



North Coast Regional Water Quality Control Board

ORDER No. R1-2019-0007 WDID No. 1B841240SON

WASTE DISCHARGE REQUIREMENTS AND WATER RECLAMATION REQUIREMENTS FOR AIRPORT-LARKFIELD-WIKIUP SANITATION ZONE WASTEWATER TREATMENT AND RECLAMATION FACILITY

SONOMA COUNTY

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	Sonoma County Water Agency			
Name of Facility	Airport-Larkfield-Wikiup Sanitation Zone Wastewater Treatment Facility			
	800 Aviation Boulevard			
Facility Address	Santa Rosa, CA 95403			

The discharge by the Airport-Larkfield-Wikiup Sanitation Zone Wastewater Treatment Facility (WWTF or Facility) from the discharge points identified below is subject to waste discharge requirements and water reclamation requirements as set forth in this Order:

Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Discharge Location
001	Secondary Treated Municipal Wastewater	38º31'10.26"N	122 º48'3.9"W	Secondary Effluent Storage Pond
002	Tertiary Treated Municipal Wastewater	38º31'0.18"N	122 º48'10.77"W	Tertiary Recycled Water Storage Pond at WWTF
002	Tertiary Treated Municipal Wastewater	38º30'19.08"N	122 º51'3.07"W	Tertiary Recycled Water Storage Pond at Reservoir D
0031	Secondary or Tertiary Treated Municipal Wastewater	38º30'21.06"N	122 º48'55.39"W	Pasture Irrigation (Sonoma County Airport)
0041	Tertiary Treated Municipal Recycled Water			Agricultural Irrigation
0051	Tertiary Treated Municipal Recycled Water			Transfers to Windsor and Santa Rosa reclamation systems

VALERIE L. QUINTO, CHAIR | MATTHIAS ST. JOHN, EXECUTIVE OFFICER

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Table Note:

1. Recycled water use at Discharge Points 003, 004, and 005 is addressed in the Discharger's enrollment under State Water Resources Control Board Order WQ 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use* (Recycled Water General Order).

Table 3. Administrative Information

This Order was adopted on:	April 17/18, 2019
This Order will be effective on:	July 1, 2019

IT IS HEREBY ORDERED, that Order No. R1-2001-0069 is rescinded upon the effective date of this Order except for enforcement purposes and, in order to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Matthias St. John, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on April 18, 2019.

Matthias St. John Executive Officer

19_0007_Airport-Larkfield-Wikiup Sanitation Zone_WDR

I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements and water reclamation requirements as set forth in this Order:

Discharger	Sonoma County Water Agency		
Name of Facility Airport-Larkfield-Wikiup Sanitation Zone Wastewater Treatment Facility Facility			
	800 Aviation Boulevard		
Facility Address	Santa Rosa, CA 95403		
	Sonoma County		
Facility Contact, Title, and Phone	George Lincoln, Water Agency Engineer, (707) 521-1808		
Mailing Address	404 Aviation Boulevard, Santa Rosa, CA 95403		
Type of Facility	Municipal Wastewater Treatment Plant		
Facility Design Flow	Average Dry Weather Flow (ADWF): 0.9 million gallons per day (mgd) Peak Wet Weather Flow (PWWF): 5.0 mgd		

Table4. Facility Information

II. FINDINGS

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds:

- **A. Basis and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the Discharger's previous application for permit renewal, monitoring data submitted during the term of the Discharger's previous Order, and other available information.
- **B. Background and Facility Description**. The Sonoma County Water Agency (hereinafter Discharger) is currently discharging pursuant to Waste Discharge Requirements Order No. R1-2001-0069. The renewal of these waste discharge requirements (WDRs) is for the Airport-Larkfield-Wikiup Sanitation Zone Wastewater Treatment Facility (Facility). The Discharger submitted a Report of Waste Discharge (ROWD) on May 22, 2018 and applied for renewal of WDRs to treat and reclaim up to 0.9 mgd ADWF of municipal treated wastewater from the Facility to pastures, orchards, vineyards, agriculture, and landscapes owned by private parties.

The Discharger owns and operates a wastewater collection, treatment, and disposal facility serving a population of approximately 9,400 people and 3,577 equivalent single-family dwelling units. The service area is primarily comprised of residential users, along with some industrial and commercial facilities.

The Facility preferentially produces disinfected tertiary recycled water but has the capability to store and use disinfected secondary-23 recycled water. All recycled water that is produced, is used for irrigation and frost control. If secondary treated recycled water is produced, it is used for pasture irrigation on restricted access land at the Sonoma County Airport. Tertiary treated recycled water is used for agricultural irrigation, landscape irrigation, and frost control. The production of recycled water is addressed in these WDRs. On June 1, 2018, the Discharger submitted a Notice of Intent (NOI) for enrollment of recycled water uses under State Water Resources Control Board

Order WQ 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use* (Recycled Water General Order).

