# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

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#### ORDER NO. R4-2023-XXXX FILE NO. 61-061 CI-3017

#### WASTE DISCHARGE REQUIREMENTS ISSUED TO LOS ANGELES COUNTY, DEPARTMENT OF PUBLIC WORKS TRANCAS WATER POLLUTION CONTROL PLANT

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

#### BACKGROUND

- The Los Angeles County Department of Public Works (hereinafter Discharger) owns and operates the Trancas Water Pollution Control Plant (Trancas WPCP), located at 6338 Paseo Canyon Drive, Malibu, California (Site), as shown in Figure 1. The Trancas WPCP was originally constructed by a private developer in 1963. It treats domestic wastewater from an estimated population of 600 people residing in 275 single family homes and condominiums located in the two following communities:
  - The Malibu West Community (also known as the Trancas Community), consisting of 238 single family homes and condominiums, of which approximately 29 homes/condominiums were lost in the Woolsey Fire in 2018; and
  - The Lechuza Community, consisting of 37 single family homes.

The Trancas WPCP and its sewer collection system are owned and operated by the Discharger through the Consolidated Sewer Maintenance District and Consolidated Sewer Maintenance District, Trancas Zone.

2. On March 2, 2000, the Regional Water Board adopted Waste Discharge Requirements (WDRs) Order No. 00-030 and a Time Schedule Order (TSO) No. 00-031 requiring the Discharger to upgrade the Trancas WPCP with an installation of a disinfection system. The TSO directed the Discharger to complete the construction of the disinfection system by June 1, 2002, and to achieve the final compliance with all the requirements of WDRs Order No. 00-030, including fecal coliform limitations, by July 30, 2002.

- 3. TSO Order No. 00-031 allowed the Regional Water Board's Executive Officer discretion to extend the time schedule in the event that the compliance with the California Environmental Quality Act (CEQA) or project funding would delay the construction and startup. Since 2001, the Executive Officer has granted five TSO extensions for the various upgrade milestones (completing design, beginning construction, completing construction, and achieving full compliance). The last TSO extension, granted by the Executive Officer on October 19, 2005, extended the task completion deadline to April 2008.
- 4. On August 29, 2008, the Regional Water Board reviewed the compliance with the requirements contained in TSO No. 00-031 and determined that the Discharger had completed the construction of the advanced treatment system specified in TSO No. 1-031 on March 17, 2008 and met the discharge limitations prescribed in WDRs Order No. 00-030 on April 25, 2008. On October 2, 2008, the Regional Water Board adopted Order No. R4-2008-0086, which terminated TSO No. 00-031.
- 5. On September 26, 2014, the Regional Water Board adopted the Individual WDRs Order No. R4-2014-0188 and the Monitoring and Reporting Program (MRP) No. CI-3017 to reflect the upgraded treatment plant to meet the turbidity and fecal coliform requirements.
- 6. On May 13, 2019, the Discharger submitted a Report of Waste Discharge (ROWD) for the renewal of the Order No. R4-2014-0188. On October 4, 2022, the Regional Water Board issued an incomplete ROWD letter in which it requested additional information. The updated supplemental information was submitted by the Discharger on November 3, 2022.
- 7. The Trancas WPCP was designed for an average dry weather flow of 85,000 gallons per day (gpd) and a peak flow of 220,000 gpd. The tertiary treated domestic wastewater is discharged to three onsite leach fields.

# PURPOSE Of THE ORDER

8. California Water Code (CWC) section 13260 requires any person "proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than to a community sewer system," to file a report of waste discharge. The term "waste" is defined in CWC section 13050(d) to include "sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, . . . prior to, and for purposes of, disposal." The Discharger proposes to discharge tertiary-treated human sewage, i.e., "waste" to land where it could affect the quality of the waters of the state.

Sewage contains various waste constituents, including total dissolved solids (TDS), sulfate, salts (e.g., chloride, boron), bacteria, nitrogen, priority pollutants, and constituents of emerging concern. In accordance with CWC section 13263(g), no discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.

- CWC section 13263(e) provides that all WDRs shall be reviewed periodically and, upon such review, may be revised by the Regional Water Board. Following a review of the requirements prescribed in the current WDRs Order No. R4-2014-0188, these requirements have been revised to include additional findings, effluent discharge limitations, updated standard provisions, and a revised MRP.
- 10. This Order includes requirements to upgrade the existing wastewater treatment plant and prescribes more stringent effluent discharge limitations, including the requirement to meet effluent discharge limitations equal to groundwater quality objectives at the point of discharge. This Order also revises the MRP and discontinues groundwater and surface water monitoring requirements as explained below.
- 11. The guality of the groundwater near and around the Trancas WPCP is likely affected both the overlying surface water and possibly the Trancas WPCP as well. Figure 2 - Groundwater Monitoring Well, Surface Sampling, and Leach Field Location illustrates the proximity of the leach field and groundwater monitoring locations to a lined creek (Trancas Canyon Channel) and a natural creek. Figure 4 identifies storm drain outlet locations, and Figure 5 plots measured groundwater and surface water elevations from January 2018 through June 2022 that indicate a surface and groundwater interaction. The shallow groundwater elevation and low/flat hydraulic gradient at the Site, coupled with elevated levels of bacteria, total dissolved solids (TDS), chloride, and sulfate found in the surface water samples indicate that degradation of groundwater guality at the Site may be attributed to hydraulic communication and mixing between the impacted surface water and the groundwater beneath the Site. Evaluation of the impact of Trancas WPCP's effluent discharge on groundwater quality using groundwater monitoring data to determine compliance with groundwater limitations is uncertain or inconclusive. Therefore, this Order provides certainty in compliance with groundwater quality objectives at the Trancas WPCP's effluent discharge point without surface water and groundwater monitoring requirements.
- 12. Since the effluent discharge limitations are the same as the groundwater quality objectives for the Site, the discharge will not degrade groundwater. Accordingly, this Order complies with the Antidegradation Policy (State Water Board Resolution No. 68-16), Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan), and State Water Board Recycled Water Policy (Recycled Water Policy).

#### FACILITY AND TREATMENT PROCESS DESCRIPTION

- 13. The Site is located approximately 1,000 feet east of the intersection of Trancas Canyon Drive and Pacific Coast Highway in the City of Malibu. It sits above the Point Dume Hydrologic Area Trancas Canyon Hydraulic unit in a small alluvial basin of gravels and sands within Trancas Canyon.
- 14. The approximate coordinates of the Site are latitude 34°01' 56" and longitude 118°50' 25". The Site is in an unsewered area of the City of Malibu. To date, no public sewers have been scheduled for construction in the vicinity of the Site.
- 15. The Trancas WPCP and its leach field dispersal systems are shown in Figures 1 and 2. Figure 3 shows the current process flow diagram (PFD) of the Trancas WPCP. The treatment plant consists of the following key unit components.
  - a headworks with a communitor;
  - a bar screen;
  - a Parshall flume with a flow meter/totalizer;
  - an influent pump station;
  - dual anoxic/extended aeration tanks;
  - dual clarifiers;
  - three-cell anthracite filter;
  - a chlorine contact tank;
  - an aerobic sludge digester;
  - an effluent pump station; and
  - instruments and controls.
- 16. As shown in Figure 3, the plant influent is conveyed to Trancas WPCP, where flow is conveyed through a communitor with a manual bar screen bypass prior to being measured at the influent Parshall flume flow meter. The influent flow is then conveyed to an influent pump station, which additionally receives supernatant flow, a result of the aerobic digester decanting process and filter backwash.
- 17. The influent flow is pumped to the biological treatment process via three constant speed pumps. The biological treatment system is a packaged system which includes two anoxic tanks, two aeration tanks, and two secondary clarifiers. Return activated sludge is returned to the extended aeration tanks, and waste activated sludge is wasted to the aerobic digester.

