). The Permittee must report any non-compliance (40 CFR part 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 CFR part 122.41(d)). See the Order at Attachment D, subsections I.D, V.E, V.H, and I.C., and the following section of this Order.

d. **Filter Bypass**

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

or partially treated wastewater to waters of the State is prohibited, except as allowed under conditions stated in 40 CFR part 122.41(m) and (n). Consistent with those provisions, during periods of elevated, wet weather flows, the operational diversion of a portion of the secondary treated wastewater around the tertiary filters is allowable provided that the resulting combined discharge of fully treated (tertiary) and partially treated (secondary) wastewater complies with the effluent and receiving water limitations in this Order.

6. Spills Reporting Requirements

a. **Initial Notification**

Although State and Regional Water Board staff do not have duties as first responders, this requirement is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. For certain spills, overflows and bypasses, the Permittee shall make notifications as required below:

i. In accordance with the requirements of Health and Safety Code section 5411.5, the Permittee shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but no later than **two hours** after becoming aware of the release.

ii. In accordance with the requirements of Water Code section 13271, the Permittee shall provide notification to the California Office of Emergency Services (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, Division 3, Chapter 9.2, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting these releases to the OES is (800) 852-7550. In addition, the Permittee shall notify Heal the Bay of any such sewage spill.

iii. The Permittee shall notify the Regional Water Board of any unauthorized release of sewage from its POTW that causes, or probably will cause, a discharge to a water of the state as soon as possible, but not later than **two hours** after becoming aware of the release. This initial notification does not need to be made if the Permittee has notified OES and the local health officer or the director of environmental health with jurisdiction over the affected waterbody. The phone number for reporting these releases of sewage to the Regional Water Board is (213) 576-6657. The phone numbers for after hours and weekend reporting of releases of sewage to the Regional Water Board are (213) 305-2284 and (213) 305-2253.

At a minimum, the following information shall be provided to the Regional Water Board:

(a) The location, date, and time of the release.

(b) The water body that received or will receive the discharge.

(c) An estimate of the amount of sewage or other waste released and the amount that reached a surface water at the time of notification.

(d) If ongoing, the estimated flow rate of the release at the time of the notification.

(e) The name, organization, phone number and email address of the reporting representative.

b. **Monitoring**

For spills, overflows and bypasses reported under section VI.C.6.a, the Permittee shall monitor as required below:

i. To define the geographical extent of the spill's impact, the Permittee shall obtain grab samples (if feasible, accessible, and safe) for all spills, overflows or bypasses of any volume that reach any waters of the state (including surface and ground waters). For spills that reach surface freshwaters, the Permittee shall monitor for *E. coli* density. For spills that reach marine water, the Permittee shall monitor for total coliform, and enterococcus density. The Permittee also shall analyze the samples for relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible, and safe). This monitoring shall be done on a daily basis 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 or Ventura County Environmental Health Division authorizes cessation of monitoring.

c. **Reporting**

The initial notification required under section VI.C.6.a shall be followed by:

i. As soon as possible, but **not later than twenty-four hours** after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, the Permittee shall submit a statement to the Regional Water Board by email at augustine.anijielo@waterboards.ca.gov. If the discharge is 1,000 gallons or more, this statement shall certify that 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:

(a) Agency, NPDES No., Order No., and MRP CI No., if applicable.

(b) The location, date, and time of the discharge.

(c) The water body that received the discharge.

(d) A description of the level of treatment of the sewage or other waste discharged.

(e) An initial estimate of the amount of sewage or other waste released and the amount that reached a surface water.

(f) The OES control number and the date and time that notification of the incident was provided to OES.

(g) The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).

ii. A written preliminary report five working days after disclosure of the incident is required. Submission to the Regional 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 Permittee shall submit the final written report to this Regional Water Board. (A copy of the final written report, for a given incident, already submitted pursuant to a statewide General WDRs for Wastewater Collection System Agencies (SSO WDR), may be submitted to the Regional 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 Permittee 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 Permittee's preventive maintenance plan. Any deviations from or modifications to the plan shall be discussed.

d. **Records**

The Permittee 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 Regional 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 VI.C.6.b.

iv. The cause of each spill, overflow, or bypass.

v. Whether each spill, overflow, or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances.

vi. Any mitigation measures implemented.

vii. Any corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.

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

e. **Activities Coordination**

Although not required by this Order, Regional 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 MS4 NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements and (iii) the SSO WDR.

f. **Consistency with SSO WDRs**

The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 United States Code sections 1311, 1342). The State Water Board adopted General Waste Discharge Requirements for Sanitary Sewer Systems, (WQ Order No. 2006-0003-DWQ; SSO WDR) on May 2, 2006, to provide a consistent, statewide regulatory approach to address sanitary sewer overflows. The SSO WDR requires public agencies that own or operate sanitary sewer systems to apply for coverage under the SSO WDR, develop and implement sewer system management plans, and report all SSO to the State Water Board's online SSOs database. Regardless of the coverage obtained under the SSO WDR, the Permittee's collection system is part of the POTW that is subject to this NPDES permit. As such, pursuant to federal regulations, the Permittee must properly operate and maintain its collection system (40 CFR part 122.41 (e)), report any non-compliance (40 CFR part 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR part 122.41(d)).

The requirements contained in this Order in sections VI.C.3.b (SCCP Plan section), VI.C.4 (Construction, Operation and Maintenance Specifications section), and VI.C.6 (Spill Reporting Requirements section) are intended to be consistent with the requirements of the SSO WDR. The Regional Water Board recognizes that there may be some overlap between these NPDES permit provisions and SSO WDR requirements, related to the collection systems. The requirements of the SSO WDR are considered the minimum thresholds (see finding 11 of State Water Board Order No. 2006-0003-DWQ). To encourage efficiency, the Regional Water Board will accept the documentation prepared by the Permittees under the SSO WDR for compliance purposes as satisfying the requirements in sections VI.C.3.b, VI.C.4, and VI.C.6 provided the more stringent provisions contained in this NPDES permit are also addressed. Pursuant to SSO WDR, section D, provision 2(iii) and (iv), the provisions of this NPDES permit supersede the SSO WDR, for all purposes, including enforcement, to the extent the requirements may be deemed duplicative.

7. Other Special Provisions – Not Applicable

8. Compliance Schedules

a. This Order does not include compliance schedules or interim effluent limitations because the *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits, State Water Board Resolution No. 2008-0025*, does not authorize compliance schedules in permits for new dischargers. Newhall Ranch WRP is considered a new discharger since its construction will commence after new WQOs or criteria in water quality standards became applicable.

VII. COMPLIANCE DETERMINATION

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

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

B. 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, the Permittee shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

C. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection B 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, though the Permittee 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). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Permittee may be considered out of compliance for that calendar month. The Permittee will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to the AMEL.

If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for a given parameter, the Permittee 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 Permittee 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**.**

D. Average Weekly Effluent Limitation (AWEL)

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

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

E. Maximum Daily Effluent Limitation (MDEL)

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

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

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

H. 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 Permittee will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the six-month median, the Permittee will be considered out of compliance for the

180-day period. For any 180-period during which no sample is taken, no compliance determination can be made for the six-month median effluent limitation.

I. Median Monthly Effluent Limitation (MMEL)

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

J. Chronic Toxicity

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

The MDEL for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST statistical approach, results in "Fail" and the "Percent Effect" is ≥ 50%.

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

The chronic toxicity MDEL and MMEL are set at the IWC for the discharge (100% effluent) and expressed in units of the TST statistical approach ("Pass" or "Fail", "Percent Effect"). All NPDES effluent compliance monitoring for the chronic toxicity MDEL and MMEL shall be reported using only the 100% effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (Ho) (see above) is statistically analyzed using the IWC and a negative control. Effluent toxicity tests shall be run using a multi-concentration test design when required by *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (USEPA 2002, EPA-821-R-02-013). The Regional Water Board's review of reported toxicity test results will include review of concentration-response patterns as appropriate (see Fact Sheet discussion at IV.C.5). As

described in the bioassay laboratory audit correspondence from the State Water Resources Control Board dated August 7, 2014, and from the USEPA dated December 24, 2013, the Percent Minimum Significant Difference (PMSD) criteria only apply to compliance reporting for the No Observable Effect Concentration (NOEC) and the sublethal statistical endpoints of the NOEC, and therefore are not used to interpret TST results. Standard Operating Procedures used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent (and receiving water) toxicity test measurement results from the TST statistical approach, including those that incorporate a consideration of concentration-response patterns, must be submitted to the Regional Water Board (40 CFR section 122.41(h)). The Regional Water Board will make a final determination as to whether a toxicity test result is valid, and may consult with the Permittee, the USEPA, the State Water Board's Quality Assurance Officer, or the State Water Board's Environmental Laboratory Accreditation Program (ELAP) as needed. The Board may consider the results of any TIE/TRE studies in an enforcement action.

K. 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 Permittee may substitute mass loadings and mass emissions for the concentrations.

L. 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.

M. Compliance with Single Constituent Effluent limitations

Permittees may be considered out of compliance with the effluent limitation if the concentration of the pollutant (see section B "Multiple Sample Data Reduction" above) in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

N. 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.

O. Compliance with Santa Clara River Nutrient Compounds TMDL effluent limitations

Newhall Ranch WRP, when built, will discharge to Santa Clara River. Reaches of the Santa Clara River are on the CWA section 303(d) list as impaired for various pollutants. Total Maximum Daily Loads (TMDLs), adopted by the Regional Water Board establish waste load allocations (WLAs) for chloride, bacteria, and nutrient compounds, applicable to discharges into the Santa Clara River. These TMDLs also provide interim WLAs under certain

conditions. Federal regulations require that NPDES permits incorporate WQBELs consistent with the requirements and assumptions of any available WLAs.

This Order incorporates WQBELs consistent with applicable TMDLs. However, since the Newhall Ranch WRP is a new discharge, this Order does not include compliance schedules or interim effluent limitations, consistent with the *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits, State Water Board Resolution No. 2008-0025*, which does not authorize compliance schedules in permits for new discharges.

P. Compliance with 2,3,7,8-TCDD Equivalents

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

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

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-HeptaCDFs	50	0.01
1,2,3,4,7,8,9-HeptaCDFs	50	0.01
OctaCDF	100	0.0001

Q. Compliance with Gross Beta/photon Emitters

The monthly average effluent limitation for gross beta/photon is equal to 4 millirem/year. If the results of testing for all beta and photon emitters is less than or equal to 50 picoCuries per liter (pCi/L), the facility is in compliance and the value shall be reported as <4 millirem/year. If the test results for all beta and photon emitters are greater than 50 pCi/L, the Permittee must have the samples further analyzed for the *individual* nuclides. The calculation for the sum of the fractions is presented below.

The maximum contaminant level (MCL) for gross beta/photon is equal 4 millirem per year. A millirem is a dose energy to the body. 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 on table, *Derived Concentrations of (pCi/L) of Beta and Photon Emitters in Drinking Water,* 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-85m	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 141.66(d)(2).

Each nuclide has a different concentration that produces 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:

TENTATIVE

Emitter	X	Y	X/Y	4(X/Y)
	Lab Analysis (pCi/L)	Conversion from table (pCi/4millirem)	Calculate Fraction	Calculate Total (millirem)
Cs-134	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

The system would be considered in violation of the gross beta/photon effluent limitation if 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.

R. Mass Emission Rate

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

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

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

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

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined effluent discharged 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 effluent discharged. 'Qi' and 'Ci' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Q_t' is the total flow rate of the combined effluent discharged.

S. Bacterial Standards and Analysis

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. The geometric mean values should be calculated based on a statistically sufficient number of samples and should not be less than 5 samples equally spaced over a 30-day period.

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 *E. coli*, 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.

3. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR part 136 or 40 CFR part 141 when approved by this Regional Water Board and the State Water Board, 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.

4. Detection methods used for *E. coli* shall be those presented in Table 1A of 40 CFR part 136 or 40 CFR part 141 when approved by this Regional Water Board and the State Water Board, 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.

T. Single Operational Upset (SOU)

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

1. A 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.

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 V.E.2(b) of Attachment D – Standard Provisions.

3. For purpose outside 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).

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:

Arithmetic mean = $\mu = \Sigma x / n$ 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

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

Method Detection Limit (MDL)
MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 C.F.R. part 136, Attachment B, revised as of May 18, 2012, or most recent version.

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

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

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

Persistent Pollutants
Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

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

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

Reporting Level (RL)
The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional 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 State Implementation Plan (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 Regional Water Board Basin Plan.

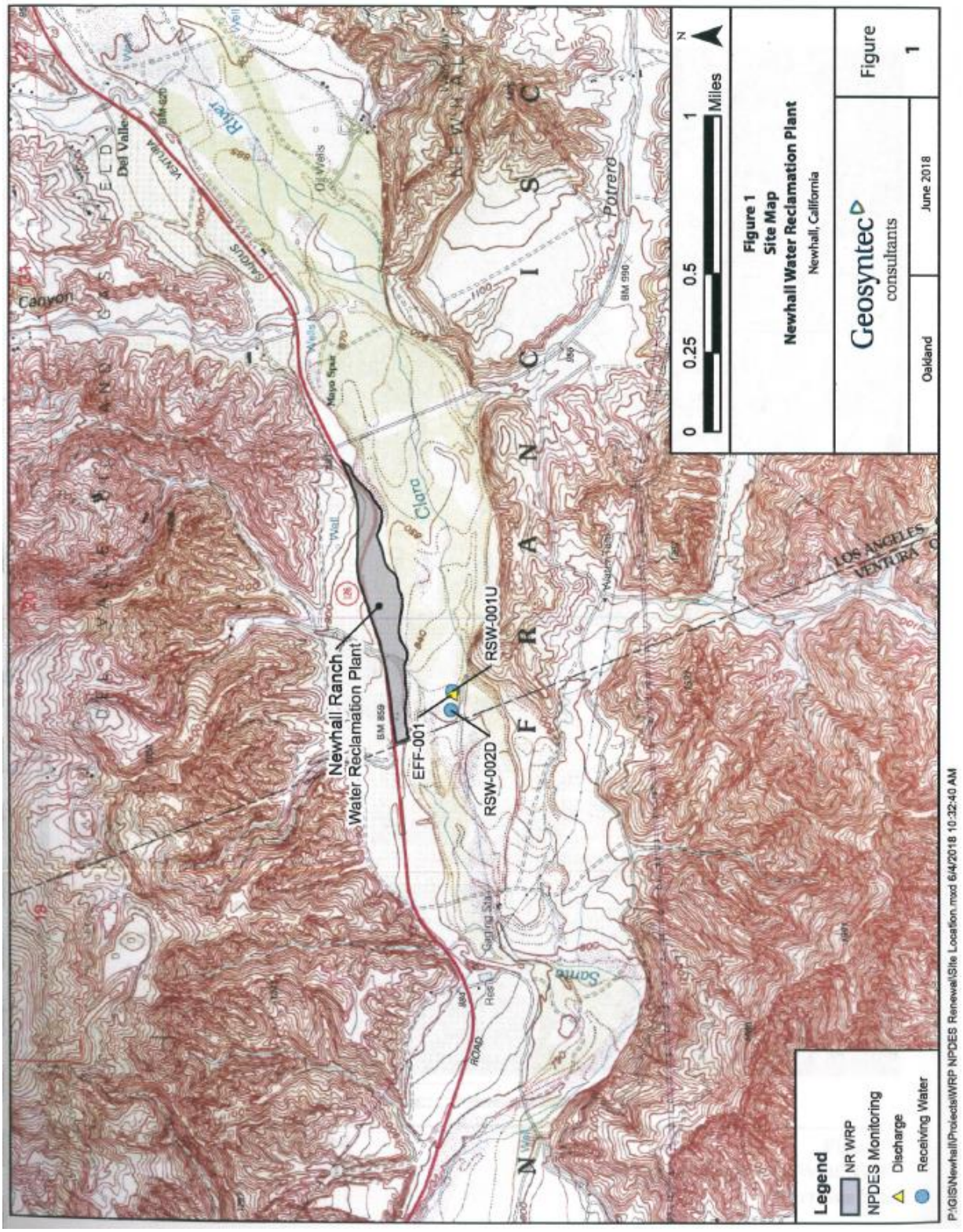
Standard Deviation (σ)
Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

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

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 – LOCATION OF FUTURE NEWHALL RANCH WRP



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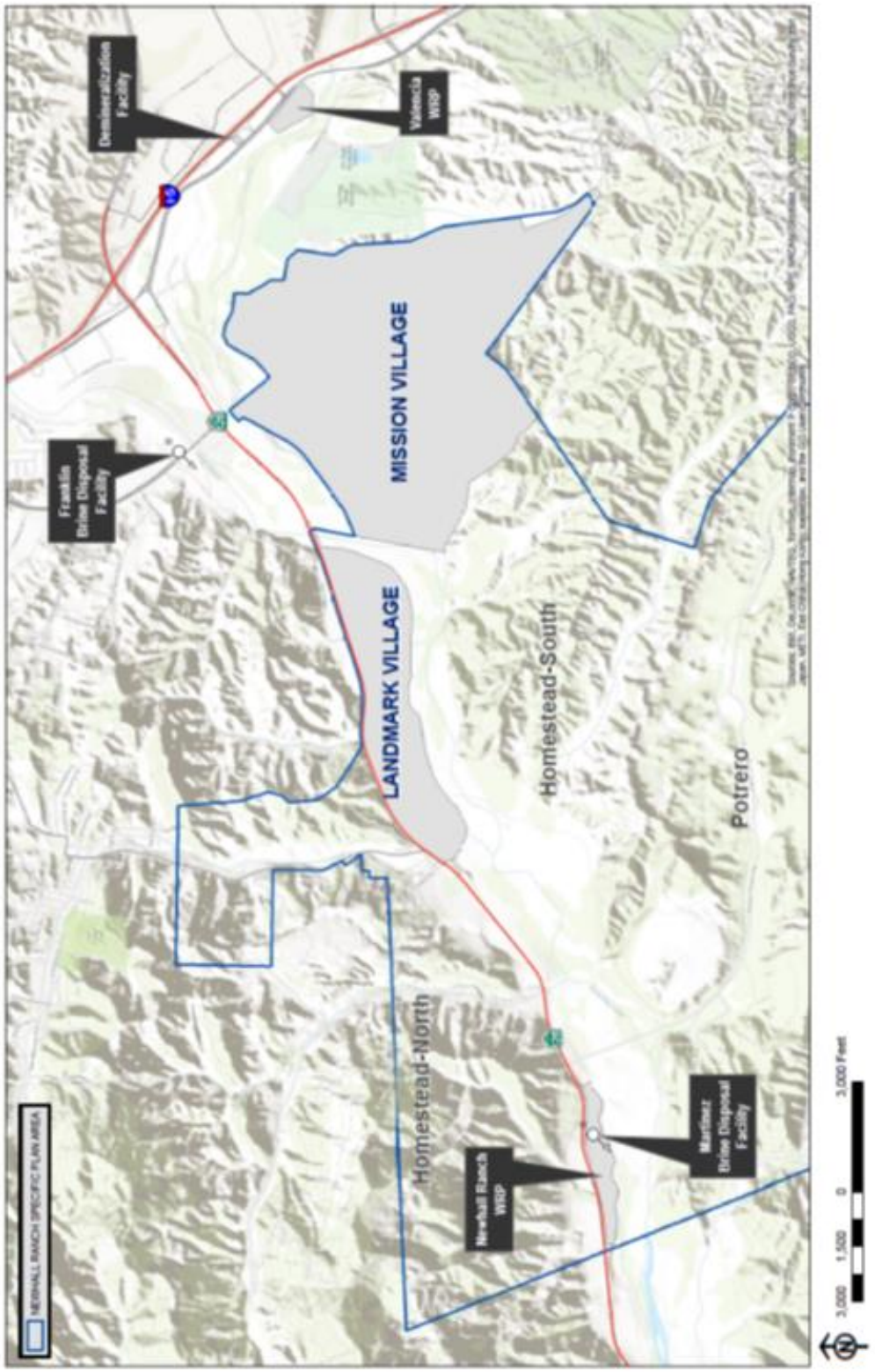
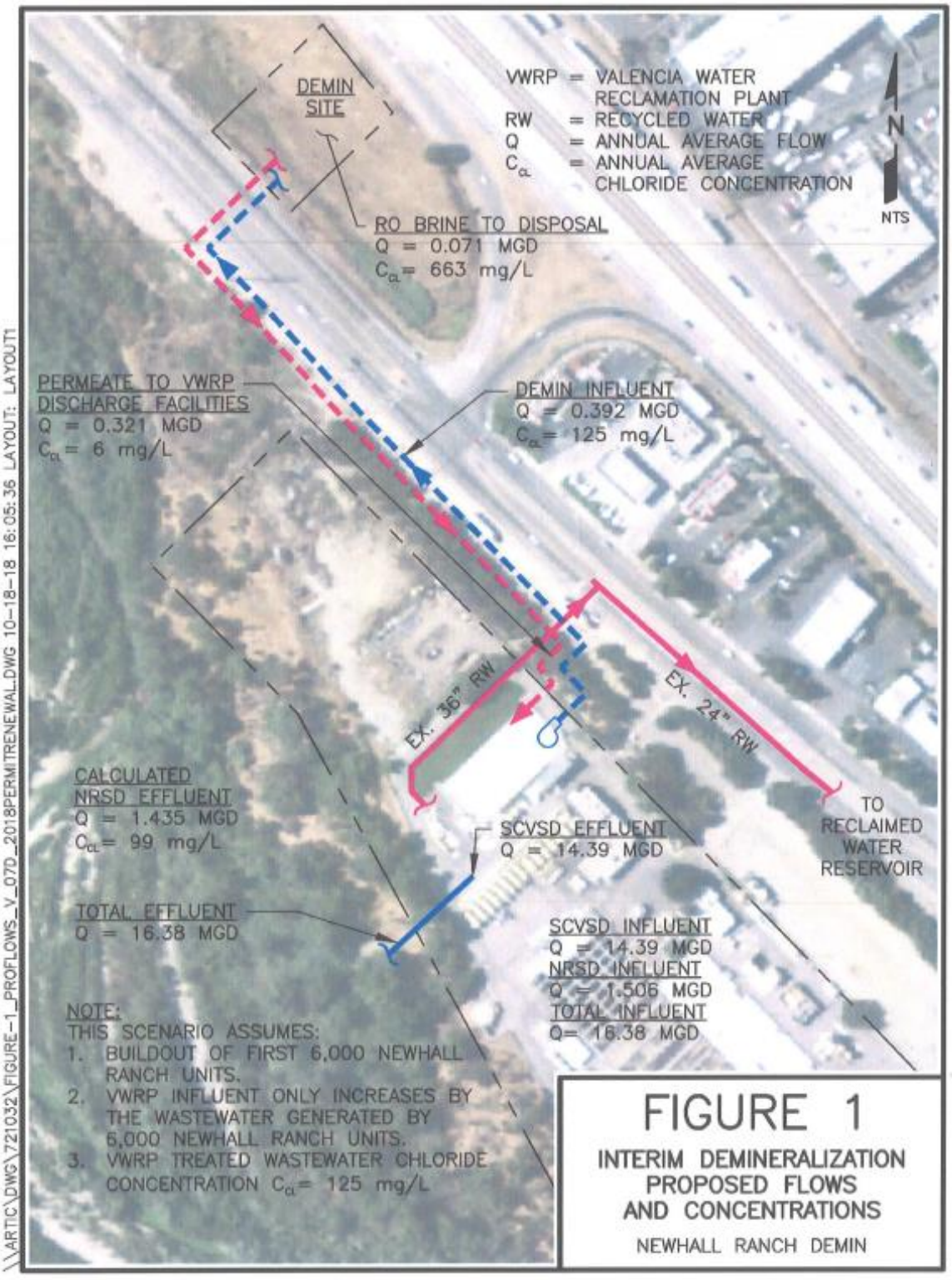
ATTACHMENT B2 – LOCATION OF INTERIM CHLORIDE DEMINERALIZATION FACILITY