Influent to the Facility is gravity fed into an influent pump station wet well, then pumped to the headworks where it is screened through a bar or spiral coarse screen for pretreatment. Screened influent passes through a Parshall flume for flow measurement, then receives secondary treatment through three aeration ponds (operated in series or in parallel) and two settling ponds (operated in series). Secondary treated effluent is gravity fed to a transfer pump station wet well where it is chlorinated in-pipe and discharged to Effluent Storage Pond No. 1 (North Pond) or conveyed to the tertiary treatment system. The tertiary treatment system consists of four 500-micron mechanical screens, followed by the tertiary microfiltration membrane system where effluent is chlorinated and then conveyed through up to four chlorine contact basins. The disinfected effluent flows into the effluent pump station wet well where the chlorinated effluent is pumped either through the transfer line to Recycled Water Storage Pond No. 2 (South Pond) or to the Irrigation Pump Station and through the tertiary recycled water distribution system to the Oceanview Storage Reservoir (Reservoir D).

The Discharger has 95 million gallons (MG) of secondary recycled water storage capacity and 198 MG of tertiary recycled water storage capacity for a total of 293 MG of storage capacity. The Discharger currently has signed agreements with twelve individual recycled water users and currently provides disinfected tertiary recycled water for irrigation of up to 500 acres of vineyards, 10 acres of pasture, 5 acres of grass, and 20 acres of nut trees. In addition, the Discharger periodically applies secondary or tertiary recycled water to 210 acres of grasslands at the Sonoma County Airport. The Discharger also maintains agreements with the City of Santa Rosa and the Town of Windsor to transfer tertiary recycled water to these two entities when the Discharger needs assistance to maintain its water balance and the City or the Town has adequate storage and/or disposal capacity to assist.

Solids are removed from the aeration and settling ponds on an as-needed basis, approximately once every ten years. The most recent solids removal event occurred in 2018. The solids are currently transported to the Redwood Landfill in Novato, California to be used as daily cover.

Attachment A provides a map of the area around the Facility. Attachment B provides a Facility layout and Attachment C provides a Facility flow schematic.

- **C. Legal Authorities.** This Order serves as WDRs for discharges to land issued pursuant to section 13263 of the California Water Code (Water Code).
- D. Basin Plan. As required by Water Code section 13263(a), these WDRs are crafted to implement the Water Quality Control Plan for the North Coast Region (Basin Plan), and in so doing, the Regional Water Board has taken into consideration the beneficial uses to be protected, the water quality objectives (both numeric and narrative) reasonably required for that purpose, other (including previous) waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241. The Basin Plan contains implementation plans and policies for protecting waters of the basin. The Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

Thus, beneficial uses applicable to area groundwater within the Mark West Hydrologic Subarea of the Middle Russian River Hydrologic Area to be protected are as follows: municipal and domestic supply (MUN), agricultural water supply (AGR), industrial service supply (IND), industrial process supply (PRO), aquaculture (AQUA), and Native American culture (CUL).

The beneficial uses applicable to surface waters in the Mark West Hydrologic Subarea of the Middle Russian River Hydrologic Area to be protected are as follows: municipal and domestic supply (MUN), agricultural water supply (AGR), industrial service supply (IND), industrial process supply (PRO), groundwater recharge (GWR), freshwater replenishment (FRSH), hydropower generation (POW), navigation (NAV), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), warm freshwater habitat (WARM), cold freshwater habitat (COLD), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development (SPWN), shellfish harvesting (SHELL), and aquaculture (AQUA).

E. California Water Code. The California Water Code (Water Code) establishes the authority for the Regional Water Board to establish water quality objectives, impose discharge prohibitions, and prescribe waste discharge and reclamation requirements. Water Code section 13241 requires each regional board to "establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance [...]." The control of waste is established through effluent limitations and other requirements in Waste Discharge Requirement permits. Water Code section 13243 provides that "A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

It is the Regional Water Board's intent that this Order shall ensure attainment of water quality standards, applicable water quality objectives, and protection of beneficial uses of receiving waters. This Order therefore requires the Discharger to comply with all prohibitions, discharge specifications, receiving water limitations, standard provisions, and monitoring and reporting requirements. The Order further prohibits discharges from causing violations of water quality objectives or causing conditions to occur that create a condition of nuisance or water quality impairment in receiving waters as a result of the discharge.