- 18. Clarified effluent is conveyed to a three-cell anthracite filter system. Filtered effluent is pumped from the filter process clearwell to the chlorine contact tank, where chlorine is mixed with the filtered effluent via chemical metering pumps and a static mixer prior to the chlorine contact tank. The current chlorine contact tanks were originally rotating biological contactor tanks prior to being retrofitted to the current chlorine contact tanks. Effluent from the chlorine contact tanks is then conveyed to the effluent pump station, where it is pumped through a flow meter and ultimately conveyed to one of the three leach fields on site.
- 19. The leach field dispersal system consists of three leach fields. The dimension of each leach field is 75 feet long by 10 feet wide by 5 feet deep. The leach fields are located approximately 330 feet away from Trancas Canyon Creek and approximately 1,315 feet from the Pacific Ocean.
- 20. To meet the revised effluent limitations for coliform specified in this Order, the existing chlorination process will need to be optimized and a new dechlorination unit will need to be added prior to treated wastewater discharge to the leach field consistent with Provisions, Section F.1.
- 21. Sludge generated from the plant goes into the sludge holding tank. The sludge is hauled in tanker trucks to the City of Los Angeles Tillman Water Reclamation Plant for treatment and disposal.
- 22. Trancas WPCP effluent water quality based on the self-monitoring reports (SMRs) from January 2018 to June 2022 is summarized as follows:

Table 1. Endent Water Quality Summary						
Constituents	Units <sup>[1]</sup>	Effluent	Effluent Limit <sup>[2]</sup>			
рН	standard unit	6.9 – 8.5	6.5 – 8.5			
Total coliform	MPN/100 mL	< 1.8 – 20.9	23/240			
Fecal coliform	MPN/100 mL	< 1.8 – 4.5	200			
Enterococcus	MPN/100 mL	< 2 – 6	NA <sup>[3]</sup>			
Turbidity	NTU	0 – 9.5	10 – 15			
Biochemical oxygen	m a /l	2 25	20 45			
demand (5-day BOD @20°C)	mg/L	2 – 25	30 – 45			
Total suspended Solids	mg/L	1 – 10	30 – 45			
Residual chlorine	mg/L	0 – 39	NA <sup>[3]</sup>			
Oil & grease	mg/L	0.6 – 3.0	10 –15			
Total dissolved solids	mg/L	360 - 3,400 <sup>[4]</sup>	1,000			
Chloride	mg/L	95 – 190	250			
Boron	mg/L	0.18 – 0.55	1			

Constituents	Units <sup>[1]</sup>	Effluent	Effluent Limit <sup>[2]</sup>
Sulfate	mg/L	58 – 240	250
Nitrate as N	mg/L	0.38 – 27	10
Nitrite as N	mg/L	<0.015 – 0.26	1
Ammonia as N	mg/L	<0.017 – 5.8	NA <sup>[3]</sup>
Organic-N	mg/L	0.14 – 3.2	NA <sup>[3]</sup>
Total Nitrogen	mg/L	1.15 – 27.78	10
Phosphate as P	mg/L	0.01 – 4.5	NA <sup>[3]</sup>
Methylene blue active substances (MBAS)	mg/L	0.03 – 0.29	1

Table 1 Note:

<sup>[1]</sup> mg/L = milligrams per liter; MPN/100 mL = most probable number (MPN) per 100 milliliters

- <sup>[2]</sup> Effluent limits prescribed in Order No. R4-2014-0188
- <sup>[3]</sup> NA= Not applicable
- <sup>[4]</sup> One time exceedance of 3,400 mg/L, see Compliance History, Finding 25
- <sup>[5]</sup> See Compliance History, Finding 25
- 23. In March 2002, the Discharger installed four groundwater monitoring wells: MW-2, MW-3, MW-4, and MW-5 at the Site (Figure 2). The completed well depths vary from 20 feet to 24 feet below ground surface (bgs). The ambient groundwater quality based on the SMRs from January 2018 to June 2022 is summarized as follows:

Table 2. Amblent Oroundwater Quality Summary					
Constituents	Units <sup>[1]</sup>	MW-2 <sup>[2]</sup>	MW-3 <sup>[3]</sup>	MW-4 <sup>[3]</sup>	MW-5 <sup>[3]</sup>
рН	Standard unit	6.8 - 7.3	6.6 – 7.3	6.7 – 7.2	6.7 – 7.5
Total coliform	MPN/100 mL	<1.1 – 540	< 1.8 – 540	2.2 – 1,600	2.2 – 79
Fecal coliform	MPN/100 mL	< 1.1 -16	< 1.1 – 79	< 1.1 – 130	< 1.1 – 1,600
Enterococcus	MPN/100 mL	< 1.0 – 350	< 1.0 – 540	< 1.8 – 350	< 1.0 – 46
BOD₅ @20°C	mg/L	1.50 – 3.60	< 2.0	1.9 – 24	< 2.0 - 4.9
Total dissolved solids	mg/L	1,200 – 1,400	460 – 1,100	670 – 1,600	440 – 1,100
Chloride	mg/L	72 – 260	100 – 170	110 – 350	63 – 200
Residual chlorine	mg/L	< 0.05 – 0.042	< 0.05	< 0.05 - 0.79	< 0.05 - 0.39
Boron	mg/L	0.24 – 0.39	0.25 – 0.42	0.20 – 0.36	0.17 – 0.41
Sulfate	mg/L	140 – 380	72 – 250	120 – 400	43 – 270

# Table 2. Ambient Groundwater Quality Summary

Constituents	Units <sup>[1]</sup>	MW-2 <sup>[2]</sup>	MW-3 <sup>[3]</sup>	MW-4 <sup>[3]</sup>	MW-5 <sup>[3]</sup>
Nitrate as N	mg/L	0.23 – 3.10	0.53 – 5.40	< 0.11 - 3.40	0.95 – 8.1
Nitrite as N	mg/L	< 0.50	< 0.50	< 0.50	< 0.50
Ammonia as N	mg/L	< 0.10 - 0.42	< 0.50	< 0.017 – 0.22	< 0.012 – 0.27
Organic-N	mg/L	< 0.10 - 0.29	<0.10 – 0.47	< 0.10 - 0.46	< 0.017 – 2.2
Total nitrogen	mg/L	0.42 – 3.10	0.25 – 5.40	0.23 – 3.54	1.26 – 8.10
Phosphorus	mg/L	< 0.006 – 0.11	<0.006 – 1.6	< 0.008 - 1.3	< 0.008 - 3.1
MBAS	mg/L	< 0.05	< 0.05	< 0.017 – 0.098	< 0.017 – 0.048

Table 2 Notes:

<sup>[1]</sup> mg/L=milligrams per liter; MPN/100 mL = most probable number (MPN) per 100 milliliters

<sup>[2]</sup>MW-2: Upgradient Well

<sup>[3]</sup>MW-3, MW-4, and MW-5: Downgradient Wells

Groundwater quality data from groundwater monitoring well MW-1 is not included in this Order because there is no new data available since the last permit renewal in 2014. Although WDRs Order No. R4-2014-0188 required the sampling of MW-1 as one of the upgradient wells, the sampling of MW-1 was discontinued due to the poor condition of the well and was last sampled on June 23, 2014.

24. Surface water monitoring and reporting were required in the WDRs Order No. R4-2014-0188. Surface water quality based on the SMRs from January 2018 to June 2022 is summarized as follows:

Constituents	Units <sup>[1]</sup>	SW-1A <sup>[2]</sup>	SW-1B <sup>[2]</sup>	SW-2 <sup>[3]</sup>	SW-3 <sup>[3]</sup>
рН	Standard unit	7.56 – 9.25	7.01 – 9.20	7.73 – 8.68	8.14 – 9.19
Total coliform	MPN/100 mL	17 – >1,600	23 – >1,600	55 – >1,600	920 - >1,600
Fecal coliform	MPN/100 mL	2 – >1600	23 – >1,600	350 – 1,600	220 - >1,600
Enterococcus	MPN/100 mL	23 - >1600	23 – >1,600	920 - >1,600	33 – >1,600
BOD₅ @20°C	mg/L	<2 – 15	< 2 – 4	<2.0 – 19	<2.0 - 6.50
Total dissolved solids	mg/L	330 – 920	460 – 3,600	440 – 2,000	540 – 25,000

 Table 3. Surface Water Quality Summary

Constituents	Units <sup>[1]</sup>	SW-1A <sup>[2]</sup>	SW-1B <sup>[2]</sup>	SW-2 <sup>[3]</sup>	SW-3 <sup>[3]</sup>
Chloride	mg/L	47 – 260	78 – 470	65 – 320	51 – 15,000
Residual chlorine	mg/L	<0.05 – 0.66	< 0.05 - 0.14	< 0.05 – <0.10	< 0.05 - 0.60
Boron	mg/L	<0.10 – 0.50	<0.10-0.49	0.23 – 0.65	0.12 – 4
Sulfate	mg/L	50 – 260	130 – 960	61 – 510	110 – 2,200
Nitrate as N	mg/L	<0.044 – 4.71	<0.50 – 1.90	< 0.11 - 2.70	<0.11 – 5.80
Nitrite as N	mg/L	< 0.015	<0.015 - 0.11	< 0.50	< 0.50
Ammonia as N	mg/L	< 0.047 – 2.90	< 0.047 – 0.26	< 0.10 - 3	< 0.10 - 0.15
Organic-N	mg/L	0.32 – 6.0	0.36 – 2.5	1 – 1.3	< 0.10 - 1.5
Phosphorus	mg/L	<0.0062 – 0.72	<0.0062 - 0.2	0.23 – 1.8	0.09 – 0.51
MBAS	mg/L	<0.017 – 0.09	< 0.05 - 0.07	0.09 - <0.2	< 0.05 - 0.24