TENTATIVE

ATTACHMENT B3 – PROPOSED FLOWS FOR INTERIM DEMINERALIZATION FACILITY



TENTATIVE

ATTACHMENT B4 -JOINT ADMINISTRATIVE AGREEMENT STRUCTURE

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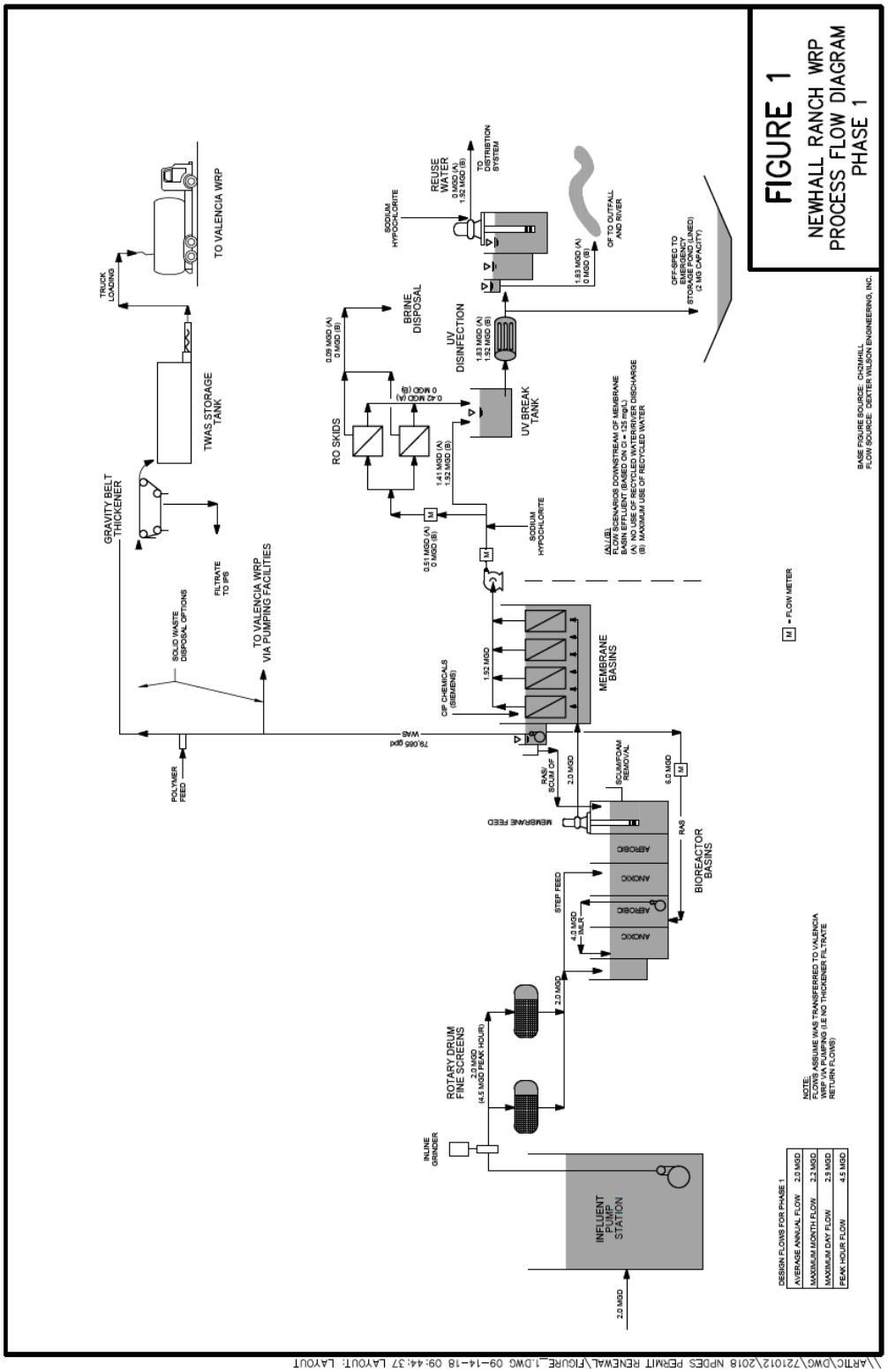
ATTACHMENT C – FLOW SCHEMATIC



TENTATIVE

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

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

2. The Discharger shall comply with effluent standards or prohibitions established under Part 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA 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. (Title 40 of the Code of Federal Regulations (40 CFR) part 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

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).)

F. Inspection and Entry

The Discharger shall allow the Regional 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)(4)(B); 40 CFR § 122.41(i); Wat. Code, §§ 13267, 13383):

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

G. Bypass

1. Definitions
   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 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).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional 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 Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)

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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, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR section 122.41(m)(3)(i).)

   b. Unanticipated bypass. The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(ii).)

H. Upset

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made 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).)

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 V.E.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 I.C above. (40 CFR § 122.41(n)(3)(iv).)

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

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a

notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR § 122.41(f).)

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

B. 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 or O. For the purposes of this paragraph, a method is sufficiently sensitive when:

1. The method minimum level (ML) is at or below the level of the 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
2. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 when approved by this Regional Water Board and the State Water Board, or required under 40 CFR chapter 1, subchapter N or O 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, subchapters N or O, 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).

IV. STANDARD PROVISIONS – RECORDS

A. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

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

1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and
2. Permit applications and attachments, permits and discharge data. (40 CFR § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional 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 Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 CFR § 122.41(k).)
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).).
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
   a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 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 Regional Water Board and State Water Board. (40 CFR § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

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"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).)

6. Any person providing the electronic signature for documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all relevant requirements of 40 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).)

C. Monitoring Reports

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).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting the results of monitoring, sludge use, or disposal practices. All reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J and comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127.
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, subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board.
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with

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

As of December 21, 2020, 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 V.J. The reports shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 122.41(l)(6)(i).)

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

   a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 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).)

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

F. Planned Changes

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

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

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

3. The alteration or addition results in a significant change in the Discharger'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).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional 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).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E 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 V.E and the applicable required data in appendix A to 40 CFR part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board**,** State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR § 122.41(l)(8).)

J. 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)]. U.S. EPA will update and maintain this listing.
(40 CFR § 122.41(l)(9).)

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional 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.

B. 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

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can be fined up to $2,000,000 for second or subsequent convictions (40 CFR part 122.41(a)(2); Water Code section 13385 and 13387).

C. Any person may be assessed an administrative penalty by the Administrator of USEPA, the Regional 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 part 122.41(a)(3))

D. 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 part 122.41(j)(5)).

E. 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 part 122.41(k)(2)).

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

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

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
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).)
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, CI-9322

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP), CI-9322

Section 308 of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(*l*), 122.44(i), and 122.48 of title 40 of the Code of Federal Regulations (40 CFR) require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

I. GENERAL MONITORING PROVISIONS

A. All samples shall be representative of the waste discharge under conditions of peak load. Quarterly effluent analyses shall be performed during the months of February, May, August, and November. Semiannual analyses shall be performed during the months of February and August. Annual analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Permittee must notify the Regional Water Board, state the reason why monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of monthly, quarterly, semiannual, and annual analyses shall be reported as due date specified in Table E-8 of MRP.

B. Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 136.3, 136.4, and 136.5; or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

C. Laboratory Certification. Laboratories analyzing monitoring samples shall be certified by the State Water Resources Control Board (State Water Board), Division of Drinking Water, Environmental Laboratory Accreditation Program (ELAP), in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports. A copy of the laboratory certification shall be provided in the Annual Report due to the Regional Water Board each time a new certification and/or renewal of the certification is obtained.

D. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR section 136.3. All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Permittee shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Water Board. Proper chain of custody procedures must be followed, and a copy of that documentation shall be submitted with the monthly report.

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

F. 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.

G. Each monitoring report must affirm in writing that "*all analyses were conducted at a laboratory certified for such analyses by the State Water Board, Division of Drinking Water, Environmental Laboratory Accreditation Program, Division of Drinking Water or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this Monitoring and Reporting Program*."

H. 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 RL.

I. The Permittee shall select the analytical method that provides a ML lower than the permit limit established for a given parameter, unless the Permittee 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 K, below. If the effluent limitation is lower than all the MLs in Appendix 4, SIP, the Permittee must select the method with the lowest ML for compliance purposes. The Permittee shall include in the Annual Summary Report a list of the analytical methods employed for each test.

J. The Permittee 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 Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. In accordance with section K, below, the Permittee's laboratory may employ a calibration standard lower than the ML in Appendix 4 of the SIP.

K. In accordance with section 2.4.3 of the SIP, the Regional 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 Permittee's permit in any of the following situations:

1. When the pollutant under consideration is not included in Appendix 4, SIP;
2. When the Permittee and the Regional Water Board agree to include in the permit a test method that is more sensitive than those specified in 40 CFR part 136;
3. When the Permittee agrees to use an ML that is lower than those listed in Appendix 4;
4. When the Permittee demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 and proposes an appropriate ML for the matrix; or,
5. When the Permittee uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are USEPA-approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Permittee, the Regional 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.

L. If the Permittee samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water

constituent more frequently than required by this MRP using approved analytical methods, the results of 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.

M. The Permittee 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 Regional Water Board upon request and a spill summary shall be included in the annual summary report.

N. For all bacteriological analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total 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. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR part 136, unless alternate methods have been approved in advance by the USEPA pursuant to 40 CFR part 136.
2. Detection methods used for *E.coli* shall be those presented in Table 1A of 40 CFR part 136, or in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure*, or any improved method determined by the Regional Water Board to be appropriate.

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

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

II. MONITORING LOCATIONS

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

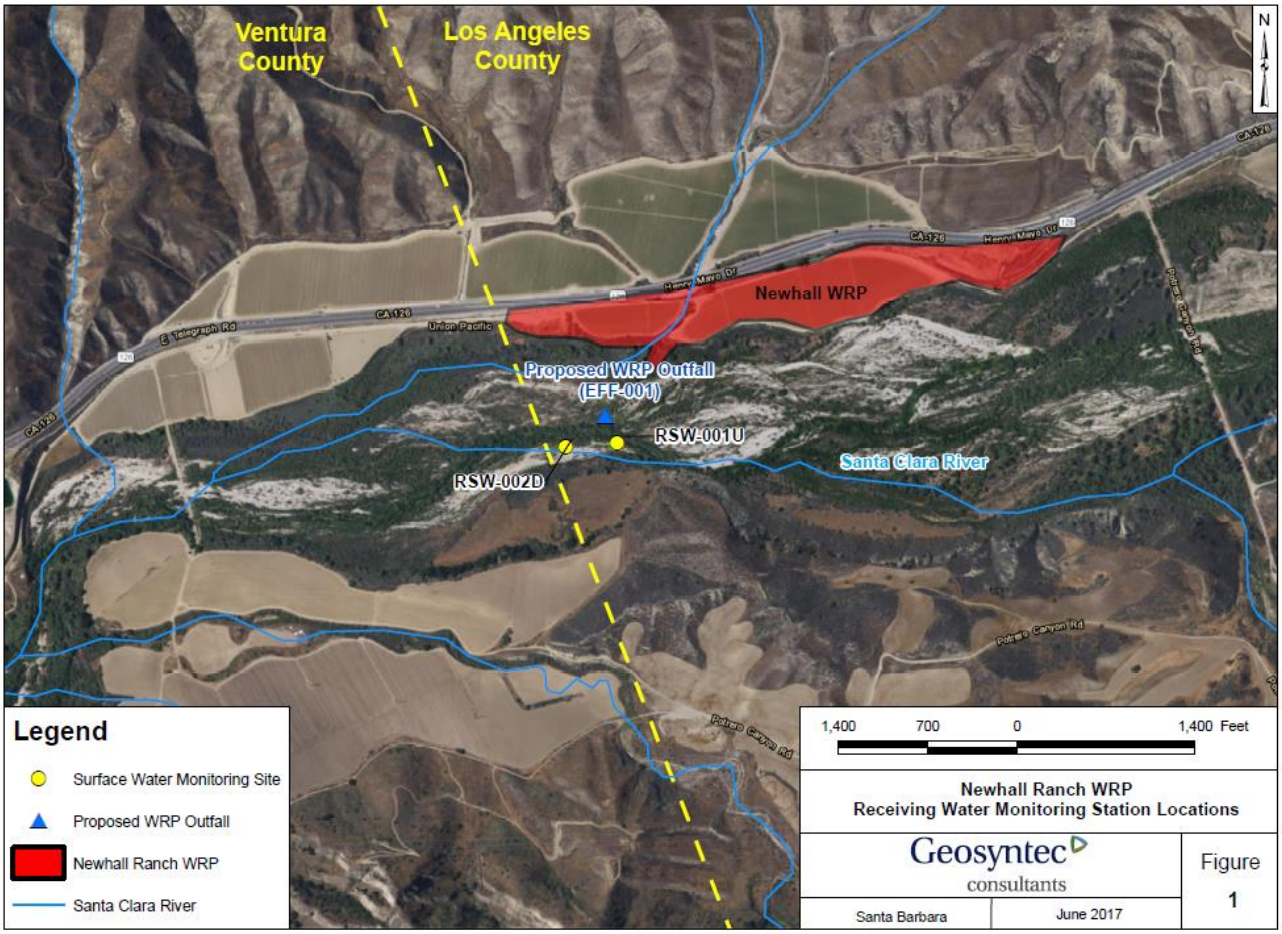
Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Influent Monitoring Station		
--	INF-001	Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained.
Effluent Monitoring Stations		
001	EFF-001	The effluent sampling station shall be located downstream of any in-plant return flows and after the final disinfection process, where representative samples of the effluent can be obtained. Latitude 34°0.403166’ and Longitude 118°0.689667’

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Receiving Water Monitoring Stations		
--	RSW-001U	Santa Clara River, approximately 100 feet upstream of Discharge Point 001. Latitude: 34.4031673° Longitude: -118.6894755°
--	RSW-002D	Santa Clara River, approximately 300 feet downstream of the Newhall Ranch WRP Discharge Point 001. Latitude: 34.4031107° Longitude: -118.6903682°
Groundwater Monitoring Stations		
--	RGW-001	Groundwater aquifer, upgradient of discharge point
--	RGW-002	Groundwater aquifer, downgradient of discharge point
--	RGW-003	Groundwater aquifer, downgradient of discharge point

The North latitude and West longitude information in Table E-1 are approximate for administrative purposes.

Figure E-1. Newhall Ranch WRP Receiving Water Stations



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III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

Influent monitoring is required to:

1. Determine compliance with NPDES permit conditions.
2. Assess treatment plant performance.
3. Assess effectiveness of the Pretreatment Program, if a Pretreatment Program has been developed.

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

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	recorder	continuous[1]	[1]
pH	pH unit	grab	weekly	[2]
Total suspended solids (TSS)	mg/L	24-hour composite	weekly	[2]
Biochemical oxygen demand (BOD_5 20°C)	mg/L	24-hour composite	weekly	[2]
Nitrite nitrogen	mg/L	24-hour composite	weekly	[2]
Nitrate nitrogen	mg/L	24-hour composite	weekly	[2]
Ammonia nitrogen	mg/L	24-hour composite	weekly	[2]
Total nitrogen	mg/L	calculated	weekly	[2]
Total phosphorus	mg/L	24-hour composite	weekly	[2]
Orthophosphate-P	mg/L	24-hour composite	monthly	[2]
Chloride	mg/L	24-hour composite	monthly	[2]
Total dissolved solids	mg/L	24-hour composite	monthly	[2]
Sulfate	mg/L	24-hour composite	monthly	[2]
Boron	mg/L	24-hour composite	monthly	[2]
Antimony	µg/L	24-hour composite	quarterly	[2]
Arsenic	µg/L	24-hour composite	quarterly	[2]
Cadmium	µg/L	24-hour composite	quarterly	[2]
Chromium III	µg/L	calculated	quarterly	[2]
Chromium VI	µg/L	grab	quarterly	[2]
Copper	µg/L	24-hour composite	monthly	[2]
Lead	µg/L	24-hour composite	quarterly	[2]
Mercury	µg/L	24-hour composite	monthly	[2]
Nickel	µg/L	24-hour composite	quarterly	[2]

[1] Total daily flow and instantaneous peak daily flow (24-hr basis). Actual monitored flow shall be reported (not the maximum flow, i.e., design capacity).

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

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Selenium	µg/L	24-hour composite	monthly	[2]
Silver	µg/L	24-hour composite	quarterly	[2]
Thallium	µg/L	24-hour composite	quarterly	[2]
Zinc	µg/L	24-hour composite	quarterly	[2]
Cyanide	µg/L	grab	monthly	[2]
Acrylonitrile	µg/L	grab	quarterly	[2]
Tetrachloroethylene	µg/L	grab	quarterly	[2]
Dibromochloromethane	µg/L	grab	semiannually	[2]
Bis(2-ethylhexyl)phthalate	µg/L	24-hour composite	monthly	[2]
p-Dichlorobenzene	µg/L	grab	quarterly	[2]
Lindane (gamma-BHC)	µg/L	24-hour composite	monthly	[2]
4,4-DDE	µg/L	24-hour composite	quarterly	[2]
Total trihalomethanes	µg/L	grab	semiannually	[2]
Iron	µg/L	24-hour composite	monthly	[2]
Hardness	mg/L	24-hour composite	monthly	[2]
PCBs as aroclors[3]	µg/L	24-hour composite	annually	[2]
PCBs as congeners[4]	pg/L	24-hour composite	annually	[2]
Remaining EPA priority pollutants[5] excluding asbestos and PCBs	µg/L	24-hour composite/grab for VOCs, cyanide, and Chromium VI	semiannually	[2]

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IV. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

1. Determine compliance with National Pollutant Discharge Elimination System (NPDES) permit conditions and water quality standards.

[3] PCBs as Aroclors is the sum of PCB 1016, PCB 1221, PCB 1232, PCB 1242, PCB 1248, PCB 1254, and PCB 1260 when monitoring using USEPA method 608.

[4] PCBs as congeners shall mean the sum of 41 congeners when monitoring using USEPA proposed method 1668c. PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105,110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206 shall be individually quantified, or quantified as co-elutions as appropriate. PCBs as congeners shall be analyzed using method EPA 1668c for three years and may be discontinued for the remaining life of this Order if none of the PCB congeners are detected using method EPA 1668c.

USEPA recommends that until USEPA proposed method 1668c for PCBs is incorporated into 40 CFR 136, Permittees should use for discharge monitoring reports/State monitoring reports: (1) USEPA method 608 for monitoring data, reported as aroclor results, that will be used for assessing compliance with WQBELs (if applicable) and (2) USEPA proposed method 1668c for monitoring data, reported as 41 congener results, that will be used for informational purposes.

[5] Priority pollutants are those constituents referred to in 40 CFR part 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423. PCB as aroclors shall be analyzed using method EPA 608 and PCB as congeners shall be analyzed using method EPA 1668c.

2. Assess plant performance, identify operational problems and improve plant performance.
3. Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.
4. Determine reasonable potential analysis for toxic pollutants.
5. Determine TMDL effectiveness in waste load allocation compliance.

A. Minimum Level (ML) and Analytical Method Selection

1. Minimum Level (ML) and Analytical Method Selection

   USEPA published regulations for the Sufficiently Sensitive Methods Rule (SSM Rule) which became effective September 18, 2015. For the purposes of the NPDES program, when more than one test procedure is approved under 40 CFR part 136 for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv). Both 40 CFR sections 122.21(e)(3) and 122.44(i)(1)(iv) apply to the selection of a sufficiently sensitive analytical method for the purposes of monitoring and reporting under NPDES permits, including review of permit applications. A USEPA-approved analytical method is sufficiently sensitive where:

   a. The ML is at or below both the level of the applicable water quality criterion/objective and the permit limitation for the measured pollutant or pollutant parameter; or

   b. In permit applications, the ML is above the applicable water quality criterion/objective, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

   c. The method has the lowest ML of the USEPA-approved analytical methods where none of the USEPA-approved analytical methods for a pollutant can achieve the MLs necessary to assess the need for effluent limitations or to monitor compliance with a permit limitation.

2. The MLs in SIP Appendix 4 remain applicable. However, there may be situations when analytical methods are published with MLs that are more sensitive than the MLs for analytical methods listed in the SIP. For instance, USEPA Method 1631E for mercury is not currently listed in SIP Appendix 4, but it is published with an ML of 0.5 ng/L that makes it a sufficiently sensitive analytical method. Similarly, USEPA Method 245.7 for mercury is published with an ML of 5 ng/L.

B. Monitoring Location EFF-001

1. The Permittee shall monitor the discharge of tertiary-treated effluent at EFF-001. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML:

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Total flow	MGD	recorder	continuous[6]	[6]

[6] 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. Grab sample may be collected to determine compliance with the 10 NTU

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Turbidity	NTU	recorder	continuous[6]	[7]
Total residual chlorine	mg/L	recorder	continuous[8]	--
Total residual chlorine	mg/L	grab	daily[9]	[7]
Total coliform	MPN/100mL or CFU/100ml	grab	daily[10]	[7]
E. coli	MPN/100mL or CFU/100ml	grab	daily[10]	[7]
Temperature	°F	grab	daily[10]	[7]
pH	pH units	grab	daily[10]	[7]
Settleable Solids	mL/L	grab	weekly	[7]
Total Suspended Solids (TSS)	mg/L	24-hour composite	weekly	[7]
BOD_5 20°C	mg/L	24-hour composite	weekly	[7]
Oil and grease	mg/L	grab	monthly	[7]
Dissolved oxygen	mg/L	grab	monthly	[7]
Total Dissolved Solids	mg/L	24-hour composite	monthly	[7]
Sulfate	mg/L	24-hour composite	monthly	[7]
Chloride	mg/L	24-hour composite	monthly	[7]
Boron	mg/L	24-hour composite	monthly	[7]
Ammonia Nitrogen	mg/L	24-hour composite	weekly	[7]
Nitrite nitrogen	mg/L	24-hour composite	weekly	[7]
Nitrate nitrogen	mg/L	24-hour composite	weekly	[7]
Organic nitrogen	mg/L	24-hour composite	weekly	[7]
Total nitrogen	mg/L	calculated	weekly	[7]

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limit. A flow-weighted 24-hour composite sample may be used in place of the recorder to determine the flow-proportioned average daily value.