- **F. Title 27 Exemption.** The wastewater treatment, storage, and disposal activities described in this Order are exempt from the requirements of Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste in California Code of Regulations, title 27, division 2, Subdivision 1, section 20005, et seq. The activities are exempt from the requirements of title 27 so long as the activity meets, and continues to meet, all preconditions listed below. (Cal. Code Regs., tit. 27, § 20090.)
 - 1. Sewage—Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to California Code of Regulations, title 23, division 3, chapter 9, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludge or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable State Water Board promulgated provisions of this division. (Cal. Code Regs., tit. 27, § 20090(a).)
 - **2.** Wastewater—Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields if the following conditions are met:

- **a.** the applicable Regional Water Board has issued WDRs, reclamation requirements, or waived such issuance;
- **b.** the discharge is in compliance with the applicable water quality control plan; and
- **c.** the wastewater does not need to be managed according to, California Code of Regulations, title 22, division 4.5, chapter 11, as a hazardous waste. (Cal. Code Regs., tit. 27, § 20090(b).)
- **3.** Underground Injection—Discharges of waste to wells by injection pursuant to the Underground Injection Control Program established by the USEPA under the Safe Drinking Water Act, 42 US Code section 300(h), see Code of Federal Regulations title 40, Parts 144 to 146. (Cal. Code Regs., tit. 27, § 20090(c).)
- **4.** Soil Amendments—Use of nonhazardous decomposable waste as a soil amendment pursuant to applicable best management practices, provided that Regional Water Boards may issue waste discharge or reclamation requirements for such use. (Cal. Code Regs., tit. 27, § 20090(f).)
- **5.** Fully Enclosed Units—Waste treatment in fully enclosed facilities, such as tanks, or in concrete lined facilities of limited areal extent, such as oil water separators designed, constructed, and operated according to American Petroleum Institute specifications. (Cal. Code Regs., tit. 27, § 20090(i).)
- **G. Antidegradation Policy**. State Water Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality Waters of California (hereafter the Antidegradation Policy) requires the disposal of waste be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the state. The quality of some waters is higher than established by adopted policies and higher quality water shall be maintained to the maximum extent possible consistent with the Antidegradation Policy. The Antidegradation Policy requires the following:
 - 1. Higher quality water will be maintained until it has been demonstrated to the state that any change will be consistent with the maximum benefit to the people of the state, will not unreasonably affect present and anticipated beneficial use of the water, and will not result in water quality less than prescribed in the policies.
 - **2.** Any activity that produces a waste and discharges to existing high quality waters will be required to meet WDRs that will result in the best practicable treatment or control of the discharge necessary to assure pollution or nuisance will not occur, and the highest water quality consistent with the maximum benefit to the people of the state will be maintained.

Limited degradation of groundwater by some waste constituents associated with municipal wastewater effluent, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The technology, energy, water recycling, and waste management advantages of centralized wastewater treatment systems far exceed any benefits derived from reliance on numerous, concentrated individual wastewater systems, and the cumulative impact on water quality will be substantially less. The economic prosperity of communities and associated industry is of maximum benefit to the people of the state and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order provided the terms of the Basin Plan, and other applicable State Water Board and Regional Water Board policies are consistently met.

This Order will offer protection of beneficial uses of groundwater with no discharge to surface water. This Order is consistent with Resolution No. 68-16 because implementation of the Order will

result in the best practicable treatment or control of the discharge and lead to a net benefit to water quality by improving and monitoring existing conditions currently impacted by this activity. The Order is designed to protect beneficial uses and does not promote or authorize discharges that exceed water quality standards or result in the permanent lowering of high-quality waters. This Order contains discharge prohibitions, effluent limitations, water recycling requirements, and receiving water limitations that are expected to maintain or improve water quality by addressing nutrients, bacteria and other pollutants in the waste streams.