Table 3 Notes:

<sup>[1]</sup> mg/L=milligrams per liter; MPN/100 mL = most probable number (MPN) per 100 milliliters

<sup>[2]</sup>SW-1A and SW-1B: Upstream sampling locations

<sup>[3]</sup>SW-2, and SW-3: Downstream sampling locations

- 25. The effluent quality data from January 2018 to June 2022 show that except for TDS, effluent concentrations are below the current discharge limitations of total coliform at 23 MPN/100 mL, fecal coliform at 200 MPN/100 mL, chloride at 250 mg/L, and sulfate at 250 mg/L, while the water quality data show elevated concentrations of total coliform, fecal coliform, enterococcus, TDS, chloride, and sulfate in surface water and groundwater samples collected at the Site. Specifically, elevated concentrations of total coliform up to 1,600 MPN/100 mL, fecal coliform up to 1,600 MPN/100 mL, fecal coliform up to 1,600 MPN/100 mL, fecal coliform up to 25,000 mg/L, chloride up to 15,000 mg/L, and sulfate up to 2,200 mg/L were detected in the surface water samples, while total coliform up to 1,600 MPN/100 mL, fecal coliform up to 1,600 MPN/100 mL, enterococcus up to 540 MPN/100 mL, TDS up to 1,400 mg/L, chloride up to 350 mg/L, and sulfate up to 400 mg/L were detected in the groundwater samples.
- 26. From 2018 through June 2022, the average daily discharge flowrate from the Trancas WPCP was 40,784 gpd. The Trancas WPCP has sufficient capacity for the current connections. Therefore, there will be no change in the peak flow capacity limit of 220,000 gpd.

# COMPLIANCE HISTORY

27. Effluent sampling analytical results from January 2018 through June 2022 indicated the following exceedances: one exceedance of TDS at 3,400 mg/L in 2019, above the TDS discharge limit of 1,000 mg/L; two exceedances of total nitrogen at 21.5 mg/L and 27.78 mg/L in 2021, above the limit of 10 mg/L; and two exceedances of nitrate at 17 mg/L and 27 mg/L in 2021, above the limit of 10 mg/L. Subsequently, the Discharger has optimized the treatment system operations to address the nitrate and nitrogen exceedances and are fully compliant with all effluent limitations for the remainder of the period reviewed. The single TDS exceedance was reported to be erroneous or an anomaly as the sample results before and after that incident were well below the limit at 480 mg/L and 680 mg/L, respectively.

As presented in Table 2 above, the groundwater sampling results from 2018 through 2022 indicated that the following parameters have exceeded their respective groundwater water quality objectives at upgradient (MW-2) and downgradient monitoring wells (MW-3, MW-4, and MW-5), making the determination of the impact of effluent discharge on groundwater quality inconclusive, as shown below.

- Total coliform ranged from 2.0 540 MPN/100 mL in MW-2, 1.8 540 MPN/100 mL in MW-3, 2.2 - 1,600 MPN/100 mL in MW-4, and 2.2 - 79 MPN/100 mL in MW-5; the groundwater quality objective is 1.1 MPN/100 mL;
- Fecal coliform ranged from 2.0 16 MPN/100 mL in MW-2, 1.1 79 MPN/100 mL in MW-3, 2.0 130 MPN/100 mL in MW-4, and 1.1 1,600 MPN/100 mL in MW-5. The groundwater objective is 1.1 MPN/100 mL;
- Enterococcus ranged from 2.0 350 MPN/100 mL in MW-2, 1.1 540 MPN/100 mL in MW-3, 1.1 - 350 MPN/100 mL in MW-4, and 2.0 - 46 MPN/100 mL in MW-5. The groundwater objective is 1.1 MPN/100 mL;
- TDS ranged from 1,200 1,400 mg/L in MW-2, 460 1,100 mg/L in MW-3, 670 - 1,600 mg/L in MW-4, and 440 - 1,100 mg/L in MW-5. The groundwater objective is 1,000 mg/L;
- Chloride ranged from 72 260 mg/L in MW-2 and 110 350 mg/L in MW-4. The groundwater objective is 250 mg/L; and
- Sulfate ranged from 140 380 mg/L in MW-2, 72 250 mg/L in MW-3, 120 400 mg/L in MW-4, and 43 270 mg/L in MW-5. The groundwater objective is 250 mg/L.

The SMRs indicate that the effluent concentrations of the above listed constituents of concern are lower than their respective groundwater concentrations. The Discharger noted the elevated background levels of TDS, salt, and bacterial counts in surface water and reported that water quality is potentially impacted by the intermixing of the groundwater and the surface water discharges due to changes in surface water elevation and the shallow groundwater conditions at the Site.

# SITE SPECIFIC CONDITIONS

- 28. The Trancas WPCP overlies the Malibu Valley Groundwater Basin within the subbasin of the Point Dume Area.
- 29. Groundwater beneath the Trancas WPCP is contained in alluvial, beach, and terrace deposits. The groundwater elevations beneath the Site range from approximately 5 feet to 11 feet above mean sea level (amsl), and the hydraulic gradient is generally flat. The groundwater flow beneath the Site is generally in a southwesterly direction towards the Pacific Ocean. In addition, groundwater may be present in some sandstone rock formations underlying recent deposits, especially in fracture systems within bedrock formations.
- 30. Bedrock units exposed in this area are almost entirely of Tertiary age, with some Cretaceous rocks exposed on the southern flank of the Santa Monica Mountains. The youngest Tertiary rocks (upper Miocene) are unconformably overlain by upper Pleistocene marine terrace deposits. Strata of Pliocene and early Pleistocene age are not present within the quadrangle.
- 31. There are no public water wells downgradient of the Trancas WPCP. The residents receive portable water from the West Basin Municipal Water District, Metropolitan Water District of Southern California (MWD).
- 32. The Site is bounded by two municipal storm drains (PD 2324 and PD 306 Line B) and Los Angeles County Trancas Canyon Flood Control Channel (PD306 Line A), which are located in close proximity of the downgradient groundwater monitoring wells: MW-3, MW-4, and MW-5 and surface water sampling locations: SW-1A, SW-1B, and SW-2 (Figure 4).
- 33. Based on the most recent groundwater monitoring event conducted in August 2022, the groundwater elevation is at approximately 5 feet amsl. The elevations of the surface water sampling locations range from 5 to 16 feet amsl. Due to the debris deposit from the Woolsey fire burn area, the surface water elevation has been altered and raised in the vicinity of the surface water sampling locations over the years. The surface water elevation is currently approximately 3 feet higher than the groundwater elevation. The change in surface water elevation with respect to the groundwater elevation over time is presented in shown in Figure 5.

34. As described above, due to shallow groundwater elevation and low/flat hydraulic gradient at the Site, coupled with elevated levels of bacteria, TDS, chloride, and sulfate found in the surface water, degradation of groundwater quality at the Site may be attributed to the hydraulic communication and mixing between the impacted surface water and the groundwater beneath the Trancas site.

#### APPLICABLE PLANS, POLICIES AND REGULATIONS

# Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan)

35. On June 13, 1994, the Regional Water Board adopted a revised Basin Plan. The Basin Plan (i) designates beneficial uses for surface and groundwater, (ii) establishes narrative and numeric water quality objectives that must be attained or maintained to protect the designated beneficial uses, and (iii) sets forth implementation programs to protect the beneficial uses of the waters of the state. The Basin Plan also incorporates the State Water Resources Control Board (State Board) Resolution 68-16. In addition, the Basin Plan incorporates by reference applicable State and Regional Water Board plans and policies and other pertinent water quality policies and regulations. The Regional Water Board prepared the 1994 update of the Basin Plan to be consistent with previously adopted State and Regional Water Board plans and policies. This Order implements the plans, policies and provisions of the Regional Water Board's Basin Plan. The Basin Plan has been amended occasionally since 1994.

