CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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TENTATIVE

ORDER R4-2013-XXXX
NPDES NO. CA053961

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

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

Table 1. Discharger Information

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

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Tertiary treated wastewater	34 º24’ 11” N	118º41’ 22” W	Santa Clara River

Table 3. Administrative Information

This Order was adopted on:	December 5, 2013
This Order shall become effective on:	February 1, 2014
This Order shall expire on:	January 31, 2019
The Discharger shall file a Report of Waste Discharge as an application for renewal of waste discharge requirements in accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System permit in accordance with Title 40, part 122.21(d) of the Code of Federal regulations no later than:	180 days prior to the Order expiration date
The United States Environmental Protection Agency and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Major

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I, Samuel Unger, 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 December 5, 2013.

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Samuel Unger, P.E., 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 (CWC; 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 (USEPA) and chapter 5.5, division 7 of the CWC (commencing with section 13370). It shall serve as an National Pollutant Discharge Elimination System (NPDES) permit for point source discharges from this facility to surface waters.

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 are also incorporated into this Order.

C. Notification of Interested Parties. The Regional Water Board has notified the Newhall Ranch Sanitation District (Newhall Ranch SD or 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.

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

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order R4-2007-0046 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (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 past violations of the previous Order. If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified, the Discharger shall comply with the analogous portions of the previous Order, which shall remain in effect for all purposes during the pendency of the stay.

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 design capacity.

D. The Discharger shall not cause degradation of any water supply, except as consistent with 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 CWC.

F. The discharge of any substances in concentrations toxic to animal or plant is prohibited.

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

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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, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP) , Attachment E:

Table 4. Final Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Minimum	Instant-aneous Maximum
Biochemical Oxygen Demand ($BOD_5 20^oC$)	mg/L	20	30	45	--	--
	lbs/day[1]	330	500	750	--	--
Total Suspended Solids (TSS)	mg/L	15	40	45	--	--
	lbs/day[1]	250	670	750	--	--
pH	standard units	--	--	--	6.5	8.5
Removal Efficiency for BOD and TSS	%	85	--	--	--	--
Oil and Grease	mg/L	10	--	15	--	--
	lbs/day[1]	170	--	250	--	--
Settleable Solids	ml/L	0.1	--	0.3	--	--
Total Residual Chlorine	mg/L	--	--	0.1	--	--
Total Dissolved Solids	mg/L	1000	--	--	--	--
	lbs/day[1]	16700	--	--	--	--
Sulfate	mg/L	400	--	--	--	--
	lbs/day[1]	6700	--	--	--	--

[1] The mass emission rates are based on the plant design flow rate of 2.0 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.

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Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Minimum	Instant-aneous Maximum
Chloride	mg/L	100[2]	--	--	--	--
	lbs/day[1]	1700	--	--	--	--
Boron	mg/L	1.5	--	--	--	--
	lbs/day[1]	25	--	--	--	--
MBAS	mg/L	0.5	--	--	--	--
	lbs/day[1]	8	--	--	--	--
Ammonia Nitrogen	mg/L	1.75[3]	--	5.2[4]	--	--
Nitrate + Nitrite (as N)	mg/L	5	--	--	--	--
	lbs/day[1]	80	--	--	--	--
Nitrite (as N)	mg/L	0.9	--	--	--	--
	lbs/day[1]	15	--	--	--	--
Antimony	µg/L	6	--	--	--	--
	lbs/day[1]	0.1	--	--	--	--
Arsenic	µg/L	10	--	--	--	--
	lbs/day[1]	0.2	--	--	--	--
Copper	µg/L	12	--	35	--	--
	lbs/day[1]	0.20	--	0.58	--	--
Lead	µg/L	13	--	--	--	--
	lbs/day[1]	0.22	--	--	--	--
Mercury	µg/L	0.051	--	0.10	--	--
	lbs/day[1]	0.00085	--	0.0025	--	--
Nickel	µg/L	100	--	--	--	--
	lbs/day[1]	1.7	--	--	--	--
Selenium	µg/L	4.1	--	8.2	--	--
	lbs/day[1]	0.068	--	0.14	--	--
Zinc	µg/L	5000	--	--	--	--
	lbs/day[1]	83	--	--	--	--
Cyanide	µg/L	4.2	--	8.5	--	--
	lbs/day[1]	0.07	--	0.14	--	--
Acrylonitrile	µg/L	0.66	--	1.3	--	--

[2] This effluent limitation is consistent with the assumptions of the *Revision of the TMDL for Chloride in the Upper Santa Clara River (Chloride TMDL)*, Resolution No. 2008-012, which reads: "Other major NPDES discharges (as defined in Table 4-1 of the Basin Plan) receive WLAs equal to 100 mg/L." . This effluent limitation applies immediately.

[3] 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 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.

[4] 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.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Minimum	Instant-aneous Maximum
	lbs/day[1]	0.011	--	0.022	--	--
Tetrachloroethylene	µg/L	5	--	--	--	--
	lbs/day[1]	0.08	--	--	--	--
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--
	lbs/day[1]	0.07	--	--	--	--
p-Dichlorobenzene (1,4-Dichloro benzene)	µg/L	5	--	--	--	--
	lbs/day[1]	0.08	--	--	--	--
Lindane	µg/L	0.2	--	--	--	--
	lbs/day[1]	0.003	--	--	--	--
4,4-DDE	µg/L	0.00059	--	0.0012	--	--
	lbs/day[1]	0.0000098	--	0.00002	--	--
Iron	µg/L	300	--	--	--	--
	lbs/day[1]	5	--	--	--	--

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2. Interim Effluent Limitations – NOT APPLICABLE

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 a water quality standard became applicable.

Table 5. Interim Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Minimum	Instant-aneous Maximum
N/A	--	--	--	--	--	--

3. Other Effluent Limitations – Discharge Point 001

a. Percent Removal: The average monthly percent removal of BOD 5-day 20°C and TSS shall not be less than 85 percent.

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

c. 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.

d. 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 the median number of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) or colony forming units (CFUs) of 2.2 per 100 milliliters, and the number of total coliform

bacteria does not exceed an MPN or CFU of 23 per 100 milliliters in more than one sample within any 30-day period. No sample shall exceed an MPN or CFU of 240 total coliform bacteria per 100 milliliters. The median value shall be determined from the bacteriological results of the last seven (7) days for which an analysis has been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and disinfection processes.

e. For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the treated wastewater does not exceed any of the following: (a) an average of 2 Nephelometric turbidity units (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.

f. To protect the underlying groundwater basins, pollutants shall not be present in the wastes discharged at concentrations that pose a threat to groundwater quality.

g. Acute Toxicity Limitation and Requirements:

i. The acute toxicity of the effluent shall be such that:

(1). The average survival in the undiluted effluent for any three consecutive 96-hour static renewal bioassay tests shall be at least 90%, and

(2). No single test producing less than 70% survival.

ii. If either of the above requirements IV.A.3.g.i.(1) or IV.A.3.g.i.(2) is not met, the Discharger shall conduct six additional tests over a 12-week period, approximately one test every two weeks. The Discharger shall ensure that results of a failing acute toxicity test are received by the Discharger within 24 hours of completion of the test, and the additional tests shall begin within 5 business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume testing at the regular frequency as specified in the monitoring and reporting program. However, if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

iii. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately implement the Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan.

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iv. The Discharger shall conduct acute toxicity monitoring as specified in the MRP.

h. Chronic Toxicity Trigger and Requirements:

i. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

ii. There shall be no chronic toxicity in the effluent discharge.

iii. If the chronic toxicity of the effluent exceeds the monthly median trigger of 1.0 TUc, the Discharger shall immediately implement an accelerated chronic toxicity testing according to Attachment E - MRP section V.B.3. If any three out of the initial test and the six accelerated tests results exceed 1.0 TUc, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Work Plan, as specified in Attachment E – MRP sections V.D and V.E.

iv. The Discharger shall conduct chronic toxicity monitoring as specified in Attachment E – MRP.

B. Land Discharge Specifications – Not Applicable

This Order does not include land discharge specifications because the Newhall Ranch WRP will not have any soft-bottom percolation ponds.

C. Recycling Specifications

Newhall Ranch SD 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 report of waste discharge pursuant to CWC section 13260 to the Regional Water Board applying for Water Recycling Requirements (WRRs) and WDRs and submit an engineering report to the California Department of Public Health (CDPH), 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 separate WRRs. 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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V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the 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 (or above 70°F if the ambient receiving water temperature is less than 60°F) due to the discharge of effluent at the receiving water station located downstream of the discharge 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 the 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 the 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. 30-Day Geometric Mean Limits

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

b. Single Sample Limits

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

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%, and

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

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

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 waters 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 the 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.

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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. Acute Toxicity Receiving Water Quality Objective

a. There shall be no acute 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. The acute toxicity of the receiving water, at monitoring location RSW-002D, located approximately 300 feet downstream of the discharge, shall be such that (i) the average survival in the undiluted receiving water for any three (3) consecutive 96-hour static, static-renewal, or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival. Static-renewal bioassay tests may be used, as allowed by the most current USEPA test method for measuring acute toxicity.

d. If the upstream acute toxicity of the receiving water is greater than the downstream acute toxicity but the effluent acute toxicity is in compliance, acute toxicity accelerated monitoring in the receiving water according to MRP section V.A.2.d does not apply.

24. Chronic Toxicity Receiving Water Quality Objective

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

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

c. If the chronic toxicity in the receiving water at the monitoring station immediately downstream of the discharge, exceeds the monthly median of 1.0 TUc trigger in a critical life stage test and the toxicity cannot be attributed to upstream toxicity, as assessed by the Discharger, then the Discharger shall immediately implement an accelerated chronic toxicity testing according to MRP section V.B.3. If two of the six tests exceed a 1.0 TUc trigger, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Work Plan.

d. If the chronic toxicity of the receiving water upstream of the discharge is greater than the downstream and the TUc of the effluent chronic toxicity test is less than or equal to a monthly median of 1 TUc trigger, then accelerated monitoring need not be implemented.

25. 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 WQOs 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

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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 Discharger 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 CWC.

   b. Odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system due to improper operation of facilities, as determined by the 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 discharger from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the CWA.

   h. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities or penalties to which the discharger is or may be subject to under section 311 of the CWA.

   i. 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.

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

   k. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations

established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the federal CWA and amendments thereto.

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

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

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

o. 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.

p. The Discharger 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.

q. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger 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.

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

s. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

i. Name and general composition of the chemical,

ii. Frequency of use,

iii. Quantities to be used,

iv. Proposed discharge concentrations, and

v. USEPA registration number, if applicable.

t. Violation of any of the provisions of this Order may subject the Discharger to any of the penalties described herein or in Attachment D of this Order, or any

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combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

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

v. The CWC provides that any person who violates a waste discharge requirement or a provision of the CWC is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation, or some combination thereof, depending on the violation, or upon the combination of violations.

w. CWC 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 CWC section 13385(h)(2), a “serious violation” is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR part 123.45 specifies the Group I and II pollutants. Pursuant to CWC section 13385.1(a)(1), a “serious violation” is also defined as “a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.”

x. CWC 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 violations within that time period.

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

z. CWC section 13387(e) provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this order, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained in this order shall be punished by a fine of not more than twenty-five thousand dollars ($25,000), imprisonment pursuant to subdivision (h) of

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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.

aa. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Watershed Regulatory Section Chief at the Regional Water Board by telephone (213) 576-6616, or electronically at dhung@waterboards.ca.gov, or by fax at (213) 576-6660 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing to the 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-4245 to losangeles@waterboards.ca.gov. Other noncompliance requires written notification as above at the time of the normal monitoring report.

bb. 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 watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (CWC section 1211)

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 Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

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

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

d. The Regional Water Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/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 Discharger for an Order modification, revocation and issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

f. This Order may be modified, in accordance with the provisions set forth in 40 CFR parts 122 to 124, to include new minimum levels (MLs).

g. If an applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the 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 revise effluent limitations as a result of future Basin Plan Amendments, such as an update of a water quality objective, or a revision of a TMDL for the Santa Clara River.

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 may be reopened and modified to revise the chronic toxicity effluent limitation and/or total residual chlorine limitations, to the extent necessary, to be consistent with State Water Board precedential decisions, new policies, new laws, or new regulations.

l. 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

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

i. CECs 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 Discharger shall update its existing initial investigation TRE work plan and submit a copy of the revised initial investigation TRE work plan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the work plan within 60 days from the date it was received, the work plan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal), or the most current version, as guidance. At a minimum, the initial investigation TRE work plan must contain the provisions in Attachment G. This work plan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include the following, at a minimum:

i. 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;

ii. A description of the Facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility; and,

iii. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

If the effluent toxicity test result exceeds the 1.0 TUc monthly median trigger, then the Discharger shall immediately implement accelerated toxicity testing that consists of six additional tests, each test done approximately every two weeks, over a 12-week period. Effluent sampling for the first test of the six additional tests shall commence within five days of receipt of the test results exceeding the toxicity trigger.

If the results of any two of the six tests (any two tests in a 12-week period) exceed the limitation, the Discharger shall initiate a TRE.

If results of the implementation of the Facility's initial investigation TRE work plan (as described above) indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE work plan for submittal to the Executive Officer within 15 days of completion of the initial investigation TRE.

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Detailed toxicity testing and reporting requirements are contained in section V of the MRP.

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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; and,

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

This requirement is applicable 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.

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 Ranch SD 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.

b. Spill Clean-up Contingency Plan (SCCP)

Within 90 days, the Discharger 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 Discharger's collection system or treatment facilities that reach water bodies, including dry channels and beach sands. At a minimum, the plan shall include sections on spill clean-up and containment measures, public notification, and monitoring. The Discharger shall review and amend the plan as appropriate after each spill from the Facility or in the service area of the Facility. The Discharger shall include a discussion in the annual summary report of any modifications to the Plan and the application of the Plan to all spills during the year.

c. Pollutant Minimization Program (PMP)

Reporting protocols in MRP section 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 Minimum Level (ML) and Method Detection Limit (MDL) are provided in Attachment A. These reporting protocols and definitions are used in determining the need to conduct a PMP as follows:

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

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

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

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 CWC section 13263.3(d), shall be considered to fulfill the PMP requirements.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the 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; and

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

(1). All PMP monitoring results for the previous year;

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

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

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

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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 the California Code of Regulations(CCR), title 23, division 3, chapter 26 (CWC sections 13625 – 13633).

b. The Discharger shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, 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 Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur.

5. Special Provisions for Municipal Facilities [Publicly Owned Treatment Works (POTWs) Only]

a. Sludge Disposal Requirements (NOT APPLICABLE)

i. All sludge 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.

ii. The Discharger shall ensure compliance with the requirements in State Water Board Order No. 2004-10-DWQ, General WDRs for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities for those sites receiving the Discharger's biosolids which a Regional Water Board has placed under this general order, and with the requirements in individual WDRs issued by a Regional Water Board for sites receiving the Discharger's biosolids.

iii. The Discharger shall comply, if applicable, with WDRs issued by other Regional Water Boards to which jurisdiction the biosolids are transported and applied.

iv. The Discharger shall furnish this Regional Water Board with a copy of any report submitted to USEPA, the State Water Board or other Regional Water Board, with respect to municipal sludge or biosolids.

v. The Discharger shall assure that haulers transporting sludge off site for treatment, storage, use, or disposal take all necessary measures to keep the sludge contained. The Discharger shall maintain and have haulers adhere to a spill clean-up plan. Any spills shall be reported to USEPA and the Regional Water Board or state agency in which the spill occurred. All trucks hauling sludge shall be thoroughly washed after unloading at the field or at the receiving facility.

b. Pretreatment Requirements (NOT APPLICABLE)

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, under the conditions specified below, the Discharger will be required to develop a Pretreatment Program to implement it and to enforce it, in its entire service area.

ii. Applications for renewal or modification of this Order must contain information about industrial discharges to the POTW pursuant to 40 CFR 122.21(j)(6). Pursuant to 40 CFR 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 122.44(j)(1), the Discharger 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 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.