- Human Right to Water. 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 (Water Code §106.3, subd. (a)). The Safe Drinking Water Act provides that all Californians have a right to pure and safe drinking water (Health & Safety Code § 116270, subd. (a)). This Order promotes that policy by requiring the Discharger to handle and dispose of waste in a manner that will protect water quality objectives, including those that protect drinking water supplies.
- I. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A sections 1531 to 1544). The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- J. Recycled Water. This Order includes water recycling requirements that apply to the production and storage of secondary and tertiary recycled water, while the Discharger's distribution and use of recycled water are permitted through the Discharger's enrollment under the Recycled Water General Order. The Discharger submitted a NOI on June 1, 2018 to obtain coverage under the Recycled Water General Order. The NOI included a title 22 Recycled Water Engineering Report (title 22 report) that was reviewed by State Water Board Division of Drinking Water (DDW) staff. The revised NOI and title 22 report were submitted to the Regional Water Board and DDW on February 25, 2019. The Regional Water Board Executive Officer will issue a Notice of Applicability of Enrollment under the Recycled Water General Order upon receipt of DDW's approval of the title 22 report and prior to the effective date of this Order.
- **K. Monitoring and Reporting.** Water Code section 13267 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement State requirements. The Monitoring and Reporting Program is necessary to determine compliance with the conditions of this Order and to determine the discharges impacts, if any, on groundwater. As such, the burden, including costs, of this monitoring bears a reasonable relationship to the need for that information and the benefits to be obtained from that information. This Monitoring and Reporting Program is provided in Attachment D. The Executive Officer of the Regional Water Board is delegated the authority to modify the Monitoring and Reporting Program, as determined appropriate to protect water quality.
- L. California Environmental Quality Act (CEQA). The Regional Water Board has determined the activities covered under this permit will not have a significant effect on the environment and are exempt from CEQA pursuant to California Code of Regulations, title 14, section 15301 (ongoing or existing projects). The Facility is an existing wastewater treatment facility with negligible or no expansion of use or wastewater flow beyond existing use or design capacity.

- **M.** Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements and Water Reclamation Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.
- **N. Consideration of Public Comment.** The Regional Water Board provided a 30-day written comment period prior to adoption of the Order, and, in a public meeting, heard and considered all comments pertaining to the discharge.
- **O. Petition of Action.** Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

III. DISCHARGE PROHIBITIONS

- A. The discharge of waste to Mark West Creek or its tributaries, is prohibited.
- **B.** The direct or indirect discharge from recycled water use areas to surface waters is prohibited except in minor amounts such as that associated with Best Management Practices (BMPs) for good irrigation practices.
- **C.** The discharge of any waste not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.
- **D.** Creation of pollution, contamination, or nuisance as defined by section 13050 of the Water Code is prohibited.
- **E.** The discharge or reclamation of untreated or partially treated waste (receiving a lower level of treatment than described in Finding II.B) from anywhere within the collection, treatment, disposal, or reclamation system is prohibited.
- **F.** Any sanitary sewer overflow (SSO) that results in a discharge of untreated or partially treated wastewater to (a) waters of the State, or (b) land that creates pollution, contamination, or nuisance as defined in Water Code section 13050 (m) is prohibited.
- **G.** The discharge of waste or distribution of recycled water to land that is not owned by or under agreement to use by the Discharger is prohibited, except as authorized under section VI. (Solids Disposal and Handling Requirements) or for use for fire suppression as provided in title 22, sections 60307 (a) and (b) of the California Code of Regulations.
- **H.** The discharge of waste at any point not described in Table 2 or authorized by a permit issued by the State Water Board or another Regional Water Board is prohibited.

- I. The average daily dry weather flow (ADWF) of waste through the Facility in excess of 0.9 mgd, as determined from the calendar month with the lowest average daily flow, is prohibited. Compliance with this prohibition shall be determined as defined in section IX.B of this Order.
- J. Discharges of waste that violate any narrative or numerical water quality objective that are not authorized by waste discharge requirements or other order or action by the Regional or State Water Board are prohibited.
- **K.** The discharge of sludge is prohibited, except as authorized under section VI.A (Solids Disposal and Handling Requirements) of this Order and/or the Discharger's enrollment under Statewide Biosolids Permit.
- **L.** The discharge into the Facility of hazardous wastes¹, including any flammable, explosive, or corrosive wastes, is prohibited.
- **M.** The discharge of liquid or solid waste other than municipal wastewater and domestic septage in the Facility is prohibited.

IV. EFFLUENT LIMITATIONS

A. Effluent Limitations – Discharge to Secondary Effluent Storage Pond (Discharge Point 001)

1. The Discharger shall maintain compliance with the following effluent limitations for disinfected secondary-treated effluent prior to secondary storage, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program. The disinfected secondary treated wastewater shall be adequately oxidized and disinfected as defined in Title 22, Division 4, Chapter 3 of the CCR.

		Effluent Limitations ¹			
Parameter	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	50	80		
Total Suspended Solids	mg/L	50	80		
рН	Standard units			6.0	9.0
Table Notes:1. See Definitions in Order Section IX. Compliance Determination.					

2. Total Coliform Bacteria. The disinfected secondary effluent, sampled at Monitoring Location EFF-001, shall not contain concentrations of total coliform bacteria exceeding the following concentrations:

¹ "Hazardous waste" is defined under the California Code of Regulations, Article 1, title 22, section 66261.3 et seq.

- **a.** The median concentrations shall not exceed a Most Probable Number (MPN) of 23 per 100 milliliters, using the bacteriological results of the last seven days for which analyses have been completed²; and
- **b.** The number of coliform bacteria shall not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30-day period.