In addition, the Basin Plan incorporates State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

36. The Trancas WPCP overlies the Malibu Valley Groundwater Basin within the subbasin of the Point Dume Area. The designed beneficial uses of the receiving groundwater are as follows:

Existing beneficial uses:

- Municipal and Domestic Supply (MUN)
- Agricultural Supply (AGR)

Potential beneficial use:

- Industrial service supply (IND)

37. The Basin Plan (Chapter 3) incorporates as water quality objectives primary and secondary maximum contaminants levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water that are codified in Title 22 California Code of Regulations, Division 1 (CCR Title 22). This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect. The CCR Title 22 primary MCLs are applicable water quality objectives for a receiving water to protect beneficial uses when that receiving water is designated as municipal and domestic supply. Also, the Basin Plan specifies that "Groundwaters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Therefore, the CCR Title 22 secondary MCLs, which are limits based on aesthetic, organoleptic standards, are applicable water quality objectives for a receiving water to protect beneficial uses when that receiving water to protect beneficial uses for a receiving water to protect standards, are applicable water quality objectives for a receiving water to protect beneficial uses when that receiving water is designated as municipal and domestic supply. These water quality objectives are implemented in this Order to protect groundwater quality.

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 MCLs designed to protect human health and ensure that water is safe for domestic use.

- 38. Publicly Owned Treatment Works (POTW) The term POTW means a treatment works as defined by section 212 of the federal Clean Water Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment facility. The term also means the municipality as defined in section 502(4) of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such treatment works. (40 Code of Federal Regulations [CFR] 403.3(q)). Trancas WPCP meets all the above criteria and therefore is considered a POTW.
- 39. Pursuant to CWC section 13263, the requirements of this Order take into consideration the provisions of CWC section 13241, including the following factors.
  - a) Past, present, and probable future beneficial uses of water;

The receiving water for discharges from the Trancas WPCP is the Malibu Valley Groundwater Basin within the sub-basin of the Point Dume Area. The receiving water limitations in this Order are specified to maintain the existing and probable future beneficial uses of this basin: municipal and domestic water supply (MUN) and agricultural supply (AGR) and potential beneficial use: industrial service supply (IND). This Order also specifies effluent limitations protective of the beneficial uses and includes effluent monitoring and reporting requirements to verify that discharges will not adversely affect the beneficial uses of groundwater.

b) Environmental characteristics of the hydrographic unit under consideration, including the quality of the water available thereto;

This Order incorporates the site-specific water quality objectives for groundwater in the Basin Plan considering geology, hydrogeology, and hydrology. Trancas WPCP will produce effluent quality that meets or is better than the groundwater quality objectives and will comply with the state's Antidegradation Policy (Resolution No. 68-16). The project will therefore limit further groundwater degradation.

- c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area, such as joint efforts in developing the Salt and Nutrient Management Plan (SNMP) for the Malibu Valley Groundwater Basin. The SNMP was developed by the City of Malibu in consultation with Los Angeles County Water Works District 29 and other basin stakeholders. The SNMP strategies developed are measures designed to maintain water quality that is protective of beneficial uses, preserve capacity for stormwater recharge, address elevated salt concentrations, and curtail impacts from seawater intrusion.
- d) Economic considerations;

Surface water and groundwater monitoring required in prior permits yielded information that demonstrated that hydraulic mixing of surface and groundwater occurs at the site causing uncertainty in compliance determination with the groundwater limitations/groundwater quality objectives. Moving the compliance point to the end of the treatment process will 1) provide certainty of compliance determination allowing staff to discontinue surface and groundwater monitoring; 2) provide cost savings to offset the cost of enhanced disinfection, installation of a dechlorination unit, and other capital improvements; and 3) provide better water quality data to determine what might be contributing to groundwater problems in the area. This, in turn, will lead to more cost

effective solutions and better water quality down the line for all in the area.

e) The need for developing housing within the region;

The Trancas WPCP serves the Malibu West Community (also known as the Trancas Community), consisting of 238 single family homes and condominiums and the Lechuza Community, consisting of 37 single family homes. From 2018 through June 2022, the average daily discharge flowrate from the Trancas WPCP is 40,784 gpd. The Trancas WPCP has sufficient capacity up to 220,000 gpd for the Trancas Zone service area for developing housing, but the Discharger indicated that there are no plans to expand their service area.

f) The need to develop and use recycled water;

This Order authorizes Trancas WPCP to treat and discharge up to 220,000 gpd of disinfected tertiary-treated wastewater for discharge into leach fields. It currently only discharges an average of 40,784 gpd. The Discharger has indicated that it has no plans to meet recycled water requirements for reuse of wastewater.

40. **AB 685 – CWC Section 106.3** – It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels developed to protect human health and ensure that water is safe for domestic use.

#### Antidegradation Policy, State Water Board Resolution No. 68-16

41. State Water Board Resolution No. 68-16 ("Statement of Policy with Respect to Maintaining High Quality Waters in California", also called the "Antidegradation Policy") requires the Regional Water Board, in regulating the discharge of waste, to maintain high quality waters of the state until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the State Water Board's policies (e.g., quality that exceeds water quality objectives). The Regional Water Board finds that the discharge, as allowed in these WDRs, is consistent with Resolution No. 68-16 since this Order requires (1) compliance with more stringent revised coliform effluent discharge requirements set forth in this Order, including the use of best practicable treatment and control (BPTC)

technology, (2) implementation of the revised MRP; and (3) regular monitoring of the discharge to comply with water quality objectives.

#### **Antidegradation Analysis**

42. As described in Finding 26 above, the groundwater beneath the Site is impacted with total coliform up to 1,600 MPN/100 mL, fecal coliform up to 1,600 MPN/100 mL, enterococcus up to 540 MPN/100 mL, TDS up to 1,400 mg/L, chloride up to 350 mg/L, and sulfate up to 400 mg/L; therefore, to provide certainty that groundwater quality objectives for coliform are complied with, this Order moves the groundwater limitations compliance point to the Trancas WPCP above ground discharge point and sets the effluent discharge limitations the same as the groundwater quality objectives. The effluent limitations for TDS, chloride and sulfate remain unchanged and are the same as the groundwater R4-2014-0188. limitations as in the previous Order No.

This Order specifies new and more stringent revised coliform effluent limitations based on groundwater quality objectives. The revised 1.1 MPN/100 mL total coliform effluent limitation based on a weekly average is more stringent than the existing total coliform effluent limits of 23 MPN/100 mL (7-day median) and 240 MPN/100 mL (not to exceed 1 sample in 30 days). Similarly, the revised 1.1 MPN/100 mL effluent limit based on a weekly average for fecal coliform is more stringent than the existing 200 MPN/100 mL fecal coliform daily maximum effluent limitation. This Order specifies a new effluent limitation of 1.1 MPN/100 mL for enterococcus based on groundwater quality objectives. The previous Order No. R4-2014-0188 prescribed a 1.1 MPN/100 mL groundwater limitation for enterococcus, but no effluent limitation for this constituent was specified. Moving the compliance point for the groundwater limitations for coliform specified in Table 5 to the end of the treatment process from Trancas WPCP not only provides certainty that the discharge from Trancas WPCP meets groundwater guality objectives, but the additional soil treatment that may occur will potentially reduce pollutant concentrations further, thus contributing to groundwater quality improvement beneath the Site. Since this Order contains tasks for assuring that best practical treatment and control of pollutants occurs, and the highest water quality consistent with the maximum benefit to the people of the State results, the discharge is consistent with the Antidegradation Policy, Basin Plan, and Recycled Water Policy. However, the Regional Water Board will review this Order periodically and may revise requirements when necessary.

- 43. Pursuant to California Water Code Section 13263(g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.
- 44. Section 13267(b) of the California Water Code states, in part, that "In conducting an investigation specified in subdivision (a), the Regional Water Board may require that

any person who has discharged, discharges, or is suspected of having discharged or discharging or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state within its region shall furnish under penalty of perjury, technical or monitoring program reports which the Regional Water Board requires to protect public health and provide water beneficial use benefits. The burden, including the costs of preparing these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The reports including guarterly SMRs and annual reports required by the revised MRP No. CI-3017 are necessary to assure compliance with these waste discharge requirements to protect future beneficial uses. The costs to prepare a quarterly SMR including analytical and labor costs typically range from \$18,000 to \$25,000. The costs to prepare an annual summary report typically range from \$7,000 to \$14,000. The submission of the SMRs ensures effluent limitations are compiled. The benefits to the water quality and the public health outweigh the costs associated with the production of these reports.