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

8 When chlorination is used, the total residual chlorine (TRC) shall be recorded continuously. The recorded data shall be maintained by the Permittee for at least five years. The Permittee shall extract the maximum daily peak, and average daily from the recorded media and shall be reported on the monthly monitoring reports. In addition, calibration records for the TRC analyzer shall be submitted quarterly. The continuous monitoring data are not intended to be used for compliance determination purposes.

9 When chlorination is used, the daily samples shall be collected at monitoring location EFF-001, 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 IV.B.2 shall be followed.

10 Daily grab samples shall be collected at monitoring location EFF-001, Monday through Friday only, except for holidays. *E.coli* shall be conducted only be 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 will be reported for *E.coli*.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Total phosphorus	mg/L	24-hour composite	weekly	[7]
Orthophosphate-P	mg/L	24-hour composite	monthly	[7]
Surfactants (MBAS)	mg/L	24-hour composite	monthly	[7]
Surfactants (CTAS)	mg/L	24-hour composite	monthly	[7]
Total hardness ($CaCO_3$)	mg/L	24-hour composite	weekly	[7]
Chronic toxicity	Pass or Fail, % Effect (TST)	24-hour composite	monthly	[7,11]
Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium)	pCi/L	24-hour composite	semiannually	[12]
Antimony	µg/L	24-hour composite	quarterly	[7]
Arsenic	µg/L	24-hour composite	quarterly	[7]
Beryllium	µg/L	24-hour composite	semiannually	[7]
Cadmium	µg/L	24-hour composite	quarterly	[7]
Chromium III	µg/L	calculated	quarterly	[7]
Chromium VI	µg/L	grab	quarterly	[7]
Copper	µg/L	24-hour composite	monthly	[7]
Lead	µg/L	24-hour composite	quarterly	[7]
Mercury[13]	µg/L	24-hour composite	monthly	[7]
Selenium	µg/L	24-hour composite	monthly	[7]
Silver	µg/L	24-hour composite	quarterly	[7]
Thallium	µg/L	24-hour composite	quarterly	[7]
Zinc	µg/L	24-hour composite	quarterly	[7]
Cyanide	µg/L	grab	monthly	[7]
Iron	µg/L	24-hour composite	monthly	[7]
Aluminum	µg/L	24-hour composite	quarterly	[7]
Total trihalomethanes	µg/L	grab	quarterly	[7]
Manganese	µg/L	24-hour composite	quarterly	[7]

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[11] The Permittee shall conduct whole effluent toxicity monitoring as outlined in section V. Please refer to section V.A.7 of this MRP for the accelerated monitoring schedule. The median monthly summary result shall be reported as “Pass” or “Fail.” The maximum daily single result shall be reported as “Pass” or “Fail” and “% Effect.” When there is a discharge on more than one day in a calendar month period, up to three independent toxicity tests may be conducted when one toxicity test results in “Fail.”

[12] 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 or beta greater than 50 pCi/L. If Radium-226 & 228 exceeds the stipulated criteria, analyze for Tritium, Strontium-90 and Uranium.

[13] The effluent samples shall be analyzed for mercury using EPA method 1631E, per 40 CFR part 136.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
p-dichlorobenzene	µg/L	grab	quarterly	[7]
Bis(2-Ethylhexyl) Phthalate	µg/L	24-hour composite	monthly	[7]
Acrylonitrile	µg/L	24-hour composite	quarterly	[7]
Lindane (gamma-BHC)	µg/L	24-hour composite	quarterly	[7]
4,4-DDE	µg/L	24-hour composite	quarterly	[7]
2,3,7,8-TCDD[14]	pg/L	24-hour composite	quarterly	[7]
Perchlorate	µg/L	grab	semiannually	[15]
1,4-Dioxane	µg/L	grab	semiannually	[15]
1,2,3-Trichloropropane	µg/L	grab	semiannually	[15]
Methyl tert-butyl-ether (MTBE)	µg/L	grab	semiannually	[15]
PCBs as aroclors[16]	µg/L	24-hour composite	annually	[7]
PCBs as congeners[17]	pg/L	24-hour composite	annually	[7]
Remaining USEPA priority pollutants[18]	µg/L	24-hour composite; grab for VOCs	semiannually	[7]

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

$$\text{Dioxin concentration in effluent} = \sum_{1}^{17}(TEQ_i) = \sum_{1}^{17}(C_i)(TEF_i)$$

[15] 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).

[16] PCBs as Aroclors is the sum of PCB 1016, PCB 1221, PCB 1232, PCB 1242, PCB 1248, PCB 1254, and PCB 1260 when monitoring using USEPA method 608.

[17] PCBs as congeners shall mean the sum of 41 congeners when monitoring using USEPA proposed method 1668c. PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105,110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206 shall be individually quantified, or quantified as co-elutions as appropriate. PCBs as congeners shall be analyzed using method EPA 1668c for three years and may be discontinued for the remaining life of this Order if none of the PCB congeners are detected using method EPA 1668c.

USEPA recommends that until USEPA proposed method 1668c for PCBs is incorporated into 40 CFR 136, Permittees should use for discharge monitoring reports/State monitoring reports: (1) USEPA method 608 for monitoring data, reported as aroclor results, that will be used for assessing compliance with WQBELs (if applicable) and (2) USEPA proposed method 1668c for monitoring data, reported as 41 congener results, that will be used for informational purposes.

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
excluding asbestos and PCBs				

Effluent monitoring shall start on the day of plant startup.

2. **Total Residual Chlorine Additional Monitoring (when chlorination is used)**

   Continuous monitoring of total residual chlorine at the current location shall serve as an internal trigger for the increased grab sampling at EFF-001 if either of the following occurs, except as noted in item c:

   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.

   c. Additional grab samples need not be taken 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.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

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

   The chronic toxicity IWC for this discharge is 100 percent effluent.

2. **Sample Volume and Holding Time**

   The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. For the receiving water, sufficient sample volume shall also be collected during accelerated monitoring for subsequent TIE studies, if necessary, at each sampling event. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation**.**

3. **Chronic Freshwater Species and Test Methods**

   If effluent samples are collected from outfalls discharging to receiving waters with salinity <1 parts per thousand, the Permittee shall conduct the following chronic toxicity tests on effluent samples at the in-stream waste concentration for the discharge in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to 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.

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

b. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0).

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

4. **Species Sensitivity Screening**

Species sensitivity screening shall be conducted beginning the first month the permit is in effect. The Permittee shall collect a single effluent sample to initiate and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required on a monthly frequency for the discharge, during that given month. As allowed under the test method for the *Ceriodaphnia dubia* and the *Pimephales promelas*, a second and third sample may be collected for use as test solution renewal water as the seven-day toxicity test progresses. However, that same sample shall be used to renew both the *Ceriodaphnia dubia* and the *Pimephales promelas*. If the result of all three species is "Pass," then the species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle. If only one species fails, then that species shall be used for routine monitoring during the permit cycle. If two or more species result in "Fail," then the species that exhibits the highest "Percent Effect" at the discharge IWC during the suite of species sensitivity screening shall be used for routine monitoring during the permit cycle, until such time as a rescreening is required (24 months later).

Species sensitivity rescreening is required every 24 months if there has been discharge during dry weather conditions. If the intermittent discharge is only during wet weather, rescreening is not required. If rescreening is necessary, the Permittee shall rescreen with the fish, an invertebrate, and the alga species previously referenced and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive, then the rescreening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Permittee shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

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

5. **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.

a. The discharge is subject to a determination of "Pass" or "Fail" and "Percent Effect" from a single chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) statistical t-test approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, Appendix A, Figure A-1, Table A-1 and Appendix B, Table B-1* (EPA 833-R-10-003, 2010*)*. 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.

b. The Median Monthly Effluent Limit (MMEL) for chronic toxicity only applies when there is a discharge on more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests may be conducted when one toxicity test results in "Fail."

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

Table E-4. USEPA Test Methods and Test Acceptability Criteria

Species & USEPA Test Method Number	Test Acceptability Criteria (TAC)
Fathead Minnow, *Pimephales promelas*, Larval Survival and Growth Test Method 1000.0 (Table 1 of the test method, 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 the test method, 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 surviving control females must produce three broods. (required)
Green Alga, *Selenastrum capricornutum,* Growth Toxicity Test Method 1003.0. (Table 3 of the test method, above)	Mean cell density of at least 1 X 10^6 cells/mL in the controls; and variability (CV%) among control replicates less than or equal to 20%. (required)

d. Dilution water 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.

e. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported using EC25[19].

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

6. **Preparation of an Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan**

The Permittee shall prepare and submit a copy of the Permittee's initial investigation TRE work plan, before May 31, 2023 (one year prior to the permit expiration date), to the

[19] 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.

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

a. 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.

b. 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.

c. 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).

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

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

Once the Permittee becomes aware of this result, the Permittee shall implement an accelerated monitoring schedule within seven calendar days for the *Ceriodaphnia dubia* test, and within 5 calendar days for both the *Pimephales promelas* and *Selenastrum capricornutum* tests. However, if the sample is contracted out to a commercial laboratory, the Permittee shall ensure that the first of four accelerated monitoring tests is initiated within seven calendar days of the Permittee becoming aware of the result. The accelerated monitoring schedule shall consist of four toxicity tests (including IWC), conducted at approximately two-week intervals, over an eight-week period; in preparation for the TRE process and associated reporting, these results shall also be reported using the EC25. If each of the accelerated toxicity tests results in "Pass", the Permittee shall return to routine monitoring for the next monitoring period.

8. **TRE Process**

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

a. **Preparation and Implementation of Detailed TRE Work Plan.** The Permittee shall immediately initiate a TRE using, according to the type of treatment facility, USEPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) and, within 15 days, submit to the Executive Officer a Detailed TRE Work Plan, which shall follow the TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:

i. Further actions by the Permittee to investigate, identify, and correct the causes of toxicity.

ii. Actions the Permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.

iii. A schedule for these actions, progress reports, and the final report.

b. **TIE Implementation.** The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, USEPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Chronic TIE Manual: Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I (*EPA/600/6-91/005F, 1992); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Permittee 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.

d. The Permittee shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE process is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.

e. The Regional Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

f. The Board may consider the results of any TIE/TRE studies in an enforcement action.

9. **Reporting**

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

a. The valid toxicity test results for the TST statistical approach, reported as “Pass” or “Fail” and “Percent Effect” at the chronic toxicity IWC for the discharge. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported on the SMR due date specified in Table E-6.

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

c. The statistical analysis used in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document *Appendix A, Figure A-1, Table A-1, and Appendix B, Table B-1* (EPA 833-R-10-003, 2010).

d. 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 Permittee shall provide status updates in the monthly monitoring reports, indicating which TIE/TRE steps are underway and which steps have been completed.

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

f. 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.

g. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon request from the Regional Water Board Chief Deputy Executive Officer or the Executive Officer.

B. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Permittee must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

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

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

   c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.

   d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

C. Chlorine Removal

1. Except with prior approval from the Executive Office of the Regional Water Board, chlorine shall not be removed from bioassay samples. 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 after the dechlorination process.

VI. LAND DISCHARGE MONITORING REQUIREMENTS (NOT APPLICABLE)

VII. RECYCLING MONITORING REQUIREMENTS (NOT APPLICABLE)

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location RSW-001U and RSW-002D

1. The Discharger shall monitor Santa Clara River at RSW-001U and RSW-002D as follows.

Table E-5. Receiving Water Monitoring Requirements at RSW-001U and RSW-002D

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total flow	cfs	calculated	monthly	--
Turbidity	NTU	grab	monthly	[20]
Total residual chlorine	mg/L	grab	monthly[21]	[20]
E. coli	MPN/100ml or CFU/100ml	grab	monthly	[20]
Temperature[22]	°F	grab	monthly	[20]
pH[22]	pH units	grab	monthly	[20]
Settleable Solids	mL/L	grab	quarterly	[20]
Total Suspended Solids	mg/L	grab	quarterly	[20]
BOD_5 20°C	mg/L	grab	quarterly	[20]
Total organic carbon	mg/L	grab	quarterly	[20]
Oil and grease	mg/L	grab	quarterly	[20]
Dissolved oxygen	mg/L	grab	quarterly	[20]
Total Hardness ($CaCO_3$)	mg/L	grab	monthly	[20]
Conductivity	µmhos/cm	grab	quarterly	[20]
Total Dissolved Solids	mg/L	grab	quarterly	[20]
Sulfate	mg/L	grab	quarterly	[20]
Chloride	mg/L	grab	monthly	[20]
Boron	mg/L	grab	quarterly	[20]
Ammonia nitrogen[22]	mg/L	grab	monthly	[20]
Nitrate + nitrite (as N) [22]	mg/L	grab	monthly	[20]
Nitrate (as N) [22]	mg/L	grab	monthly	[20]
Nitrite (as N) [22]	mg/L	grab	monthly	[20]

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

[21] Total residual chlorine monitoring is applicable when chlorination process is in operation.

[22] Temperature, pH, nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, and organic nitrogen sampling shall be collected concurrently.

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Organic nitrogen[22]	mg/L	grab	monthly	[20]
Total kjeldahl nitrogen (TKN) [22]	mg/L	grab	monthly	[20]
Total nitrogen[22]	mg/L	calculated	monthly	[20]
Total phosphorus	mg/L	grab	monthly	[20]
Orthophosphate-P	mg/L	grab	monthly	[20]
Algal biomass (Chlorophyll a)[23]	mg/L	grab	annually	[20]
Surfactants (MBAS)	mg/L	grab	quarterly	[20]
Surfactants (CTAS)	mg/L	grab	quarterly	[20]
Chronic toxicity[24]	Pass or Fail, % Effect (TST)	grab	quarterly	[20]
Antimony	µg/L	grab	quarterly	[20]
Arsenic	µg/L	grab	quarterly	[20]
Cadmium	µg/L	grab	semiannually	[20]
Copper	µg/L	grab	monthly	[20]
Lead	µg/L	grab	quarterly	[20]
Mercury[25]	µg/L	grab	monthly	[20]
Nickel	µg/L	grab	Quarterly	[20]
Selenium	µg/L	grab	monthly	[20]
Zinc	µg/L	grab	quarterly	[20]
Cyanide	µg/L	grab	monthly	[20]
Acrylonitrile	µg/L	grab	quarterly	[20]
Tetrachloroethylene	µg/L	grab	quarterly	[20]
Bis(2-Ethylhexyl)Phthalate	µg/L	grab	monthly	[20]
P-Dichlorobenzene	µg/L	grab	quarterly	[20]
Lindane (gamma-BHC)	µg/L	grab	quarterly	[20]
4,4-DDE	µg/L	grab	quarterly	[20]
Total trihalomethanes	µg/L	grab	monthly	[20]

TENTATIVE

[23] Algal biomass or Chlorophyll *a* samples shall be collected by obtaining scrapings from the substrate, and shall be reported concurrently with (macro)invertebrate monitoring. This will be a measure of benthic algae, rather than algae in the water column. Percent cover shall also be reported.

[24] The Permittee shall conduct whole effluent toxicity monitoring at stations RSW-001U and RSW-002D as outlined in section V. Please refer to section V.A.7 of this MRP for the accelerated monitoring schedule. The median monthly summary result is a threshold value for a determination of meeting the narrative receiving water objective and shall be reported as "Pass" or "Fail." The maximum daily single result is a threshold value for a determination of meeting the narrative receiving water objective and shall be reported as "Pass or Fail" and "% Effect." Up to three independent toxicity tests may be conducted when one toxicity test results in "Fail." If the chronic toxicity median monthly threshold at the immediate downstream receiving water location is not met and the toxicity cannot be attributed to upstream toxicity, as assessed by the Permittee, then the Permittee shall initiate accelerated monitoring. For example, if the chronic toxicity median monthly threshold of the receiving water at both upstream and downstream stations is not met, but the effluent chronic toxicity median monthly effluent limitation was met, then accelerated monitoring need not be implemented.

[25] The samples shall be analyzed for mercury using EPA method 1631E, per 40 CFR part 136.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Aluminum	µg/L	grab	quarterly	[20]
Iron	µg/L	grab	monthly	[20]
Manganese	µg/L	grab	quarterly	[20]
Beryllium	µg/L	grab	semiannually	[20]
Chromium III	µg/L	calculation	semiannually	[20]
Chromium VI	µg/L	grab	semiannually	[20]
Total Chromium	µg/L	grab	semiannually	[20]
Silver	µg/L	grab	semiannually	[20]
Thallium	µg/L	grab	semiannually	[20]
Fluoride	mg/L	grab	semiannually	[20]
Methyl tert-butyl-ether (MTBE)	µg/L	grab	annually	[26]
Perchlorate	µg/L	grab	annually	[26]
1,2,3-Trichloropropane	µg/L	grab	annually	[26]
1,4-Dioxane	µg/L	grab	annually	[26]
2,3,7,8-TCDD[27]	pg/L	grab	semiannually	[20]
PCBs as aroclors[16]	µg/L	grab	annually	[20]
PCBs as congeners[17]	pg/L	grab	annually	[20]
Remaining USEPA priority pollutants[28] excluding asbestos and PCBs	µg/L	grab	semiannually	[20]

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Ordinarily, receiving water 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 has not been constructed yet. In the absence of effluent data from the Newhall Ranch WRP, receiving water data will be of great importance when staff conducts future reasonable potential analysis. Therefore, a minimum of four samples per year, for each receiving water constituent with a monthly frequency of sampling, are required to be collected to evaluate potential seasonal differences in the receiving water. Other receiving water constituents will be sampled at the frequency specified in Table E-5.

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[26] 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).

[27] In accordance with the SIP, the Discharger shall conduct monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in the receiving water stations RSW-003 through RSW-005. The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i), (i.e., $TEQ_i = C_i \times TEF_i$). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

$$\text{Dioxin concentration in effluent} = \sum_{1}^{17}(TEQ_i) = \sum_{1}^{17}(C_i)(TEF_i)$$

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

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).
3. The time, date, and weather conditions at the time of sampling shall be reported.
4. The color of the effluent shall be contrasted with that of the receiving water and reported descriptively.
5. Receiving water samples shall not be taken during or within 48-hours following the flow of rainwater runoff into the Santa Clara River unless it is safe to do so.
6. Weekly sampling may be rescheduled at receiving water stations if weather and/or flow conditions would endanger personnel collecting receiving water samples. The monthly monitoring report shall note such occasions.
7. The results of receiving water monitoring and observations shall be submitted with the effluent monitoring reports.

B. GROUNDWATER MONITORING LOCATIONS

1. The Discharger shall monitor the groundwater aquifer at RGW-001 (Upgradient well), RGW-002 (Downgradient well) and RGW-003 (Downgradient well) as follows:

Table E-6. Receiving Groundwater Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nitrite nitrogen	mg/L	grab	quarterly	--
Nitrate nitrogen	mg/L	grab	quarterly	[20]
Organic nitrogen	mg/L	grab	quarterly	[20]
Total nitrogen	mg/L	calculated	quarterly	[20]
Total phosphorus	mg/L	grab	quarterly	[20]
Orthophosphate-P	mg/L	grab	quarterly	[20]
Total Dissolved Solids	mg/L	grab	quarterly	[20]
Chloride	mg/L	grab	quarterly	[20]
Sulfate	mg/L	grab	quarterly	[20]
Boron	mg/L	grab	quarterly	[20]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
USEPA priority pollutants excluding asbestos	µg/L	grab	semiannually	[20]
Methyl tert-butyl ether (MTBE)	µg/L	grab	semiannually	[26]
Perchlorate	µg/L	grab	semiannually	[26]
1,4-Dioxane	µg/L	grab	semiannually	[26]
1,2,3-Trichloropropane	µg/L	grab	semiannually	[26]

A work plan for a groundwater monitoring network capable of detecting any impact to the groundwater as a result of Newhall Ranch WRP's discharge is due to the Regional Water Board 180 days upon the adoption of this Order. Groundwater monitoring shall also provide background conditions in the groundwater basin prior to Newhall Ranch WRP's discharge, indicate the direction of groundwater flow, and specify the depth to groundwater for each monitoring well. Groundwater monitoring shall commence no later than one year prior to the Newhall Ranch WRP's start-up date.

IX. OTHER MONITORING REQUIREMENTS

A. Special Study

1. CEC Monitoring in the Effluent

The CEC Monitoring is discussed in section VI.C.2.a. of the Order. In recent years, the Los Angeles Regional Water Board has incorporated monitoring of a select group of man-made chemicals, particularly pesticides, pharmaceuticals and personal care products, known collectively as CECs, into permits issued to publicly-owned treatment works (POTWs) to better understand the propensity, persistence and effects of CECs in our environment. Recently adopted permits in this region contain requirements for CEC effluent monitoring and submittal of a work plan identifying the CECs to be monitored in the effluent, sample type, sampling frequency and sampling methodology. Based on feedback we have received from permittees and our review of the results of a recent CEC-related study by the Southern California Coastal Water Research Project (SCCWRP) and the State Water Board, we have modified our CEC monitoring program to respond to feedback while proceeding to fill identified data gaps without overly burdening any one permittee.

2. The Discharger shall conduct a special study to investigate the CECs in the effluent discharge as listed in the Table below, beginning the first year of operation. These constituents shall be monitored annually for at least 2 years. The Regional Water Board has determined that 2 years is an appropriate time period to determine those CECs that are present in POTW effluent. Monitoring results shall be reported as part of the annual report. Within the first six months of operation, the Discharger shall submit to the Executive Officer a CECs special study work plan for approval. Upon approval, the Discharger shall implement the work plan.