B. Water Recycling Effluent Limitations –Discharge to Tertiary Recycled Water Storage Ponds (Discharge Point 002)

1. The Discharger shall maintain compliance with the following effluent limitations for disinfected tertiary recycled water prior to tertiary recycled water storage, with compliance measured at Monitoring Location EFF-002 as described in the Monitoring and Reporting Program. The tertiary treated recycled water shall, at a minimum, be adequately oxidized, microfiltered, and disinfected as defined in Title 22, Division 4, Chapter 3.

 Table 6. Effluent Limitations – Discharge to Tertiary Recycled Water Storage Ponds

		Effluent Limitations ¹				
Parameter	Units	Average Monthly ²	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	10	20			
Total Suspended Solids	mg/L	10	20			
рН	std units			6.0	9.0	
 <u>Table Notes:</u> See Definitions in Order Section IX. Compliance Determination. See Section IX of this Order regarding compliance with the Average Monthly Effluent Limitation. 						

- **2.** Total Coliform Bacteria. Disinfected tertiary effluent discharged at Discharge Point 002 shall not contain coliform bacteria in excess of the following concentrations:
 - **a.** The median concentration shall not exceed an MPN of 2.2 per 100 mL, using the bacteriological results of the last 7 days for which analysis have been completed³; and
 - **b.** The number of coliform bacteria shall not exceed an MPN of 23 per 100 mL in more than one sample in any 30-day period.
 - c. No single sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.

C. Water Recycling Requirements

 The Discharger shall comply with applicable state and local requirements regarding the production of secondary and tertiary recycled water, including requirements of Water Code sections 13500-13577 (Water Reclamation) and State Water Board, DDW regulations at title 22, sections 60301 – 60357 of the CCR (Water Recycling Criteria). The Discharger's distribution

² See Section IX of this Order regarding compliance with the 7-day median bacteriological limitation.

³ See Section IX of this Order regarding compliance with the 7-day median bacteriological limitation.

and use of recycled water are permitted through the Discharger's enrollment under the Recycled Water General Order.

2. Filtration Process Requirements for Tertiary Treatment System – INT-001

- **a. Turbidity.** The effluent from the filtration system shall at all times be filtered such that the filtered effluent does not exceed any of the following specifications at Monitoring Location INT-001 prior to discharge to the disinfection unit:
 - i. 0.2 NTU more than 5 percent of the time during any 24-hour period; and
 - **ii.** 0.5 NTU at any time.
- **b.** Filtered effluent in excess of the turbidity specifications shall not enter the reclamation distribution system. Filtered effluent in excess of turbidity specifications shall be automatically diverted to an upstream treatment process or to emergency storage or result in a plant shut down as soon as the Discharger is aware of the exceedance. The Discharger shall provide notification of non-compliance with filtration process requirements as required in Provision VIII.O of this Order.

3. Disinfection Process Requirements for Chlorine Disinfection System

a. Discharge Point 001

As measured following the end of the secondary chlorine contact basin at Monitoring Location EFF-001, the total residual chlorine concentration shall be maintained at a level that ensures the discharge meets the total coliform effluent limitations at the discharge to the secondary recycled water storage pond at Discharge Point 001.

b. Discharge Point 002

As measured at the end of the tertiary chlorine contact basin at Monitoring Location EFF-002, tertiary treated recycled water shall be disinfected in a manner that ensures effective pathogen reduction as described in the following specifications, with compliance measured at Monitoring Location EFF-002:

- i. The chlorine disinfection process shall at all times provide a CT value of not less than 450 milligram-minutes per liter (mg-min/L) with a modal contact time of at least 90 minutes, based on peak dry weather design flow.
- **ii.** Effluent not meeting the CT criteria shall be diverted to an upstream treatment process unit or to emergency storage as soon as the Discharger is aware of the exceedance. The Discharger shall provide notification of non-compliance with disinfection requirements as required by Provision VIII.O of this Order.

V. STORAGE AND DISCHARGE SPECIFICATIONS

A. Pond Freeboard. The Discharger shall maintain at least 2 feet of freeboard at all times in all treatment, effluent, and recycled water storage ponds.

- **B. Objectionable Odor**. Objectionable odors originating at the Facility shall not be perceivable beyond the limits of the wastewater treatment, storage, and disposal areas.
- **C. Public Contact.** The Discharger shall preclude or control public contact with wastewater through such means as fences and signs, or other applicable alternatives.
- **D. Vector Control.** The Discharger shall manage the Facility and effluent disposal area to prevent the breeding of mosquitos.
- **E. Capacity Assurance.** The Discharger shall monitor Facility storage and disposal capacity by developing a storage operations curve to be submitted with the annual report each year.
- **F.** Winter Months. The Facility shall have sufficient treatment, storage, and disposal capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary infiltration and inflow during the winter months. When stored effluent reaches 85 percent of total facility storage capacity, or when stored effluent exceeds 67 percent of total facility storage on January 1, the Discharger shall submit a report, on a monthly basis, detailing contingency measures taken to ensure adequate and safe freeboard within all storage ponds.