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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 semiannual and 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 and semiannual reports shall contain, but not be limited to, the information required in the attached *Pretreatment Reporting Requirements* (**Attachment J**), 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 CWC.

c. Collection System Requirements

i. The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (40 CFR part 122.41I). The Discharger 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.

6. Spill Reporting Requirements

a. Initial Notification

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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 Discharger shall make notifications as required below:

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

ii. In accordance with the requirements of CWC section 13271, the Discharger shall provide notification to the California Emergency Management Agency (Cal EMA) of the release of reportable amounts of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but not later than two hours after becoming aware of the release. The CCR, Title 23, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting these releases to the Cal EMA is (800) 852-7550.

iii. The Discharger 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 Discharger has notified Cal EMA 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:

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

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

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

(4). If ongoing, the estimated flow rate of the release at the time of the notification; and,

(5). 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 Discharger shall monitor as required below:

i. To define the geographical extent of the spill's impact, the Discharger shall obtain grab samples (if feasible, accessible, and safe) for all spills,

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overflows or bypasses of any volume that reach any waters of the state (including surface and ground waters). The Discharger shall analyze the samples for total coliform, E. coli, enterococcus, and 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 authorizes cessation of monitoring.

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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 Discharger shall submit a statement to the Regional Water Board by email at aanijielo@waterboards.ca.gov . If the discharge is 1,000 gallons or more, this statement shall certify that Cal EMA has been notified of the discharge in accordance with CWC section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:

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

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

(3). The water body that received the discharge;

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

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

(6). The Cal EMA control number and the date and time that notification of the incident was provided to Cal EMA; and,

(7). 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 Discharger 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

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proposed to be implemented to prevent/minimize future occurrences. The Executive Officer for just cause can grant an extension for submittal of the final written report.

iii. The Discharger shall include a certification in the annual summary report (due according to the schedule in the MRP) that states that the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components were maintained and tested in accordance with the Discharger's preventive maintenance plan. Any deviations from or modifications to the plan shall be discussed.

d. Records

The Discharger shall develop and maintain a record of all spills, overflows or bypasses of raw or partially treated sewage from its collection system or treatment plant. This record shall be made available to the 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; and,

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

e. Activities Coordination

In addition, Regional Water Board expects that the POTW owners/operators will coordinate their compliance activities for consistency and efficiency with other entities that have responsibilities to implement: (i) this NPDES permit, including the Pretreatment Program; (ii) a Municipal Separate Storm Sewer System (MS4) NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements; and, (iii) the SSO WDR.

f. Consistency with SSO WDRs

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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 (U.S.C.) 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 Discharger's collection system is part of the POTW that is subject to this NPDES permit. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR 122.41 (e)), report any non-compliance (40 CFR 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR 122.41(d)).

The requirements contained in this Order in sections 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

g. The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur.

7. Compliance Schedules

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 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).

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. In those cases, the Discharger 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 Discharger may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger may be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to the AMEL.

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

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

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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.

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D. Average Weekly Effluent Limitation (AWEL)

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

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

E. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for that parameter for that one day only within the reporting period. For any one day during which no sample is taken, no compliance determination can be made for that day with respect to the MDEL.

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

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

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

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

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I. 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:

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

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

J. 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.

K. Compliance with single constituent effluent limitations

Dischargers 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.

L. Compliance with effluent limitations expressed as a sum of several constituents

Dischargers 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.

M. Mass Emission Rate

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

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

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

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

and 'Qi' is the average flow rate occurring during the period over which samples are composited.

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

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

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

N. Bacterial Standards and Analysis

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

$$\text{Geometric Mean} = (C_1 \times C_2 \times \ldots \times C_3)^{1/n}$$

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.

2. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for enterococcus). The detection methods used for each analysis shall be reported with the results of the analyses.

3. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR part 136, unless alternate methods have been approved by USEPA pursuant to 40 CFR part 136, or improved methods have been determined by the Executive Officer and/or USEPA.

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

O. 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 Discharger'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 Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in Provision V.E.2(b) of Attachment D – Standard Provisions.

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

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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.

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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 waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
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 CWC 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 in 40 CFR part 136, Attachment B, revised as of May 18, 2012, or most recent revision.

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 water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The 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 CWC section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention

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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 CWC 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 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:

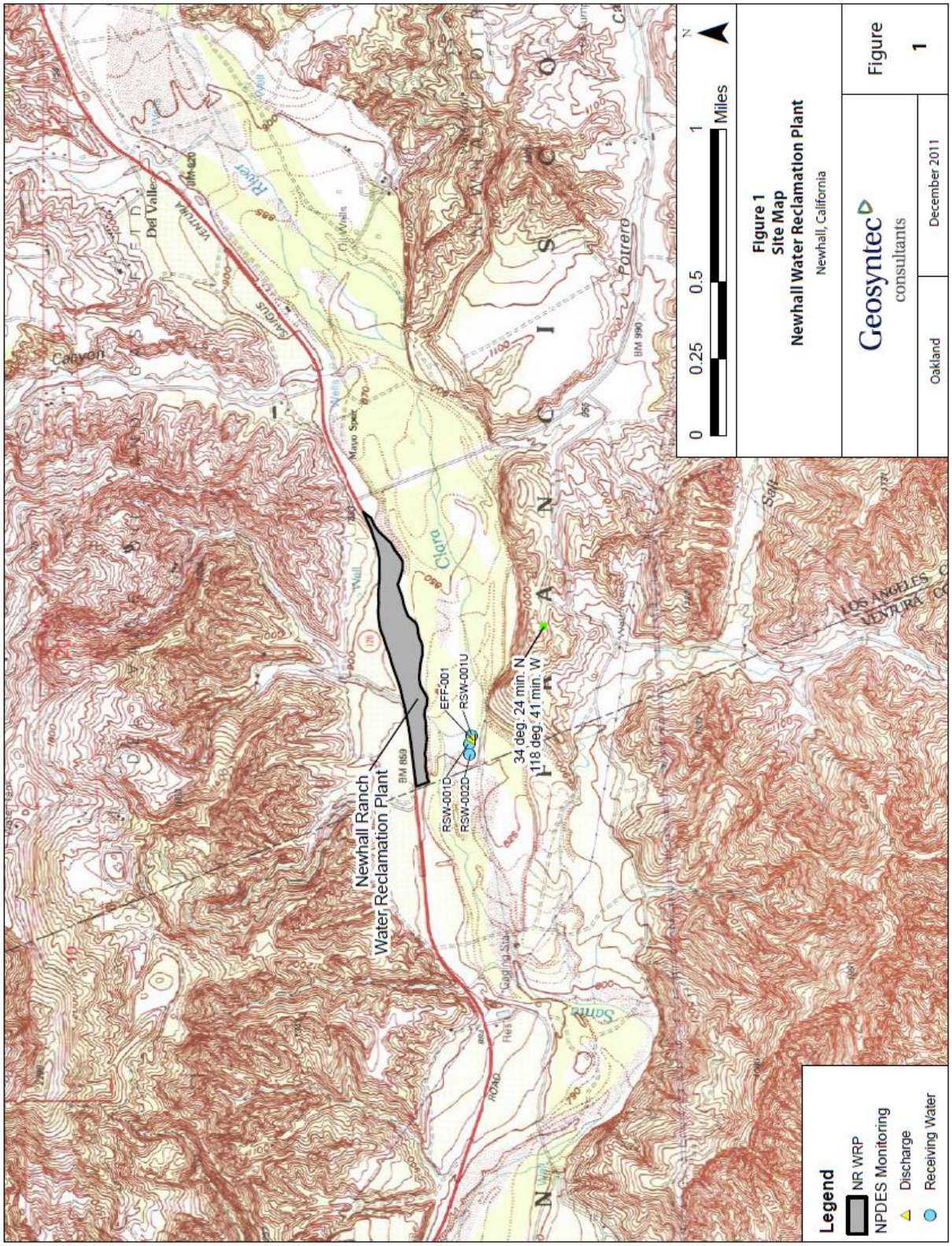
$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

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

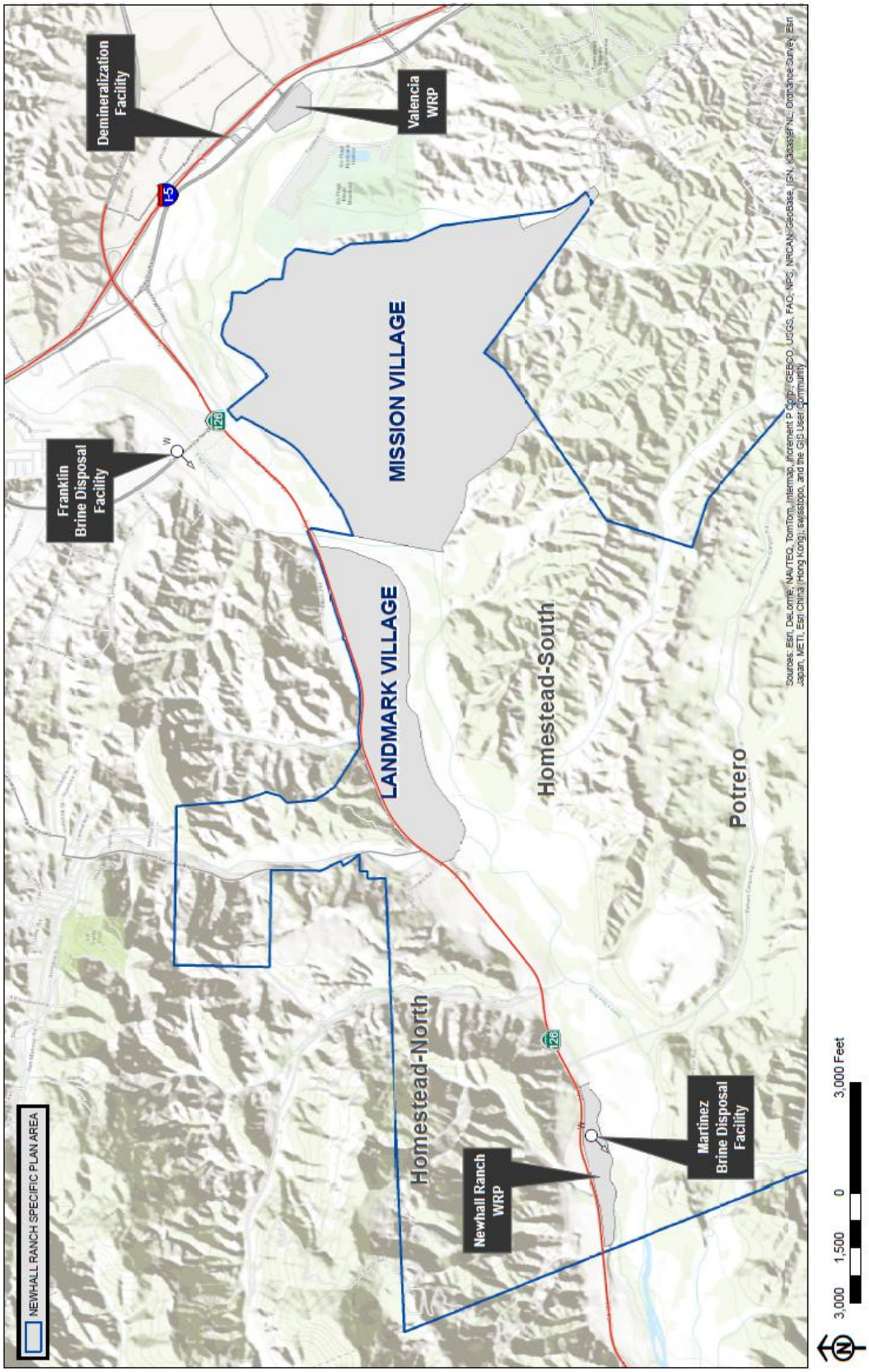
Toxicity Reduction Evaluation (TRE)
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first 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

TENTATIVE



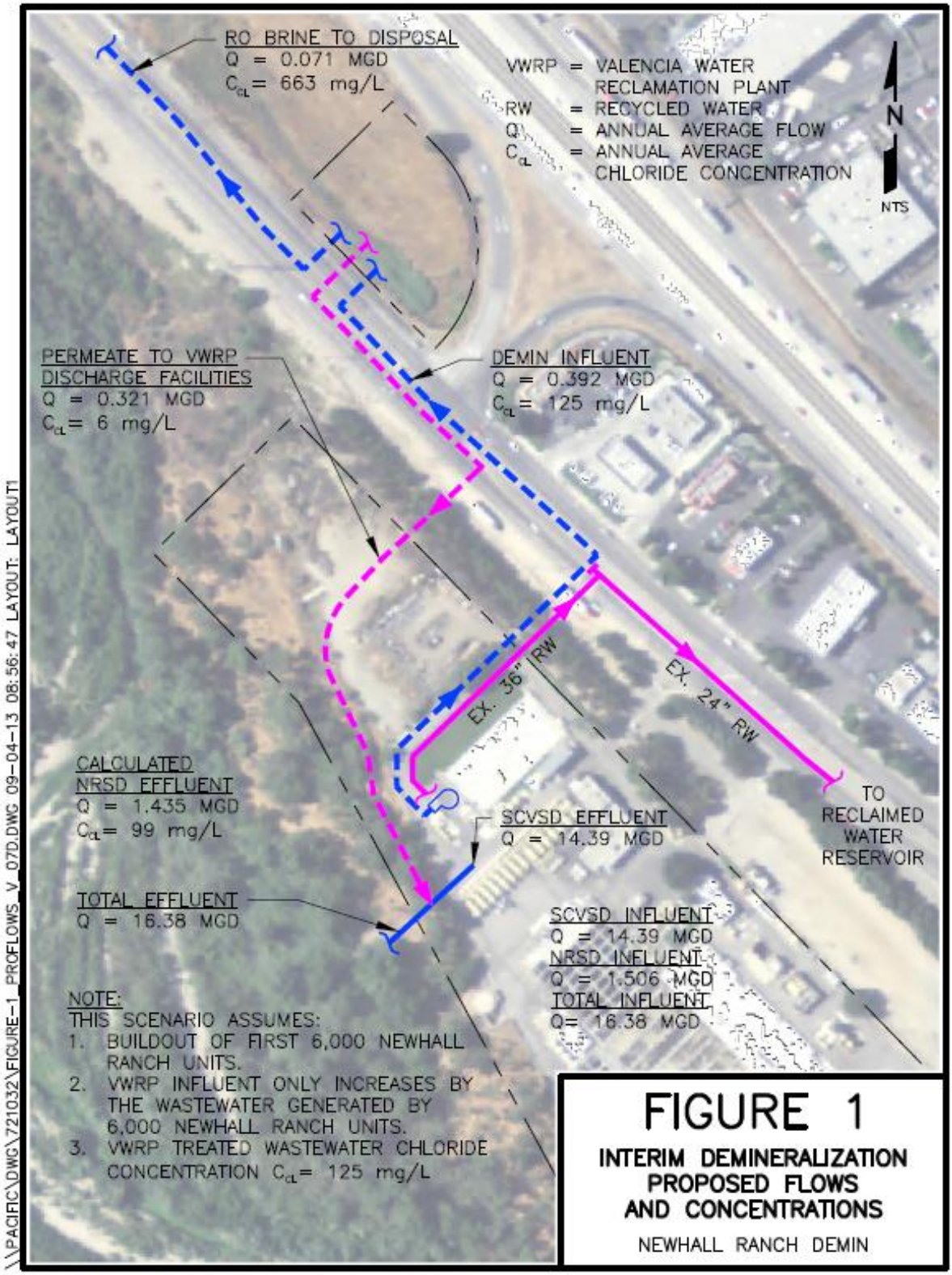
ATTACHMENT B2 – Location of Interim Chloride Demineralization Facility