#### Global Warming and Climate Change

45. In Southern California, the predicted impacts of climate change are numerous, including the following.

Annual average temperatures are expected to increase, coupled with a higher frequency of extreme heat days. A likely consequence of this warmer climate will be more severe drought periods, leading to an increase in the amount and intensity of wildfires and a longer wildfire season. In addition, precipitation patterns are likely to be modified.

A decrease in snowfall, combined with warmer temperatures, will induce a decrease in the amount and duration of snowpack, an essential source of freshwater to the region. Although changes to mean precipitation are expected to be small, the increasing occurrence of extreme precipitation events will amplify the risk of flooding. These impacts may affect water quality in multiple ways, including decreases in stream flow, reductions in, and changes to, aquatic habitats, increases in surface water temperature, increases in pollutant levels, sedimentation, algal growth, and changes in salinity levels and acidification in coastal areas.

For permitted municipal wastewater treatment facilities such as Trancas WPCP, specific impacts could include, but are not limited to, an increase in the concentration of pollutants entering the facility, an increase in the temperature of effluents and receiving waters, an increase in storm water inflow and infiltration, increase in flooding inundation of facilities, sewer overflows, power outages, pump maintenance issues, and onsite or nearby hillside destabilization.

46. On March 7, 2017, recognizing the challenges posed by climate change, the State Water Board adopted Resolution No. 2017-0012, Comprehensive Response to Climate Change, directed state agencies to take climate change into account in their planning decisions which are guided by the following principles: Priority should be given to actions that both build climate preparedness and reduce greenhouse gas emissions; where possible, flexible and adaptive approaches should be taken to prepare for uncertain climate impacts; actions should protect the state's most vulnerable populations; and natural infrastructure solutions should be prioritized.

On May 10, 2018, the Regional Water Board adopted Resolution No. R18-004, A Resolution to Prioritize Actions to Adapt to and Mitigate the Impacts of Climate Change on the Los Angeles Region's Water Resources and Associated Beneficial Uses, which encourages mitigating direct and indirect impacts of climate change on water quality and beneficial uses.

47. This Order contains provisions to require planning and taking actions to address climate-related impacts that can cause or contribute to violations of permit requirements and/or degradation of the waters of the state.

#### California Environmental Quality Act and Public Notification

- 48. This project involves the re-issuance of WDRs for an existing facility; as such, the action to adopt WDRs is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et seq.) in accordance with California Code of Regulations, Title 14, section 15301.
- 49. Assembly Bill 2108, "Water policy: environmental justice: disadvantaged and tribal communities," has been signed into law as of September 2022. AB 2108 adds sections 189.7 and 13149.2 to the Water Code. Effective January 1, 2023, this law requires the Water Boards to conduct equitable, culturally relevant outreach when considering proposed discharges of waste that may have disproportionate impacts on water quality in disadvantaged communities or tribal communities. Also, for certain actions, the Water Boards must adopt findings related to water quality impacts in disadvantaged or tribal communities and related to environmental justice concerns.

To comply with California Water Code Sections 189.7 and 13149.2 requirements, the Regional Water Board conducted a community profile assessment based on CalEnviroScreen 4.0 for the Trancas Census Tract No. 6037800408 defined by CalEnviroScreen. CalEnviroScreen is a mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. It uses environmental, health, and socioeconomic information to produce scores for every census tract in the state. The scores are mapped so that different communities can be compared. An area with a

high score is one that experiences a much higher pollution burden than areas with low scores. CalEnviroScreen ranks communities based on data that are available from state and federal government sources.

For the community profile which comprises racial demographics, pollution burden, income survey data, and linguistic isolation factors, the Regional Water Board found that (1) this Order will not disproportionately impact Black, Indigenous, people of color (BIPOC) communities due to the community made up of 83.6% white, 12.9% BIPOC (1.9% black, 0.1% American Indian and Alaska Native, 2.6% Asian, 8.3% Hispanic or Latinx), and 2.7% other ethnicity based on 2020 Census Demographic Data Map Viewer; (2) pollution burden percentile is 24 % based on CalEnviroScreen 4.0; (3) the community is not a disadvantaged community based on California Department of Water Resources (DWR) Disadvantaged Community (DAC) Mapping Tool; and (4) a majority of language spoken is English with very small percentages of the population speaking Persian 0.2%, German 0.5%, and Japanese 0.5% based on the Water Boards Linguistic Isolation Tool.

Regarding water quality in the vicinity of the Trancas Census Tract No. 6037800408, the Regional Water Board found no aquifer risk, no drinking water wells nearby, and the census tract is not located in a priority basin where groundwater is overdrafted for potential saltwater intrusion. There is an impaired water body Ramirez Canyon Creek near the Site, but although this Order delays the effective date for meeting effluent limitations as specified in Provisions, Section F.1, this Order specifies more stringent effluent limitations and its implementation provides groundwater water quality benefits.

In summary, Trancas WPCP is not located in a disadvantaged community, but there are tribal communities in the area. Therefore, the delayed implementation of the more stringent effluent limitations specified in this Order will not have disproportionate impacts on water quality in disadvantaged communities but it could have impacts on tribal communities. Although the impacts are not expected to be significant, a notice has been provided to the identified tribal communities in the area as part of the Regional Water Board's outreach process.

- 50. On April 28, 2023, the Regional Water Board notified the Discharger, interested agencies and parties including tribal communities, and persons of the intent to revise WDRs for this facility, and has provided an opportunity to submit written comments by May 30, 2023.
- 51. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

#### **RECONSIDERATION OF THE WDRs:**

52. Pursuant to California Water Code section 13320, any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The State Water Board (P.O. Box 100, Sacramento, California, 95812) must receive the petition by 5:00 p.m. within 30 days of the date this Order is adopted. The regulations regarding petitions, and the address to which petitions may be sent, may be found at:

http://www.waterboards.ca.gov/public notices/petitions/water quality/index.shtml

**IT IS HEREBY ORDERED** that the Discharger, Los Angeles County Department of Public Works, shall be responsible for and shall comply with the following requirements in all operations and activities at the Trancas WPCP.

# A. INFLUENT LIMITATIONS

- 1. The source of wastewater is limited to the Malibu West Community, Lechuza Community, and neighboring properties. The influent wastewater shall not contain any volatile organic compounds.
- 2. The Executive Officer of the Regional Water Board is delegated with the authority to approve the additional connection(s). The Discharger shall submit a workplan including the analysis of the capacity for Executive Officer's review and approval.
- 3. Waste discharge shall be limited to domestic wastewater only. No commercial or industrial wastewater shall be discharged to the Trancas WPCP.
- 4. The maximum daily flow of the influent from the collection system to the Trancas WPCP shall not exceed the maximum daily design flowrate of 220,000 gpd.

#### B. EFFLUENT LIMITATIONS

- 1. The discharge flowrate shall not exceed a maximum daily flowrate of 220,000 gpd.
- 2. The pH in the effluent shall be between 6.5 and 8.5 standard units at all times.
- 3. Effluent shall not contain constituents in excess of the following

limits.

4. Compliance with the effluent limitations will be determined at the location immediately prior to discharge to the leach fields as shown the "Schematic Flow Chart" in Figure 3.

Constituent	Units <sup>[1]</sup>	<u>Daily</u> <u>Maximum</u>	<u>Monthly<sup>[3]</sup> Average</u>
BOD₅ @20°C	mg/L	45	30
Total suspended solids	mg/L	45	30
Turbidity	NTU	15	10
Total nitrogen <sup>[2]</sup>	mg/L	10	NA
Nitrate-N	mg/L	10	NA
Nitrite-N	mg/L	1	NA
Oil and grease	mg/L	15	10
Total dissolved solids	mg/L	1,000	NA
Sulfate	mg/L	250	NA
Chloride	mg/L	250	NA
Boron	mg/L	1.0	NA
MBAS	mg/L	1.0	NA
Total residual chlorine	mg/L	NA	NA
Fecal coliform	MPN/100 mL	200	NA

Table 4. Effluent Limitations Before the Completion of the Trancas WPCP
Upgrade

Table 4 Notes:

[1]mg/L=milligrams per liter; MPN/100 mL = most probable number (MPN) per 100 milliliters

<sup>[2]</sup>Total nitrogen= nitrate-N + nitrite-N + ammonia-N + Organic Nitrogen NA = Not Applicable

[3]Revised frequency to indicate monthly average instead of 30-day average to be consistent with actual monitoring period in the MRP.