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Table E-7. CEC Monitoring Requirements

Parameter	Unit	Reporting Limit	Sample Type	Analytical Method	Minimum Sampling Frequency
17α-Ethynyl Estradiol	ng/L	0.5	24-hr composite	EDC Steroid	Annually
17β-Estradiol	ng/L	0.5	24-hr composite	EDC Steroid	Annually
Estrone	ng/L	0.5	24-hr composite	EDC Steroid	Annually
Bisphenol A	ng/L	10	24-hr composite	EDC Steroid	Annually
Nonylphenol & Nonylphenol polyethoxylates	ng/L	100	24-hr composite	EDC Steroid	Annually
Octylphenol & octylphenol polyethoxylates	ng/L	100	24-hr composite	EDC Steroid	Annually
Polybrominated Diphenyl Ethers (PBDE) 28, 47, 99, 100, 153, 154, 183 and 209	ng/L	100 for PBDE 209 and 5 for all others	24-hr composite	PBDEs	Annually
Amoxicillin	ng/L	10	24-hr composite	PPCPs	Annually
Azithromycin	ng/L	10	24-hr composite	PPCPs	Annually
Carbamazepine	ng/L	10	24-hr composite	PPCPs	Annually
Caffeine	ng/L	10	24-hr composite	PPCPs	Annually
N,N-Diethyl-m-toluamide (DEET)	ng/L	10	24-hr composite	PPCPs	Annually
Dilantin	ng/L	10	24-hr composite	PPCPs	Annually
Gemfibrozil	ng/L	10	24-hr composite	PPCPs	Annually
Ibuprofen	ng/L	10	24-hr composite	PPCPs	Annually
Iodinated contrast media (iopromide)	ng/L	10	24-hr composite	PPCPs	Annually
Sulfamethoxazole	ng/L	10	24-hr composite	PPCPs	Annually
Trimethoprim	ng/L	10	24-hr composite	PPCPs	Annually
TCEP, TCPP and TDCPP	ng/L	10	24-hr composite	PPCPs	Annually
Triclosan	ng/L	10	24-hr composite	PPCPs	Annually
Bifenthrin	ng/L	5	24-hr composite	Pyrethroids	Annually
Permethrin	ng/L	10	24-hr composite	Pyrethroids	Annually
Chlorpyrifos	ng/L	10	24-hr composite	Chlorpyrifos	Annually
Galaxolide	ng/L	10	24-hr composite	Galaxolide	Annually
Diclofenac	ng/L	10	24-hr composite	PPCPs	Annually
Perfluorooctane Sulfonate (PFOS)	ng/L	10	grab	PFOS	Annually
Perfluorooctanoic Acid (PFOA)	ng/L	10	grab	PFOA	Annually
Fipronil	ng/L	2	grab	Fipronil	Annually
Meprobamate	ng/L	10	24-hr composite	PPCPs	Annually

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B. Watershed Monitoring

The goals of the Watershed-wide Monitoring Program for the Santa Clara River Watershed are to:

1. Determine compliance with receiving water limits.
2. Monitor trends in surface water quality.
3. Ensure protection of beneficial uses.

4. Provide data for modeling contaminants of concern.
5. Characterize water quality including seasonal variation of surface waters within the watershed.
6. Assess the health of the biological community.
7. Determine mixing dynamics of effluent and receiving waters in the estuary.

The Santa Clarita Valley Sanitation District of Los Angeles County submitted the *Santa Clara River Watershed-Wide Monitoring Program and Implementation Plan" (SCRWMP)* to the Regional Water Board on December 15, 2011. This plan presented a design for an integrated regional monitoring program for the Santa Clara River Watershed and was developed by a multi-stakeholder workgroup. To achieve the goals of the Watershed-wide Monitoring Program, Newhall Ranch SD shall participate in the implementation of the SCRWMP. Changes to the receiving water monitoring program may be required to help fulfill the goals of the watershed-wide monitoring program, while retaining monitoring required to evaluate compliance with the NPDES permit. Revisions to the Discharger's monitoring program will be made under the direction of the Regional Water Board's Executive Officer, as necessary, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, and/or the number of samples collected.

In coordination with interested stakeholders in the Santa Clara River Watershed, the Discharger shall conduct instream bioassessment monitoring once a year, at the two receiving water stations RSW-001U and RWS-002D, during the spring/summer period. Over time, bioassessment monitoring will provide a measure of the physical condition of the waterbody and the integrity of its biological communities.

1. The bioassessment program shall include an analysis of the community structure of the instream macroinvertebrate assemblages and physical habitat assessment at a minimum of two sites within the Santa Clara River. All of the sites shall be sampled annually during the spring/summer.
2. 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.
3. The Discharger must provide a copy of their Standard Operation Procedures (SOPs) for the Bioassessment Monitoring Program to the Regional Water Board upon request. The document must contain step-by-step field, laboratory and data entry procedures, as well as, 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.
4. Field sampling must conform to the SOP established for the California Stream Bioassessment Procedure (CSBP) or more recently established sampling protocols, such as used by the Surface Water Ambient Monitoring Program (SWAMP). 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.

5. 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 Regional 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 Game's Aquatic Bioassessment Laboratory located in Rancho Cordova, California.
6. The Executive Officer of the Regional Water Board may modify the MRP to accommodate the watershed-wide monitoring.

C. Tertiary Filter Treatment Bypasses

1. During any day that filters are bypassed, the Discharger shall monitor the effluent for BOD, suspended solids, settleable solids, and oil and grease, on daily basis, until it is demonstrated that the filter "bypass" has not caused an adverse impact on the receiving water.
2. The Discharger shall maintain chronological log of tertiary filter treatment process bypasses, to include the following:
   a. Date and time of bypass start and end.
   b. Total duration time.
   c. Estimated total volume bypassed.
3. The Discharger shall submit a written report to the Regional 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 C.1. above, shall be verbally reported to the Regional Water Board as the results become available and submitted as part of the monthly SMR.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Permittee shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.
3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.
4. The Permittee shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

B. Santa Clara River TMDL Monitoring and Reporting Requirements

In order to monitor compliance with the WLA-based final effluent limitations for ammonia as nitrogen, nitrate as nitrogen, nitrite as nitrogen, *E.coli*, and chloride, the Discharger shall monitor the effluent for ammonia as nitrogen, nitrate as nitrogen, nitrite as nitrogen, *E.coli,* and chloride, at the frequencies required in Table E-3. Each result shall be reported in the monthly report.

C. Self-Monitoring Reports (SMRs)

1. The Permittee shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website http://www.waterboards.ca.gov/water_issues/programs/ciwqs/. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Permittee shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Permittee shall submit monthly, quarterly, semiannual, annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Permittee samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this MRP using approved analytical methods, the results of 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.
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	Permit effective date	All	Submit with monthly SMR
Daily	Permit 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 permit 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 permit 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) permit 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) permit effective date	January 1 through June 30 July 1 through December 31	September 15 March 15
Annually	January 1 following (or on) permit effective date	January 1 through December 31	April 15

4. Reporting Protocols. The Permittee shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR part 136.

   The Permittee shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

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

   b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

      For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

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

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

5. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above, section VII of this Order, and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional 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).

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 Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

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

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

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

   b. The Permittee shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the 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.

D. Discharge Monitoring Reports (DMRs)

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

E. Other Reports

1. The Discharger shall report the results of any special studies, chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C. The Permittee shall submit reports in compliance with SMR reporting requirements described in subsection X.C. above.

2. Annual Summary Report

   By April 15 of each year, the Permittee shall submit an annual report containing a discussion of the previous year's influent/effluent analytical results and receiving water monitoring data. The annual report shall contain an overview of any plans for upgrades to the treatment plant's diversion system, the treatment processes, or the outfall system. The Permittee shall submit annual report to the Regional Water Board in accordance with the requirements described in subsection X.C.7 above.

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

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

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

   c. The concentration of the pollutant(s).

   d. The test method used to analyze the sample.

   e. The date and time of sample collection.

4. The Permittee shall submit to the Regional Water Board, together with the monitoring report required by this permit after the facility becomes operational, 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.

5. The Regional Water Board requires the Permittee to file with the Regional Water Board, within 90 days after the effective date of this Order, or within 90 days after the facility becomes operational, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:

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

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

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

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

ATTACHMENT F – FACT SHEET

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TABLES

ATTACHMENT F – FACT SHEET

As described in section II.B of this Order, the Regional Water Board incorporates this Fact Sheet as findings of the Regional 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.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4A190118001
Discharger/Permittee	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
	Newhall, CA 91355
	Los Angeles County
Facility Contact, Title and Phone	Naoko Munakata, Supervising Engineer, (562) 908-4288 x2830
Authorized Person to Sign and Submit Reports	Naoko Munakata, Supervising Engineer, (562) 908-4288 x2830
Mailing Address	1955 Workman Mill Road, Whittier, CA 90601
Billing Address	SAME
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	N
Recycling Requirements	Not Applicable
Facility Permitted Flow	2 million gallons per day (MGD)
Facility Design Flow	2 MGD
Watershed	Santa Clara River Watershed
Receiving Water	Santa Clara River – Reach 5
Receiving Water Type	Inland surface water

A. 1. Current Status

On June 29, 2018, Newhall Ranch Sanitation District (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 Ranch SD (Discharger or Permittee) will own a publicly-owned treatment works (POTW) comprised of the Newhall Ranch Water Reclamation Plant (Newhall Ranch WRP or Facility) and its

associated wastewater collection system and outfall, but Santa Clarita Valley Sanitation District (SCVSD) will operate the POTW.

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

2. Background

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 a new POTW that would treat the sewage generated by the inhabitants of Newhall Ranch, a new housing development that would be constructed in phases. The initial phase would include Landmark Village and Mission Village.

According to the project timeline, home construction within the Newhall Ranch SD service area would precede completion and initial operation of the Newhall Ranch WRP. 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 be temporarily treated at the Valencia Water Reclamation Plant, until such time as the Newhall Ranch WRP is constructed. 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. This interim wastewater treatment scenario is described in further detail in a separate Regional 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 Regional 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 6000 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."

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 would serve as the Board of Directors for the Newhall Ranch SD, and the Los Angeles Department of Public Works (LADPW) would serve as the acting staff.

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On September 6, 2007, the Regional Water Board adopted Order No. R4-2007-0046, which served as the first NPDES and WDRs for the Newhall Ranch SD's Newhall Ranch WRP. Newhall Land and Farming Company, owners of the land where the Newhall Ranch WRP would be built, planned on transferring ownership of the land to Newhall Ranch Sanitation District in 2007, after Newhall Ranch SD became signatory to the Joint Administration Agreement (JAA) with the County Sanitation Districts of Los Angeles County. Due to a downturn in the housing market, neither the Landmark Village, the Mission Village, nor the Newhall Ranch WRP were built.

In 2013, Newhall Ranch SD submitted an ROWD for renewal of their NPDES Order. On December 5, 2013, the Regional 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 the Landmark Village, Mission Village, and the Newhall Ranch WRP were not built.

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. SCVSD replaced LADWP as staff to Newhall Ranch SD.

3. Interim Demineralization Facility

Newhall Land and Farming will obtain the necessary permits, design, fund, and construct the following, associated with the Interim Demineralization Facility:

a. All sewers, pumping plants, and force mains required to convey any flow generated from Landmark Village and Mission Village to be treated at the Valencia WRP;

b. An Interim Demineralization Facility;

c. Any necessary pipelines to convey permeate from the Interim Demineralization Facility back to the Valencia WRP; and,

d. Any necessary pipelines to convey the brine waste stream from Interim Demineralization Facility to the deep-well injection system and the injection system itself, which will be permitted under a separate USEPA-issued Class I Non-hazardous Underground Injection Control (UIC) permit.

SCVSD will accept the treated permeate from the Interim Demineralization Facility.

On August 27, 2013, Newhall Land and Farming indicated that the demineralized treated effluent, also known as permeate, containing chloride concentrations of 100 mg/L or less, would be combined with Valencia WRP's tertiary treated effluent for discharge to the Santa Clara River. (ATTACHMENT B3 provides a closer aerial view of the proposed site for the Interim Demineralization Facility and an overview of the proposed flows in and out of the Interim Demineralization Facility). The concentrate waste stream is expected to be disposed of by either trucking it offsite, or in offsite injection wells (under a separate Class I Non-hazardous Underground Injection Control (UIC) permit, which was adopted by the United States Environmental Protection Agency (USEPA) on November 13, 2013).

B. The Facility will discharge wastewater to the Santa Clara River, a water of the United States and of the State. The Discharger was previously regulated by Order No. R4-2013-0180 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0064556, adopted on December 5, 2013 and which expired on January 31, 2019. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

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

D. On September 5, 2018, the Regional Water Board completed their review of the Discharger's ROWD submittal and deemed it incomplete. On September 18, 2018, the Discharger requested a one-month extension of the deadline to submit the deficient information. On September 19, 2018, the Regional Water Board staff granted the request for extension. On October 25, 2018, the Discharger submitted the supplemental information. The application was deemed complete on December 6, 2018. The NPDES permit was administratively extended upon receipt of a complete ROWD. A site visit was conducted on July 19, 2018, to observe the receiving water stations and collect additional data to develop permit limitations and requirements for waste discharge.

E. Regulations at 40 CFR section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. However, pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES requirements for continuation of expired permits.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment and Controls

1. The Newhall Ranch WRP will be a tertiary wastewater treatment facility with a dry weather design capacity of 2.0 MGD. 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 will be discharged intermittently from Discharge Point 001 (see Table 2 on the cover page) to the Santa Clara River, a water of the United States, when the demand for recycled water is low. In the ROWD submittal for the 2013 NPDES Order, Newhall Ranch SD proposed to have a diffuser at Discharge Point 001; however, the design drawings prepared by Pacific Advanced Civil Engineering indicated that 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. In the 2018 ROWD submittal, Newhall Ranch SD indicated that the determination has yet to be made regarding the need for a diffuser and its configuration. 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 would occur, under Valencia WRP's NPDES permit.

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.

   a. **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.

   b. **Grit removal and screening**: Rotating drum type 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.

   c. **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.

   d. **Membrane Bioreactor (MBR) Filtration**: A suspended growth biological reactor that utilizes ultrafiltration membranes will be used for 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.

   e. **Reverse Osmosis**: Reverse osmosis treatment is proposed for a portion of the MBR treated effluent at the Newhall Ranch WRP, to achieve chloride reduction. The permeate would be blended with MBR effluent which had not undergone RO treatment, to achieve the desired final effluent chloride concentration. RO is expected to reduce the chloride levels in the treated effluent by approximately 95%. Brine will be disposed of in one of two ways: by deep well injection (through a separate USEPA permit already obtained) or by trucking it to the Joint Water Pollution Control Plant for treatment and ocean disposal.

   f. **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). 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.

   g. **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.

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

i. **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, or trucking the dewatered sludge from a gravity belt thickener to the Valencia WRP.

B. Discharge Points and Receiving Waters

1. The Newhall Ranch WRP will discharge tertiary-treated municipal wastewater intermittently to the Santa Clara River. Newhall Ranch SD plans on applying for separate Waste Discharge Requirements to be able to recycle 478 acre-feet per month of 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:

   a. **Discharge Point 001**

      Discharge to reach 5 of the Santa Clara River, a water of the United States, via a point located approximately 1300 feet south west of intersection of Barranca Drive and Highway 126 (Henry Mayo Drive) (approximate coordinates: Latitude 34.40316667º, Longitude 119.689667º). Newhall Ranch SD indicated, in the ROWD supplemental information package, that the final determination has yet to be made with respect to whether or not the discharge point would have a diffuser. If utilized, the diffuser design information would be submitted to the Regional Water Board in the future.

      Figure E-1 in the Monitoring and Reporting Program shows the location of Discharge Point 001.

   The Santa Clara River is part of the Santa Clara River Watershed. The Santa Clara River 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 watershed of the Santa Clara River 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.

C. Summary of Previous Requirements and Self-Monitoring Report (SMR) Data

Effluent limitations contained in the previous Newhall Ranch WRP Order for discharges from Discharge Point 001 (Monitoring Location EFF-001) and are as follows. No representative effluent monitoring data from the Newhall Ranch WRP because it has not been constructed.

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (None available – POTW not built)		
		Average Monthly	Average Weekly	Max. Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
$BOD_5$20°C	mg/L	20	30	45	--	--	--
Suspended Solids	mg/L	15	40	45	--	--	--
Oil and Grease	mg/L	10	--	15	--	--	--
Settleable Solids	ml/L	0.1	--	0.3	--	--	--
Residual Chlorine	mg/L	--	--	0.1	--	--	--
Total Dissolved Solids	mg/L	1000	--	--	--	--	--
MBAS	mg/L	0.5	--	--	--	--	--
Chloride	mg/L	100	--	--	--	--	--
Sulfate	mg/L	400	--	--	--	--	--
Boron	mg/L	1.5	--	--	--	--	--
Nitrite-N (as N)	mg/L	0.9	--	--	--	--	--
Nitrate + Nitrite as N	mg/L	5	--	--	--	--	--
Total Ammonia	mg/L	1.75	--	5.2	--	--	--
Antimony	µg/L	6	--	--	--	--	--
Arsenic	µg/L	10	--	--	--	--	--
Beryllium	µg/L	--	--	--	--	--	--
Cadmium	µg/L	--	--	--	--	--	--
Chromium III	µg/L	--	--	--	--	--	--
Chromium VI	µg/L	--	--	--	--	--	--
Copper	µg/L	12	--	35	--	--	--
Iron	µg/L	300	--	--	--	--	--
Lead	µg/L	13	--	26	--	--	--
Mercury	µg/L	0.051	--	0.10	--	--	--
Nickel	µg/L	100	--	--	--	--	--
Selenium	µg/L	4.1	--	8.2	--	--	--
Silver	µg/L	--	--	--	--	--	--
Thallium	µg/L	--	--	--	--	--	--
Zinc	µg/L	0.068	--	0.14	--	--	--
Cyanide	µg/L	4.2	--	8.5	--	--	--
Asbestos	µg/L	--	--	--	--	--	--
2,3,7,8-TCDD (Dioxin)	pg/L	--	--	--	--	--	--
Acrolein	µg/L	--	--	--	--	--	--
Acrylonitrile	µg/L	0.66	--	1.3	--	--	--
Benzene	µg/L	--	--	--	--	--	--
Bromoform	µg/L	--	--	--	--	--	--

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Parameter	Units	Effluent Limitation			Monitoring Data (None available – POTW not built)		
		Average Monthly	Average Weekly	Max. Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Carbon Tetrachloride	µg/L	--	--	--	--	--	--
Chlorobenzene	µg/L	--	--	--	--	--	--
Dibromochloro-methane	µg/L	--	--	--	--	--	--
Chloroethane	µg/L	--	--	--	--	--	--
2-chloroethyl vinyl ether	µg/L	--	--	--	--	--	--
Chloroform	µg/L	--	--	--	--	--	--
Dichlorobromo-methane	µg/L	--	--	--	--	--	--
1,1-dichloroethane	µg/L	--	--	--	--	--	--
1,2-dichloroethane	µg/L	--	--	--	--	--	--
1,1-dichloroethylene	µg/L	--	--	--	--	--	--
1,2-dichloropropane	µg/L	--	--	--	--	--	--
1,3-dichloropropylene	µg/L	--	--	--	--	--	--
Ethylbenzene	µg/L	--	--	--	--	--	--
Methyl bromide	µg/L	--	--	--	--	--	--
Methyl chloride	µg/L	--	--	--	--	--	--
Methylene chloride	µg/L	--	--	--	--	--	--
1,1,2,2-tetrachloroethane	µg/L	--	--	--	--	--	--
Tetrachloroethylene	µg/L	5	--	--	--	--	--
Toluene	µg/L	--	--	--	--	--	--
Trans 1,2-Dichloroethylene	µg/L	--	--	--	--	--	--
1,1,1-Trichloroethane	µg/L	--	--	--	--	--	--
1,1,2-Trichloroethane	µg/L	--	--	--	--	--	--
Trichloroethylene	µg/L	--	--	--	--	--	--
Vinyl Chloride	µg/L	--	--	--	--	--	--
2-chlorophenol	µg/L	--	--	--	--	--	--
2,4-dichlorophenol	µg/L	--	--	--	--	--	--
2,4-dimethylphenol	µg/L	--	--	--	--	--	--
4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	µg/L	--	--	--	--	--	--
2,4-dinitrophenol	µg/L	--	--	--	--	--	--
2-nitrophenol	µg/L	--	--	--	--	--	--
4-nitrophenol	µg/L	--	--	--	--	--	--
3-Methyl-4-Chlorophenol (aka P-chloro-m-cresol)	µg/L	--	--	--	--	--	--
Pentachlorophenol	µg/L	--	--	--	--	--	--

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Parameter	Units	Effluent Limitation			Monitoring Data (None available – POTW not built)		
		Average Monthly	Average Weekly	Max. Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Phenol	µg/L	--	--	--	--	--	--
2,4,6-trichlorophenol	µg/L	--	--	--	--	--	--
Acenaphthene	µg/L	--	--	--	--	--	--
Acenaphthylene	µg/L	--	--	--	--	--	--
Anthracene	µg/L	--	--	--	--	--	--
Benzidine	µg/L	--	--	--	--	--	--
Benzo(a)Anthracene	µg/L	--	--	--	--	--	--
Benzo(a)Pyrene	µg/L	--	--	--	--	--	--
Benzo(b)Fluoran-thene	µg/L	--	--	--	--	--	--
Benzo(ghi)Perylene	µg/L	--	--	--	--	--	--
Benzo(k)Fluoran-thene	µg/L	--	--	--	--	--	--
Bis(2-Chloroethoxy) methane	µg/L	--	--	--	--	--	--
Bis(2-Chloroethyl)Ether	µg/L	--	--	--	--	--	--
Bis(2-Chloroisopropyl) Ether	µg/L	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	µg/L	4	--	--	--	--	--
4-Bromophenyl Phenyl Ether	µg/L	--	--	--	--	--	--
Butylbenzyl Phthalate	µg/L	--	--	--	--	--	--
2-Chloronaphthalene	µg/L	--	--	--	--	--	--
4-Chlorophenyl Phenyl Ether	µg/L	--	--	--	--	--	--
Chrysene	µg/L	--	--	--	--	--	--
Dibenzo(a,h) Anthracene	µg/L	--	--	--	--	--	--
1,2-Dichlorobenzene	µg/L	--	--	--	--	--	--
1,3-Dichlorobenzene	µg/L	--	--	--	--	--	--
1,4-Dichlorobenzene	µg/L	5	--	--	--	--	--
3-3'-Dichlorobenzidine	µg/L	--	--	--	--	--	--
Diethyl Phthalate	µg/L	--	--	--	--	--	--
Dimethyl Phthalate	µg/L	--	--	--	--	--	--
Di-n-Butyl Phthalate	µg/L	--	--	--	--	--	--
2-4-Dinitrotoluene	µg/L	--	--	--	--	--	--
2-6-Dinitrotoluene	µg/L	--	--	--	--	--	--
Di-n-Octyl Phthalate	µg/L	--	--	--	--	--	--

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Parameter	Units	Effluent Limitation			Monitoring Data (None available – POTW not built)		
		Average Monthly	Average Weekly	Max. Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
1,2-Diphenylhydrazine	µg/L	--	--	--	--	--	--
Fluoranthene	µg/L	--	--	--	--	--	--
Fluorene	µg/L	--	--	--	--	--	--
Hexachlorobenzene	µg/L	--	--	--	--	--	--
Hexachloro-butadiene	µg/L	--	--	--	--	--	--
Hexachloro-cyclopentadiene	µg/L	--	--	--	--	--	--
Hexachloroethane	µg/L	--	--	--	--	--	--
Indeno(1,2,3-cd)Pyrene	µg/L	--	--	--	--	--	--
Isophorone	µg/L	--	--	--	--	--	--
Naphthalene	µg/L	--	--	--	--	--	--
Nitrobenzene	µg/L	--	--	--	--	--	--
N-Nitrosodi-methylamine	µg/L	--	--	--	--	--	--
N-Nitrosodi-n-Propylamine	µg/L	--	--	--	--	--	--
N-Nitrosodi-phenylamine	µg/L	--	--	--	--	--	--
Phenanthrene	µg/L	--	--	--	--	--	--
Pyrene	µg/L	--	--	--	--	--	--
1,2,4-Trichlorobenzene	µg/L	--	--	--	--	--	--
Aldrin	µg/L	--	--	--	--	--	--
Alpha-BHC	µg/L	--	--	--	--	--	--
Beta-BHC	µg/L	--	--	--	--	--	--
Gamma-BHC (aka Lindane)	µg/L	0.2	--	--	--	--	--
delta-BHC	µg/L	--	--	--	--	--	--
Chlordane	µg/L	--	--	--	--	--	--
4,4'-DDT	µg/L	--	--	--	--	--	--
4,4'-DDE	µg/L	0.00059	--	0.0012	--	--	--
4,4'-DDD	µg/L	--	--	--	--	--	--
Diazinon	µg/L	--	--	--	--	--	--
Dieldrin	µg/L	--	--	--	--	--	--
Alpha-Endosulfan	µg/L	--	--	--	--	--	--
Beta-Endosulfan	µg/L	--	--	--	--	--	--
Endosulfan Sulfate	µg/L	--	--	--	--	--	--
Endrin	µg/L	--	--	--	--	--	--
Endrin Aldehyde	µg/L	--	--	--	--	--	--

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Parameter	Units	Effluent Limitation			Monitoring Data (None available – POTW not built)		
		Average Monthly	Average Weekly	Max. Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Heptachlor	µg/L	--	--	--	--	--	--
Heptachlor Epoxide	µg/L	--	--	--	--	--	--
PCB 1016	µg/L	--	--	--	--	--	--
PCB 1221	µg/L	--	--	--	--	--	--
PCB 1232	µg/L	--	--	--	--	--	--
PCB 1242	µg/L	--	--	--	--	--	--
PCB 1248	µg/L	--	--	--	--	--	--
PCB 1254	µg/L	--	--	--	--	--	--
PCB 1260	µg/L	--	--	--	--	--	--
Toxaphene	µg/L		--	--	--	--	--
1,4-Dioxane	µg/L	--	--	--	--	--	--
MTBE	µg/L	--	--	--	--	--	--
Perchlorate	µg/L	--	--	--	--	--	--
1,2,3-Trichloropropane	µg/L	--	--	--	--	--	--
Methoxychlor	µg/L	--	--	--	--	--	--
Alpha Radioactivity	pCi/mL	--	--	--	--	--	--
Beta Radioactivity	pCi/mL	--	--	--	--	--	--
Radium-228	pCi/mL	--	--	--	--	--	--
Strontium-90	pCi/mL	--	--	--	--	--	--
Tritium	pCi/mL	--	--	--	--	--	--
Uranium	pCi/mL	--	--	--	--	--	--

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D. Compliance Summary

The Newhall Ranch WRP is not operational because it has not been constructed. Therefore, there have not been any exceedances of the final effluent limitations.