TENTATIVE

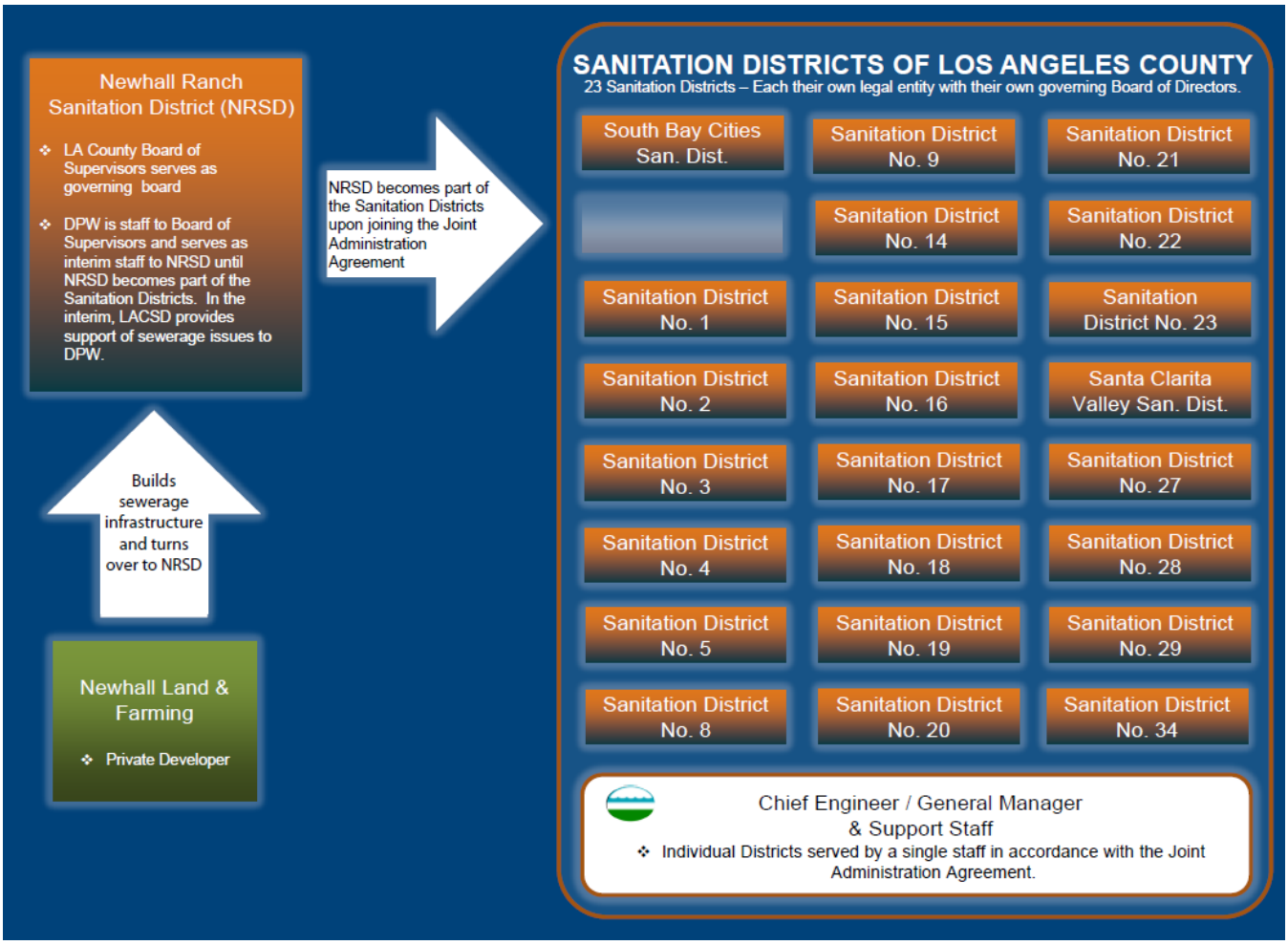
ATTACHMENT B3 – Proposed Flows for Interim Demineralization Facility

TENTATIVE



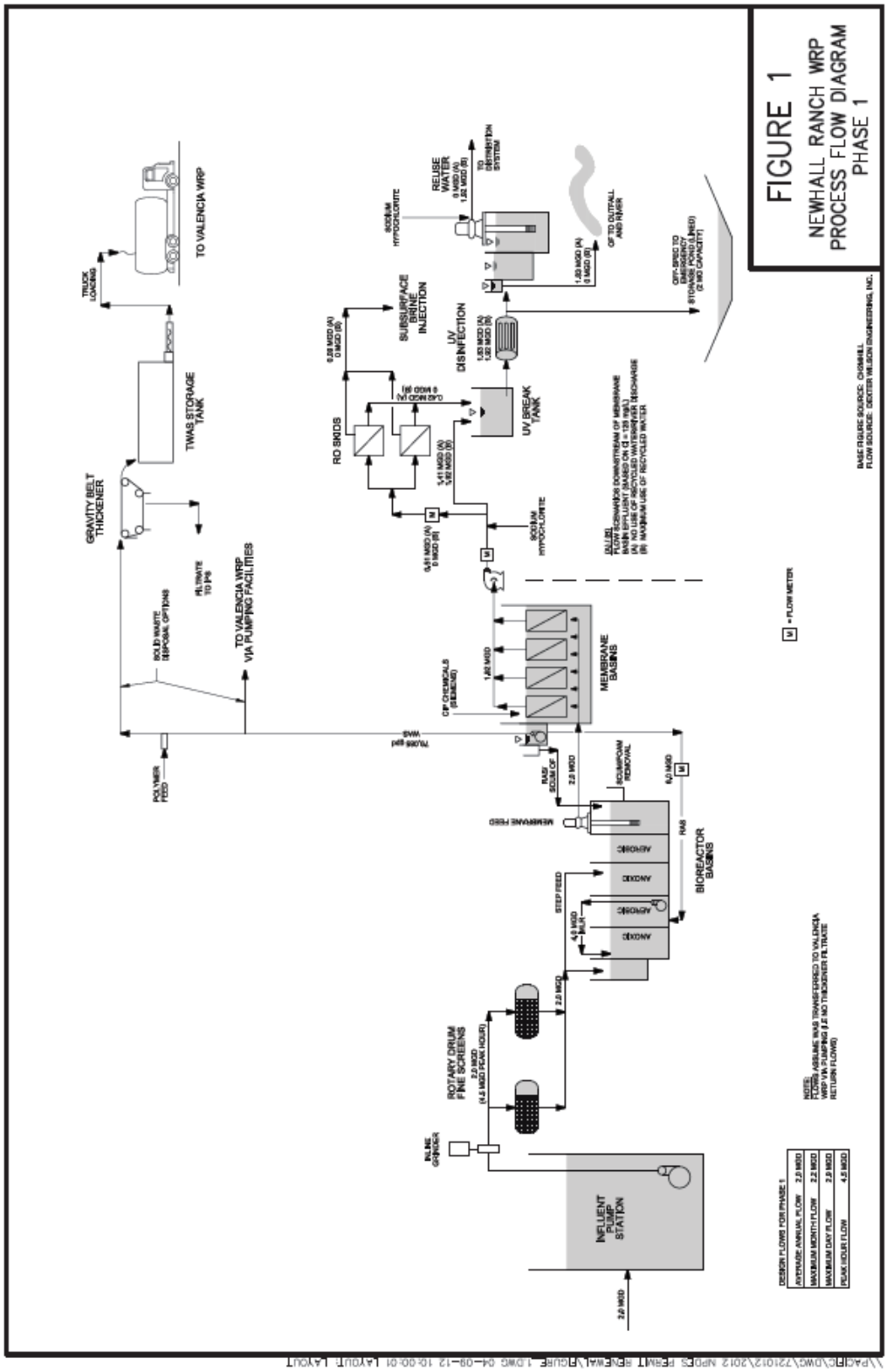
ATTACHMENT B4- Joint Administrative Agreement Structure

TENTATIVE



ATTACHMENT C – FLOW SCHEMATIC FOR NEWHALL RANCH WRP

TENTATIVE



TENTATIVE

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR part 122.41(a).)

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 part 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 part 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR part 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 part 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 (40 CFR part 122.41(i); Wat. Code, section 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 (40 CFR part 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR part 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR part 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location. (40 CFR part 122.41(i)(4).)

G. Bypass

1. Definitions
   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR part 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 part 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 part 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 part 122.41(m)(4)(i)):
   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR part 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 part 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 part 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 part 122.41(m)(4)(ii).)

TENTATIVE

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR part 122.41(m)(3)(i).)

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR part 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 part 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 part 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 part 122.41(n)(3)):

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

b. The permitted facility was, at the time, being properly operated (40 CFR part 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 part 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 part 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 part 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 part 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 part 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 CWC. (40 CFR part 122.41(l)(3); part 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 part 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503 unless other test procedures have been specified in this Order. (40 CFR part 122.41(j)(4); part 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 CFR part 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR part 122.41(j)(3)(i));

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

3. The date(s) analyses were performed (40 CFR part 122.41(j)(3)(i ii));

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

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

6. The results of such analyses. (40 CFR part 122.41(j)(3)(vi).)

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

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

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

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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 part 122.41(h); Wat. Code, section 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR part 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 U.S. EPA). (40 CFR part 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 part 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 part 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR part 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 part 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:

"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 part 122.22(d).)

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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 part 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 results of monitoring of sludge use or disposal practices. (40 CFR part 122.41(l)(4)(i).)

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 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. (40 CFR part 122.41(l)(4)(ii).)

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

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 part 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that 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 written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission 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. (40 CFR part 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR part 122.41(l)(6)(ii)):

a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR part 122.41(l)(6)(ii)(A).)

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

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

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 part 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 part 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 subject neither to effluent limitations in this Order nor to notification requirements under part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 CFR part 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 part 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 CFR part 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. (40 CFR part 122.41(l)(7).)

I. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 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

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402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two years, or both. Any person who *knowingly* violates such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions (40 CFR 122.41(a)(2)).

C. Any person may be assessed an administrative penalty by the Administrator 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)).

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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 part 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 part 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 part 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 part 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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

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Title 40 of the Code of Federal Regulations (40 CFR) part 122.48 requires that all NPDES permits specify monitoring and reporting requirements. California Water Code (CWC) sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement federal and California 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 January, April, July, and October. Semiannual analyses shall be performed during the months of January and July. Annual analyses shall be performed during the month of July (except for bioassessment monitoring, which will be conducted in the spring/summer; and algal biomass, which will be conducted concurrently with the bioassessment monitoring). Biennial analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Discharger 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 quarterly, semiannual, and annual analyses shall be reported in the monthly monitoring report for the month in which the sample was collected.

B. Pollutants shall be analyzed using the analytical methods described in 40 CFR parts 136.3, 136.4, and 136.5; or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health (CDPH) Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided in the Annual Report due to the Regional Water Board each time a new certification and/or renewal of the certification is obtained from ELAP.

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

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

E. 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.

F. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the CDPH or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this Monitoring and Reporting Program."

G. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), and the Reporting Level (RL) [the applicable minimum level (ML) or reported Minimum Level (RML)] for each pollutant. The MLs are those published by the State Water Resources Control Board (State Water Board) in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, (State Implementation Policy or SIP),* February 9, 2005, Appendix 4. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the reported ML.

H. The Discharger shall select the analytical method that provides a ML lower than the permit limit established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR part 136, and obtains approval for a higher ML from the Executive Officer, as provided for in section J, below. If the effluent limitation is lower than all the MLs in Appendix 4, SIP, the Discharge must select the method with the lowest ML for compliance purposes. The Discharger shall include in the Annual Summary Report a list of the analytical methods employed for each test.

I. The Discharger shall instruct its laboratories to establish calibration standards so that the ML (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. In accordance with section J, below, the Discharger's laboratory may employ a calibration standard lower than the ML in Appendix 4 of the SIP.

J. 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 discharger's permit in any of the following situations:

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

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

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

5. When the Discharger uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are USEPA-approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the discharger, the 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.

K. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this MRP using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with limitations set forth in this Order.

L. The Discharger shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the WDR section of this Order. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the annual summary report.

M. For all bacteriological analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for *enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.

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

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II. MONITORING LOCATIONS

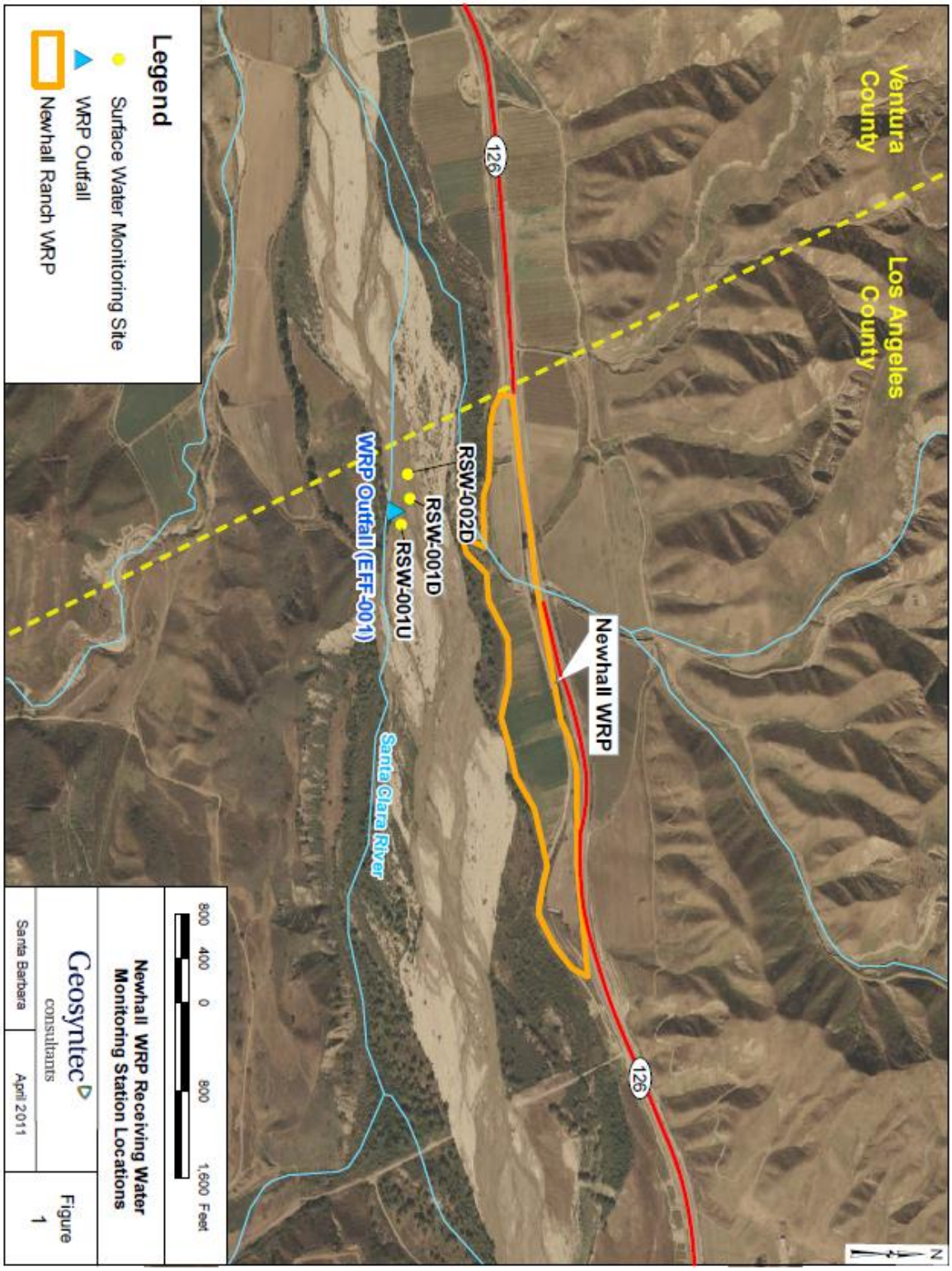
The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

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 inplant 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'
Receiving Water Monitoring Stations		
--	RSW-001U	Santa Clara River, approximately 100 feet upstream of Discharge Point 001.
--	RSW-002D	Santa Clara River, approximately 300 feet downstream of the Newhall Ranch WRP Discharge Point 001
Groundwater Monitoring Station		
--	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 1 are approximate for administrative purposes.