5. Total Coliform Limits Before the Completion of the Trancas WPCP Upgrade: The total coliform (median number of coliform organisms in the effluent) shall not exceed 23 MPN per 100 ml, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of total coliform bacteria shall not exceed 240 MPN/100 mL in more than one sample in any 30 days period.

<u>Constituent</u>	Units <sup>[1]</sup>	<u>Daily</u> <u>Maximum</u>	<u>Weekly</u> Average	Monthly <sup>[3]</sup> Average
BOD₅ @20°C	mg/L	45	NA	30
Total suspended			NA	
solids	mg/L	45		30
Turbidity	NTU	15	NA	10
Total nitrogen <sup>[2]</sup>	mg/L	10	NA	NA

Constituent	Units <sup>[1]</sup>	<u>Daily</u> <u>Maximum</u>	<u>Weekly</u> Average	Monthly <sup>[3]</sup> Average
Nitrate-N	mg/L	10	NA	NA
Nitrite-N	mg/L	1	NA	NA
Oil and grease	mg/L	15	NA	10
Total dissolved solids	mg/L	1,000	NA	NA
Sulfate	mg/L	250	NA	NA
Chloride	mg/L	250	NA	NA
Boron	mg/L	1.0	NA	NA
MBAS	mg/L	1.0	NA	NA
Total residual chlorine	mg/L	0.1	NA	NA
Total coliform	MPN/100 mL	NA	1.1	NA
Fecal coliform	MPN/100 mL	NA	1.1	NA
Enterococcus	MPN/100 mL	NA	1.1	NA

Table 5 Notes:

<sup>[1]</sup>mg/L=milligrams per liter; MPN/100 mL = most probable number (MPN) per 100 milliliters

<sup>[2]</sup>Total nitrogen= nitrate-N + nitrite-N + ammonia-N + Organic Nitrogen NA = Not Applicable

<sup>[3]</sup> Revised frequency to indicate monthly average instead of 30-day average to be consistent with actual monitoring period in the MRP.

- Effluent from the Trancas WPCP shall not contain heavy metals, arsenic, or cyanide, or other pollutants designated as Priority Pollutants (Appendix A to 40 CFR, Part 423--126 Priority Pollutants – Attachment D) by the U.S. Environmental Protection Agency in concentrations exceeding the limits contained in the California Drinking Water Standards, CCR Title 22, section 64431 (Attachment A-1).
- 7. Radionuclides shall not exceed the limits specified in the current California Drinking Water Standards, CCR Title 22, sections 64441 or subsequent revisions (Attachment A-2).
- 8. Effluent shall not contain organic chemicals in concentrations exceeding the limits contained in the current California Drinking Water Standards, CCR Title 22, section 64444 or subsequent revisions (Attachment A-3).
- 9. Effluent shall not contain disinfectant byproducts in concentrations exceeding the limits contained in the current California Drinking Water Standards, CCR Title 22, section 64533, or subsequent

revisions (Attachment A-4).

- 10. Effluent shall not exceed the Secondary MCLs, California Drinking Water Standards, CCR Title 22, Table 64449-A (Attachment A-5).
- Effluent shall be monitored for the constituents of emerging concern (CECs) as health-based and performance indicators in accordance with the Recycled Water Policy, effective April 8, 2019 (Attachment B).

# C. <u>RECEIVING WATER LIMITATIONS FOR GROUNDWATER QUALITY BEFORE</u> <u>THE COMPLETION OF THE TRANCAS WPCP UPGRADE</u>

- 1. "Receiving water" is defined as groundwater underlying the wastewater treatment plant.
- 2. The Site's groundwater quality limitations consistent with the Basin Plan are listed in Table 6 below and shall be met at the effluent from the treatment process consistent with Section B.4 above:

Constituent	Units <sup>[1]</sup>	Maximum Limitation
Total dissolved solids	mg/L	1,000
Sulfate	mg/L	250
Chloride	mg/L	250
Boron	mg/L	1.0
Total nitrogen <sup>[2]</sup>	mg/L	10
Nitrate-N	mg/L	10
Nitrite-N	mg/L	1.0
Total coliform	MPN/100 mL	1.1
Fecal coliform	MPN/100 mL	1.1
Enterococcus	MPN/100 mL	1.1

# Table 6. Receiving Water Limitations for Groundwater Quality

Table 6 Notes:

<sup>[1]</sup>mg/L= milligrams per liter; MPN/100 mL= most probable number (MPN) per 100 milliliters

<sup>[2]</sup>Total nitrogen = nitrate-N + nitrite-N + ammonia-N + organic nitrogen

#### **D. GENERAL REQUIREMENTS**

- 1. Dischargers shall operate and maintain facilities, treatment operations, associated collection systems and discharge locations in ways to preclude adverse impacts to surface or groundwater from impacts predicted to occur due to climate change.
- 2. The Discharger shall submit a Climate Change Effects Vulnerability Assessment and Management Plan (Climate Change Plan) no later than 12 months after adoption of this permit. Submittal of the Climate Change Plan is required pursuant to Water Code section 13267. As required by this provision, a regional water board may require a person to submit technical or monitoring program reports which the regional water board requires. The Climate Change Plan is needed in order to assess and manage climate change related effects associated with Discharger operations that may affect water quality.

The Climate Change Plan shall include an assessment of short and long term vulnerabilities of the facility(ies) and operations as well as plans to vulnerabilities of collection systems, facilities, treatment systems, and discharge locations for predicted impacts in order to ensure that facility operations are not disrupted, compliance with permit conditions is achieved, and receiving waters are not adversely impacted by discharges. Control measures shall include, but are not limited to, emergency procedures, contingency plans, alarm/notification systems, training, backup power and equipment, and the need for planned mitigations to ameliorate climate-induced impacts including, but not limited to, changing influent and receiving water quality and conditions, as well as the impact of rising sea level (where applicable) storm surges and back-to-back severe storms that are expected to become more frequent.

- 3. Standby or emergency power facilities and/or sufficient capacity shall be provided for treated wastewater storage during rainfall or in the event of system upsets or outages.
- 4. Adequate measures shall be provided to protect the Trancas WPCP, treatment systems, wastewater collection system, as well as instrumentation and controls from damage by storm and runoff or runoff generated by a 100-year storm.
- 5. The Discharger's wastewater treatment system and leach fields shall be operated and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 6. The Discharger shall optimize the wastewater treatment processes periodically to maximize treatment of wastewater and produce a high quality of effluent for discharge. Sludge and other solids shall be removed from wastewater treatment equipment, sumps, tanks, etc. as needed to ensure optimal system operation and adequate hydraulic capacity.

- 7. The wastewater collection system, treatment system, and the treated wastewater dispersal system (i.e., leach fields) shall be maintained in such a manner that prevents wastewater from surfacing or overflowing at any location.
- 8. Sludge and other solids removed from wastewater treatment shall be disposed of in a manner that is consistent with Title 27, Division 2, Subdivision 1 of the CCR and approved by the Executive Officer.
- 9. Storage and disposal of domestic wastewater shall comply with existing federal, state, and local laws and regulations, including permitting requirements and technical standards.
- 10. Any proposed change in solids use or disposal practice from a previously approved practice shall be reported to the Executive Officer at least 60 days for approval in advance of the change.
- 11. Dischargers are directed to submit all reports required by the WDRs and MRP, including self-monitoring reports, groundwater monitoring analytical data, and discharge location data to the State Water Resources Control Board GeoTracker database website at:

https://geotracker.waterboards.ca.gov/ under Global ID WDR100018599.

# E. PROHIBITIONS

- 1. The direct or indirect discharge of any waste and/or wastewater to surface waters or surface water drainage courses is prohibited.
- 2. Bypass, discharges, or overflow of untreated wastes, except as allowed by Section E. Item 12 of this Order, are prohibited.
- 3. Discharge of waste classified as "hazardous," as defined in Section 2521(a) of Title 23, CCR, Section 2510 et seq., is prohibited. Discharge of waste classified as 'designated,' as defined in California Water Code Section 13173, in a manner that causes violation of groundwater limitations, is prohibited.
- 4. Wastes shall not be disposed of in geologically unstable areas to cause earth movement.
- 5. Wastes discharged shall not impart tastes, odors, color, foaming or other objectionable characteristics to the receiving waters.
- 6. There shall be no onsite permanent disposal of sludge. Sludge-drying activities are allowed. Any offsite disposal of wastewater or sludge shall be made only to a legal

point of disposal. For the purposes of this Order, a legal disposal site is one for which requirements have been established by the Regional Water Board or comparable regulatory entity, and which is in full compliance therewith. Any wastewater or sludge handling shall be conducted in such a manner to prevent its reaching surface waters or watercourses.