E. Planned Changes

Newhall Land and Farming plans to build the Newhall Ranch WRP according to the following tentative schedule:

Task	Timeframe
Construct Interim Demineralization Plant	2019
Begin Newhall Ranch Home Construction (1st Building Permit)	2020
Start Up Interim Demineralization Plant	2021
Begin Construction of Newhall Ranch WRP	2022
End construction of Newhall Ranch WRP	2023
Start-up Newhall Ranch WRP	2024

Construction of the Newhall Ranch WRP will begin prior to Newhall Land obtaining building permit(s) that would result in exceeding 4,000 equivalent dwelling units. Construction of the Newhall Ranch WRP shall 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 community.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. 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 U.S. EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

B. California Environmental Quality Act (CEQA)

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

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

1. **Water Quality Control Plan.** The Water Quality Control Plan for the Los Angeles Region (Basin Plan) designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. On May 26, 2000, the USEPA approved the revised Basin Plan except for the implementation plan for potential MUN-designated water bodies. On August 22, 2000, the City of Los Angeles, City of Burbank, City of Simi Valley, and the County Sanitation Districts of Los Angeles County challenged USEPA's water quality standards action in the U.S. District Court. On December 18, 2011, the court issued an order remanding the matter to USEPA to take further action on the 1994 Basin Plan consistent with the court's decision. On February 15, 2002, USEPA revised its decision and approved the 1994 Basin Plan in whole. In its February 15, 2002 letter, USEPA stated:

> "EPA bases its approval on the court's finding that the Regional Board's identification of waters with an asterisk ("*") in conjunction with the implementation language at page 2-4 of the 1994 Basin Plan, was intended "to only conditionally designate and not finally designate as MUN those water bodies identified by an ('*') for the MUN use in Table 2-1 of the Basin Plan, without further action." Court Order at p. 4. Thus, the waters identified with an ("*") in Table 2-1 do not have MUN as a designated use until such time as the State undertakes additional study and modifies its Basin Plan. Because this conditional use designation has no legal effect, it does not constitute a new water quality standard subject to EPA review under section 303(c)(3) of the Clean Water Act ("CWA"). 33 U.S.C. § 1313(c)(3)."

USEPA's decision has no effect on the MUN designations of groundwater. Beneficial uses applicable to Santa Clara River are as follows:

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

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Santa Clara River Reach 5 (Hydrologic Unit Code (HUC) 180701020403, formerly Calwater Hydro. Unit No. 403.51)	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 water supply (MUN*)[1].
001	Santa Clara River Reach 4B (HUC 180701020403, formerly Calwater Hydro. Unit No. 403.41)	Existing: IND; PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; WET; and migration of aquatic organisms (MIGR). Potential: MUN.
001	Santa Clara River Reach 4A (HUC 180701020802, formerly Calwater Hydro. Unit No. 403.41)	Existing: IND; PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; MIGR; and, WET. Potential: MUN.
001	Santa Clara River Reach 3 (HUC 180701020802, formerly Calwater Hydro. Unit No. 403.31)	Existing: IND; PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; MIGR; and WET. Potential: MUN.
001	**Santa Clara River** (HUC 180701020903, formerly Calwater Hydro. Unit No. 403.21)	Existing: IND; PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; MIGR; and WET. Potential: MUN.
001	Santa Clara River Reach 2 (HUC 180701020904, formerly Calwater Hydro Unit 403.11)	Existing: IND; PROC; AGR; GWR; FRSH; REC1; REC2; WARM; WILD; RARE; MIGR; WET; and Coldwater Habitat (COLD). Potential: MUN.

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[1] As described above, the receiving water was designated as Potential MUN* consistent with State Water Board Resolution No. 88-63 and Regional Water Board Resolution No. 89-003. However, when designating the receiving water as Potential MUN, the Regional Water Board only conditionally designated rather than finally designated the water body as Potential MUN as indicated by the "*". The Basin Plan states that until the Board undertakes a detailed review of the criteria in State Water Board Resolution No. 88-63, no new effluent limitations will be placed in Waste Discharge Requirements as a result of these designations.

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	**Santa Clara River Estuary** (HUC 180701020904, formerly Calwater Hydro. Unit No. 405.11)	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).

Beneficial uses of the receiving ground waters are as follows:

Table F-4. Basin Plan Beneficial Uses – Ground Waters

Department of Water Resources (DWR) Basin No.	Basin Name	Beneficial Use(s)				
		MUN	IND	PROC	AGR	AQUA
4-4.07	**Santa Clara River Valley East**					
	Bouquet and San Francisquito Canyons	existing	existing	existing	existing	
	Castaic Valley	existing	existing	existing	existing	
	Saugus Aquifer	existing				
4-4.06	**Piru Basin**					
	Upper Area (above Lake Piru)	potential	existing	existing	existing	
	Lower area east of Piru Creek	existing	existing	existing	existing	
	Lower area west of Piru Creek	existing	existing	existing	existing	
4-4.05	**Fillmore Basin**					
	Pole Creek Fan area	existing	existing	existing	existing	
	South side of Santa Clara River	existing	existing	existing	existing	
	Remaining Fillmore area	existing	existing	existing	existing	existing
	Topa Topa (upper Sespe) area	potential	existing	potential	existing	
4-4.04	**Santa Paula Basin**					
	East of Peck Road	existing	existing	existing	existing	
	West of Peck Road	existing	existing	existing	existing	
4-4.03	Mound					
	Confined aquifers	existing	existing	existing	existing	
	Unconfined and perched aquifers	existing	potential		existing	
4-4.02	**Oxnard Plain**					
	Oxnard Forebay	existing	existing	existing	existing	
	Confined aquifers	existing	existing	existing	existing	
	Unconfined and perched aquifers	existing	potential		existing	

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA 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, U.S. EPA 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

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state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants applicable to all surface waters in California.

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 U.S. EPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA 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.

4. **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 promotes that policy by requiring discharges to meet maximum contaminant levels implemented by the Basin Plan that are designed to protect human health and ensure that water is safe for domestic use.

5. **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.

6. **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, oil and grease, settleable solids, turbidity, pH, and percent removal of BOD and TSS. Restrictions on BOD, TSS, oil and grease, settleable solids, turbidity, and pH are discussed in section IV.B.2 of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are carried over from the previous permit.

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

7. **Antidegradation Policy.** Federal regulation 40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State

Water Board Resolution No. 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California"). Resolution No. 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

8. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

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

10. **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 Permittee 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.

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

12. **Monitoring and Reporting.** 40 CFR part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and state requirements. This MRP is provided in Attachment E.

13. **Sewage Sludge/Biosolids Requirements.** Section 405 of the CWA and implementing regulations at 40 CFR part 503 require that producers of sewage sludge/biosolids meet certain reporting, handling, and use or disposal requirements. The state has not been

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

delegated the authority to implement this program; therefore, USEPA is the implementing agency.

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

15. **Mercury Provisions.** The State Water Board adopted "*Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California-Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions*" (Mercury Provisions) through Resolution No. 2017-0027, which was approved by OAL on June 28, 2017 and became effective upon U.S. EPA approval on July 14, 2017. The Mercury Provisions established 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 Provisions included implementation provisions for individual non-storm water NPDES permits for municipal and industrial dischargers; storm water discharges including MS4 discharges and discharges regulated by the Industrial General Permit (NPDES No. CAS000001); mine site remediation; nonpoint source discharges; dredging activities; and wetland projects.

    The Mercury Provisions contains provisions that apply to POTWs and individual industrial discharges. The Mercury Provisions converted the fish tissue-based water quality objectives to water column values, denoted as "C". The implementation section of the Mercury Provisions requires the application of section 1.3 of the 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. (See section IV.C.3. for SIP procedures).

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

The State Water Board proposed the California 2014-16 Integrated Report from a compilation of the adopted Regional Water Boards' Integrated Reports containing CWA section 303(d) List of Impaired Waters and section 305(b) Reports following recommendations from the Regional Water Boards and information solicited from the public and other interested persons. On October 03, 2017, the State Water Board adopted the California 2014-16 Integrated Report. On April 06, 2018, the USEPA approved California's 2014-16 Integrated Report Section 303(d) List of Impaired Waters requiring Total Maximum Daily Loads (TMDLs) for the Los Angeles Region. The CWA section 303(d) list can be found at the following link: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml. The Santa Clara River and Santa Clara River Estuary are in the California 2014-16 Integrated Report. The following pollutants were identified as impacting the receiving waters:

Santa Clara River Reach 5 (Blue Cut Gaging Station to West Pier Hwy 99) - Calwater Watershed 4403.410000

Pollutants: Chloride, Indicator bacteria, Iron, Trash

Santa Clara River Reach 3 (Freeman Diversion to A Street) Calwater Watershed 40331000

Pollutants: Chloride, Indicator bacteria, Selenium, Total dissolved solids, Toxicity, Trash

Santa Clara River Reach 1 (Estuary to Hwy 101 bridge - Calwater Watershed 4403.100000

Pollutants: dissolved oxygen, toxicity, trash, pH

Santa Clara River Estuary - Calwater Watershed 40210011

Pollutants: Ammonia, ChemA, Indicator bacteria, Toxaphene, Toxicity.

E. Other Plans, Polices and Regulations

1. **Sources of Drinking Water Policy.** On May 19, 1988, the State Water Board adopted Resolution No. 88-63, Sources of Drinking Water (SODW) Policy, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with the State Water Board's SODW Policy, on March 27, 1989, the Regional Water Board adopted Resolution No. 89-03, *Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans) – Santa Clara River Basin (4A)/ Los Angeles River Basin (4B)*.

   Consistent with Regional Water Board Resolution No. 89-03 and State Water Board Resolution No. 88-63, in 1994 the Regional Water Board conditionally designated all inland surface waters in Table 2-1 of the 1994 Basin Plan as existing, intermittent, or potential for Municipal and Domestic Supply (MUN). However, the conditional designation in the 1994 Basin Plan included the following implementation provision: "no new effluent limitations will be placed in Waste Discharge Requirements as a result of these [potential MUN designations made pursuant to the SODW policy and the Regional Water Board's enabling resolution] until the Regional Water Board adopts [a special Basin Plan Amendment that incorporates a detailed review of the waters in the Region that should be exempted from the potential MUN designations arising from SODW policy and the Regional Water Board's enabling resolution]." On February 15, 2002, the USEPA clarified its partial approval (May 26, 2000) of the 1994 Basin Plan amendments and acknowledged that the conditional designations do not currently have a legal effect, do not reflect new water quality standards subject to USEPA review, and do not support new effluent limitations based on the conditional designations stemming from the SODW Policy until a subsequent review by the Regional Water Board finalizes the designations for these waters. This permit is designed to be consistent with the existing Basin Plan.

2. **Title 22 of the California Code of Regulations (CCR Title 22).** The California Department of Public Health (CDPH) established primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water. These MCLs are codified in Title 22. The Basin Plan (Chapter 3) incorporates Title 22 primary MCLs by reference. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect. Title 22 primary MCLs have been used as bases for effluent limitations in WDRs and NPDES permits to protect groundwater recharge beneficial use when that receiving groundwater is designated as MUN. 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."

3. **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

4. **Storm Water.** CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR part 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, in November 1991, the State Water Board issued a statewide general

permit, *General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities.* This permit was amended in September 1992 and reissued on April 17, 1997 in State Water Board Order No. 97-03-DWQ to regulate storm water discharges associated with industrial activity. General NPDES Permit No. CAS000001 was revised on April 1, 2014, and became effective on July 1, 2015.

General NPDES permit No. CAS000001 is not applicable to storm water discharges from the Newhall Ranch WRP's premises because the Discharger has not filed a Notice of Intent to comply with the requirements of the general permit. The Discharger has not yet developed and is not yet implementing any Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Water Board's General NPDES permit No. CAS000001.

5. **Sanitary Sewer Overflows (SSOs).** The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 United States Code (USC) sections 1311 and 1342). The State Water Board adopted General WDRs for Sanitary Sewer Systems, (Water Quality Order No. 2006-0003-DWQ; SSO WDR) on May 2, 2006, to provide a consistent, statewide regulatory approach to address SSOs. The SSO WDR requires public agencies that own or operate sanitary sewer systems to apply for coverage under the SSO WDR, develop and implement sewer system management plans, and report all SSOs to the State Water Board's online SSO database. Regardless of the coverage obtained under the SSO WDR, the Permittee's collection system is part of the POTW that is subject to this NPDES permit. As such, pursuant to federal regulations, the Permittee must properly operate and maintain its collection system (40 CFR section 122.41 (e)), report any non-compliance (40 CFR sections 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR section 122.41(d)).

   The requirements contained in this Order sections VI.C.3.b (Spill Cleanup Contingency Plan section), VI.C.4 (Construction, Operation and Maintenance Specifications section), and VI.C.6 (Spill Reporting Requirements section) are intended to be consistent with the requirements of the SSO WDR. The Regional Water Board recognizes that there may be some overlap between these NPDES permit provisions and SSO WDR requirements, related to the collection systems. The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of State Water Board Order No. 2006-0003-DWQ). To encourage efficiency, the Regional Water Board will accept the documentation prepared by the Permittees under the SSO WDR for compliance purposes as satisfying the requirements in sections VI.C.3.b, VI.C.4, and VI.C.6, provided the more stringent provisions contained in this NPDES permit are also addressed. Pursuant to SSO WDR, section D, provision 2(iii) and (iv), the provisions of this NPDES permit supersede the SSO WDR, for all purposes, including enforcement, to the extent the requirements may be deemed duplicative.

6. **Watershed Management.** This Regional 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 Regional 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.

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7. **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 Total Maximum Daily Loads (TMDLs) for each waterbody for each pollutant of concern. TMDLs identify the maximum amount of pollutants that can be discharged to waterbodies without causing violations of water quality standards.

   a. **TMDL for Chloride in the Upper Santa Clara River –** On October 9, 2014, with Resolution No. R4-2014-010, the Regional Water Board adopted an *Amendment to the Basin Plan for the Los Angeles Region to Incorporate an Averaging Period for Chloride Water Quality Objectives in Reaches 4B~ 5 and 6; Incorporate New Site Specific Objectives for Chloride in Reaches 5 and 6; and Revise the Total Maximum Daily Load for Chloride in the Upper Santa Clara River.* On December 16, 2014, the State Water Board approved the Santa Clara River Chloride TMDL in Resolution No. 2014-0069. On March 18, 2015, and April 28, 2015, respectively, OAL and USEPA approved the *Santa Clara River Chloride TMDL,* and it became effective on April 28, 2015.

   b. **TMDL for Nitrogen Compounds in the Santa Clara River.** – On August 7, 2003, 2012, with Resolution No. R03-011, the Regional Water Board established a *Total Maximum Daily Load for Nitrogen Compounds in the Santa Clara River.* On November 19, 2003, the State Water Board approved the Santa Clara River Nitrogen Compounds TMDL in Resolution No. 2003-0073. On February 27, 2004, and March 18, 2004, respectively, OAL and USEPA approved the Santa Clara River Nutrients TMDL, and it became effective on March 23, 2004. The Santa Clara River Nutrients TMDL contains waste load allocations applicable to the Newhall Ranch WRP for ammonia as nitrogen, nitrate-N as nitrogen, nitrite-N as nitrogen, and nitrate-N plus nitrite-N as nitrogen.

   c. **TMDL for Trash –**On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-009, *Amendment to the Basin Plan for the Los Angeles Region to Incorporate a TMDL for Trash in Lake Elizabeth, Munz Lake and Lake Hughes in the Santa Clara River Watershed* (Trash TMDL). State Water Board, OAL, and USEPA approval occurred on December 4, 2007, February 11, 2008, and February 27, 2008, respectively. However, since the Newhall Ranch WRP does not discharge to a lake, the NPDES permit does not contain any requirements based on the Trash TMDL.

   d. **TMDL for Bacteria -** On July 8, 2010, the Regional Water Board adopted Resolution No. R10-007, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Indicator Bacteria in the Santa Clara River Estuary and Reaches 3, 5, 6, and 7* (Bacteria TMDL). The *Santa Clara River Bacteria TMDL* contains a WLA for the Newhall WRP, which is set equal to a 7-day median of 2.2 MPN/100 mL of *E. coli* and a daily maximum of 235 MPN/100mL of E. coli to ensure zero allowable exceedance days. The Santa Clara River Bacteria TMDL was approved by the State Water Board, OAL, and USEPA, on October 4, 2011, December 19, 2011, and January 13, 2012, respectively. It went into effect on March 21, 2012.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 CFR section 122.44(a) requires that permits include applicable technology-based

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

The variety of potential pollutants found in discharges from the Facility 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 pollutant of concern for protection and evaluation of narrative Basin Plan Objectives.

A. Discharge Prohibitions

Effluent and receiving water limitations in this Board 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 types of discharges.

B. Technology-Based Effluent Limitations (TBELs)

1. Scope and Authority

Technology-based effluent limits require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the Permittee to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level referred to as "secondary treatment" --that all POTWs were required to meet by July 1, 1977. More specifically, section 301(b)(1)(B) of the CWA required that USEPA develop secondary treatment standards for POTWs as defined in section 304(d)(1). Based on this statutory requirement, USEPA developed national secondary treatment regulations which are specified in 40 CFR part 133. These technology- based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of $BOD_5$20°C, TSS, and pH.

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, TSS, and pH. However, all TBELs from the previous Order No. R4-2013-0180 are based on tertiary-treated wastewater treatment standards. These effluent limitations have been carried over from the previous Order to avoid backsliding. Further, mass-based effluent limitations are based on a design flow rate of 2 MGD. The removal efficiency for BOD and TSS is set at the minimum level attainable by secondary treatment technology. The following Table summarizes the TBELs applicable to the Facility.

Table F-5. Summary of TBELs

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
$BOD_5$20°C	mg/L	20	30	45	--	--
	lbs/day[3]	330	500	750	--	--

[3] The mass emission rates 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. During wet-weather storm events in

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
TSS	mg/L	15	40	45	--	--
	lbs/day[3]	250	670	750	--	--
pH	standard units	--	--	--	6.5	8.5
Removal Efficiency for BOD	%	≥85	--	--	--	--
Removal Efficiency for TSS	%	≥85	--	--	--	--

This Facility is also subject to TBELs contained in similar NPDES permits, for similar facilities, based on the treatment level achievable by tertiary-treated wastewater treatment systems. These effluent limitations are consistent with the State Water Board precedential decision, State Water Board Order No. WQ 2004-0010 (City of Woodland).

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

CWA section 301(b) and 40 CFR section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirement, more stringent than secondary treatment requirements that are necessary to meet applicable water quality standards. The Regional Water Board has considered the factors listed in Water Code section 13241 in establishing these requirements. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements or other provisions, is discussed beginning in section IV.C.2.

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

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

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

a. 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.

b. The Basin Plan also specifies narrative and numeric WQOs applicable to surface water as shown in the following discussions.

i. **$BOD_5$20°C and TSS**

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

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

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

Newhall Ranch WRP will provide tertiary treatment. As such, the BOD and TSS limits in the permit are more stringent than secondary treatment requirements and are based on Best Professional Judgment (BPJ). The Facility will achieve solids removals that are better than secondary-treated wastewater by filtering the effluent.

The monthly average and the daily maximum limits cannot be removed because none of the anti-backsliding exceptions apply. Those limits were all included in the previous permit for the Newhall Ranch WRP for both BOD and TSS.