Newhall Ranch WRP Receiving Water Stations



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III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to:

- Determine compliance with NPDES permit conditions.
- Assess treatment plant performance.
- Assess effectiveness of the Pretreatment Program

A. Monitoring Location INF-001

1. 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	24-hour composite	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]
Antimony	µg/L	24-hour composite	monthly	[2]
Arsenic	µg/L	24-hour composite	monthly	[2]
Cadmium	µg/L	24-hour composite	quarterly	[2]
Chromium III	µg/L	grab	quarterly	[2]
Chromium VI	µg/L	grab	quarterly	[2]
Copper	µg/L	24-hour composite	monthly	[2]
Lead	µg/L	24-hour composite	monthly	[2]
Mercury	µg/L	24-hour composite	monthly	[2]
Nickel	µg/L	24-hour composite	monthly	[2]
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	monthly	[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, by methods 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.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Cyanide	µg/L	grab	monthly	[2]
Acrylonitrile	µg/L	grab	monthly	[2]
Tetrachloroethylene	µg/L	grab	monthly	[2]
Dibromochloromethane	µg/L	grab	semiannually	[2]
Bis(2-ethylhexyl)phthalate	µg/L	grab	monthly	[2]
p-Dichlorobenzene	µg/L	grab	monthly	[2]
Lindane (gamma-BHC)	µg/L	grab	monthly	[2]
4,4-DDE	µg/L	grab	monthly	[2]
Total trihalomethanes	µg/L	grab	semiannually	[2]
Iron	µg/L	24-hour composite	monthly	[2]
Hardness	mg/L	24-hour composite	monthly	[2]
Remaining EPA priority pollutants[3] excluding asbestos	µg/L	24-hour composite/grab for VOCs, and dichlorobenzenes	semiannually	[2]

TENTATIVE

Influent monitoring must be performed upon plant start-up.

IV. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

- Determine compliance with National Pollutant Discharge Elimination System (NPDES) permit conditions and water quality standards.
- Assess plant performance, identify operational problems and improve plant performance.
- Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.
- Determine reasonable potential analysis for toxic pollutants.

A. Monitoring Location EFF-001

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

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Total waste flow	mgd	recorder	continuous[4]	[5]

[3] 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.

[4] Where continuous monitoring of a constituent is required, the following shall be reported:
Total waste flow – Total daily and peak daily flow (24-hour basis);

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Turbidity	NTU	recorder	continuous[4]	[5]
Total residual chlorine	mg/L	grab	daily[6]	[5]
Total coliform	MPN/100mL or CFU/100mL	grab	daily[7]	[5]
Fecal coliform	MPN/100mL or CFU/100mL	grab	daily[8]	[5]
E. coli	MPN/100mL or CFU/100mL	grab	daily[8]	[5]
Temperature[9]	°F	grab	daily[7]	[5]
pH [9]	pH units	grab	daily[7]	[5]
Settleable solids	mL/L	grab	weekly	[5]
TSS	mg/L	24-hour composite	weekly	[5]
BOD_5 20°C	mg/L	24-hour composite	weekly	[5]
Oil and grease	mg/L	grab	monthly	[5]
Dissolved oxygen	mg/L	grab	monthly	[5]
Total Dissolved Solids	mg/L	24-hour composite	monthly	[5]
Sulfate	mg/L	24-hour composite	monthly	[5]
Chloride	mg/L	24-hour composite	monthly	[5]
Boron	mg/L	24-hour composite	monthly	[5]
Ammonia Nitrogen[9]	mg/L	24-hour composite	weekly	[5]
Nitrite nitrogen	mg/L	24-hour composite	weekly	[5]
Nitrate nitrogen	mg/L	24-hour composite	weekly	[5]
Organic nitrogen	mg/L	24-hour composite	weekly	[5]
Total nitrogen	mg/L	24-hour composite	weekly	[5]

TENTATIVE

Turbidity – maximum daily value, total amount of time each day the turbidity exceeded five turbidity units, flow-proportioned average daily value. Grab sample can be used to determine compliance with the 10 NTU limit.

[5] Pollutants shall be analyzed using the analytical methods described in 40 CFR 136; where no methods are specified for a given pollutant, by methods approved by this 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 Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

[6] When chlorination is used, daily grab samples shall be collected during peak flow 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.A.2. shall be followed.

[7] Daily samples shall be collected Monday through Friday, except for holidays.

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

[9] Temperature, pH, nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, and organic nitrogen shall be conducted concurrently.

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Total phosphorous	mg/L	24-hour composite	weekly	[5]
Orthosphosphate-P	mg/L	24-hour composite	monthly	[5]
Surfactants (MBAS)	mg/L	24-hour composite	monthly	[5]
Surfactants (CTAS)	mg/L	24-hour composite	monthly	[5]
Total hardness ($CaCO_3$)	mg/L	24-hour composite	weekly	[5]
Acute toxicity	% survival	24-hour composite	quarterly	[5]
Chronic toxicity	TUc	24-hour composite	monthly	[5]
Chronic toxicity (narrative effluent limit reporting)[10]	Passed / Triggered	24-hour composite	monthly	[5]
Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium)	pCi/L	24-hour composite	semiannually	[11]
Antimony	µg/L	24-hour composite	monthly	[5]
Arsenic	µg/L	24-hour composite	monthly	[5]
Beryllium	µg/L	24-hour composite	semiannually	[5]
Cadmium	µg/L	24-hour composite	quarterly	[5]
Chromium III	µg/L	grab	quarterly	[5]
Chromium VI	µg/L	grab	quarterly	[5]
Copper	µg/L	24-hour composite	monthly	[5]
Lead	µg/L	24-hour composite	monthly	[5]
Mercury	µg/L	24-hour composite	monthly	[5]
Nickel	µg/L	24-hour composite	monthly	[5]
Selenium	µg/L	24-hour composite	monthly	[5]
Silver	µg/L	24-hour composite	quarterly	[5]
Thallium	µg/L	24-hour composite	quarterly	[5]
Zinc	µg/L	24-hour composite	monthly	[5]
Cyanide	µg/L	grab	monthly	[5]
Iron	µg/L	24-hour composite	monthly	[5]
Aluminum	µg/L	24-hour composite	quarterly	[5]
Total trihalomethanes	µg/L	grab	quarterly	[5]
Manganese	µg/L	24-hour composite	quarterly	[5]
p-dichlorobenzene	µg/L	24-hour composite	monthly	[5]

[10] For narrative chronic toxicity effluent limit reporting, "Passed" is reported when chronic toxicity effluent results do not trigger accelerated testing by exceeding the monthly median trigger of 1.0 TU_c = 100/NOEC. "Triggered" is reported when chronic toxicity effluent results trigger accelerated testing by exceeding the monthly median trigger of 1.0 TU_c = 100/NOEC.

[11] 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.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Bis(2-Ethylhexyl) Phthalate	µg/L	24-hour composite	monthly	[5]
Acrylonitrile	µg/L	24-hour composite	monthly	[5]
Lindane (gamma-BHC)	µg/L	24-hour composite	monthly	[5]
4,4-DDE	µg/L	24-hour composite	monthly	[5]
2,3,7,8-TCDD[12]	pg/L	24-hour composite	semiannually	[5]
Perchlorate	µg/L	grab	semiannually	[13]
1,4-Dioxane	µg/L	grab	semiannually	[13]
1,2,3-Trichloropropane	µg/L	grab	semiannually	[13]
Methyl tert-butyl-ether (MTBE)	µg/L	grab	semiannually	[13]
Remaining EPA priority pollutants[14] excluding asbestos	µg/L	24-hour composite; grab for VOCs	semiannually	[5]

TENTATIVE

Effluent monitoring shall start on the day of plant start-up.

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-001A 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.

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[12] In accordance with the SIP, the Discharger shall conduct effluent 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-003, located upstream of the 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:

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

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

[14] 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.

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.

TENTATIVE

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Acute Toxicity

1. Definition of Acute Toxicity

Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) effluent.

a. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static renewal bioassay tests shall be at least 90%, and

b. No single test shall produce less than 70% survival.

2. Acute Toxicity Effluent Monitoring Program

a. **Method.** The Discharger shall conduct acute toxicity tests on 24-hr composite 100% effluent and receiving water grab samples by methods specified in 40 CFR part 136, which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October, 2002 (EPA-821-R-02-012) or a more recent edition to ensure compliance.

b. **Test Species.** The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges.

c. **Alternate Reporting.** In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test, but only if the Discharger uses USEPA's October 2002 protocol (EPA-821-R-02-013) and fathead minnow is used to conduct the chronic toxicity test.

d. **Acute Toxicity Accelerated Monitoring.** If either of the effluent or receiving water acute toxicity requirements in section IV.A.3.g.i.(1)and (2), and section V.A.25.c., respectively, of this Order is not met, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that results of a failing acute toxicity test are received by the Discharger within 24 hours of completion of the test and the additional tests shall begin within five business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing.

However, if the extent of the acute toxicity of the receiving water upstream of the discharge is greater than the downstream and the results of the effluent acute toxicity test comply with acute toxicity limitation, the accelerated monitoring need not be implemented for the receiving water.

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e. **Toxicity Identification Evaluation (TIE).**

1. If the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a TIE. The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

2. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately implement Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan. Once the sources are identified the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.

B. Chronic Toxicity

1. Definition of Chronic Toxicity

Chronic toxicity is a measure of adverse sub-lethal effects in plants, animals, or invertebrates in a long-term test. The effects measured may include lethality or decreases in fertilization, growth, and reproduction.

2. Chronic Toxicity Effluent Monitoring Program

a. Test Methods. The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100% effluent samples and receiving water grab samples in accordance with EPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, October 2002 (EPA-821-R-02-013). The Discharger shall conduct static renewal tests in accordance with the 2002 freshwater chronic methods manual for water flea and fathead minnow. For *Selenastrum*, use a static non-renewal test protocol.

b. Frequency

1. **Screening and Monitoring**. - The Discharger shall conduct the first chronic toxicity test screening for three consecutive months in the first year of operation. The Discharger shall conduct short-term tests with the cladoceran, water flea (*Ceriodaphnia dubia* - survival and reproduction test), the fathead minnow (*Pimephales promelas* - larval survival and growth test), and the green alga (*Selenastrum capricornutum* - growth test) as an initial screening process for a minimum of three, but not to exceed, five suites of tests to account for potential variability of the effluent/receiving water. After this screening period, monitoring shall be conducted using the most sensitive species.

2. **Re-screening** is required every 24 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is uncertainty as to whether the same species is still the most sensitive based on the test results, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

3. **Regular toxicity tests** - After the screening period, monitoring shall be conducted monthly using the most sensitive species.

c. Toxicity Units. The chronic toxicity of the effluent shall be expressed and reported in Chronic Toxic Units, TUc, where,

$$TUc = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

3. Accelerated Monitoring

If the chronic toxicity of the effluent or the receiving water downstream the discharge exceeds the monthly trigger median of 1.0 TU_c, the Discharger shall conduct six additional tests of the water source that exceeded the 1.0 TUc trigger (effluent or downstream receiving water), approximately every two weeks, over a 12-week period. The Discharger shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the completion of the test and the additional tests shall begin within five business days of the receipt of the result. However, if the chronic toxicity of the receiving water upstream of the discharge is greater than the downstream and the TUc of the effluent chronic toxicity test is less than or equal to a monthly median of 1 TU_c trigger, then accelerated monitoring need not be implemented for the receiving water.

a. If any three out of the initial test and the six additional tests results exceed 1.0 TU_c the Discharger shall immediately implement the Initial Investigation TRE work plan. Otherwise, the Discharger may return to normal sampling.

b. If implementation of the initial investigation TRE work plan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the normal sampling frequency required in Table E-3 and Table E-4 of this MRP.

c. If all of the six additional tests required above do not exceed 1 TUc, then the Discharger may return to the normal sampling frequency.

d. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

C. Quality Assurance

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).

2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manual (EPA-821-R-02-012 and/or EPA-821-R-02-013), then the Discharger must re-sample and re-test within 14 days.

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3. Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

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D. Preparation of an Initial Investigation TRE Work Plan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE work plan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the work plan within 60 days, the work plan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the TRE Work Plan must contain the provisions in Attachment G. This work plan shall describe the steps that the Discharger intends to follow if toxicity is detected. At minimum, the work plan shall include:

1. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

2. A description of the Facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility; and,

3. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP section V.E.3. for guidance manuals.

E. Steps in TRE and TIE

1. If results of the implementation of the Facility's initial investigation TRE work plan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE work plan for submittal to the Executive Officer within 15 days of completion of the initial investigation TRE. The detailed work plan shall include, but not be limited to:

a. Further actions to investigate and identify the cause of toxicity;

b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and

c. A schedule for these actions.

2. The following section summarizes the stepwise approach used in conducting the TRE:

a. Step 1 includes basic data collection.

b. Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and selection and use of in-plant process chemicals.

c. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity.

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d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options.

e. Step 5 evaluates in-plant treatment options.

f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the Facility's TRE work plan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity violations.

3. The Discharger shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/6-91/003 (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.

4. If a TRE/TIE is initiated prior to completion of the accelerated testing required in section V.D. of this program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance, if appropriate.

6. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

a. If all the results of the six additional tests are in compliance with the chronic toxicity limitation, the Discharger may resume regular monthly testing.

b. If the results of any of the six accelerated tests exceeds the limitation, the Discharger shall continue to monitor weekly until six consecutive weekly tests are in compliance. At that time, the Discharger may resume regular monthly testing.

c. If the results of two of the six tests exceed the $1TU_C$ trigger, the Discharger shall initiate a TRE.

d. If implementation of the initial investigation TRE work plan (see item D.3, above) indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the regular testing frequency.

F. Ammonia Removal

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

G. Reporting

The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month, as required by this permit. Test results shall be reported in Acute Toxicity Units (% Survival) or Chronic Toxicity Units (TUc), as required, with the self-monitoring report (SMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to sections V.A.2.d. and V.B.3., then those results also shall be submitted with the SMR for the period in which the Investigation occurred.

1. The full report shall be received by the Regional Water Board by the 15th day of the third month following sampling.

2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the toxicity limit; and, (4) printout of the toxicity program (ToxCalc or CETIS).

3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test, as appropriate:

   a. sample date(s)

   b. test initiation date

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c. test species

d. end point value(s) for each dilution (e.g. number of young, growth rate, percent survival)

e. NOEC values in percent effluent

f. TUc value(s), where $TU_c = \frac{100}{NOEC}$

g. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable)

h. NOEC and LOEC (Lowest Observable Effect Concentration) values for reference toxicant test(s)

i. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).