- 7. Odors originating at this facility shall not be perceivable beyond the limits of the property operated by the Discharger.
- 8. Wastes discharged from the wastewater treatment plant shall at no time contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- 9. The discharge of waste shall not create a condition of pollution, contamination, or nuisance. No new connections may be made without prior notification to the Regional Water Board for approval.
- 10. The discharge of any wastewater to surface waters or surface water drainage courses is prohibited without a National Pollutant Discharge Elimination System (NPDES) permit.
- 11. The holding tanks shall not contain floating materials, including solids, foams, or scum in concentrations that cause nuisance, adversely affect beneficial uses, or serve as a substrate for undesirable bacterial or algae growth or insect vectors.
- 12. Bypass (the intentional diversion of waste stream from any portion of a treatment facility) is prohibited. The Regional Water Board may take enforcement actions against the Discharger for bypass unless:
  - Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that cause them to become inoperable, or substantial and permanent loss in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production);
  - b) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and

- c) The Discharger submitted a notice at least 48 hours in advance of the need for a bypass to the Regional Water Board.
- 13. Any discharge of wastewater from the treatment system (including the wastewater collection system) at any point other than specifically described in this Order is prohibited and constitutes a violation of this Order.

# F. PROVISIONS

- 1. In accordance with California Water Code section 13300, the Discharger shall make any necessary system modifications to optimize the treatment and operation and comply with the following schedules:
  - a) Perform the following tasks no later than August 31, 2023.
    - i. Conduct a chlorination bench-scale treatability study by performing jar tests using representative samples collected during wet weather and dry weather conditions.
    - ii. Conduct disinfection byproduct formation testing.
    - iii. Conduct a tracer study on the current disinfection and contact tank.
    - iv. Prepare a summary report on the results and findings of the above tests.
  - b) Submit a Preliminary Design Report and cost estimate for the treatment system improvements no later than **March 31, 2024**;
  - c) Complete detailed design and prepare a bid document for the treatment system improvements no later than **December 31, 2024**;
  - d) Obtain funding and necessary permits, including Coastal Commission approval, and complete contractor selection no later than March 31, 2026;
  - e) Construct and start up the upgraded treatment plant including the dechlorination system no later than **September 30, 2027**;
  - f) Achieve full compliance with the Effluent Discharge Limitations in Section B no later than December 1, 2027; and
  - g) A copy of this Order shall be maintained at the wastewater treatment

plant so as to be available at all times to operating personnel.

- 2. The Discharger shall file with the Regional Water Board self-monitoring reports on work performed according to the detailed specifications contained in the revised MRP No. CI-3017 attached hereto and incorporated herein by reference, as directed by the Executive Officer. The results of any monitoring done more frequently than required at the location and/or times specified in the MRP shall be reported to the Regional Water Board. The Discharger shall comply with all of the provisions and requirements of the MRP.
- 3. The Discharger shall comply with all applicable requirements set forth in Chapter 4.5 (commencing with section 13290) of division 7 of the California Water Code.
- 4. The Discharger shall achieve compliance with all the effluent limitations requirements listed in this Order.
- 5. Revised MRP No. CI-3017 contains requirements for the sampling and monitoring of influent and effluent wastewater samples to determine if discharges from the Trancas WPCP are meeting the discharge limits.
- 6. Should effluent monitoring data indicate potential degradation of groundwater attributable to Discharger's effluent, the Discharger shall submit, within 90 days after discovery of the problem, mitigation measures that will be taken, or have been taken, to prevent degradation that may result from the discharge(s).
- 7. Wastewater treatment and discharge at the discharge/disposal area shall not cause pollution or nuisance as defined in California Water Code section 13050.
- 8. In accordance with California Water Code section 13260(c), the Discharger shall file a report of any material change or proposed change in the character, location, or volume of the discharge.
- 9. The Discharger shall operate and maintain its wastewater collection, treatment, and dispersal facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, to provide adequate and reliable transport, treatment, and disposal of all wastewaters from both existing and planned future wastewater sources under the Discharger's responsibilities. The plant operators and supervisors employed in the operations of the wastewater treatment plant must be certified pursuant to California Water Code sections 13625 through 13633, and in accordance with CCR Title 23, section 3680.
- 10. The Discharger shall submit an updated Operations and Maintenance Manual (O & M Manual) for the Trancas WPCP and its dispersal facilities to the Regional Water Board by December 15, 2027. The Discharger shall maintain the O & M Manual in a

usable condition and available for reference and use by all applicable personnel. The Discharger shall regularly review, and revise or update as necessary, the O & M Manual in order for the document to remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary and submitted to the Regional Water Board.

- 11. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
- 12. Collection System Requirements

This Order does not regulate the collection system, but rather regulates only the effluent being discharged into the waters of the State. The collection system is regulated pursuant to the State Water Board's General WDRs for Sanitary Sewer Systems, (WQ Order No. 2006-0003), adopted on May 2, 2006 and amended the WDRs by Order No. WQ 2008-0002-EXEC and Order No. WQ 2013-0058-EXEC. WQ Order No. 2006-0003, as amended, provides a consistent, statewide regulatory approach to address sanitary sewer collection systems. The General WDRs require public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all sanitary sewer overflows (SSOs) to the State Water Board's online SSO database.

The Discharger's collection system is part of the system that is subject to WQ Order No. 2006-0003, as amended. As such, the Discharger must properly operate and maintain its collection system (40 CFR part 122.41(e)). 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)). The Discharger is currently enrolled under the SSO General WDRs.

The State Water Board adopted General WDRs for Sanitary Sewer Systems, (WQ 2022-0103-DWQ) on December 6, 2022 and becomes effective on June 5, 2023. The Discharger is expected to apply for continuation of existing regulatory coverage under the new General WDRs.

- 13. Spill Reporting Requirements for the Treatment Plant
  - a) Initial Notification Although State and Regional Water Board staff do not have duties as first responders, this requirement is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. For certain spills, overflows and bypasses, the 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 (2) hours after becoming aware of the release.
- ii. In accordance with the requirements of CWC section 13271, the Discharger shall provide notification to the California Office of Emergency Services (Cal OES) of the release of reportable quantities 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 (2) hours after becoming aware of the release. CCR, Title 23, section 2250, established 1,000 gallons or more as a reportable quantity of sewage. The phone number for reporting these releases to the Cal OES is (800) 852-7550. The Discharger shall also include public outreach in their emergency communications protocols, which may include media updates, social media postings, and community notices.
- iii. The Discharger shall notify the Regional Water Board of any unauthorized release of sewage from the Trancas WPCP that causes, or probably will cause, a discharge to a water of the state as soon as possible, but not later than two (2) hours after becoming aware of the release. This initial notification does not need to be made if the Discharger has notified Cal OES and the local health officer or the director of environmental health with jurisdiction over the affected waterbody. The phone number for reporting these releases of sewage to the Regional Water Board is (213) 576-6683. 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:

• The location, date, and time of the release;

- The water body that may be impacted by the discharge;
- An estimate of the amount of sewage or other waste released and the amount that reached the receiving water at the time of notification;
- If ongoing, the estimated flowrate of the release at the time of the notification;
- The name, organization, phone number, and email address of the reporting representative; and
- A certification that Cal OES and the local health officer or directors of environmental health with jurisdiction over the possibly affected water bodies have been notified of the discharge.
- b) Monitoring For spills, overflows and bypasses reported under Section E of this Order, the Discharger shall monitor as required below:

To define the geographical extent of spill's impact, the Discharger shall obtain grab samples (if feasible, accessible, and safe) for all spills, overflows or bypasses of any volume that reach any waters of the State (including surface and ground waters). The Discharger shall analyze the samples for total and fecal coliform, Escherichia coli ([E. coli], if a fecal coliform test shows positive), 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 time the spill is known until the results of two (2) consecutive sets of bacteriological monitoring indicate the return to the background level or the County Department of Public Health authorizes cessation of monitoring.