VI. SOLIDS DISPOSAL AND HANDLING REQUIREMENTS

- **A.** Sludge, as used in this Order, means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screenings generated during preliminary treatment.
- **B.** All collected sludges and other solid waste removed from liquid wastes shall be removed from screens, sumps, ponds, and tanks as needed to ensure optimal plant operation and disposed of in accordance with applicable federal and State regulations.
- **C.** All collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal.
- **D.** The use and disposal of biosolids shall comply with all of the land application and disposal requirements in 40 Code of Federal Regulations (CFR) Part 503, which are enforceable by the U.S. EPA, not the Regional Water Board. If, during the life of this Order, the state accepts primacy for implementation of 40 CFR Part 503, the Regional Water Board may also initiate enforcement where appropriate.
- **E.** Sludge that is disposed of in a municipal solid waste landfill or used as daily landfill cover shall meet the applicable requirements of 40 CFR 258. In the annual self-monitoring report, the Discharger shall report the amount of sludge placed in a landfill and the landfill(s) which received the sludge.
- **F.** The Discharger shall prevent and minimize any sludge use or disposal in violation of this Order that may adversely affect human health or the environment.
- **G.** Solids and sludge treatment and storage shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
- **H.** Solids and sludge treatment and storage sites shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection from at least a 100-year storm with a 100-year recurrence interval and 24-hour duration.
- I. The discharge of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State.

VII. RECEIVING WATER LIMITATIONS

A. Groundwater Limitations

- 1. The collection, treatment, storage, and disposal of wastewater shall not cause or contribute to a degradation of groundwater quality unless a technical evaluation is performed that demonstrates that any degradation that could reasonably be expected to occur, after implementation of all regulatory requirements and reasonable best management practices, will not violate groundwater quality objectives or cause impacts to beneficial uses of groundwater.
- 2. The collection, treatment, storage and disposal of wastewater or use of recycled water shall not cause or contribute to levels of chemical constituents in groundwater that exceed the maximum and secondary maximum contaminant levels specified in California Code of Regulations, title 22, Table 64431-A, Table 64444-A, Table 64449-A, and Table 64449-B. (Cal. Code Regs., tit. 22, § 64444 and § 64449.).
- **3.** The collection, treatment, storage and disposal of wastewater or use of recycled water shall not cause or contribute to levels of radionuclides in groundwater in excess of the limits specified in California Code of Regulations, title 22, Table 64442 and Table 64443. (Cal. Code Regs., tit. 22, § 64442, and § 64443.).
- **4.** The collection, treatment, storage, and disposal of wastewater or use of recycled water shall not cause groundwater to contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
- **5.** The collection, treatment, storage and disposal of the treated wastewater or use of recycled water shall not cause the median concentration of coliform organisms over any 7-day period to exceed 1.1 MPN per 100 milliliters or 1 colony per 100 milliliters in groundwater.
- 6. The collection, treatment, storage and disposal of wastewater or use of recycled water shall not cause groundwater to contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in humans, or that adversely affects beneficial uses. This limitation applies regardless of whether the toxicity is caused by a single substance or the synergistic effect of multiple substances.

VIII. GENERAL PROVISIONS

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. The Discharger shall comply with the following provisions:

- **A. Availability.** A copy of this Order and the associated Monitoring and Reporting Program shall be maintained at the Facility and be available at all times to operating personnel.
- **B.** Enforcement. The Discharger shall operate and maintain the Facility as described in this Order. Violation of any requirements contained in this Order subject the Discharger to enforcement action, including civil liability, under the Water Code.

- **C. Severability**. Provisions of these waste discharge and water reclamation requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.
- **D. Sanitary Sewer Overflows.** On May 2, 2006, the State Water Board adopted State Water Board Order No. 2006-0003-DWQ, Statewide General WDRs for Sanitary Sewer Systems. Order No. 2006-0003-DWQ requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage under the General WDRs by November 2, 2006. On September 9, 2013, the State Water Board adopted Order No. WQ-2013-0058-EXEC amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The Discharger has coverage under and is separately subject to the requirements of Order Nos. 2006-0003-DWQ and WQ-2013-0058-EXEC and any future revisions thereto for operation of its wastewater collection system.
- **E. Operation and Maintenance.** The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance include adequate laboratory control 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.