4. The Discharger shall provide a compliance summary that includes a summary table of toxicity data from at least eleven of the most recent samples.

5. The Discharger shall notify this Regional Water Board immediately of any toxicity exceedance and in writing 14 days after the receipt of the results of an effluent limit. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. LAND DISCHARGE MONITORING REQUIREMENTS (NOT APPLICABLE)

VII. RECYCLING MONITORING REQUIREMENTS (NOT APPLICABLE)

The production, distribution, and use of reclaimed water will be regulated under separate Water Reclamation Requirements (WRRs).

VIII. RECEIVING WATER MONITORING REQUIREMENTS

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

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

Table E-4a. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total flow	cfs	calculation	monthly	--

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity	NTU	grab	monthly	[15]
Temperature[16]	°F	grab	monthy	[15]
pH [16]	pH units	grab	monthly	[15]
E.Coli	MPN/100ml or CFU/100ml	grab	monthly	[15]
Total residual chlorine	mg/L	grab	monthly[17]	[15]
Settleable solids	mL/L	grab	quarterly	[15]
TSS	mg/L	grab	quarterly	[15]
BOD_5 20°C	mg/L	grab	quarterly	[15]
Total organic carbon	mg/L	grab	quarterly	[15]
Oil and grease	mg/L	grab	quarterly	[15]
Dissolved oxygen	mg/L	grab	quarterly	[15]
Total Hardness ($CaCO_3$)	mg/L	grab	monthly[18]	[15]
Conductivity	μmhos/cm	grab	quarterly	[15]
Total Dissolved Solids	mg/L	grab	quarterly	[15]
Sulfate	mg/L	grab	quarterly	[15]
Chloride	mg/L	grab	monthly	[15]
Boron	mg/L	grab	quarterly	[15]
Chronic toxicity	TUc	grab	quarterly	[15]
Acute toxicity	% Survival	grab	quarterly	[15]
Nitrate nitrogen	mg/L	grab	monthly	[15]
Nitrite nitrogen	mg/L	grab	monthly	[15]
Ammonia nitrogen[16]	mg/L	grab	monthly	[15]
Organic nitrogen	mg/L	grab	monthly	[15]
Total nitrogen	mg/L	grab	monthly	[15]
Total kjeldahl nitrogen (TKN)	mg/L	grab	monthly	[15]
Total phosphorus	mg/L	grab	monthly	[15]
Orthosphosphate-p	mg/L	grab	monthly	[15]
Algal biomass (Chlorophyll a)[19]	mg/L	grab	annually	[15]
Surfactants (MBAS)	mg/L	grab	quarterly	[15]

[15] 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 MLs specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

[16] Temperature, pH, nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, and organic nitrogen shall be conducted concurrently.

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

[18] Total hardness shall be sampled at station RSW-003 only.

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

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Surfactants (CTAS)	mg/L	grab	quarterly	[15]
Antimony	µg/L	grab	quarterly	[15]
Arsenic	µg/L	grab	quarterly	[15]
Cadmium	µg/L	grab	semiannually	[15]
Copper	µg/L	grab	quarterly	[15]
Lead	µg/L	grab	quarterly	[15]
Mercury	µg/L	grab	quarterly	[15]
Nickel	µg/L	grab	quarterly	[15]
Selenium	µg/L	grab	quarterly	[15]
Zinc	µg/L	grab	quarterly	[15]
Cyanide	µg/L	grab	quarterly	[15]
Acrylonitrile	µg/L	grab	quarterly	[15]
Tetrachloroethylene	µg/L	grab	quarterly	[15]
Bis(2-Ethylhexyl)Phthalate	µg/L	grab	quarterly	[15]
P-Dichlorobenzene	µg/L	grab	quarterly	[15]
Lindane (gamma-BHC)	µg/L	grab	quarterly	[15]
4,4-DDE	µg/L	grab	quarterly	[15]
Total trihalomethanes	µg/L	grab	quarterly	[15]
Aluminum	µg/L	grab	quarterly	[15]
Iron	µg/L	grab	quarterly	[15]
Manganese	µg/L	grab	quarterly	[15]
Beryllium	µg/L	grab	semiannually	[15]
Chromium III	µg/L	calculation	semiannually	[15]
Chromium VI	µg/L	grab	semiannually	[15]
Total Chromium	µg/L	grab	semiannually	[15]
Silver	µg/L	grab	semiannually	[15]
Thallium	µg/L	grab	semiannually	[15]
Fluoride	mg/L	grab	semiannually	[15]
2,3,7,8-TCDD[20]	µg/L	grab	semiannually	[15]
1,4-Dioxane	µg/L	grab	annually	[21]
Perchlorate	µg/L	grab	annually	[21]

[20] In accordance with the SIP, the Discharger shall conduct effluent 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 TEF to determine TEQ. Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding 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:

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

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
1,2,3-Trichloropropane	µg/L	grab	annually	[21]
Methyl tert-butyl-ether (MTBE)	µg/L	grab	annually	[21]
Remaining EPA priority pollutants[22] excluding asbestos	µg/L	grab	semiannually	[15]

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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 constituent, are required to be collected to evaluate potential seasonal differences in the receiving water.

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

i. Measurement of flow;
ii. Odor of water;
iii. Color of water;
iv. Occurrence of significant storm runoff (flowing into the river)
v. Presence of floating solids (type);
vi. Presence of any sludge banks or deposits, grease, oil, foam, or visible solids of waste origin;
vii. Presence of any aquatic plant growth, sessile or floating;
viii. Any unusual occurrence;
ix. Users of water in river (i.e. people washing, swimming, and playing in the river);
x. Non-contact users (i.e. bikers, joggers, etc); and
xi. 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:

[22] 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.

Table E-4b. Receiving Groundwater Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nitrite nitrogen	mg/L	grab	quarterly	[23]
Nitrate nitrogen	mg/L	grab	quarterly	[23]
Organic nitrogen	mg/L	grab	quarterly	[23]
Total nitrogen	mg/L	grab	quarterly	[23]
Total phosphorus	mg/L	grab	quarterly	[23]
Orthophosphate-P	mg/L	grab	quarterly	[23]
Total Dissolved Solids	mg/L	grab	quarterly	[23]
Chloride	mg/L	grab	quarterly	[23]
Sulfate	mg/L	grab	quarterly	[23]
Boron	mg/L	grab	quarterly	[27]
USEPA priority pollutants excluding asbestos	µg/L	grab	semiannually	[27]
Methyl tert-butyl ether (MTBE)	µg/L	grab	semiannually	USEPA 8260B (2 µg/L detection limit)
Perchlorate	µg/L	grab	semiannually	USEPA 314 (2 µg/L detection limit)
1,4-Dioxane	µg/L	grab	semiannually	USEPA 8270c (2 µg/L detection limit)
1,2,3-Trichloropropane	µg/L	grab	semiannually	USEPA 504.1 (0.005 µg/L detection limit)

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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

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

[23] Pollutants shall be analyzed using the analytical methods described in 40 CFR 136; where no methods are specified for a given pollutant, by methods approved by this 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.

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.

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.

Table E-5. 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		24-hr composite	EDC Steroid	Annually
Polybrominated Diphenyl Ethers (PBDE) 28, 47, 99, 100, 153, 154, and 183	ng/L	5	24-hr composite	PBDEs	Annually
PBDE 209	ng/L	100	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

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Parameter	Unit	Reporting Limit	Sample Type	Analytical Method	Minimum Sampling Frequency
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	5	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	40	24-hr composite	PFOS	Annually
Fipronil	ng/L	2	24-hr composite	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:

- Determine compliance with receiving water limits;
- Monitor trends in surface water quality;
- Ensure protection of beneficial uses;
- Provide data for modeling contaminants of concern;
- Characterize water quality including seasonal variation of surface waters within the watershed;
- Assess the health of the biological community; and
- Determine mixing dynamics of effluent and receiving waters in the estuary.

1. *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 presents a design for an integrated regional monitoring program for the Santa Clara River Watershed. This program design 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.

The Santa Clarita Valley Sanitation District of Los Angeles County submitted the Santa Clara River Watershed-Wide Monitoring Program and Implementation Plan" (SCRWMPIP) to the Regional Water Board on December 15, 2011. This plan presents

a design for an integrated regional monitoring program for the Santa Clara River Watershed. This program design was developed by a multi-stakeholder workgroup.

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2. In coordination with interested stakeholders in the Santa Clara River Watershed, the Discharger shall conduct instream bioassessment monitoring once a year, at the three 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.

a. The bioassessment program shall include an analysis of the community structure of the instream macroinvertebrate assemblages and physical habitat assessment at a minimum of three sites within the Santa Clara River. All of the sites shall be sampled annually during the spring/summer.

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

b. The Discharger must provide a copy of their Standard Operation Procedures (SOPs) for the Bioassessment Monitoring Program to the 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.

c. 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.

d. A taxonomic identification laboratory shall process the biological samples that usually consist of subsampling organisms, enumerating and identifying taxonomic groups and entering the information into an electronic format. The 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

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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.

3. The Executive Officer of the Regional Water Board may modify the MRP to accommodate the watershed-wide monitoring.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

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

B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/ciwqs/index.html). 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 Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly, quarterly, semiannual, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

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

Table E-6. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	Submit with quarterly 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 quarterly SMR
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	Submit with quarterly 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	Submit with quarterly SMR
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

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4. Reporting Protocols. The Discharger shall report with each sample result the applicable RL and the current MDL, as determined by the procedure in 40 CFR part 136.

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

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

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

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

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

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

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5. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above 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 RL.

6. Multiple Sample Data. When determining compliance with an average monthly effluent limitation (AMEL), average weekly effluent limitation (AWEL), or maximum daily effluent limitation (MDEL) for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of(DNQ or 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 Discharger shall submit SMRs in accordance with the following requirements:

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

b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D). Paper SMRs should be converted to a Portable Document Format (PDF). Documents that are less than 10 megabytes (MB) should be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed below: (Reference the reports to Compliance File No. 9322 to facilitate routing to the appropriate staff and file.)

California Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA90013
Attention: Information Technology Unit.

However, Dischargers who have been certified to only submit electronic SMRs to CIWQS should continue doing so, as previously required.

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C. Discharge Monitoring Reports (DMRs)

1. As described above, at any time during the term of this permit, the State Water Board or Regional Water Board may notify the Discharger to electronically submit DMRs. Until such notification is given specifically for the submittal of DMRs, the Discharger shall submit DMRs in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR to the address listed below:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15th Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official U.S. EPA pre-printed DMR forms (EPA Form 3320-1) or on self-generated forms that follow the exact same format of EPA Form 3320-1.

D. Other Reports

1. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, Pollutant Minimization Program (PMP), and Pollution Prevention Plan required by Special Provisions – section VI.C. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – VI.C.7. The Discharger shall submit reports in compliance with SMR reporting requirements described in subsection X.B above.

2. Annual Summary Report

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

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

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

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

c. The concentration of the pollutant(s);

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

e. The date and time of sample collection.

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

4. The Regional Water Board requires the Discharger to file with the Regional Water Board, within 90 days after the effective date of this Order, 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.

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ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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As described in section I, 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	Newhall Ranch Sanitation District
Name of Facility	Newhall Ranch Water Reclamation Plant and its associated wastewater collection system and outfall
Facility Address	Hwy 126 at Los Angeles/Ventura County Line
	Newhall, CA 91355
	Los Angeles County
Facility Contact, Title and Phone	Steve Burger, Principal Engineer, (626) 458-4943
Authorized Person to Sign and Submit Reports	Steve Burger, Principal Engineer
Mailing Address	900 South Fremont, Alhambra, CA 91803
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
Receiving Water Type	Inland surface water

A. Background

Newhall Land and Farming Company (Newhall Land) initially submitted a Report of Waste Discharge (ROWD) on April 23, 2004, and applied for a National Pollutant Discharge Elimination System (NPDES) permit authorizing the discharge of up to 2.0 mgd of tertiary treated wastewater from a new publicly-owned treatment works (POTW) that would treat the sewage generated by the inhabitants of Newhall Ranch a new housing development. (Attachment B2 provides a map of the Newhall Specific Plan area, the future POTW, and the specific plan villages .) Newhall Land submitted an application to the Local Agency Formation Commission for Los Angeles County (LAFCO) requesting the formation of a new sanitation

district. Subsequently, on July 27, 2006, the Newhall Ranch Sanitation District (Newhall Ranch SD or Discharger) was formed. On January 18, 2011, the Los Angeles County Board of Supervisors confirmed formation of the Newhall Ranch Sanitation District. The Los Angeles County Board of Supervisors serves as the Board of Directors for the Newhall Ranch SD, and the Department of Public Works (DPW) serves as the acting staff. On September 6, 2007, the Regional Water Board adopted Order No. R4-2007-0046, which served as NPDES Permit No. CA0064556 for the proposed Newhall Ranch Water Reclamation Plant (Facility or Newhall Ranch WRP). However, construction of the Newhall Ranch communities and the Newhall Ranch WRP was delayed. As such, there has been no discharge under NPDES Order No. R4-2007-0046.

Newhall Ranch SD submitted a draft ROWD on January 9, 2012, and met with Regional Water Board staff to discuss the preliminary submittal. On February 9, 2012, the discharger submitted its final ROWD and applied for renewal of its NPDES permit to discharge up to 2.0 mgd of treated wastewater from the Newhall Ranch WRP. On March 12, 2012, Regional Water Board staff found the application incomplete and requested additional information. Supplemental information was received on April 12, April 26, June 27, July 25, and July 26, 2012. The application was deemed complete on July 31, 2012, and Order No. R4-2007-0046 has been administratively extended. The terms and conditions of the current order have been automatically continued and remain in effect until new WDRs and NPDES permit are adopted pursuant to this Order. A site visit was conducted on August 22, 2012, to observe the location of future operations and collect additional data to develop permit limitations and requirements for waste discharge. Additional information was received on June 19, July 22, July 23, and August 1, August 27, August 30, September 3, and September 4, 2013.

B. Interim <u>Demineralization Facility</u>

According to the project timeline, home construction within the Newhall Ranch SD service area will precede completion and initial operation of the Newhall Ranch SD WRP. With this in mind, on January 9, 2002, SCVSD and Newhall Land and Farming Company (Newhall Land) entered into an *Interconnection Agreement* so that the sewage generated by the first 6,000 dwelling units of Newhall Ranch would be temporarily treated at the Valencia WRP, until such time as the Newhall Ranch WRP is constructed. The *Interconnection Agreement* specifies that Newhall Land will design, fund, and construct all sewers, pumping plants, or force mains required to convey any flow generated within the new county sanitation district that will be treated at 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

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treated at the interim chloride and demineralization facility to meet 100 mg/L chloride prior to discharge."

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Newhall Land will obtain the necessary permits, design, fund, and construct the following:

1. An Interim Demineralization Facility;

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

3. Any necessary pipelines to convey the brine waste stream from Interim Demineralization Facility to the deep-well injection system 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 May 16, 2013, Newhall Land submitted a letter providing additional details regarding the Interim Demineralization Facility. On August 27, 2013, they 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 primarily 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 brine waste stream will be disposed of through deep well injection, under a separate Class I Non-hazardous Underground Injection Control (UIC) permit, which has yet to be approved but is currently under review by United States Environmental Protection Agency (USEPA).

C. Construction Schedule

Newhall Land plans to proceed with the project according to the following tentative schedule:

Task	Timeframe
Prepare Design Plans for Initial Development Units	ongoing
Obtain Deep Well Injection Permit from USEPA	2013
Review and Approve Design Plans for Interim Demineralization Facility & Brine Disposal	2013 - 2014
Begin Newhall Ranch Land Development (Commence Grading)	2014
Construct Interim Demineralization Plant	2014 - 2015
Construct Brine Disposal Facility	2014 - 2015
Begin Newhall Ranch Home Construction (1st Building Permit)	2016
Start Up Interim Demineralization Plant	2016
NRSD Commences Construction of Newhall Ranch WRP	2018
Start-up Newhall Ranch WRP	2019

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 communities.