- c) Reporting The initial notification required under Initial Notification shall be followed by the following.
  - i. As soon as possible, but not later than twenty-four (24) hours after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, the Discharger shall submit a statement to the Regional

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

- Agency, Order No., and MRP No.;
- The location, date, and time of the discharge;
- The water body that received the discharge;
- A description of the level of treatment of the sewage or other waste discharged;
- An initial estimate of the amount of sewage or other waste released and the amount that reached the impacted water body;
- The Cal OES control number and the date and time that notification of the incident was provided to Cal OES; and
- The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).
- A written preliminary report shall be submitted to the Regional Water Board within five (5) working days after disclosure of the incident via the State Water Board GeoTracker database under Global ID WDR100016910. Within 30 days after submitting the preliminary report, the Discharger shall submit the final written report to the Regional Water Board. The final written report shall be included in the next quarterly monitoring report submitted to the GeoTracker database above. The final written report shall document the information required in paragraph section 13.d) Records, below, monitoring results and any other information

required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.

- iii. The Discharger shall include a certification in the annual summary report (due according to the schedule in the accompanying 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;
- 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 WDRs.
- 14. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Supervisor of the Groundwater Permitting Unit at the Regional Water Board by telephone at (213) 576-6683 within 24 hours of having knowledge of any violations, and shall confirm this notification in writing to the Regional Water Board within five working days from the date of notification, unless otherwise specified in this Order. The written notification shall also be submitted via email with reference to CI-3017 to losangeles@waterboards.ca.gov. The written notification shall include, but not limited to, the following information, as appropriate:
  - a) Nature and extent of violation;
  - b) Date and time: when the violation started, when compliance was achieved; and, when discharge was suspended and restored, as applicable;
  - c) Duration of violation;
  - d) Cause(s) of violation;
  - e) Impact of the violation;
  - f) Corrective and/or remedial actions taken and/or will be taken with time schedule for implementation to return to compliance and prevent recurrence including, where applicable, a schedule of implementation; and
  - g) Other noncompliance requires written notification as above at the time of the normal monitoring report.
- 15. This Order does not relieve the Discharger from the responsibility to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.
- 16. After notice and opportunity for a hearing, this Order may be terminated or modified for causes including, but not limited, to:
  - a) Violation of any term or condition contained in this Order;

- b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; or
- c) A change in any condition, or the discovery of any information, which requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 17. The Discharger shall furnish, within a reasonable time, any information the Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Water Board, upon request, copies of records required to be kept by this Order.
- 18. This Order includes the attached *Standard Provisions Applicable to Waste Discharge Requirements* (Attachment C) which are incorporated herein by reference. If there is any conflict between the provisions stated herein and the *Standard Provisions Applicable to Waste Discharge Requirements*, the provisions stated herein will prevail.
- 19. The Discharger shall allow the Regional Water Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
  - a) Enter upon the Discharger premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
  - c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the California Water Code, any substances or parameters at any locations.
- 20. Until terminated by the Regional Water Board, the WDRs contained in this Order will remain in effect and will be reviewed periodically.
- 21. All discharges of waste into the waters of the State are privileges, not rights. In accordance with California Water Code section 13263(g), these requirements shall

not create a vested right to continue to discharge and are subject to rescission or modification.

22. Failure to comply with this Order and Revised MRP No. CI-3017, could subject the Discharger to monetary civil liability pursuant to the California Water Code, including sections 13268 and 13350. A person's failing to furnish monitoring reports or falsifying any information provided therein is guilty of a misdemeanor.

#### **G. COMPLIANCE DETERMINATION**

1. Compliance with the effluent limitations contained in Section B of this Order will be determined as specified below:

a) General:

Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e.g., monthly or weekly average), that sample shall serve to characterize the discharge for the entire interval. If quarterly sample results show noncompliance with the average monthly limit and that sample result is used or compliance determinations for each month of the quarter, then three separate violations of the average monthly limit shall be deemed to have occurred.

b) Average Monthly Effluent Limitation:

If the average of daily discharges over a calendar month exceeds the average monthly effluent limitation for a given parameter in Tables 4 and 5, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the average monthly effluent limitation, the Discharger will 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 effluent compliance determination can be made for that calendar month.

c) Maximum Daily Effluent Limitation:

If a daily discharge exceeds the maximum daily effluent limitation for a given parameter in Tables 4 and Table 5, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no effluent compliance determination can be made for that day.

# H. REOPENER

1. The Regional Water Board may modify, or revoke and reissue this Order at any time, and may 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 or to address Discharger's expansion or mitigation plans, TMDL or Basin Plan provisions, or compliance with Resolution 68-16. Additionally, the Regional Water Board at its discretion may reissue this Order to change the implementation schedule specified in Provision F.1 based on the findings from the preliminary design report.

#### I. EFFECTIVE DATE OF THE ORDER

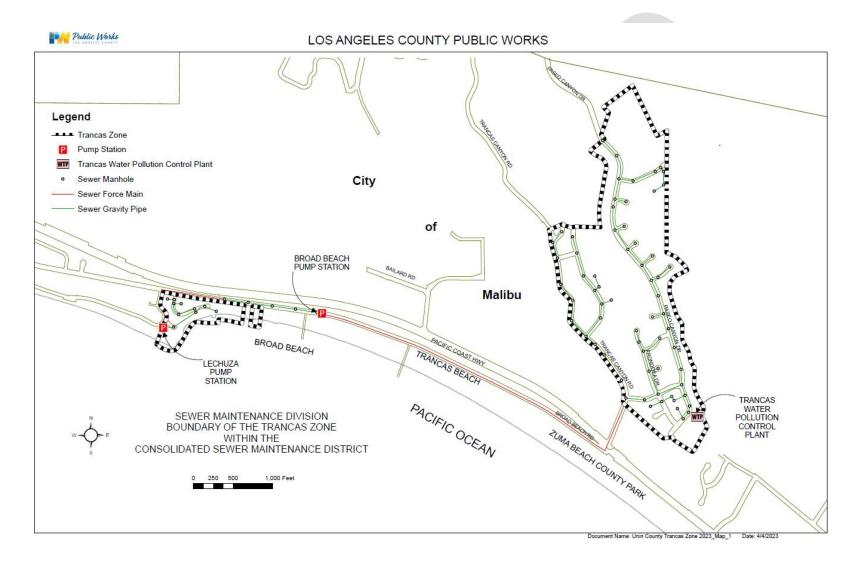
This Order takes effect upon its adoption.

I, Susana Arredondo, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 22, 2023.

Susana Arredondo Executive Officer

#### Order No. R4-2023-XXXX Page 38





Order No. R4-2023-XXXX Page 39

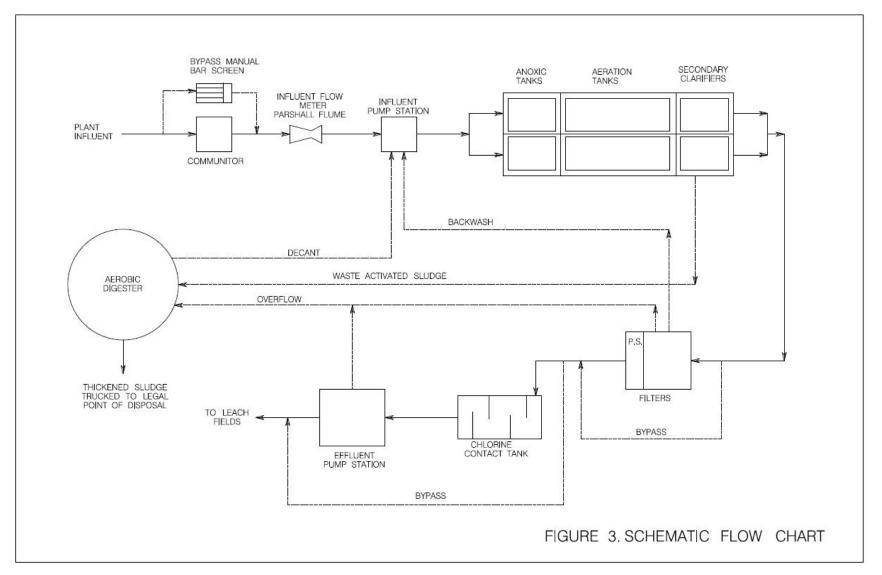
# Figure 2. Groundwater Monitoring Well, Surface Sampling, and Leach Field Location



LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

FIGURE 4: MONITORING WELL, SURFACE WATER SAMPLING AND LEACHFIELD LOCATIONS

#### Order No. R4-2023-XXXX Page 40



# Figure 3. Process Flow Diagram

#### Order No. R4-2023-XXXX Page 41

#### Figure 4. Storm Drain Outlet Locations



#### Order No. R4-2023-XXXX Page 42

# Figure 5. Measured Groundwater and Surface Water Elevation from January 2018 through June 2022.