The Discharger shall maintain an updated Operation and Maintenance Manual (O&M Manual) for the operational components of the Facility. The Discharger shall update the O&M Manual, as necessary, to conform to changes in operation and maintenance of the Facility. The Discharger shall operate and maintain the Facility in accordance with the most recently updated O&M Manual. The O&M Manual shall be readily available to operating personnel on-site and for review by state inspectors.

F. Source Control and Pretreatment Provisions.

- 1. The Discharger shall perform source control functions and provide a summary of source control activities conducted in the Discharger's Annual Report (due March 1 of each year). Source control functions and requirements shall include the following:
 - **a.** Implement the necessary legal authorities to monitor and enforce source control standards, restrict discharges of toxic materials to the collection system and inspect facilities connected to the system.
 - **b.** If waste haulers are allowed to discharge to the Facility, establish a waste hauler permit system, to be reviewed by the Regional Water Board Executive Officer, to regulate waste haulers discharging to the collection system or Facility.
 - c. Industrial Waste Inventory
 - **d.** The Discharger conducted a comprehensive survey of the commercial and industrial users in the service area in 2017. The Discharger continuously tracks changes in the commercial and industrial user base through County building permit reviews, drive-by inspections, and walk-in inspections. The Discharger shall provide an updated inventory of all identified industrial users in the service area by category (i.e., SIU, NSCIU, etc.) and permitting status

in its annual report to the Regional Water Board. At a minimum, the inventory shall identify the following information for each industrial user: the user name, whether it qualifies as a significant user; the average flow rate; the SIC code; any pretreatment being implemented by each industrial user; and whether or not the Discharger has issued a permit to any of the identified industrial users. Perform public outreach at least once a year to educate industrial, commercial, and residential users about the importance of preventing discharges of industrial and toxic wastes to the collection system or Facility;

- **e.** Perform ongoing inspections and monitoring, as necessary, to ensure adequate source control.
- **f.** General Prohibitions. Pollutants introduced into WWTFs by a non-domestic source shall not pass through [40 CFR 403.3(n)] the WWTF or interfere [40 CFR 403.3(i)] with the operation or performance of the works. These general prohibitions and the specific prohibitions in paragraph (g) of this provision apply to all non-domestic sources introducing pollutants into a WWTF whether or not the source is subject to other National Pretreatment Standards or any national, state, or local pretreatment requirements.
- **g.** Specific Prohibitions. In addition, the following pollutants shall not be introduced into a WWTF:
 - i. Pollutants that create a fire or explosion hazard in the WWTF;
 - **ii.** Pollutants that will cause corrosive structural damage to the WWTF, but in no case discharges with pH lower than 5.0, unless the WWTF is specifically designed to accommodate such discharges;
 - **iii.** Solid or viscous pollutants in amounts that will cause obstruction to the flow in the WWTF resulting in interference;
 - iv. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration that will cause interference with the WWTF;
 - v. Heat in amounts that will inhibit biological activity in the WWTF resulting in interference, but in no case heat in such quantities that the temperature at the WWTF exceeds 40°C (104°F) unless the Regional Water Board, upon request of the Discharger, approves alternate temperature limits;
 - vi. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interferences or pass through; and
 - **vii.** Pollutants that result in the presence of toxic gases, vapors, or fumes within the WWTF in a quantity that may cause acute worker health and safety problems.
- 2. In the event that the Discharger identifies industrial wastes from Significant Industrial Users (SIUs) as defined in 40 C.F.R. 403.3(v) subject to pretreatment standards under 40 C.F.R. 403 (National Pollutant Discharge Elimination System Pretreatment Program) being discharged to the wastewater treatment plant or the Regional Water Board or its Executive Officer

determines that circumstances warrant pretreatment requirements in order to prevent interference [40 C.F.R. §403.3(k)] with the wastewater treatment Facility or Pass Through [40 C.F.R. §403.3(p)], then:

- **a.** The Discharger shall notify the Regional Water Board within 30 days after there are discharges that trigger the pretreatment requirements;
- **b.** The Discharger shall submit a revised Report of Waste Discharge and the pretreatment program for the Regional Water Board's review and approval as soon as possible, but not more than one year after the Discharger's notification to the Regional Water Board of the need for pretreatment requirements being triggered; and
- **c.** Industrial Users classified as Nonsignificant Industrial Users and Middle Tier Categorical Industrial Users as defined by the U.S. EPA 2006 Pretreatment Streamlining Rule shall be exempt from the notification and reporting requirements in Provisions VIII.F.2(a) and VIII.F.2(b).
- **3.** The Regional Water Board may amend this Order, at any time, to require the Discharger to develop and implement an industrial pretreatment program pursuant to the requirements of 40 C.F.R. Part 403 if the Regional Water Board finds that the Facility receives pollutants from an IU that is subject to pretreatment standards, or if other circumstances so warrant.