D. Newhall Land owns the property where the Newhall Ranch WRP will be built. Once the POTW is constructed, Newhall Land will transfer ownership of the land and the POTW to Newhall Ranch SD. The Newhall Ranch SD will own and operate a POTW comprised of the Newhall Ranch WRP and its associated wastewater collection interceptor sewer and outfalls. The County of Los Angeles Sewer Maintenance District will own and operate the collection system for Newhall Ranch. Newhall Ranch SD will enter into a Joint Administrative Agreement (JAA) with LACSD and the confederation of twenty-three independent sanitation districts which comprise it, so that LACSD could provide engineering and administrative staffing for the Newhall RanchSD. **Attachment B4** provides a schematic of the members of the JAA.

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.

E. The Facility will discharge wastewater to Santa Clara River, a water of the United States. The Discharger was previously regulated by Order No. R4-2007-0046 and NPDES Permit No. CA0064556 adopted on September 6, 2007 and expired on August 10, 2012. Attachment B1 provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

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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 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 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. Newhall Ranch SD proposes to have a diffuser at Discharge Point 001; however the design drawings prepared by Pacific Advanced Civil Engineering indicate 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. No facilities are provided for solids processed at the plant. Sewage solids separated from the wastewater will be trucked to the Valencia WRP, where treatment and disposal occur, under Valencia WRP's NPDES permit.

2. The 2.0 mgd facility will serve the inhabitants of the first 6,000 dwelling units within the Newhall Ranch Specific Plan area, with an estimated 2.38 to 3.17 persons per unit, or an estimated population range of approximately 18,300 to 24,380 persons. The 2.0 mgd facility will be designed to have the capacity of treating the sewage from an additional 1,690 dwelling units, assuming 260 gpd per unit of wastewater generation. The wastewater will be a mixture of domestic, commercial, and industrial wastewater that is

pre-treated as required, pursuant to title 40 of the Code of Federal Regulations (40 CFR) part 403.

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B. Discharge Points and Receiving Waters

The Newhall Ranch WRP will discharge tertiary-treated municipal and industrial wastewater to the Santa Clara River. Treated effluents will be discharged from the plant to surface waters at the following discharge point:

Discharge Point 001: Discharge to the Santa Clara River, a water of the United States (approximate coordinates: Latitude 34°24' 11" N, Longitude 118º 41' 22" W).

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

Effluent limitations contained in the existing Order for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from the term of the previous Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation Order No. R4-2007-0046			Monitoring Data (None available - POTW not built)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Biochemical Oxygen Demand ($BOD_5 20^oC$)	mg/L	20	30	45	--	--	--
Total Suspended Solids (TSS)	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			--	--	--
Turbidity	NTU	2 Daily Ave	--	5	--	--	--

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Parameter	Units	Effluent Limitation Order No. R4-2007-0046			Monitoring Data (None available - POTW not built)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Nitrite as N	mg/L	0.9	--	--	--	--	--
Nitrate + Nitrite as N	mg/L	5	--	--	--	--	--
Ammonia as N	mg/L	1.93	--	3.87	--	--	--
Antimony	µg/L	6	--	--	--	--	--
Arsenic	µg/L	10	--	--	--	--	--
Copper	µg/L	22	--	44	--	--	--
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	--	--	--
Zinc	µg/L	5000	--	--	--	--	--
Cyanide	µg/L	4.2	--	8.5	--	--	--
Acrylonitrile	µg/L	0.66	--	1.3	--	--	--
Total trihalomethanes	µg/L	80	--	--	--	---	--
Tetrachloroethylene	µg/L	5	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	µg/L	4	--	--	--	--	--
1,4-Dichlorobenzene	µg/L	5	--	--	--	--	--
Gamma-BHC (aka Lindane)	µg/L	0.2	--	--	--	--	--
4,4'-DDE	µg/L	--	--	--	--	--	--

D. Compliance Summary

Not Applicable. The Facility has not been built and is not operational.

Table F-3. Preliminary List of Exceedances

Date of Exceedance	Description of Exceedance
N/A	None

E. Planned Changes

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

Task	Timeframe
Prepare Design Plans for Initial Development Units	ongoing

Task	Timeframe
Obtain Deep Well Injection Permit from USEPA	2013
Review and Approve Design Plans for Interim Demineralization Facility & Brine Disposal	2013 - 2014
Begin Newhall Ranch Land Development (Commence Grading)	2014
Construct Interim Demineralization Plant	2014 - 2015
Construct Brine Disposal Facility	2014 - 2015
Begin Newhall Ranch Home Construction (1st Building Permit)	2016
Start Up Interim Demineralization Plant	2016
NRSD Commences Construction of Newhall Ranch WRP	2018
Start-up Newhall Ranch WRP	2019

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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 communities.

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 (CWC; 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 (USEPA) and chapter 5.5, division 7 of the CWC (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this Facility to surface waters.

B. California Environmental Quality Act (CEQA)

Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 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 Regional Water Board adopted a *Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) on June 4, 1994 that 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 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 conditionally designated potential MUN water bodies. Beneficial uses applicable to Santa Clara River are as follows:

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

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	**Santa Clara River (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 (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 (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 to Estuary **(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 (Hydro Unit 403.11)**	Existing: IND; PROC; AGR; GWR; FRSH; REC1; REC2; WARM;; WILD; RARE; MIGR; WET; and Coldwater Habitat (COLD). Potential: MUN.
001	Santa Clara River Estuary **(Hydro. Unit No. 405.12)**	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).

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Beneficial uses of the receiving groundwaters are as follows:

[1] The potential municipal and domestic supply (p*MUN) beneficial use for the water body is consistent with the State Water Board Resolution 88-63 and Regional Water Board Resolution No. 89-003; however, the Regional Water Board has only conditionally designated the MUN beneficial use of the surface water and at this time cannot establish effluent limitation designed to protect the conditional designation.

Table F-4b. Basin Plan Beneficial Uses – Groundwaters

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Eastern Santa Clara **(Department of Water Resources (DWR) Basin No. 4-4.07)**	South Fork – Existing Beneficial Uses: MUN; IND; PROC; and AGR; Placerita Canyon – Existing Beneficial Uses: MUN; IND; PROC; and AGR. Santa Clara/Bouquet & San Francisquito Canyons – Existing Beneficial Uses: MUN; IND; PROC; and AGR. Castaic Valley- Existing Beneficial Uses: MUN; IND; PROC; and AGR. Saugus Aquifer- Existing Beneficial Use: MUN
001	Ventura Central Basin **(DWR Basin No. 4-4)**	Santa Clara, Lower Area East of Piru Creek Existing Beneficial Uses: MUN; IND; PROC; and AGR. Santa Clara, Lower Area West of Piru Creek Existing Beneficial Uses: MUN; IND; PROC; and AGR. Santa Clara, Upper Sespe area Existing Beneficial Uses: IND and AGR. Potential Beneficial Uses: MUN and PROC. Santa Clara – Fillmore area: Pole Creek Fan area Existing Beneficial Uses: MUN, IND, PROC; and, AGR; Santa Clara – Fillmore area: South side of Santa Clara River Existing Beneficial Uses: MUN; IND; PROC; and AGR. Santa Clara - Remaining Fillmore area Existing Beneficial Uses: MUN; IND; PROC; and AGR. Santa Clara – Santa Paula area; East of Peck Road Existing Beneficial Uses: MUN; IND; PROC; and AGR. Santa Clara – Santa Paula area: West of Peck Road Existing Beneficial Uses: MUN; IND; PROC; and AGR.

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Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Oxnard Plain (DWR Basin No. 4-4)	Oxnard Forebay Existing Beneficial Uses: MUN; IND; PROC; and AGR. <u>Confined Aquifers</u> Existing Beneficial Uses: MUN; IND; PROC; and AGR. <u>Unconfined and perched aquifers</u> Existing Beneficial Uses: MUN and AGR. Potential Beneficial Use: IND.

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

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

4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes (40 CFR part 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.

5. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based effluent limitations (TBELs) and water quality-based effluent limitations (WQBELs) for individual pollutants. The TBELs consist of restrictions on BOD, TSS, 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 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.

6. **Antidegradation Policy.** Federal regulation 40 CFR part 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The 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 CFR part 131.12 and State Water Board Resolution 68-16.

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

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

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

10. **AB 685 – CWC Section 106.** 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 developed to protect human health and ensure that water is safe for domestic use.

11. **Water Recycling -** In accordance with statewide policies concerning water reclamation[2], this Regional Water Board strongly encourages, wherever practical, water recycling,

[2] See, e.g., CWC 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).

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.

12. **Monitoring and Reporting.** 40 CFR part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC 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 delegated the authority to implement this program; therefore, USEPA is the implementing agency. This Order contains sewage sludge/biosolids requirements pursuant to 40 CFR part 503 that are applicable to the Discharger.

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.

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

The State Water Board proposed the California 2008-2010 Integrated Report from a compilation of the adopted Regional Water Boards' Integrated Reports containing 303(d) List of Impaired Waters and 305(b) Reports following recommendations from the Regional Water Boards and information solicited from the public and other interested parties. The Regional Water Boards' Integrated Reports were used to revise their 2006 303(d) List. On August 4, 2010, the State Water Board adopted the California 2008-2010 Integrated Report. On November 12, 2010, the USEPA approved California 2008-2010 Integrated Report Section 303(d) List of Impaired Waters requiring Total Maximum Daily Loads (TMDL) for the Los Angeles Region.

Santa Clara River Estuary – Calwater Watershed 40311000/ 18070103

Pollutants – ChemA, coliform bacteria, nitrogen-nitrate, toxaphene, and toxicity.

Santa Clara River Reach 1 (Estuary to Hwy 101 Bridge) – Calwater Watershed 40311000/ 18070103

Pollutants – toxicity.

Santa Clara River Reach 3 (Freeman Diversion to A Street) – Calwater Watershed 40331000/18070103

Pollutants – Ammonia, chloride, total dissolved solids, and toxicity.

Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99 Bridge) was named Reach 7 on 2002 303d List – Calwater Watershed 40351000/ 18070102

Pollutants – Chloride.

E. Other Plans, Polices and Regulations

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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 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 of 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, on November 1991, the State Water Board issued a statewide general permit, *General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities.* This permit was amended in September 1992 and reissued on April 17, 1997 in State Water Board Order No. 97-03-DWQ to regulate storm water discharges associated with industrial activity.

General NPDES permit No. CAS000001 is currently not applicable to Newhall Ranch WRP's premises since the POTW has not been built.

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 Discharger's collection system is part of the POTW that is subject to this NPDES permit. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR 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 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 following the USEPA guidance in *Watershed Protection: A Project Focus* (EPA841-R-95-003, August 1995). The objective of the WMA is to provide a more comprehensive and integrated strategy resulting in water resource protection, enhancement, and restoration while balancing economic and environmental impacts within a hydrologically-defined drainage basin or watershed. 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. The WMA integrates activities across the Regional Water Board's diverse programs, particularly permitting, planning, and other surface water-oriented programs that have tended to operate somewhat independently of each other.

   The Regional Water Board has prepared and periodically updates its Watershed Management Initiative Chapter, the latest is updated December 2007. This document contains a summary of the region's approach to watershed management. It addresses each watershed and the associated water quality problems and issues. It describes the background and history of each watershed, current and future activities, and addresses TMDL development. The information can be accessed on our website: http://www.waterboards.ca.gov/losangeles.

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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 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. **Chloride TMDL** – On October 24, 2002, the Regional Water Board adopted Resolution No. 2002-018, *Amendment to the Basin Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load to Reduce Chloride Loading in the Upper Santa Clara River*. On February 19, 2003, the State Water Board adopted Resolution No. 2003-0014, the *Remand Resolution*, finding that the Regional Water Board staff prepared the documents and followed procedures satisfying environmental documentation requirements in accordance with the California Environmental Quality Act, scientific peer review, and other state laws and regulations to develop a TMDL. However, the Remand Resolution directed the Regional Water Board to consider revising the implementation provisions of the chloride TMDL. On July 10, 2003, the Regional Water Board reconsidered Resolution No. 2002-018, in light of the Remand Resolution, and adopted Resolution No. 2003-008 which modified the chloride TMDL implementation provisions by:

      1. Expanding the phased-TMDL approach to allow County Sanitation District of Los Angeles County (CSDLAC) to complete the implementation tasks sequentially and within 13 years;

      2. Extending the interim limits beyond the proposed two and a half years but not to exceed 13 years, so that the interim limits may remain in effect during the planning, construction, and execution portions of the TMDL's implementation tasks; and,

      3. Modifying the TMDL analysis task list to include an assessment/ evaluation of alternative water supplies for agricultural beneficial uses.

      On May 6, 2004, the Regional Water Board adopted Resolution No. 2004-004, *Revision of Interim Waste Load Allocations and Implementation Plan for Chloride in the Amendment to the Water Quality Control Plan for the Los Angeles Region to include a TMDL for Chloride in the Upper Santa Clara River*, amending the Upper Santa Clara River Chloride TMDL. State Water Board, the Office of Administrative Law (OAL), and USEPA approval occurred on July 22, 2004, November 15, 2004, and April 28, 2005, respectively. The Chloride TMDL became effective on May 4, 2005.

      On August 3, 2006, the Regional Water Board adopted Resolution No. R4-2006-016, *Amendment to the Water Quality Control Plan for the Los Angeles Region through revision of the Implementation Plan for the Upper Santa Clara River Chloride TMDL*, which shortened the compliance schedule from thirteen to eleven years. State Water Board and OAL approval occurred on May 22, 2007, and August 15, 2007, respectively. USEPA approval was not required since the amendment modified only the implementation aspects of the TMDL. Resolution No. R4-2006-016 became effective on June 12, 2008.

On December 11, 2008, the Regional Water Board adopted Resolution No. R4-2008-012, *Amendment to the Water Quality Control Plan for the Los Angeles Region to adopt Site Specific Chloride Objectives and to Revise the Upper Santa Clara River Chloride TMDL*. State Water Board, OAL, and USEPA approval occurred on, October 20, 2009, January 26, 2010, and April 6, 2010, respectively. The Chloride TMDL became effective on April 6, 2010.

b. **Nitrogen Compounds TMDL–** On August 7, 2003, the Regional Water Board adopted Resolution No. 2003-11, the *Santa Clara River Nitrogen Compounds TMDL* (Nitrogen Compounds TMDL). State Water Board, OAL, and USEPA approval occurred on November 19, 2003, February 27, 2004, and March 18, 2004, respectively. The Nitrogen Compounds TMDL became effective on March 23, 2004. Although the Nitrogen Compounds TMDL does not specify an individual waste load allocation (WLA) for the Newhall Ranch WRP, the TMDL may be reopened to develop WLAs in the future. The Nitrogen Compounds TMDL staff report discusses that "the numeric targets for POTWs with increasing capacity or new POTWs will be set on a concentration basis."

c. **Trash TMDL–**On June 7, 2001, 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

d. **Bacteria TMDL –** 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 40 CFR part 122.44(a) requires that permits include applicable TBELs and standards; and 40 CFR part 122.44(d) requires that permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

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 only. It does not authorize any other types of discharges.

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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 discharger to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level--referred to as "secondary treatment" --that all POTWs were required to meet by July 1, 1977. More specifically, section 301(b)(1)(B) of the CWA required that USEPA develop secondary treatment standards for POTWs as defined in section 304(d)(1). Based on this statutory requirement, USEPA developed national secondary treatment regulations which are specified in 40 CFR part 133. These technology- based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of $BOD_5$20°C, 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. R4-2007-0046 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		
TSS	mg/L	15	40	45		
	lbs/day[3]	250	670	750		
pH	standard units	--	--	--	6.5	8.5
Removal Efficiency for BOD and 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 for the City of Woodland.