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

ii. **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 buffering from naturally-occurring carbonate dissolved in the water. Minor changes from natural conditions can harm aquatic life. In accordance with 40 CFR part 133.102(c), the effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the POTW demonstrates that (1) inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than

9.0. The effluent limitation for pH in this permit requiring that the wastes discharged shall at all times be within the range of 6.5 to 8.5 is taken from the Basin Plan which reads “the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge.”

iii. **Settleable solids**

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

It is impracticable to use a 7-day average 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 the daily maximum limits cannot be removed because none of the anti-backsliding exceptions apply. The monthly average and daily maximum limits were both included in the previous Newhall Ranch WRP permit.

iv. **Oil and grease**

Oil and grease are not readily soluble in water and form a film on the water surface. Oily films can coat birds and aquatic organisms, impacting respiration and thermal regulation, and causing death. Oil and grease can also cause nuisance conditions (odors and taste), are aesthetically unpleasant, and can restrict a wide variety of beneficial uses. The limits for oil and grease are based on the Basin Plan narrative, “Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.”

The numeric limits are empirically based on concentrations at which an oily sheen becomes visible in water. It is impracticable to use a 7-day average 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. The monthly average and the daily maximum limits cannot be removed because none of the anti-backsliding exceptions apply. Both limits were included in the previous permit for the Newhall Ranch WRP.

v. **Residual Chlorine**

Disinfection of effluent with chlorine produces a chlorine residual. Chlorine and its reaction products are toxic to aquatic life, and short-term exposure to chlorine may cause fish kills. The limit for residual chlorine is based on the Basin Plan water quality objective, “Chlorine residual shall not be present in surface water discharges at concentrations that exceed 0.1 mg/L and shall not persist in receiving waters at any concentration that causes impairment of beneficial uses.”

It is impracticable to use a 7-day average or a 30-day average limitation, because it is not as protective of beneficial uses as a daily maximum limitation.

The Facility uses ultra violet (UV) lamps to disinfect the effluent. As such, chlorine is not typically used at the Facility. However, it is used as a cleaning agent and may be dosed into the treated effluent, therefore a final effluent limitation for residual chlorine is included.

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

The limitations for TDS, sulfate, and boron are based on 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 is1.5 mg/L. It is practicable to express these limits as monthly averages, since they are not expected to cause acute effects on beneficial uses.

Limitations based upon the Basin Plan WQOs have been included in this Order because, based upon BPJ, these constituents are always present in potable water 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.

The chloride concentration-based effluent limitation is also consistent with the assumptions of the *Revision of the TMDL for Chloride in the Upper Santa Clara River (Chloride TMDL)*, Resolution No. R4-2014-010, which reads: "Other NPDES discharges receive WLAs equal to 100 mg/L as a 3-month rolling average." This effluent limitation applies immediately.

vii. **Methylene Blue Activated Substances (MBAS) & Cobalt thiocyanate active substances (CTAS)**

The existing permit effluent limitation of 0.5 mg/L for MBAS was developed based on the Basin Plan water quality objective, which incorporates Drinking Water Standards in Title 22, California Code of Regulations, to protect the surface water MUN beneficial use. Given the nature of the facility which accepts domestic wastewater into the sewer system and treatment plant, and the characteristics of the wastes discharged, the discharge has the reasonable potential to exceed both the numeric MBAS water quality objective (WQO) and the narrative WQO for the prohibition of floating material such as foams and scums. Therefore, an effluent limitation is required.

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 Permittee 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.

viii. **Nitrogen Compounds/Nutrient Compounds**

Nitrate Nitrogen (NO_3 –N), Nitrite Nitrogen (NO_2 –N), Total Inorganic Nitrogen (NO_2 + NO_3 as N) – Total inorganic nitrogen is the sum of Nitrate-nitrogen and Nitrite-nitrogen. High nitrate levels in drinking water can cause health problems in humans. Infants are particularly sensitive and can develop methemoglobinemia (blue-baby syndrome). Nitrogen is also considered a nutrient. Excessive amounts of nutrients can lead to other water quality impairments.

(a) **Algae.** Excessive growth of algae and/or other aquatic plants can degrade water quality. Algal blooms sometimes occur naturally, but they are often the result of excess nutrients (i.e., nitrogen, phosphorus) from waste discharges or nonpoint sources. These algal blooms can lead to problems with tastes, odors, color, and increased turbidity and can depress the dissolved oxygen content of the water, leading to fish kills. Floating algal scum and algal mats are also an aesthetically unpleasant nuisance.

The limitations for biostimulatory substances are based on the Basin Plan water quality objective, "Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses," and other relevant information and are intended to be protective of the beneficial uses, pursuant to 40 CFR part 122.44(d). Total inorganic nitrogen will be the indicator parameter intended to control algae, pursuant to 40 CFR part 122.44(d)(1)(vi)(C).

(b) **Concentration-based limit.** Section 7 of the *Santa Clara River Nitrogen Compounds TMDL* staff report (p. 69) discusses future growth and the proportional load increase. "The load will increase proportionally to the population increase if it is assumed that future domestic water use per person and future nutrient load per household are approximately equal to current water use and nutrient loads. Under those assumptions, the volume of wastewater discharged by the POTW is also projected to increase proportional to population increase. Because impairments are based on in-stream nitrogen concentrations, increased loads (i.e. flows) from POTWs is not expected to result in impairment of the Santa Clara River because the relative nitrogen concentrations will remain unchanged as long as nitrogen compounds do not accumulate in the sediments or other areas within the watershed. Therefore, the projected future increase in nitrogen loads from current and future POTWs in the watershed due to population growth are expected to be assimilated adequately." The *Santa Clara River Nitrogen Compounds TMDL* staff report (p.70)[4] also discusses that "*the numeric targets for POTWs with increasing capacity or <u>new</u> POTWs will be set on a concentration basis."* Since the Nitrogen Compounds TMDL does not specify an individual WLA for the Newhall Ranch WRP, the proposed effluent limitations of 5 mg/L and 0.9 mg/L for nitrate plus nitrite as nitrogen and nitrite nitrogen, respectively, are carried over and are equal to the final effluent limitations contained in NPDES Order No. R4-2013-0180 for the Newhall Ranch WRP. However, if the Nitrogen Compounds TMDL is revised to develop WLAs for the Newhall Ranch WRP in the future, then the NPDES permit shall be reopened to incorporate those WLAs. In addition, the Newhall Ranch WRP once constructed, and once they receive a notice of applicability for the State Water Board's General Order WQ 2016-0068-DDW for Water Reclamation Requirements for Recycled Water Use, will only discharge to the Santa Clara River intermittently, two to three months out of the year, when there is little to no demand for recycled water.

[4] http://www.waterboards.ca.gov/losangeles/board_decisions/basin_plan_amendments/technical_documents/2003-011/03_0523/StaffReport06-16.pdf

(c) **Mass-based limit.** The mass emission rates are based on the plant design flow rate of 2 MGD.

ix. **Total Ammonia**

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

The Basin Plan ammonia objectives were revised on April 25, 2002, by the Regional Water Board, with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of Aquatic Life*. Resolution No. 2002-011 was approved by the State Water Board, OAL, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively, and is now in effect.

On December 1, 2005, the Regional Water Board adopted Resolution No. 2005-014, An Amendment to the *Water Quality Control Plan for the Los Angeles Region to Revise Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life*. This amendment contains ammonia objectives to protect Early Life Stages (ELS) of fish in inland surface water supporting aquatic life. This resolution was approved by the USEPA on April 5, 2007. This amendment revised the implementation provision included as part of the freshwater ammonia objectives relative to the protection of ELS of fish in inland surface waters. On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate Site-Specific Objectives in Select Waterbodies in the Santa Clara, Los Angeles and San Gabriel River Watersheds*. This amendment to the Basin Plan incorporates site-specific 30-day average objectives for ammonia along with corresponding site-specific early life stage implementation provisions for select waterbody reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River watersheds. The State Water Board, OAL, and USEPA approved this Basin Plan amendment on January 15, 2008, May 12, 2008, and March 30, 2009, respectively.

Separate ammonia effluent limitations, incorporating the 30-day average SSO in the ammonia translation procedures, have not been included in the effluent limitations table at this time, because the *Santa Clara River Watershed*

Nitrogen Compound TMDL (Resolution No. 03-011) has not been revised to incorporate the 30-day average SSO ammonia criteria into the WLAs. The Implementation Plan of Resolution No. 03-011 allows for the reconsideration of WLAs based on monitoring data and special studies. However, the Order does contain a permit re-opener that would allow the permit to be reopened, at a later date, to incorporate revised ammonia nitrogen limits, following the effective date of the TMDL revision.

The staff report (p. 11) for the *Santa Clara River Watershed TMDL for Nitrogen Compounds* reads: "The major dischargers include four Water Reclamation Plants (WRP) that discharge into the Santa Clara River, Saugus, Valencia, Santa Paula, and Fillmore WRPs." The Newhall Ranch WRP was not identified as a major discharger under this TMDL. The *Santa Clara River Watershed Nitrogen Compound TMDL* includes the following element on Future Growth: "Plans for the upper watershed include urban growth, which will expand the capacity of the Valencia Water Reclamation Plan, construction of an additional water reclamation plant, and increased use of reclaimed water. Wasteload and load allocations will be developed for these new sources as required to implement appropriate water quality objectives for ammonia, nitrite, nitrate, and nitrite+nitrate." If the *Santa Clara River Watershed Nitrogen Compound TMDL* is revised to assign a specific WLA to Newhall Ranch WRP, then the permit will be reopened to incorporate a revised ammonia nitrogen limits based on new WLAs, following the effective date of the TMDL revision.

The Newhall Ranch WRP has not been built, however once constructed, the tertiary-treated effluent will be recycled for irrigation purposes most of the year. Discharge to the Santa Clara River is expected to occur sometime after 2022, and only during the months when there is little to no demand for recycled water. Since the discharge will be intermittent, the monthly average effluent limit of 1.75 mg/L and the daily maximum effluent limit of 5.2 mg/L for ammonia as nitrogen (NH_3-N) are based on the Santa Clara River Watershed Nitrogen Compound TMDL Waste Load Allocations which were assigned to minor dischargers discharging into the *Santa Clara River Watershed Nitrogen Compound TMDL*.

Table F-6. Summary of Ammonia Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Ammonia Nitrogen	mg/L	1.75	--	5.2	--	--

x. **Bacteria Indicator**

Total coliform bacteria is used to indicate the likelihood of pathogenic bacteria in surface waters. Given the nature of the facility, pathogens are likely to be present in the effluent in cases where the disinfection process is not operating adequately. As such, the permit contains the following:

(a) Effluent Limitations:

(1) The 7-day median number of total coliform bacteria at some point at the end of the UV channel, during normal operation of the UV channel, must not exceed a Most Probable Number (MPN) or Colony Forming Unit (CFU) of 2.2 per 100 milliliters,

(2) 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

(3) No sample shall exceed an MPN or CFU of 240 total coliform bacteria per 100 milliliters.

These disinfection-based effluent limitations for coliform are for human health protection and are consistent with requirements established by the California Department of Public Health. These limits for coliform must be met at the point of the treatment train immediately following disinfection, as a measure of the effectiveness of the disinfection process.

(4) *Escherichia coli* (*E. coli*) shall not exceed a 7-day median value of 2.2 MPN/100 mL or a maximum daily value of 235 MPN/ 100 mL.

These limitations are based on Resolution No. R4-2010-006, an Amendment to the Water Quality Control Plan – Los Angeles Region to Incorporate the TMDL for Indicator Bacteria in the Santa Clara River, adopted by the Regional Water Board on July 8, 2010. The Santa Clara River Indicator Bacteria TMDL was approved by the State Water Board, OAL, and USEPA on October 4, 2011, December 19, 2011, and January 13, 2012, respectively. It became effective on March 21, 2012. The *E. coli* final effluent limitations are based on the final Waste Load Allocations (WLAs) for the Newhall Ranch WRP established in the Santa Clara River Indicator Bacteria TMDL.

(b) Receiving Water Limitation

(1) Geometric Mean Limits

E.coli density shall not exceed 126/100 mL.

(2) Single Sample Limits

E.coli density shall not exceed 235/100 mL.

These receiving water limitations are based on the Basin Plan water quality objectives as amended by the Board in Resolution No. R10-005, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Bacteria Objectives for Freshwaters Designated for Water Contact Recreation by Removing the Fecal Coliform Objective*, adopted by the Regional Water Board on July 8, 2010, and became effective on December 5, 2011.

xi. **Temperature**

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. The Gold Book also references a maximum temperature limit for some species, based on experimental data presented in Appendix II-C of a National Academy of Sciences document.

(a) 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).

(b) 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.

(c) 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.

Table 2 of the USEPA guidance document titled, *Temperature Criteria for Freshwater Fish: Protocol and Procedures* [EPA-600/3-77-061, May 1977], recommends a 30°C (or 86°F) maximum temperature criteria for the Fathead minnow species which is protective of short-term exposures during the spawning season. This document, like the Gold book, incorporates Appendix II-C. The Fathead minnow is the fish species representative of inland surface waters and is the vertebrate species used in toxicity sensitive screening testing for inland waters.

The new temperature effluent limitation is reflective of new information available that indicates that the 100°F temperature which was formerly used in permits was not protective of aquatic organisms. It is impracticable to use a 7-day average or a 30-day average limitation for temperature, because it is not as protective as of beneficial uses as a daily maximum limitation is. A daily maximum limit is necessary to protect aquatic life and is consistent with the fishable/swimmable goals of the CWA.

Table 4 – Effluent Limitations of this Order contains 86°F as temperature effluent limitation. It also carries a footnote that states:

> "The temperature of wastes discharged shall not exceed 86°F except as a result of external ambient temperature."

Considering the findings in the Gold Book, USEPA guidance documents, and best professional judgement, Water Board staff relied on such findings to justify that 86°F as the final temperature effluent limitation is protective of aquatic organisms. The above effluent limitation for temperature has been quoted in all recent NPDES permits adopted by this Regional Water Board. Section V.A.1. of the Order explains how compliance with the receiving water temperature limitation will be determined.

xii. **Turbidity**

Turbidity is an expression of the optical property that causes light to be scattered in water due to particulate matter such as clay, silt, organic matter, and microscopic organisms. Turbidity can result in a variety of water quality impairments. The effluent limitation for turbidity which reads, “For the protection of the water contact recreation beneficial use, the discharge to water courses shall have received adequate treatment, so that the turbidity of the wastewater does not exceed: (a) a daily average of 2 Nephelometric turbidity units (NTU); (b) 5 NTU more than 5 percent of the time (72 minutes) during any 24 hour period; and (c) 10 NTU at any time” is based on the Basin Plan and section 60301.320 of Title 22 CCR, Chapter 3, “Filtered Wastewater.” These limitations are technology-based and are achievable using tertiary treatment technology. The Newhall Ranch WRP will be a tertiary treatment facility that uses sand as filtration media that consistently complies with the turbidity effluent limitations.

xiii. **Radioactivity**

Radioactive substances are generally present in natural waters in extremely low concentrations. Mining or industrial activities increase the amount of radioactive substances in waters to levels that are harmful to aquatic life, wildlife, or humans. Section 301(f) of the CWA contains the following statement with respect to effluent limitations for radioactive substances. “Notwithstanding any of 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.” The effluent limitation for radioactivity which reads, “Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Sections 64442 and 64443, of the California Code of Regulations, or subsequent revisions,” is based on the Basin Plan incorporation of Title 22, Drinking Water Standards, by reference, to protect the surface water MUN beneficial use. However, the Regional Water Board has new information about the appropriate designated uses for the water body, and based on the current designated uses, a limit for Radioactivity is unnecessary and inappropriate unless discharge is to a reach used for groundwater recharge, where Title 22-based limits apply. As indicated in Table 2-1, Basin Plan Beneficial Uses – Receiving Waters, Santa Clara River has a GWR beneficial use. Therefore, the accompanying Order will contain the limit for radioactivity to protect the GWR beneficial use.

xiv. **Iron**

The Gold Book contains criteria for iron: 300µg/L for the protection of domestic water supply and 1000 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 to contribute to an exceedance, a limit for iron, based on the 300 µg/L criteria, is prescribed for the protection of the GWR beneficial use in the surface water and for the protection of the MUN beneficial use in the underlying groundwater basins. The highest receiving water concentration was 1800 µg/L. There was Tier 2 reasonable potential.

c. **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 specifies the procedures to conduct reasonable potential analyses for non-priority pollutants.

3. Determining the Need for WQBELs

The Regional Water Board developed WQBELs for total ammonia as nitrogen, nitrate as nitrogen, nitrite as nitrogen, and nitrate plus nitrite as nitrogen that have available WLAs established in the *Santa Clara River Nitrogen Compounds TMDL*. Pursuant to 40 CFR 122.44(d)(1)(vii)(B), the effluent limitations for these pollutants were established without conducting a reasonable potential analysis during permit development, consistent with the SIP, since there are available WLAs applicable to the discharge. The NPDES regulations at 40 CFR 122.44(d)(1)(vii)(B) require that NPDES permits include effluent limitations developed consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL. Thus, consistent with the federal requirement and with the NPDES Permit Writers' Manual (EPA-833-K-10-001, September 2010), final effluent limitations have been included in this Order for total ammonia as nitrogen, nitrate as nitrogen, nitrite as nitrogen, and nitrate plus nitrite as nitrogen for which a WLA has been assigned to the permitted facility through a TMDL.

For those priority pollutants that have no assigned WLAs under a TMDL, in accordance with Section 1.3 of the SIP, Regional Water Board staff conducted an RPA for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Water Board analyzed effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that demonstrate reasonable potential, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional 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 cover the period from March 2014 to July 2018.

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

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

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

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

Sufficient effluent and ambient data are needed to conduct a complete RPA. Newhall Ranch WRP collected receiving water data but was not able to produce effluent data because the Newhall Ranch WRP has not been built. Since activated sludge from the Valencia WRP will be used to start up the Newhall Ranch WRP, effluent data from the Valencia WRP was used to run Tier 1 of the RPA. Upon review of new data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

Based on the RPA, bis(2-ethylhexyl)phthalate demonstrates reasonable potential because of Trigger 2, background water quality (B) > C and the pollutant is detected in the effluent. The following Table summarizes results from RPA.

Table F-7. Summary of Reasonable Potential Analysis

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
1	Antimony	6	1.56	0.44	No	MEC<C, B<C
2	Arsenic	10	1.25	2.2	No	MEC<C, B<C
3	Beryllium	4	<0.3	0.021	No	MEC<C, B<C
4	Cadmium	5	0.065	0.11	No	MEC<C, B<C
5a	Chromium III	520	<0.5	0.67	No	MEC<C, B<C
5b	Chromium VI	11	0.06	2.6	No	MEC<C, B<C
6	**Copper**	**24**	**3.84**	**3.4**	**Yes**	**Valencia WRP limit (Tier 3)**
7	Lead	13	0.1	1.8	No	MEC<C, B<C
8	**Mercury**	**0.012[5]**	**Highest annual average 0.00586**	**Highest annual average 0.01396**	**Yes**	**ISWEBE Plan Max. Annual Average B>C (Tier 2)**
9	Nickel	135	3.49	5.8	No	MEC<C, B<C
10	**Selenium**	**5**	**0.8**	**2**	**Yes**	**Valencia WRP limit (Tier 3)**
11	Silver	28	0.01	0.025	No	MEC<C, B<C
12	Thallium	2	<0.015	0.034	No	MEC<C, B<C
13	Zinc	311	32.6	15	No	MEC<C, B<C
14	**Cyanide**	**5.2**	**5.5**	**4**	**Yes**	**MEC>C (Tier 1)**
15	Asbestos	7x10^{6} fibers/L	No sample	No sample	No	N/A
16	**2,3,7,8-TCDD (Dioxin)**	**1.4x10^{-08}**		**<1x10^{-08}**	**Yes**	**Valencia WRP limit (Tier 3)**
17	Acrolein	780	<1.3	2.2	No	MEC<C, B<C
18	Acrylonitrile	0.66	<0.2	1.8	No	MEC<C, B<C
19	Benzene	1	<0.1	0.23	No	MEC<C, B<C
20	Bromoform	360	6.7	0.19	No	MEC<C, B<C
21	Carbon Tetrachloride	0.5	<0.11	0.33	No	MEC<C, B<C

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[5] Reasonable potential analysis for mercury was conducted in accordance with the amendment to the Inland Surface Waters Enclosed Bays and Estuaries (ISWEBE) Plan adopted by the State Water Board through Resolution No. 2017-0027, *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). The highest annual average observed mercury concentration in the effluent was 0.0586 µg/L, or 5.86 ng/L. The highest annual average observed mercury concentration in the receiving water was 0.01396 µg/L, or 13.96 ng/L. Since 13.96 ng/L is more than the ISWEBE Plan 12 ng/L WQO for mercury, the discharge does have RP to exceed the ISWEBE Plan mercury objective applicable to waters with a designation for WARM beneficial use. As summarized on Table F-7 above, the discharge has RP to cause or contribute to an exceedance of the ISWEBE Plan 12 ng/L mercury objective. Therefore, an ISWEBE Plan-based limit is proposed.