C. Water Quality-Based Effluent Limitations (WQBELs)

[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 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.

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1. Scope and Authority

CWA section 301(b) and 40 CFR part 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, that are necessary to achieve water quality standards. The Regional Water Board has considered the factors listed in CWC section 13241 in establishing these requirements. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements or other provisions, is discussed starting from section IV.C.2.

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

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

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

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 provides 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 providing tertiary treatment to the effluent.

The monthly average, the 7-day 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 (Order R4-2007-0046).

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 parts 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 the solubility of carbon dioxide from the atmosphere. Minor changes from natural conditions can harm aquatic life. In accordance with 40 CFR part 133.102(c), the effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the POTW demonstrates that (1) inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0. The effluent limitation for pH in this permit requiring that the wastes discharged shall at all times be within the range of 6.5 to 8.5 is taken from the Basin Plan (page 3-15) 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 (page 3-16) narrative, “Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses.” The numeric limits are empirically based on results obtained from the settleable solids 1-hour test, using an Imhoff cone.

It is impracticable to use 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.

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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 permit (Order R4-2007-0046).

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 (page 3-11) 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 (Order R4-2007-0046).

v. **Residual Chlorine**

Disinfection of wastewaters with chlorine produces a chlorine residual. Chlorine and its reaction products are toxic to aquatic life. The limit for residual chlorine is based on the Basin Plan (page 3-9) narrative, "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 as of beneficial uses as a daily maximum limitation is. Chlorine is very toxic to aquatic life and short term exposures of chlorine may cause fish kills.

The Facility proposes to use ultra violet (UV) lamps to disinfect the effluent. As such, chlorine will not typically be used at the Facility. However, chlorine may be used to clean the UV lamps.

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vi. **Total Dissolved Solids (TDS), Chloride, Sulfate, and Boron**

The limits for TDS, sulfate, and boron are based on Basin Plan Table 3-8 (page 3-12) for the Santa Clara River Watershed (between West Pier Highway 99 and Blue Cut Gauging Station). TDS = 1000 mg/L; Sulfate = 400 mg/L; Chloride = 100 mg/L; and Boron = 1.5 mg/L. It is practicable to express these limits as monthly averages, since they are not expected to cause acute effects on beneficial uses. These limits will protect waters of the United States and prevent degradation.

Limits 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. 2008-012, which reads: "Other major NPDES discharges (as defined in Table 4-1 of the Basin Plan) receive WLAs equal to 100 mg/L." . This effluent limitation applies immediately. In this instance "major" is defined as a "POTW with a yearly average flow of over 0.5 mgd or an industrial source with a yearly average flow of over 0.1 mgd and those with lesser flows but with acute or potential adverse environmental impacts."

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

The existing permit effluent limitation of 0.5 mg/l for MBAS was developed based on the Basin Plan incorporation of Title 22, Drinking Water Standards, by reference, to protect the surface water GWR beneficial use and the groundwater MUN beneficial use. Given the nature of the Facility which will accept domestic wastewater into the sewer system and treatment plant, and the characteristics of the wastes discharged, the discharge has reasonable potential to exceed both the numeric 0.5 mg/L MBAS WQO and the narrative surface water WQO for the prohibition of floating material such as foams and scums. Therefore an effluent limitation is required.

viii. **Nitrogen Compounds/Nutrient Compounds**

(1). **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.

(2). **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 WQO for biostimulatory substances in the Basin Plan (page 3-8), "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 to arrive at a mass based-limit 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).

(3). **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 new 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. R4-2007-0046 for the Newhall Ranch WRP. However, if the Nitrogen Compounds TMDL is reopened 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 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). **Mass-based limit.** The mass emission rates are based on the plant design flow rate of 2 mgd.

ix. **Total Ammonia**

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

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Ammonia is a pollutant routinely found in the wastewater effluent of POTWs, in landfill-leachate, as well as 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. There is groundwater recharge 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 1994 Basin Plan contained WQOs for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those 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, Resolution No. 2005-014, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Revise the 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,* was adopted by the Regional Water Board. Resolution No. 2005-014 was approved by the State Water Board, the Office of Administrative Law, and USEPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively. 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 will only occur after 2019, beyond this permit cycle, 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 Reach 7 of the *Santa Clara River Watershed Nitrogen Compound TMDL*.

x. **Coliform**

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

(1). Effluent Limitations:

- 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, and at the end of the chlorine contact chamber, when backup method is used, must not exceed a MPN or Colony Forming Unit (CFU) of 2.2 per 100 milliliters,

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- 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

- No sample shall exceed an MPN of 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.

(2). Receiving Water Limitations

- Geometric Mean Limitations

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

- Single Sample Limitations

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

These receiving water limitations are based on 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 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).

- 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.

- 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.

The Basin Plan lists temperature requirements for the receiving waters. Based on the requirements of the Basin Plan and a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region,* a maximum effluent temperature limitation of 86°F is included in the Order. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. The 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. A survey was completed for several kinds of fish and the 86°F temperature was found to be protective. 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.

Section IV.A.3.b. of the Order contains the following effluent limitation for temperature:

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

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 wastes discharged 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 (page

3-17) and section 60301.320 of Title 22, chapter 3, "Filtered Wastewater" of the CCR.

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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." Chapter 4.4 of the CWC contains a similar prohibition under section 13375, which reads as follows: "The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is hereby prohibited." However, rather than an absolute prohibition on radioactive substances, Regional Water Board staff have set the following effluent limit for radioactivity: "Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, sections 64442 and 64443, of the CCR, or subsequent revisions." The limit is based on the Basin Plan incorporation of Title 22, CCR, *Drinking Water Standards,* by reference, to protect the surface water GWR beneficial use and the groundwater MUN beneficial use. Therefore, the accompanying Order will retain the limit for radioactivity.

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 5300 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

a. In accordance with section 1.3 of the SIP, the Regional Water Board conducted a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. Effluent data for

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the Newhall Ranch WRP is not available because it has not been constructed. However, since the Newhall Ranch WRP will be seeded with activated sludge from the Valencia WRP and the quality of source water to and effluent from the Newhall WRP is expected to be similar to the source water to and effluent from the Valencia WRP, Regional Water Board staff used effluent data from the Valencia WRP to conduct the RPA. Newhall Ranch SD has been conducting receiving water monitoring, so that data was used to evaluate Trigger 2 of the SIP RP process. The monitoring data cover the period from February 2008 to September 2011. 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, WQOs 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 Discharger.

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 a RPA:

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

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

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

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the 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.

The RPA was performed for the priority pollutants included in the Basin Plan and the CTR; and, for iron included in the Basin Plan, for which data are available. Based on the RPA, pollutants that demonstrate reasonable potential are copper and iron. Copper shows Tier 1 reasonable potential because the MEC was greater than C. Iron shows Tier 2 reasonable potential because the B is greater than C and it was detected in the effluent. The limits for antimony, arsenic, mercury, lead, nickel, selenium, cyanide, zinc, acrylonitrile, tetrachloroethylene, bis(2-ethylhexyl)phthalate, p-dichlorobenzene, lindane, and 4,4-DDE were carried over because none of the backsliding exceptions apply. The following Table summarizes results from RPA. Table R1 contains a more detailed 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	0.87		Yes	Existing limit
2	Arsenic	10	1.88		Yes	Existing limit
6	Copper	21	122	4.4	Yes	Tier 1, MEC>C
7	Lead	10.9	0.15		Yes	Existing limit
8	Mercury	0.051	0.0012	0.01	Yes	Existing limit
9	Nickel	100	11.5		Yes	Existing limit
10	Selenium	5	0.84		Yes	Existing limit
13	Zinc	5000	80.7		Yes	Existing limit
14	Cyanide	5.2	5		Yes	Existing limit
18	Acrylonitrile	0.66	<2		Yes	Existing limit
38	Tetrachloroethylene	5	<0.5		Yes	Existing limit
68	Bis(2-Ethylhexyl) Phthalate	4.0	1		Yes	Existing limit
77	1,4-Dichlorobenzene	5	0.2		Yes	Existing limit
105	Gamma-BHC (aka Lindane)	2	0.009		Yes	Existing limit
109	4,4'-DDE	0.00059	<0.01		Yes	Existing limit
	Iron	300	81.8	5300	Yes	Tier 2, B>C & existing limit

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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. **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 (starting on page 6) lists the statistical equations that adjust CTR criteria for effluent variability.

Step 5 of section 1.4 of the SIP (starting on page 8) lists the statistical equations that adjust CTR criteria for averaging periods and exceedance frequencies of the criteria/objectives. This section also reads, "For this method only, maximum daily

effluent limitations shall be used for publicly-owned treatment works (POTWs) in place of average weekly limitations."

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. RPA results showed that there is reasonable potential to exceed the CTR criteria for copper. The following CTR-based limits were retained because none of the antibacksliding exceptions applied: lead, mercury, selenium, cyanide, 4,4-DDE, and acrylonitrile.

c. **Impracticability Analysis**

Federal NPDES regulations contained in 40 CFR part 122.45 continuous dischargers, states that all permit 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 dischargers 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 POTW sampling for a toxicant to evaluate compliance with a 7-day average limitation could fully comply with this average limit, but still be discharging toxic effluent on one, two, three, or up to four of these seven days and not be meeting 1-hour average acute criteria or 4-day average chronic criteria. For these reason, 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:

- 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.
- block, prevent and alter hormonal binding to hormone receptors or influencing cell signaling pathways.
- alter production and breakdown of natural hormones.
- modify the making and function of hormone receptors.

d. **Mass-based limits**. 40 CFR part 122.45(f)(1) requires that except under certain conditions, 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 limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents.

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

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Antimony	µg/L	6	--	--	--	--
	lbs/day[5]	0.1	--	--	--	--
Arsenic	µg/L	10	--	--	--	--
	lbs/day[5]	0.2	--	--	--	--
Copper	µg/L	12	--	35	--	--
	lbs/day[5]	0.20	--	0.58	--	--
Lead	µg/L	13	--	26	--	--
	lbs/day[5]	0.22	--	0.43	--	--
Mercury	µg/L	0.051	--	0.10	--	--
	lbs/day[5]	0.00085	--	0.0017	--	--
Nickel	µg/L	100	--	--	--	--
	lbs/day[5]	1.7	--	--	--	--
Selenium	µg/L	4.1	--	8.2	--	--
	lbs/day	0.068	--	0.14	--	--
Zinc	µg/L	5000	--	--	--	--
	lbs/day[5]	83	--	--	--	--
Cyanide	µg/L	4.2	--	8.5	--	--
	lbs/day[5]	0.07	--	0.14	--	--
Acrylonitrile	µg/L	0.66	--	1.3	--	--
	lbs/day[5]	0.011	--	0.022	--	--
Tetrachloroethylene	µg/L	5	--	--	--	--
	lbs/day[5]	0.08	--	--	--	--

[5] The mass emission rates are based on the plant design flow rate of 2.0 mgd, and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day, or Flow (mgd) x Concentration (µg/L) x 0.00834 (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
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--
	lbs/day[5]	0.07	--	--	--	--
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	5	--	--	--	--
	lbs/day[5]	0.08	--	--	--	--
Lindane	µg/L	0.2	--	--	--	--
	lbs/day[5]	0.003	--	--	--	--
4,4-DDE	µg/L	0.00059	--	0.0012	--	--
	lbs/day[5]	0.0000098	--	0.00002	--	--
Iron	µg/L	300	--	--	--	--
	lbs/day[5]	5	--	--	--	--

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5. Whole Effluent Toxicity (WET)

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. Also, because numeric limits for certain toxic constituents that did not show RP have been removed, the acute toxicity limit may provide a backstop to preventing the discharge of toxic pollutants in toxic amounts.

The toxicity numeric effluent limitations are based on:

a. 40 CFR part 122.44(d)(v) – limits on WET are necessary when chemical-specific limits are not sufficient to attain and maintain applicable numeric or narrative water quality standards;

b. 40 CFR part 122.44(d)(vi)(A) – where a state has not developed a water quality criterion for a specific pollutant that is present in the effluent and has reasonable potential, the permitting authority can establish effluent limits using numeric water quality criterion;

c. Basin Plan objectives and implementation provisions for toxicity;

d. Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs Final May 31, 1996;

e. Whole Effluent Toxicity (WET) Control Policy July 1994; and,

f. TSD (several chapters and Appendix B).

The circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential were under review by the State Water Board in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, at a public hearing, the State Water Board adopted Order No. 2003-0012 deferring the issue of numeric chronic toxicity effluent 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 TUc trigger, in the Long Beach and Los Coyotes WRP NPDES permits. This permit contains a similar narrative chronic toxicity effluent limitation, with a numeric trigger for accelerated monitoring. Phase II of the SIP has been adopted, however, the toxicity control provisions were not revised.

On January 17, 2006, the State Water Board Division of Water Quality held a CEQA scoping meeting to seek input on the scope and content of the environmental information that should be considered in the planned revisions of the Toxicity Control Provisions of the SIP. However, the Toxicity Control Provisions of the SIP continue unchanged.

This Order contains a reopener to allow the Regional Water Board to modify the permit, if necessary, consistent with any new policy, law, or regulation. Until such time, this Order will have toxicity limitations that are consistent with the State Water Board's precedential decision.

a. Acute Toxicity Limitation:

The Dischargers may test for acute toxicity by using USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October 2002 (EPA-821-R-02-012). Acute toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate acute toxicity monitoring and take further actions to identify the source of toxicity and to reduce acute toxicity.

b. Chronic Toxicity Limitation and Requirements:

Chronic toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate chronic toxicity monitoring and take further actions to identify the source of toxicity and to reduce chronic toxicity. The monthly median trigger of 1.0 TUc for chronic toxicity is based on USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8). In cases where effluent receives no dilution or where mixing zones are not allowed, the 1.0 TUc chronic criterion should be expressed as a monthly median. The "median" is defined as the middle value in a distribution, above which and below which lie an equal number of values. For example, if the results of the WET testing for a month were 1.5, 1.0, and 1.0 TUc, the median would be 1.0 TUc.

The USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8) recommends two alternatives for setting up MDEL: using 2.0 TUc as the maximum daily limit; or using a statistical approach outlined in the TSD to develop a maximum daily effluent limitation. In this permit, a maximum daily limitation is not prescribed. However, a trigger for chronic toxicity is prescribed.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

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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, with some exceptions where limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order. All of the previous limits were retained and none were removed.

2. Antidegradation Policies

On October 28, 1968, the State Water Board adopted Resolution No. 68-16*, Maintaining High Quality Water*, which established an antidegradation policy for State and Regional Water Boards. 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. Similarly, the CWA section 304(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 policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. Newhall Ranch SD proposes to provide advanced treatment to its effluent prior to discharging into the Santa Clara River and proposes to recycle the treated effluent by using it for irrigation ten months out of the year. In addition, Newhall Ranch WRP's discharge containing chloride concentrations of 100 mg/L or better, will help dilute the elevated levels of chloride in the Santa Clara River upon mixing. Discharges in conformance with the provisions of this Order will not result in a lowering of water quality and therefore conform to the antidegradation policies.

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 part 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.

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Table F-9. Summary of Final Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instan-taneous Minimum	Instan-taneous Maximum	
$BOD_5 20^oC$	mg/L	20	30	45	--	--	Existing
	lbs/day[6]	330	500	750	--	--	
TSS	mg/L	15	40	45	--	--	Existing
	lbs/day[6]	250	670	750	--	--	
pH	standard units	--	--	--	6.5	8.5	Existing
Removal Efficiency for BOD and TSS	%	85	--	--	--	--	Existing
Oil and Grease	mg/L	10	--	15	--	--	Existing
	lbs/day[6]	170	--	250	--	--	
Settleable Solids	ml/L	0.1	--	0.3	--	--	Existing
Total Residual Chlorine	mg/L	--	--	0.1	--	--	Existing
Total Dissolved Solids	mg/L	1000	--	--	--	--	Existing
	lbs/day[6]	16700	--	--	--	--	
Sulfate	mg/L	400	--	--	--	--	Existing
	lbs/day[6]	6700	--	--	--	--	
Chloride	mg/L	100	--	--	--	--	Existing
	lbs/day[6]	1700	--	--	--	--	
Boron	mg/L	1.5	--	--			Existing
	lbs/day[6]	25	--	--			
MBAS	mg/L	0.5	--	--	--	--	Existing
	lbs/day[6]	8	--	--	--	--	
Ammonia Nitrogen	mg/L	1.75[7]	--	5.2[7]	--	--	Nitrogen TMDL
Nitrate + Nitrite (as N)	mg/L	5	--	--	--	--	Existing
	lbs/day[6]	80	--	--	--	--	
Nitrite (as N)	mg/L	0.9	--	--	--	--	Existing
	lbs/day[6]	15	--	--	--	--	
Antimony	µg/L	6	--	--	--	--	Existing
	lbs/day[6]	0.1					
Arsenic	µg/L	10	--	--	--	--	Existing
	lbs/day[6]	0.2	--	--	--	--	
Copper	µg/L	12	--	35	--	--	CTR

[6] The mass emission rates are based on the plant design flow rate of 2.0 mgd, and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day, or Flow (mgd) x Concentration (µg/L) x 0.00834 (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.

[7] This is the WLA, according to the Nitrogen Compounds TMDL.

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Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instan-taneous Minimum	Instan-taneous Maximum	
	lbs/day[6]	0.20	--	0.58	--	--	
Lead	µg/L	13	--	26	--	--	Existing
	lbs/day[6]	0.22	--	0.43	--	--	
Mercury	µg/L	0.051	--	0.10			Existing
	lbs/day[6]	0.00085	--	0.0017			
Nickel	µg/L	100	--	--			Existing
	lbs/day[6]	1.7	--	--			
Selenium	µg/L	4.1	--	8.2			Existing
	lbs/day[6]	0.068	--	0.14			
Zinc (wet-weather)	µg/L	5000	--		--	--	Existing
	lbs/day[6]	83	--		--	--	
Cyanide	µg/L	4.2	--	8.5	--	--	Existing
	lbs/day[6]	0.07	--	0.14	--	--	
Acrylonitrile	µg/L	0.66	--	1.3	--	--	Existing
	lbs/day[6]	0.011	--	0.022	--	--	
Tetrachloroethylene	µg/L	5	--	--	--	--	Existing
	lbs/day[6]	0.08	--	--	--	--	
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--	Existing
	lbs/day[6]	0.07	--	--	--	--	
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	5	--	--	--	--	Existing
	lbs/day[6]	0.08	--	--	--	--	
Gamma-BHC (Lindane)	µg/L	0.2	--	--	--	--	Existing
	lbs/day[6]	0.003	--	--	--	--	
4,4-DDE	µg/L	0.00059	--	0.0012	--	--	Existing
	lbs/day[6]	0.0000098	--	0.00002	--	--	
Iron	µg/L	300	--	--	--	--	Existing, Basin Plan & Gold Book
	lbs/day[6]	5	--	--	--	--	

E. Interim Effluent Limitations

The State Water Board's Resolution 2008-0025 "Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits" (Compliance Schedule Policy) requires the Regional Water Board to establish interim numeric effluent limitations in this Order for compliance schedules longer than one year. The Regional Water Board is not providing a compliance schedule for the Facility.

Table F-10. Interim Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
N/A			--	--		

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F. Land Discharge Specifications – Not Applicable

G. Recycling Specifications – Not Applicable

The Regional Water Board has not adopted WRRs for the discharge, but the Discharger plans to apply for WRRs in the future, once the Newhall Ranch WRP is constructed.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving water limitations are based on WQOs 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 Eastern Santa Clara Groundwater Basin. Since groundwater from the Basin is used to provide drinking water to the community, the groundwater aquifers should be protected.

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR part 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR part 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.

Parts 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Part 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 part 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR part 122.41(j)(5) and (k)(2) because the enforcement authority under the CWC is more stringent. In lieu of these conditions, this Order incorporates by reference CWC section 13387(e).

B. Special Provisions

1. Reopener Provisions

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.

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2. Special Studies and Additional Monitoring Requirements

a. **Constituent of Emerging Concern (CEC).** 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

The Discharger shall follow the requirements of the special study work plan as discussed in the MRP and the Fact Sheet.

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

c. **Operations Plan for Proposed Expansion.** This provision is based on section 13385(j)(1)(D) of the CWC and allows a time period not to exceed 90 days in which the Discharger may adjust and test the treatment system(s). This provision requires the Discharger to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting and testing to prevent violations.

d. **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

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

5. Special Provisions for Municipal Facilities (POTWs Only)

a. **Biosolids Requirements.** This Order does not include any requirements for biosolids because solids are not treated onsite. However, sludge handling requirements are incorporated because solids are transported offsite for treatment, storage, use, or disposal. A future permit may contain biosolids requirements.

b. **Pretreatment Requirements.** This Order does not include any requirements for a Pretreatment Program because the discharge is less than 2.0 mgd and because the POTW does not have any significant industrial users (SIUs). In the future, the

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Discharger will be required to develop a Pretreatment Program to implement it and to enforce it, in its entire service area. 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. A future permit may contain 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. A future permit may contain 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 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 (SSO WDR) on May 2, 2006. The Monitoring and Reporting Requirements for the SSO WDR were amended by Water Quality Order WQ 2008-0002-EXEC on February 20, 2008. The SSO WDR requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the SSO WDR. The SSO WDR requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Furthermore, the SSO WDR contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. Inasmuch that the Discharger's collection system is part of the system that is subject to this Order, certain standard provisions are applicable as specified in Provisions, section VI.C.5. For instance, the 24-hour reporting requirements in this Order are not included in the SSO WDR. The Discharger must comply with both the SSO WDR and this Order. 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)

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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 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, but does not authorize compliance schedules in permits for new dischargers. Newhall Ranch WRP is considered a new discharger as defined in the Compliance Schedule Policy since its construction will commence after new WQOs or criteria in a water quality standard became applicable.

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 CFR part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The MRP establishes monitoring and reporting 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:

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

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP Attachment E. This provision requires compliance with the MRP, and is based on 40 CFR parts 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 CWC, and Regional Water Board policies. The MRP also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with section 1.3 of the SIP, a periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

Monitoring for those pollutants expected to be present in the discharge from the Facility, will be required as shown on the proposed 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-11. Monitoring Frequency Comparison

Parameter	Monitoring Frequency (2007 Permit)	Monitoring Frequency (2013 Permit)
pH	daily	daily
Total coliform	daily	daily
Temperature	daily	daily
Settleable solids	daily	weekly
TSS	weekly	weekly
BOD	weekly	weekly
Dissolved oxygen	weekly	monthly
Oil and grease	monthly	monthly
Total dissolved solids	monthly	monthly
Chloride	monthly	monthly
Sulfate	monthly	monthly
Ammonia nitrogen	weekly	weekly
Nitrate nitrogen	weekly	weekly
Nitrite nitrogen	weekly	weekly
Organic nitrogen	weekly	weekly
Total nitrogen	weekly	weekly
Total phosphorus	--	weekly
Orthophosphate-P	--	monthly
Surfactants (MBAS)	monthly	monthly
Chronic Toxicity	monthly	monthly
Acute Toxicity	monthly	quarterly
Fluoride	monthly	--
Boron	monthly	monthly
Aluminum	--	quarterly
Antimony	monthly	monthly
Arsenic	monthly	monthly
Beryllium	monthly	semiannually
Cadmium	monthly	quarterly
Chromium III	monthly	quarterly
Chromium VI	monthly	quarterly
Copper	monthly	monthly
Iron	quarterly	monthly
Lead	monthly	monthly
Manganese	--	quarterly
Mercury	monthly	monthly
Nickel	monthly	monthly
Selenium	monthly	monthly
Silver	monthly	quarterly
Thallium	monthly	quarterly
Zinc	monthly	monthly

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Parameter	Monitoring Frequency (2007 Permit)	Monitoring Frequency (2013 Permit)
Cyanide	monthly	monthly
2,3,7,8-TCDD (Dioxin)	quarterly	semiannually
Acrylonitrile	quarterly	monthly
Total trihalomethanes	quarterly	quarterly
Bromoform	quarterly	semiannually
Bromodichloromethane	quarterly	semiannually
Carbon Tetrachloride	quarterly	semiannually
Dibromochloromethane	quarterly	semiannually
1,2-dichloroethane	quarterly	semiannually
Methyl bromide (Bromomethane)	quarterly	semiannually
Methyl cloride (Cloromethane)	quarterly	semiannually
Methylene chloride	quarterly	semiannually
Tetrachloroethylene	quarterly	semiannually
Benzidine	quarterly	semiannually
Benzo(a)anthracene	quarterly	semiannually
Benzo(a)pyrene	semiannually	semiannually
Benzo(b)pyrene	semiannually	semiannually
Benzo(k)fluoranthene	semiannually	semiannually
Bis(2-ethylhexyl)phthalate	quarterly	monthly
p-Dichlorobenzene	quarterly	monthly
3,3-Dichlorobenzidine	quarterly	semiannually
1,2-Diphenylhydrazine	quarterly	semiannually
Chrysene	simiannually	semiannually
Dibenzo(a,h)Anthracene	semiannually	semiannually
N-Nitrosodi-n-propylamine	semiannually	semiannually
Indeno(1,2,3-cd)pyrene	semiannually	semiannually
Hexachlorobenzene	quarterly	semiannually
Aldrin	quarterly	semiannually
Lindane	quarterly	monthly
Chlordane	quarterly	semiannually
4,4-DDT	quarterly	semiannually
4,4-DDE	quarterly	monthly
4,4-DDD	quarterly	semiannually
Dieldrin	quarterly	semiannually
Endrin	quarterly	semiannually
Heptachlor	quarterly	semiannually
Heptachlor epoxide	quarterly	semiannually
PCBs	quarterly	semiannually
Toxaphene	quarterly	semiannually
Barium	quarterly	semiannually
Methoxychlor	quarterly	semiannually

Parameter	Monitoring Frequency (2007 Permit)	Monitoring Frequency (2013 Permit)
2,4-D	quarterly	--
2,4,5-TP (Silvex)	quarterly	--
Perchlorate	semiannually	semiannually
1,4-Dioxane	semiannually	semiannually
1,2,3-Trichloropropane	semiannually	semiannually
Methyl-tert-butyl-ether (MTBE)	semiannually	semiannually
Total hardness (CaCo)	weekly	weekly
Remaining EPA Priority Pollutants	semiannually	semiannually
Radioactivity	quarterly	semiannually

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C. WET Requirements

WET testing protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

This requirement establishes conditions and protocol by which compliance with the Basin Plan narrative water quality objective for toxicity will be demonstrated and in accordance with section 4.0 of the SIP. Conditions include required monitoring and evaluation of the effluent for acute and chronic toxicity and numerical values for chronic toxicity evaluation to be used as 'triggers' for initiating accelerated monitoring and toxicity reduction evaluation(s).

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

Groundwater monitoring is required to characterize the water quality of the groundwater basins.

E. Other Monitoring Requirements

1. Watershed Monitoring and Bioassessment Monitoring

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

- Determine compliance with receiving water limits;
- Monitor trends in surface water quality;
- Ensure protection of beneficial uses;
- Provide data for modeling contaminants of concern;
- Characterize water quality including seasonal variation of surface waters within the watershed;
- Assess the health of the biological community; and,
- Determine mixing dynamics of effluent and receiving waters in the estuary.

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VIII. 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 Parties

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 <**Describe Notification Process (e.g., newspaper name and date)**>

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 where due either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order, or by email submitted to losangeles@waterboards.ca.gov.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 12:00 p.m. (noon) on October 30, 2013.

C. Public Hearing

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

Date:	December 5, 2013
Time:	9:00 a.m.
Location:	Metropolitan Water District of Southern California, Board Room 700 North Alameda Street Los Angeles, California

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

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

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E. Information and Copying

The ROWD, 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 by calling (213) 576-6600.

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.

ATTACHMENT G - GENERIC TOXICITY REDUCTION EVALUATION (TRE) WORKPLAN (POTW)

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1. **Information and Data Acquisition**
   a. **Operations and performance review**
      i. NPDES permit requirements
         (1) Effluent limitations
         (2) Special conditions
         (3) Monitoring data and compliance history
      ii. POTW design criteria
         (1) Hydraulic loading capacities
         (2) Pollutant loading capacities
         (3) Biodegradation kinetics calculations/assumptions
      iii. Influent and effluent conventional pollutant data
         (1) Biochemical oxygen demand (BOD_5)
         (2) Chemical oxygen demand (COD)
         (3) Suspended solids (SS)
         (4) Ammonia
         (5) Residual chlorine
         (6) pH
      iv. Process control data
         (1) Primary sedimentation - hydraulic loading capacity and BOD and SS removal
         (2) Activated sludge - Food-to-microorganism (F/M) ratio, mean cell residence time (MCRT), mixed liquor suspended solids (MLSS), sludge yield, and BOD and COD removal
         (3) Secondary clarification - hydraulic and solids loading capacity, sludge volume index and sludge blanket depth
      v. Operations information
         (1) Operating logs
         (2) Standard operating procedures
         (3) Operations and maintenance practices
      vi. Process sidestream characterization data
         (1) Sludge processing sidestreams
         (2) Tertiary filter backwash
         (3) Cooling water
      vii. Combined sewer overflow (CSO) bypass data
         (1) Frequency
         (2) Volume
      viii. Chemical coagulant usage for wastewater treatment and sludge processing
         (1) Polymer
         (2) Ferric chloride
         (3) Alum

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b. **POTW influent and effluent characterization data**
   - i. Toxicity
   - ii. Priority pollutants
   - iii. Hazardous pollutants
   - iv. SARA 313 pollutants
   - v. Other chemical-specific monitoring results

c. **Sewage residuals (raw, digested, thickened and dewatered sludge and incinerator ash) characterization data**
   - i. Extraction Procedure (EP) toxicity
   - ii. Toxicity Characteristic Leaching Procedure (TCLP)
   - iii. Chemical analysis

d. **Industrial waste survey (IWS)**
   - i. Information on Industrial Users (IUs) with categorical standards or local limits and other significant non-categorical IUs
   - ii. Number of IUs
   - iii. Discharge flow
   - iv. Standard Industrial Classification (SIC) code
   - v. Wastewater flow
     - (1) Types and concentrations of pollutants in the discharge
     - (2) Products manufactured
   - vi. Description of pretreatment facilities and operating practices
   - vii. Annual pretreatment report
   - viii. Schematic of sewer collection system
   - ix. POTW monitoring data
     - (1) Discharge characterization data
     - (2) Spill prevention and control procedures
     - (3) Hazardous waste generation
   - x. Industrial User (IU) self-monitoring data
     - (1) Description of operations
     - (2) Flow measurements
     - (3) Discharge characterization data
     - (4) Notice of sludge loading
     - (5) Compliance schedule (if out of compliance)
   - xi. Technically based local limits compliance reports
   - xii. Waste hauler monitoring data manifests
   - xiii. Evidence of POTW treatment interferences (i.e., biological process inhibition)