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
22	Chlorobenzene	21,000	<0.13	0.21	No	MEC<C, B<C
23	Dibromochloro-methane	34	18.4	0.2	No	MEC<C, B<C
24	Chloroethane	No criteria	<0.18	ND	No	No criteria
25	2-chloroethyl vinyl ether	No criteria	<0.12	0.28	No	No criteria
26	Chloroform	No criteria	23	0.67	No	No criteria
27	Dichlorobromo-methane	46	25.8	0.09	No	MEC<C, B<C
28	1,1-dichloroethane	5	<0.07	0.21	No	No criteria
29	1,2-dichloroethane	0.5	<0.09	0.24	No	MEC<C, B<C
30	1,1-dichloroethylene	3.2	<0.13	0.39	No	MEC<C, B<C
31	1,2-dichloropropane	5	<0.09	0.18	No	MEC<C, B<C
32	1,3-dichloropropylene	0.5	<0.5	<0.15	No	MEC<C, B<C
33	Ethylbenzene	0.3	<0.1	0.17	No	MEC<C, B<C
34	Methyl bromide	4,000	<0.2	0.47	No	MEC<C, B<C
35	Methyl chloride	No criteria	0.24	0.26	No	No criteria
36	Methylene chloride	1,600	<0.18	0.25	No	MEC<C, B<C
37	1,1,2,2-tetrachloroethane	1	<0.1	0.18	No	MEC<C, B<C
38	Tetrachloroethylene	5	<0.16	0.27	No	MEC<C, B<C
39	Toluene	150	<0.17	0.22	No	MEC<C, B<C
40	Trans 1,2-Dichloroethylene	10	<0.09	0.23	No	MEC<C, B<C
41	1,1,1-Trichloroethane	200	<0.07	0.38	No	MEC<C, B<C
42	1,1,2-Trichloroethane	5	<0.09	0.25	No	MEC<C, B<C
43	Trichloroethylene	5	<0.13	0.37	No	MEC<C, B<C
44	Vinyl Chloride	0.5	<0.2	0.33	No	MEC<C, B<C
45	2-chlorophenol	400	<0.15	0.28	No	MEC<C, B<C
46	2,4-dichlorophenol	790	<0.11	0.26	No	MEC<C, B<C
47	2,4-dimethylphenol	2,300	<0.11	0.3	No	MEC<C, B<C
48	4,6-dinitro-o-cresol(aka 2-methyl-4,6-Dinitrophenol)	765	<0.92	1.7	No	MEC<C, B<C
49	2,4-dinitrophenol	14,000	<1.7	1.6	No	MEC<C, B<C
50	2-nitrophenol	No criteria	<0.1	0.26	No	No criteria
51	4-nitrophenol	No criteria	<1.3	0.52	No	No criteria
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-cresol)	No criteria	<0.13	0.23	No	No criteria
53	Pentachlorophenol	1	<0.38	0.11	No	MEC<C, B<C
54	Phenol	4.6x10^6	0.78	0.16	No	MEC<C, B<C
55	2,4,6-trichlorophenol	6.5	0.29	0.22	No	MEC<C, B<C

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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
56	Acenaphthene	2,700	<0.15	0.38	No	MEC<C, B<C
57	Acenaphthylene	No criteria	<0.14	0.4	No	No criteria
58	Anthracene	110,000	<1.6	0.34	No	MEC<C, B<C
59	Benzidine	0.00054	<1.6	3.7	No	MEC<C, B<C
60	Benzo(a)Anthracene	0.049	<0.19	0.19	No	MEC<C, B<C
61	Benzo(a)Pyrene	0.049	<0.007	0.13	No	MEC<C, B<C
62	Benzo(b)Fluoranthene	0.049	<0.004	0.14	No	MEC<C, B<C
63	Benzo(ghi)Perylene	No criteria	<0.12	ND	No	No criteria
64	Benzo(k)Fluoranthene	0.049	<0.005	0.22	No	MEC<C, B<C
65	Bis(2-Chloroethoxy) methane	No criteria	<0.11	0.25	No	No criteria
66	Bis(2-Chloroethyl)Ether	1.4	<0.13	0.27	No	MEC<C, B<C
67	Bis(2-Chloroisopropyl) Ether	170,000	<0.16	0.38	No	MEC<C, B<C
68	**Bis(2-Ethylhexyl) Phthalate**	**4**	**0.51**	**5**	**Yes**	**B>C (Tier 2)**
69	4-Bromophenyl Phenyl Ether	No criteria	<0.21	0.36	No	No criteria
70	Butylbenzyl Phthalate	5,200	<0.1	0.4	No	MEC<C, B<C
71	2-Chloronaphthalene	4,300	<0.12	0.45	No	MEC<C, B<C
72	4-Chlorophenyl Phenyl Ether	No criteria	<0.17	0.41	No	No criteria
73	Chrysene	0.049	<0.005	0.19	No	MEC<C, B<C
74	Dibenzo(a,h) Anthracene	0.049	<0.004	0.19	No	MEC<C, B<C
75	1,2-Dichlorobenzene	600	<0.007	0.33	No	MEC<C, B<C
76	1,3-Dichlorobenzene	2,600	<0.08	0.35	No	MEC<C, B<C
77	1,4-Dichlorobenzene	5	<0.07	0.37	No	MEC<C, B<C
78	3-3'-Dichlorobenzidine	0.077	<0.66	1.2	No	MEC<C, B<C
79	Diethyl Phthalate	120,000	0.55	0.15	No	MEC<C, B<C
80	Dimethyl Phthalate	2.9x10^6	<0.19	0.18	No	MEC<C, B<C
81	Di-n-Butyl Phthalate	12,000	<0.1	0.24	No	MEC<C, B<C
82	2-4-Dinitrotoluene	9.1	<0.2	0.18	No	MEC<C, B<C
83	2-6-Dinitrotoluene	No criteria	<0.2	0.27	No	No criteria
84	Di-n-Octyl Phthalate	No criteria	<0.12	0.19	No	No criteria
85	1,2-Diphenylhydrazine	0.54	<0.11	0.25	No	MEC<C, B<C
86	Fluoranthene	370	<0.13	0.22	No	MEC<C, B<C
87	Fluorene	14,000	<0.1	0.35	No	MEC<C, B<C
88	Hexachlorobenzene	0.00077	<0.18	0.49	No	MEC<C, B<C
89	Hexachlorobutadiene	50	<0.11	0.47	No	MEC<C, B<C

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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
90	Hexachlorocyclo-pentadiene	17,000	<0.14	1.5	No	MEC<C, B<C
91	Hexachloroethane	8.9	<0.52	0.52	No	MEC<C, B<C
92	Indeno(1,2,3-cd) Pyrene	0.049	<0.13	0.12	No	MEC<C, B<C
93	Isophorone	600	<0.004	0.21	No	MEC<C, B<C
94	Naphthalene	No criteria	<0.11	0.49	No	No criteria
95	Nitrobenzene	1,900	<0.13	0.36	No	MEC<C, B<C
96	N-Nitrosodimethylamine	8.1	<0.13	0.14	No	MEC<C, B<C
97	N-Nitrosodi-n-Propylamine	1.4	0.62	0.26	No	MEC<C, B<C
98	N-Nitrosodiphenylamine	16	<0.12	0.19	No	MEC<C, B<C
99	Phenanthrene	No criteria	<0.15	0.32	No	No criteria
100	Pyrene	11,000	<0.11	0.25	No	MEC<C, B<C
101	1,2,4-Trichlorobenzene	No criteria	<0.19	0.55	No	No criteria
102	Aldrin	0.00014	<0.17	0.0015	No	MEC<C, B<C
103	Alpha-BHC	0.013	<0.0009	0.0018	No	MEC<C, B<C
104	Beta-BHC	0.046	<0.0005	0.0031	No	MEC<C, B<C
105	Gamma-BHC (aka Lindane)	0.063	<0.002	0.0021	No	MEC<C, B<C
106	delta-BHC	No criteria	0.002	0.0025	No	No criteria
107	Chlordane	0.00059	<0.001	0.08	No	MEC<C, B<C
108	4,4'-DDT	0.00059	<0.01	0.0031	No	MEC<C, B<C
109	4,4'-DDE	0.00059	<0.001	0.0025	No	MEC<C, B<C
110	4,4'-DDD	0.00084	<0.001	0.003	No	MEC<C, B<C
111	Dieldrin	0.00014	<0.001	0.0021	No	MEC<C, B<C
112	Alpha-Endosulfan	0.056	<0.001	0.0017	No	MEC<C, B<C
113	Beta-Endosulfan	0.056	<0.001	0.0019	No	MEC<C, B<C
114	Endosulfan Sulfate	240	<0.002	0.008	No	MEC<C, B<C
115	Endrin	0.036	<0.001	0.0028	No	MEC<C, B<C
116	Endrin Aldehyde	0.81	<0.001	0.003	No	MEC<C, B<C
117	Heptachlor	0.00021	<0.0008	0.0017	No	MEC<C, B<C
118	Heptachlor Epoxide	0.00011	<0.001	0.0019	No	MEC<C, B<C
119	PCB 1016	0.00017	<0.02	0.05	No	MEC<C, B<C
120	PCB 1221	0.00017	<0.2	0.06	No	MEC<C, B<C
121	PCB 1232	0.00017	<0.09	0.15	No	MEC<C, B<C
122	PCB 1242	0.00017	<0.02	0.07	No	MEC<C, B<C
123	PCB 1248	0.00017	<0.02	0.06	No	MEC<C, B<C
124	PCB 1254	0.00017	<0.01	0.04	No	MEC<C, B<C

TENTATIVE

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
125	PCB 1260	0.00017	<0.01	0.04	No	MEC<C, B<C
126	Toxaphene	0.00075	<0.04	0.12	No	MEC<C, B<C
	Iron	**300**	**260**	**1800**	**Yes**	**B>C (Tier 2)**
	Total trihalomethanes	**80**	**62.5**	**0.83**	**Yes**	**Valencia WRP limit (Tier 3**

4. 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. **Santa Clara River Nutrient Compounds TMDL Calculation Procedure.** The procedures for calculating the total ammonia as nitrogen, nitrate as nitrogen, nitrite as nitrogen, and nitrate plus nitrite as nitrogen as discussed on Table 7-9.1, in Chapter 7, Section 7-9 of the Basin Plan are provided in the Compliance Determination section of the Order, section VII.O.

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

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

Step 5 of Section 1.4 of the SIP (page 10) lists the statistical equations that adjust CTR criteria for averaging periods and exceedance frequencies of the criteria/objectives.

Sample calculation for cyanide:

Step 1: Identify applicable water quality criteria.

From California Toxics Rule (CTR), we can obtain the Criterion Maximum Concentration (CMC) and the Criterion Continuous Concentration (CCC).

Freshwater Aquatic Life Criteria:

CMC = 22 µg/L (CTR page 31712, column B1)

CCC = 5.2 µg/L (CTR page 31712, column B1)

Human Health Criteria for Organisms only = narrative (CTR page 31712, column D2).

Step 2: Calculate effluent concentration allowance (ECA)

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

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

Calculate CV:

CV = Standard Deviation/Mean = 1.5/2.6 = 0.6

Find the ECA Multipliers from SIP Table 1 (page 7), or by calculating them using equations on SIP page 6. When CV = 0.6, then:

ECA Multiplier acute = 0.174

ECA Multiplier chronic = 0.321

LTA acute = ECA acute x ECA Multiplier acute

= 22 x 0.321 = 7.062

LTA chronic = ECA chronic x ECA Multiplier chronic

= 5.2 x 0.527 = 2.740 µg/L

Step 4: Select the lowest LTA

Lowest LTA = 2.740

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

Find the multipliers. You need to know CV and n (frequency of sample collection per month). If effluent samples are collected 4 times a month or less, then n = 4. CV was determined to be 1.2 in a previous step.

AMEL Multiplier = 1.552

MDEL Multiplier = 3.114

AMEL aquatic life = lowest LTA (from Step 4) x AMEL Multiplier

= 2.740 x 1.552 = 4.2 µg/L

MDEL aquatic life = lowest LTA (from Step 4) x MDEL Multiplier

= 2.740 x 3.114 = 8.5 µg/L

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

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

For AMEL human health limit, there is no factor.

The MDEL/AMEL human health factor = 2.01

AMEL human health = ECA = 220,000

MDEL human health = ECA x MDEL/AMEL factor

= 220,000 x 2.01 = 442,200

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 = 4.3 µg/L (Based on aquatic life protection)

Lowest MDEL = 8.5 µg/L (Based on aquatic life protection)

d. **Impracticability Analysis.** Federal NPDES regulations contained in 40 CFR part 122.45, states that, for continuous discharges, all permit effluent limitations, standards, and prohibitions, including those to achieve water quality standards, shall unless impracticable be stated as maximum daily and average monthly discharge limitations for all Permittees other than POTWs.

As stated by USEPA in its long-standing guidance for developing WQBELs average alone limitations are not practical for limiting acute, chronic, and human health toxic effects.

For example, a facility 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. 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 (CTR human health for the ingestion of fish), daily maximum limitations have been established in this NPDES permit for mercury because it is considered to be a carcinogen, endocrine disruptor, and is bioaccumulative.

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. Fish exposed to these endocrine disrupting chemicals will be passed on to the human consumer. Endocrine disrupters alter hormonal functions by several means. These substances can:

i. Mimic or partly mimic the sex steroid hormones estrogens and androgens (the male sex hormone) by binding to hormone receptors or influencing cell signaling pathways.

ii. Block, prevent and alter hormonal binding to hormone receptors or influencing cell signaling pathways.

iii. Alter production and breakdown of natural hormones.

iv. Modify the making and function of hormone receptors.

e. **Mass-based limits.** 40 CFR part 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 part 122.45(f)(2) allows the permit writer, at its 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 limitations, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents.

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

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	3-Month Rolling Average
Copper	µg/L	11	--	34	--	--	--
	lbs/day	0.18	--	0.57	--	--	--
Mercury	µg/L	Annual Average 0.012	--	0.033	--	--	--
	lbs/day1	2.0×10^{-4}	--	5.5×10^{-4}	--	--	--
Selenium	µg/L	4.5	--	6.8	--	--	--
	lbs/day1	0.08	--	0.11	--	--	--
Cyanide	µg/L	4.3	--	8.5	--	--	--
	lbs/day1	0.071	--	0.14	--	--	--
2,3,7,8-TCDD	pg/L	0.014	--	0.028	--	--	--
	lbs/day	2.3×10^{-10}	--	4.7×10^{-10}	--	--	--
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--	--
	lbs/day	0.07	--	--	--	--	--
Iron	µg/L	300	--	--	--	--	--
	lbs/day	5	--	--	--	--	--
Total Trihalomethanes	µg/L	80	--	--	--	--	--
	lbs/day	1.3	--	--	--	--	--
Ammonia Nitrogen[6]	mg/L	1.75	--	5.2			
Nitrate + Nitrite as Nitrogen	µg/L	5	--	--	--	--	--
	lbs/day	80	--	--	--	--	--
Nitrite as N	µg/L	0.9	--	--	--	--	--
	lbs/day	15	--	--	--	--	--

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

There were no chronic toxicity test conducted, during the period from March 2014 to July 2018, of the final effluent because the Newhall Ranch WRP has not been constructed. However, four of the Valencia WRP final effluent chronic toxicity tests failed the test of significant toxicity (TST) in the months of February, November, and December 2015.

[6] This is final effluent limit is consistent with the final WLA for ammonia as nitrogen, for discharges into Reach 7, as set forth in Resolution No. 03-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to include a TMDL for Nitrogen Compounds in the Santa Clara River,* adopted by the Regional Water Board on August 7, 2003.

Since activated sludge from the Valencia WRP will be used to start up the Newhall Ranch WRP, and because of the nature of industrial discharges into the POTW sewershed, it is possible that other toxic constituents could be present in the Newhall Ranch WRP effluent, or could have synergistic or additive effects. Using best professional judgement, staff has determined that reasonable potential exist for the effluent to cause or contribute to an exceedance of the chronic toxicity objective. As such, the permit contains effluent limitations for chronic toxicity.

This permit contains final effluent limitations for chronic toxicity, expressed as a monthly median and a daily maximum. The effluent limitations for chronic toxicity were established because effluent data showed that there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standard.

In the past, the State Water Board reviewed the circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential with respect to SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, at a public hearing, the State Water Board adopted Order No. 2003-0012 (Los Coyotes Order) deferring the issue of numeric chronic toxicity effluent limitations until a subsequent Phase of the SIP is adopted. In the meantime, the State Water Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1.0 TUc trigger, in the Long Beach and Los Coyotes WRP NPDES permits.

However, many facts have changed since the State Water Board adopted the Los Coyotes Order in 2003. USEPA published two new guidance documents with respect to chronic toxicity testing; the Los Angeles Regional Water Board adopted NPDES permits for industrial facilities incorporating TST-based effluent limitations for chronic toxicity and has adopted numeric chronic toxicity effluent limitations for industrial facilities and POTWs with TMDL WLAs of 1.0 TUc; and the Santa Ana Regional Water Board adopted an NPDES permit for a POTW incorporating TST-based effluent limitations for chronic toxicity. In addition to these factual developments, the State Water Board has not adopted a revised policy that addresses chronic toxicity effluent limitations in NPDES permits for inland discharges, as anticipated by the Los Coyotes Order. Because the Los Coyotes Order explicitly “declined to make a determination … regarding the propriety of the final numeric effluent limitations for chronic toxicity…,” (Los Coyotes Order, p. 9) and because of the differing facts before the Regional Water Board in 2014 as compared to the facts that were the basis for the Los Coyotes Order in 2003, the Regional Water Board concludes that the Los Coyotes Order does not require inclusion of narrative rather than numeric effluent limitations for chronic toxicity. Further, the Regional Water Board finds that numeric effluent limitations for chronic toxicity are necessary, feasible, and appropriate.

On October 19, 2018, the State Water Board released for public comment the *Draft Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California,* with proposed toxicity provisions. On October 31, 2018, the State Water Board held a workshop and on November 11, 2018, the State Water Board held a hearing. The comment period ended on December 21, 2018. It is anticipated that the item will be scheduled for State Water Board consideration in early 2019. Because the effluent data from the Valencia WRP exhibited reasonable potential to cause or contribute to an exceedance of the water quality objective, this Order contains numeric chronic toxicity effluent limitations. Compliance with the chronic toxicity requirements contained in this Order are to be determined in accordance to sections VII.J. This Order contains a reopener to allow the Regional Water Board to modify the permit, if necessary, to make it consistent with any new policy, law, or regulation.

For this permit, chronic toxicity in the discharge is evaluated using a monthly median effluent limitation and a maximum daily effluent limitation that utilize USEPA's 2010 Test of Significant Toxicity (TST) hypothesis testing approach. The chronic toxicity effluent limitation is expressed as "Pass" for the median monthly summary results and "Pass" or "<50% Effect" for each maximum daily individual results.

In January 2010, USEPA published a guidance document entitled, "EPA Regions 8, 9 and 10 Toxicity Training Tool," which among other things discusses permit limit expression for chronic toxicity. The document acknowledges that NPDES regulations at 40 CFR section 122.45(d) requires that all permit limitations be expressed, unless impracticable, as an Average Weekly Effluent Limitation (AWEL)) and an Average Monthly Effluent Limitation (AMEL) for POTWs. Following section 5.2.3 of the Technical Support Document (TSD), the use of an AWEL is not appropriate for WET. In lieu of an AWEL for POTWs, USEPA recommends establishing an MDEL for toxic pollutants and pollutants in water quality permitting, including WET. This is appropriate for two reasons. The basis for the average weekly requirement for POTWs derives from secondary treatment regulations and is not related to the requirement to assure achievement of water quality standards (WQS). Moreover, an average weekly requirement comprising up to seven daily samples could average out daily peak toxic concentrations for WET and therefore, the discharge's potential for causing acute and chronic effects would be missed. It is impracticable to use an AWEL, because short-term spikes of toxicity levels that would be permissible under the 7-day average scheme would not be adequately protective of all beneficial uses. The MDEL is the highest allowable value for the discharge measured during a calendar day or 24-hour period representing a calendar day. The AMEL is the highest allowable value for the average of daily discharges obtained over a calendar month. For WET, this is the average of individual WET test results for that calendar month. However, in cases where a chronic mixing zone is not authorized, USEPA Regions 9 and 10 continue to recommend that the AMEL for chronic WET should be expressed as a median monthly limit (MMEL).

Later in June 2010, USEPA published another guidance document titled, Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June 2010), in which they recommend the following: "Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program." The TST approach is another statistical option for analyzing valid WET test data. Use of the TST approach does not result in any changes to USEPA's WET test methods. Section 9.4.1.2 of USEPA's Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013, 2002), recognizes that, "the statistical methods in this manual are not the only possible methods of statistical analysis." The TST approach can be applied to acute (survival) and chronic (sublethal) endpoints and is appropriate to use for both freshwater and marine EPA WET test methods.

USEPA's WET testing program and acute and chronic WET methods rely on the measurement result for a specific test endpoint, not upon achievement of specified concentration-response patterns to determine toxicity. USEPA's WET methods do not require achievement of specified effluent or ambient concentration-response patterns prior to determining that toxicity is present. Nevertheless, USEPA's acute and chronic WET methods require that effluent and ambient concentration-response patterns generated for multi-concentration acute and chronic toxicity tests be reviewed - as a component of test review following statistical analysis - to ensure that the calculated measurement result for the toxicity test is interpreted appropriately. (EPA-821-R-02-012, section 12.2.6.2; EPA-821-R-02-013, section 10.2.6.2.). In 2000, USEPA provided

guidance for such reviews to ensure that test endpoints for determining toxicity based on the statistical approaches utilized at the time the guidance was written (NOEC, LC50s, IC25s) were calculated appropriately (EPA 821-B-00-004).

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

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

Any Data Quality Objectives or Standard Operating Procedure used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent or receiving water toxicity test measurement results from the TST statistical approach which include a consideration of concentration-response patterns and/or PMSDs must be submitted for review by the Regional Water Board, in consultation with USEPA and the State Water Board's Quality Assurance Officer and Environmental Laboratory Accreditation Program (40 CFR section 122.41(h)). As described in the bioassay laboratory audit directives to the San Jose Creek Water Quality Laboratory from the State Water Resources Control Board dated August 7, 2014, and from the USEPA dated December 24, 2013, the PMSD criteria only apply to compliance for NOEC and the sublethal endpoints of the NOEC, and therefore are not used to interpret TST results.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR part 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. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order No. R4-2013-0180, with the exception of the limitations for antimony, arsenic, lead, nickel, zinc, Acrylonitrile, tetrachloroethylene, 1,4-dichlorobenzene, lindane, and 4,4-DDE. The discussion below is based upon whether the applicable water quality standard of the receiving water has or has not been attained with respect to final effluent data from the Valencia WRP.

The effluent limitations for antimony, arsenic, lead, nickel, zinc, Acrylonitrile, tetrachloroethylene, 1,4-dichlorobenzene, lindane, and 4,4-DDE that were included in the prior order are not included in this Order because the effluent data for the representative discharge used did not show reasonable potential to cause or contribute to an exceedance of the applicable water quality criteria for these pollutants, based on the most recent monitoring data. Section 402(o)(2) of the CWA provides statutory exceptions to the general prohibition of backsliding contained in CWA section 402(o)(1). One of these exceptions allows backsliding if "information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance." The reasonable potential analysis based on the updated monitoring data justifies removal of the effluent limitation for mercury and this approach is consistent with the anti-backsliding requirements of the CWA and federal regulations. In addition, section 303(d)(4)(B) of the CWA allows relaxation of effluent limitations where the quality of the receiving water equals or exceeds the levels necessary to protect the designated uses of the water or otherwise required by applicable water quality standards, if the revision is subject to and consistent with the state's antidegradation policy. The Santa Clara River is not impaired for antimony, arsenic, lead, nickel, zinc, acrylonitrile, tetrachloroethylene, 1,4-dichlorobenzene, lindane, or 4,4-DDE. As described below, relaxation or removal of effluent limitations for these pollutants is consistent with the state and federal antidegradation policies. Therefore, the exception to the prohibition on relaxation of effluent limitations found in section 303(d)(4)(B) allows the removal of these effluent limitations.

The other effluent limitations contained in Order No. R4-2013-0180 remain because the representative discharge continues to show reasonable potential to cause or contribute to an exceedance of the applicable water quality criteria for those parameters. For a few parameters, such as selenium and cyanide the AMEL and the mercury MDEL were slightly less stringent in comparison to the corresponding permit limitation in the 2013 Order, due to the fact that the coefficient of variation for the recent dataset was different. However, this is not considered backsliding because the remaining effluent limitation either became more stringent or stayed the same as it was in the 2013 Order.

2. Antidegradation Policies

40 CFR part 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 part 131.12. Similarly, CWA section 303(d)(4)(B) and 40 CFR part 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 Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies.

Discharges permitted in this Order are consistent with the antidegradation provisions of 40 CFR part 131.12 and State Water Board Resolution No. 68-16 because the discharge will not degrade any existing high-quality water. Effluent limitations for antimony, arsenic, lead, nickel, zinc, Acrylonitrile, tetrachloroethylene, 1,4-dichlorobenzene, lindane, and 4,4-DDE are not included in this Order because monitoring data demonstrated that there is no reasonable potential for the discharge to cause or contribute to an exceedance of the water quality standard. Monitoring for these constituents in the effluent and receiving waters continue to be required under this Order. The Regional Water Board may modify the terms of this Order to prevent degradation of high-quality waters based on any change in the concentration of these constituents in the effluent or receiving water that indicates that a degradation of high-quality waters may occur. The treatment required by this Order is the best practicable treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the State will be maintained.

3. Stringency of Requirements for Individual Pollutants

This Order contains both TBELs and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD, TSS, pH, and percent removal of BOD and TSS. Restrictions on BOD, TSS and pH are discussed in section IV.B. of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards.

Water quality-based effluent limitations have been scientifically derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs 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-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and WQOs contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any 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 part 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.

Table F-9. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations						Basis
		Average Monthly	Average Weekly	Max. Daily	Instan-taneous Minimum	Instan-taneous Maximum	3-Month Rolling Average	
$BOD_5$20°C	µg/L	20	30	45	--	--	--	Existing/ Secondary treatment
	lbs/day[7]	330	500	750	--	--	--	
TSS	mg/L	15	40	45	--	--	--	Existing/ Secondary treatment
	lbs/day[7]	250	670	750	--	--	--	
pH	standard units	--	--	--	6.5	8.5	--	Existing/ Basin Plan
Temperature	°F	--	--	86	--	--	--	Gold Book, EPA guidance & BPJ
Removal Efficiency for BOD	%	≥85	--	--	--	--	--	Existing/ Techno-logy Base
Removal Efficiency for TSS	%	≥85	--	--	--	--	--	Existing/ Techno-logy Base
Oil and Grease	mg/L	10	--	15	--	--	--	Existing/ BPJ
	lbs/day[7]	170	--	250	--	--	--	
Settleable Solids	ml/L	0.1	--	0.3	--	--	--	Existing/ BPJ
Total Residual Chlorine	mg/L	--	--	0.1	--	--	--	Existing/ Basin Plan
Total Dissolved Solids	mg/L	1,000	--	--	--	--	--	Existing/ Basin Plan
	lbs/day[7]	16,700	--	--	--	--	--	
Sulfate	mg/L	400	--	--	--	--	--	Existing/ Basin Plan
	lbs/day[7]	6,700	--	--	--	--	--	

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[7] The mass emission rates 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. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

Parameter	Units	Effluent Limitations						Basis
		Average Monthly	Average Weekly	Max. Daily	Instan-taneous Minimum	Instan-taneous Maximum	3-Month Rolling Average	
Chloride	mg/L	--	--	--	--	--	100[8]	Chloride TMDL Amend-ment
	lbs/day[7]	--	--	--	--	--	1,700	
Boron	mg/L	1.5	--	--	--	--	--	Existing/ Basin Plan
	lbs/day[7]	25	--	--	--	--	--	
MBAS	mg/L	0.5	--	--	--	--	--	Existing/ Basin Plan
	lbs/day[7]	8	--	--	--	--	--	
Ammonia Nitrogen[9]	mg/L	1.75	--	5.2	--	--	--	Nitrogen Compound TMDL
Nitrate + Nitrite (as N)	mg/L	5	--	--	--	--	--	Existing/ Basin Plan
	lbs/day[7]	80	--	--	--	--	--	
Nitrite (as N)	mg/L	0.9	--	--	--	--	--	Existing/ Basin Plan
	lbs/day[7]	15	--	--	--	--	--	
Copper	µg/L	11	--	34	--	--	--	SIP/ CTR
	lbs/day[7]	0.18	--	0.57	--	--	--	
Mercury	µg/L	0.012	--	0.033	--	--	--	Inland Surface Waters Enclosed Bays and Estuaries Plan
	lbs/day	2.0×10^{-4}	--	5.5×10^{-4}	--	--	--	
Selenium	µg/L	4.5	--	6.8	--	--	--	SIP/ CTR
	lbs/day[7]	0.08	--	0.11	--	--	--	
Cyanide	µg/L	4.3	--	8.5	--	--	--	SIP/ CTR
	lbs/day[7]	0.071	--	0.14	--	--	--	
2,3,7,8-TCDD	pg/L	0.014	--	0.028	--	--	--	SIP/ CTR
	lbs/day[7]	2.3×10^{-10}	--	4.7×10^{-10}	--	--	--	
	µg/L	4	--	--	--	--	--	Basin Plan

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[8] The final effluent limitation for chloride, expressed as a 3-month rolling average, is based on the *Amendment to the Basin Plan for the Los Angeles Region to Incorporate an Averaging Period for Chloride Water Quality Objectives in Reaches 4B, 5 and 6; Incorporate New Site Specific Objectives for Chloride in Reaches 5 and 6; and Revise the Total Maximum Daily Load for Chloride in the Upper Santa Clara River,* adopted by the Regional Water Board on October 9, 2014 (Resolution No. R4-2014-010). The State Water Board, OAL and USEPA approved the Santa Clara River Chloride TMDL on December 16, 2004, March 18, 2015, and April 28, 2015, respectively. It became effective on April 28, 2015.

[9] The ammonia nitrogen effluent limitation is the translated effluent limitation based on the WQO for ammonia in the current Basin Plan, Table 3-1 and Table 3-2, which resulted from Resolution No. 2002-011, and 2005-014 adopted by the Regional Water Board on April 25, 2002, and December 1, 2005, respectively. This effluent limitation is derived according to the Implementation Section of Resolution No. 2002-011.

Parameter	Units	Effluent Limitations						Basis
		Average Monthly	Average Weekly	Max. Daily	Instan-taneous Minimum	Instan-taneous Maximum	3-Month Rolling Average	
Bis(2-ethylhexyl) phthalate	lbs/day[7]	0.07	--	--	--	--	--	
Iron	µg/L	300	--	--	--	--	--	Basin Plan & Gold Book
	lbs/day[7]	5	--	--	--	--	--	
Total Trihalomethanes	µg/L	80	--	--	--	--	--	Basin Plan
	lbs/day[7]	1.3	--	--	--	--	--	
Total coliform[10]	MPN or CFU/100 mL	23	2.2	240	--	--	--	Existing/ Title 22
E. coli	MPN/100 mL	--	7-day Median 2.2	235	--	--	--	Bacteria Indicator TMDL
Radioactivity[11]								
Combined Radium-226 and Radium 228	pCi/L	5	--	--	--	--	--	Existing/ Title 22
Gross Alpha particle activity (excluding radon and uranium)	pCi/L	15	--	--	--	--	--	Existing/ Title 22
Uranium	pCi/L	20	--	--	--	--	--	Existing/ Title 22
Gross Beta/photon emitters	millirem/ year	4	--	--	--	--	--	Existing/ Title 22
Strontium-90	pCi/L	8	--	--	--	--	--	Existing/ Title 22
Tritium	pCi/L	20,000	--	--	--	--	--	Existing/ Title 22

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E. Land Discharge Specifications – (Not Applicable)

F. Recycling Specifications – (Not Applicable)

[10] The wastes discharged to water courses shall at all times be adequately disinfected. For the purpose of this requirement, the wastes collected at the end of the ultraviolet (UV) channel during normal operation shall be considered adequately disinfected if: (1) the median number of total coliform bacteria in the disinfected effluent does not exceed a 7-day median of 2.2 Most Probable Number (MPN) or Colony Forming Unit (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.

[11] The radioactivity of the wastes discharged 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.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order.

B. Groundwater

Limitations in this Order must protect not only surface receiving water beneficial uses, but also, the beneficial uses of underlying groundwater where there is a recharge beneficial use of the surface water. In addition to a discharge to surface water, there is discharge that can impact groundwater. Sections of the Santa Clara River, near the Newhall Ranch WRP discharge point, are designated as GWR beneficial use. Surface water from the Santa Clara River percolates into the Santa Clara River Valley East Basin. Since groundwater from the Basin is used to provide drinking water to the community, the groundwater aquifers should be protected.

The MRP includes a requirement for groundwater monitoring for the protection of the MUN use of underlying groundwater. For constituents that have limitations, the limits are based upon the Basin Plan and the CTR and are also protective of the beneficial uses of groundwater.

VI. RATIONALE FOR PROVISIONS

A. 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).

B. Special Provisions

1. Reopener Provisions

a. This provision is based on 40 CFR part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

a. **Antidegradation Analysis and Engineering Report for Proposed Plant Expansion.** In the event of any proposed plant expansion, this provision is based on the State Water Board Resolution No. 68-16, which requires the Regional Water Board in regulating the discharge of waste to maintain high quality waters of the

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state. Prior to expanding the plant capacity, the Permittee must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. This provision requires the Permittee to clarify that it has increased plant capacity through the addition of new treatment system(s) to obtain alternative effluent limitations for the discharge from the treatment system(s). This provision requires the Permittee to report specific time schedules for the plant's projects. Prior to any plant expansion, this provision requires the Permittee to submit the Antidegradation Analysis and Engineering Report for the proposed Plant Expansion to the Regional Water Board for approval.

b. **Operations Plan for Proposed Expansion.** This provision is based on section 13385(j)(1)(D) of the Water Code and allows a time period not to exceed 90 days in which the Permittee may adjust and test the treatment system(s). Prior to start-up of an expansion project, this provision requires the Permittee to submit an Operations Plan describing the actions the Permittee 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 Regional Water Board regarding Facility's increasing hydraulic capacity and growth in the service area.

3. Best Management Practices and Pollution Prevention

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

4. Construction, Operation, and Maintenance Specifications

a. This provision is based on the requirements of 40 CFR part 122.41(e) and the previous Order.

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

b. **Pretreatment Requirements.** These provisions are not applicable until such time as a Pretreatment Program is required by the Board. In the future, 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. This permit contains requirements for the implementation of an effective pretreatment program pursuant to section 307 of the CWA; 40 CFR 35 and 403; and/or Title 23, CCR section 2233.

c. **Spill Reporting Requirements.** This Order established a reporting protocol for how different types of spills, overflow or bypasses of raw or partially treated sewage

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from its collection system or treatment plant covered by this Order shall be reported to regulatory agencies.

The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (General Order) on May 2, 2006. The State Water Board amended the Monitoring and Reporting Program for the General Order through Order WQ 2013-0058-EXEC on August 6, 2013. The General Order requires public agencies that own or operate sanitary sewer systems with sewer lines one mile of pipe or greater to enroll for coverage and comply with the General Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows, among other requirements and prohibitions.

The General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows that are more extensive, and therefore, more stringent than the requirements under federal standard provisions. The Discharger and public agencies that are discharging wastewater into the Facility were required to obtain enrollment for regulation under the SSO WDR by December 1, 2006.

6. Other Special Provisions - (Not Applicable)

7. Compliance Schedules

In general, an NPDES permit must include final effluent limitations that are consistent with CWA section 301 and with 40 CFR part 122.44(d). There are exceptions to this general rule. The State Water Board's Resolution No. 2008-0025 "Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits" (Compliance Schedule Policy) allows compliance schedules for new, revised, or newly interpreted WQOs or criteria, or in accordance with a TMDL. All compliance schedules must be as short as possible, and may not exceed ten years from the effective date of the adoption, revision, or new interpretation of the applicable WQO or criterion, unless a TMDL allows a longer schedule. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric effluent limitations for that constituent or parameter, interim requirements and dates toward achieving compliance, and compliance reporting within 14 days after each interim date. The Order may also include interim requirements to control the pollutant, such as pollutant minimization and source control measures.

However, this Order does not include compliance schedules or interim effluent limitations because the Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits, State Water Board Resolution No. 2008-0025, does not authorize compliance schedules in permits for new dischargers. Newhall Ranch WRP is considered a new discharger since its construction will commence after new WQOs or criteria in water quality standards became applicable.

a. **Waste Water Treatment Plant Upgrades**

The Newhall Ranch SD has not proposed any upgrades to the Newhall Ranch WRP since it initially submitted an ROWD with the preliminary design information. The Newhall Ranch WRP will be built by Newhall Land and Farming according to the original specifications.

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(*l*), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and

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

A. Influent Monitoring

Influent monitoring is required:

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

B. Effluent Monitoring

The Permittee is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the MRP Attachment E. This provision requires compliance with the MRP, and is based on 40 CFR sections 122.44(i), 122.62, 122.63, and 124.5. The MRP is a standard requirement in almost all NPDES permits (including this Order) issued by the Regional Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the Water Code, and Regional Water Board policies. The MRP also contains sampling program specific for the Permittee's advanced water treatment facility. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with section 1.3 of the SIP, a periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

Monitoring for those pollutants expected to be present in the discharge from the Facility, will be required as shown on the MRP and as required in the SIP. Semi-annual monitoring for priority pollutants in the effluent is required in accordance with the Pretreatment requirements.

Table F-10. Monitoring Frequency Comparison

Parameter	Monitoring Frequency (2013 Permit)	Monitoring Frequency (2018 Permit)
Total waste flow	continuous	no change
Total residual chlorine	daily	daily and continuous
Turbidity	continuous	no change
Temperature	daily	no change
pH	daily	no change
Settleable solids	weekly	no change
Total suspended solids	weekly	no change
Oil and grease	monthly	no change
Dissolved oxygen	monthly	no change
BOD_5 20°C	weekly	no change
Total coliform	daily	no change
Fecal Coliform	daily	not required after WQO change

Parameter	Monitoring Frequency (2013 Permit)	Monitoring Frequency (2018 Permit)
E. coli	daily	no change
Total Dissolved Solids	monthly	no change
Sulfate	monthly	no change
Chloride	monthly	no change
Boron	monthly	no change
MBAS	monthly	no change
CTAS	monthly	no change
Ammonia nitrogen	weekly	no change
Nitrate + nitrite (as nitrogen)	weekly	no change
Nitrite nitrogen	weekly	no change
Total phosphorus	weekly	no change
Orthosphosphate-p	monthly	no change
Algal biomass (Chlorophyll a)	not required	no change
Total hardness	weekly	no change
Chronic toxicity	monthly	no change
Acute toxicity	quarterly	not required
Radioactivity	semiannually	no change
Antimony	quarterly	no change
Arsenic	monthly	no change
Cadmium	quarterly	no change
Copper	monthly	no change
Lead	monthly	no change
Mercury	monthly	no change
Nickel	monthly	no change
Selenium	monthly	no change
Silver	quarterly	quarterly
Thallium	quarterly	quarterly
Zinc	monthly	no change
Cyanide	monthly	no change
Acrylonitrile	monthly	no change
Tetrachloroethylene	semiannually	no change
Bis(2-ethylhexyl) Phthalate	monthly	no change
P-Dichlorobenzene	monthly	no change
Lindane (gamma-BHC)	monthly	no change
4,4-DDE	monthly	no change
Total trihalomethanes	quarterly	monthly
Aluminum	quarterly	no change
Iron	monthly	no change
Manganese	quarterly	no change
Beryllium	semiannually	no change
Chromium III	quarterly	no change
Chromium VI	quarterly	no change
Total Chromium	semiannually	no change
2,3,7,8-TCDD	semiannually	quarterly
1,4-Dioxane	semiannually	no change

Parameter	Monitoring Frequency (2013 Permit)	Monitoring Frequency (2018 Permit)
Perchlorate	semiannually	no change
1,2,3-Trichloropropane	semiannually	no change
Methyl tert-butyl-ether (MTBE)	semiannually	no change
Remaining EPA priority pollutants[12] excluding asbestos	semiannually	semiannually

The acute toxicity monitoring is no longer required because chronic toxicity is more stringent requirement than acute toxicity. Algal biomass was removed from the effluent monitoring section, but remains a requirement in the receiving water monitoring section because it is a measure of benthic algae, rather than algae in the water column. The fecal coliform effluent monitoring is no longer required because the Basin Plan was revised to remove the fecal coliform WQO. The frequency of monitoring was kept as monthly, for the following parameters which showed reasonable potential, in order to determine compliance with the final effluent limitation: copper, mercury, selenium, cyanide, iron, and bis(2-ethylhexyl)phthalate. The frequency of monitoring was increased from quarterly to monthly for total trihalomethanes because it had reasonable potential. The frequency of monitoring was increased to quarterly for 2,3,7,8-TCDD because it showed reasonable potential based on one out of fourteen samples. A chemical at a low concentration can have chronic effects but no acute effect until it gets to the higher level. The selenium monitoring frequency was increased from semiannually to monthly because it showed reasonable potential to exceed the criteria.

C. Whole Effluent Toxicity Testing Requirements

WET 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 longer period of time and may measure mortality, reproduction, and growth. Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects until it gets to the higher level. For this permit, chronic toxicity in the discharge is evaluated using USEPA's 2010 Test of Significant Toxicity (TST) hypothesis testing 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 protect the narrative Basin Plan Water Quality Objective for chronic toxicity. The rationale for WET has been discussed extensively in section IV.C.5 of this Fact Sheet.

D. Receiving Water Monitoring

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.

2. Groundwater (Not Applicable)

Groundwater monitoring is required for the protection of the MUN use of underlying groundwater basin.

E. Other Monitoring Requirements

1. Watershed Monitoring and Bioassessment Monitoring

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

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. Monitor trends in surface water quality;

c. Ensure protection of beneficial uses;

d. Provide data for modeling contaminants of concern;

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

f. Assess the health of the biological community; and,

g. Determine mixing dynamics of effluent and receiving waters in the estuary.

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

Under the authority of section 308 of the CWA (33 U.S.C. § 1318), U.S. EPA 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 U.S. EPA 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 U.S. EPA's DMR-QA Coordinator and Quality Assurance Manager.

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

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

B. 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 III.C.1.

C. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto: The environmental characteristics are discussed in 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 water, will be improved by compliance with the requirements of this Order. Additional information on the Santa Clara River watershed is available at

http://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/watershed/.

D. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area: The beneficial uses of the waterbodies in the Santa Clara River watershed can reasonably be achieved through the coordinate control of all factors that affect water quality in the area. TMDLs have been developed (as required by the CWA) for many of the impairments in the watershed. A number of Regional Water Board programs and actions are in place to address the water quality impairments in the watershed, including regulation of point source municipal and industrial discharges with appropriate NPDES permits and non-point source discharges such as irrigated agriculture. All of these regulatory programs control the discharge of pollutants to surface and ground waters to prevent nuisance and protect beneficial uses. These regulatory programs have resulted in watershed solutions and have improved water quality. Generally, improvements in the quality of the receiving waters impacted by the permittee's discharges can be achieved by reducing the volume of discharges to receiving waters (e.g., through increased recycling), reducing pollutant loads through source control/pollution prevention, including operational source control such as public education (e.g., disposal of pesticides, pharmaceuticals, and personal care products into the sewer) and product or materials elimination or substitution, and removing pollutants through treatment.

E. Economic considerations: The Permittee did not present any evidence regarding economic considerations related to this Order. However, the Regional Water Board has considered the economic impact of requiring certain provisions pursuant to state law. The additional costs associated with complying with state law requirements are reasonably necessary to prevent nuisance and protect beneficial uses identified in the Basin Plan. Further, the loss of, or impacts to, beneficial uses would have a detrimental economic impact. Economic considerations related to costs of compliance are therefore not sufficient, in the Regional Water Board's determination, to justify failing to prevent nuisance and protect beneficial uses.

F. Need for developing housing within the region: This NPDES permit is for a new POTW that will be constructed to treat the sewage generated by the inhabitants of Newhall Ranch, a new housing development that would be constructed in phases. The initial phase would include Landmark Village and Mission Village. The Regional Water Board has information regarding the need for developing housing within the region and how the Permittee's discharge will affect that need. This Order helps address the need for housing by treating the raw sewage generated by the community that will populate the homes which are planned for construction. A reliable water supply for future housing development is required by law, and with less imported water available to guarantee this reliability, an increase in local supply is necessary. Therefore, the potential for developing housing in the area will be facilitated by improved water quality.

G. Need to develop and use recycled water: The State Water Board's Recycled Water Policy requires the Regional Water Boards to encourage the use of recycled water. In addition, as discussed immediately above, a need to develop and use recycled water exists within the region, especially during times of drought. To encourage recycling, the Permittee is required by this Order to continue to explore the feasibility of recycling to maximize the beneficial reuse of tertiary treated effluent. Most of the effluent to be discharged under this Order will be reused for beneficial purposes.

IX. PUBLIC PARTICIPATION

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

A. Notification of Interested Persons

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the following: (1) public notice in daily newspaper, and (2) posting by the Discharger at administrative offices.

The public had access to the agenda and any changes in dates and locations through the Regional Water Board's website at http://www.waterboards.ca.gov/losangeles/.

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Regional Water Board at losangeles@waterboards.ca.gov.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by **5:00 p.m. on February 15, 2019**.

C. Public Hearing

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

Date:	**March 14, 2019**
Time:	9:00 a.m.
Location:	Port of Long Beach Board Room 4801 Airport Plaza Drive Long Beach, CA 90815

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

D. Reconsideration of Waste Discharge Requirements

Any aggrieved person may petition the State Water Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be received by the State Water Board at the following address within 30 calendar days of the Regional Water Board's action:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

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.

TENTATIVE

E. Information and Copying

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

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Veronica Cuevas at (213) 576-6662 or via email at veronica.cuevas@waterboards.ca.gov.

ATTACHMENT G – TOXICITY REDUCTION EVALUATION (TRE) WORK PLAN OUTLINE

A. Gather and Review Information and Data
   1. POTW Operations and Performance
   2. POTW Influent and Pretreatment Program
   3. Effluent Data, including Toxicity Results
   4. Sludge (Biosolids) Data

B. Evaluate Facility Performance

C. Conduct Toxicity Identification Evaluation (TIE)

D. Evaluate Sources and In-Plant Controls

E. Implement Toxicity Control Measures

F. Conduct Confirmatory Toxicity Testing

ATTACHMENT H – BIOSOLIDS AND SLUDGE MANAGEMENT- NOT APPLICABLE

BIOSOLIDS USE AND DISPOSAL REQUIREMENTS

The Biosolids and Sludge Management requirement are not applicable to the Newhall Ranch SD (Permittee or District) at this time because the Newhall Ranch WRP has not been built yet and once built (under Phase 1: 2 MGD design capacity), the Facility plans of transporting the sludge to the Valencia WRP for treatment and disposal.

ATTACHMENT I – PRETREATMENT REPORTING REQUIREMENTS-NOT APPLICABLE

The Newhall Ranch SD (Permittee or District) is not required to submit annual Pretreatment Program Compliance Report (Report) to the Regional Water Board and United States Environmental Protection Agency, Region 9 (USEPA) at this time because the Newhall Ranch WRP has not been built and because the Facility does not have an approved pretreatment program.