4. Source Control and Pretreatment Studies

- **a.** Local Limits Study. The Discharger shall conduct a Local Limits Study to determine the pollutants of concern, collect and analyze data, calculate maximum allowable headworks loadings (MAHLs) for each pollutant of concern, and designate and implement technically-based local limits, where necessary, for industrial users discharging to the Discharger's collection system. The Local Limits Study shall be conducted in accordance with U.S. EPA's July 2004 Local Limits Development Guidance (EPA 833-R-04-002A) and shall be submitted to the Regional Water Board by June 1, 2022.
- b. Updated Sewer Use Ordinance. The Discharger shall perform a review of its existing sewer use ordinance to ensure the Discharger has the necessary legal authorities to monitor and enforce source control standards, restrict discharges of toxic materials to the collection system and inspect facilities connected to the system. In conducting the review, the Discharger may consult the January 2007 EPA Model Pretreatment Ordinance (EPA 833-B-06-002). The Discharger shall submit a report documenting the results of the review and recommended revisions to the sewer use ordinance, if any, to the Regional Water Board by February 1, 2023. If the report recommends revisions to the sewer use ordinance, the Discharger shall update the sewer use ordinance accordingly by February 1, 2025.
- **G. Disaster Preparedness Assessment Report and Action Plan.** Natural disasters, extreme weather events, sea level rise, and shifting precipitation patterns, some of which are projected to intensify due to climate change, have significant implications for wastewater treatment and operations. Some natural disasters are expected to become more frequent and extreme according to the current science on climate change. In order to ensure that Facility operations are not disrupted, compliance with conditions of this Order are achieved, and receiving waters are not adversely impacted by permitted and unpermitted discharges, the Permittee shall submit a Disaster

Preparedness Assessment Report and Action Plan to the Regional Water Board by **June 1, 2022,** for Executive Officer review and approval.

The Permittee shall: (1) conduct an assessment of the wastewater treatment facility, operations, collection, and discharge systems to determine areas of short- and long-term vulnerabilities related to natural disasters and extreme weather, including sea level rise and other conditions projected by climate change science, if applicable; the assessment shall consider, as applicable, impacts to plant operations due to changing influent and receiving water quality, rising sea level, storm surges, fires, floods, earthquakes, tsunamis, back-to-back severe storms, and other extreme conditions that pose a risk to plant operations and water quality; (2) identify control measures needed to protect, improve, and maintain wastewater infrastructure, waste discharge compliance, and receiving water quality in the event of a natural disaster or, if applicable, under conditions resulting from climate change; (3) develop a schedule to implement necessary control measures. 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 potential risks associated with extreme weather events and changing conditions resulting from climate change; and (4) implement the necessary control measures per the approved schedule of implementation.

- **H. Change in Discharge.** The Discharger shall promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge.
- I. Change in Control or Ownership. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the Regional Water Board of such changes in writing and shall also notify the succeeding owner or operator of the existence of this Order and current compliance status in writing. The succeeding owner or operator, in order to obtain authorization for discharges regulated by this Order, must apply in writing to the Regional Water Board Executive Officer, requesting transfer of the Order. This request must include complete identification of the new owner or operator, the reasons for the change, evidence that the new owner has agreed to the transfer of ownership or operation, and effective date of the change. Discharges conducted without submittal of this request will be considered discharges without waste discharge requirements, which are violations of the Water Code.
- J. Vested Rights. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, state, or local laws, nor create a vested right for the Discharger to continue the waste discharge.
- **K. Monitoring and Reporting.** The Discharger shall comply with the Monitoring and Reporting Program and any modifications to these documents as specified by the Regional Water Board Executive Officer. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by State Water Board DDW and shall conform to DDW guidelines. The Discharger shall comply with the MRP in Attachment D of this Order and any future revisions thereto.
- L. Records Retention. The Discharger shall maintain records of all monitoring information, including calibration and maintenance records and all 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 upon notification of extension by the Regional Water Board Executive Officer.

- **M. Signatory Requirements.** All reports shall be signed by persons identified below:
 - **1.** For a corporation: by a principal executive officer of at least the level of senior vice-president.
 - **2.** For a partnership or sole proprietorship: by a general partner or the proprietor.
 - **3.** For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.
 - 4. A duly authorized representative of a person designated in L1, L2 or L3 of this requirement if;
 - **a.** the authorization is made in writing by a person described in L1, L2 or L3 of this provision;
 - **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 waste management unit, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - **c.** the authorization is submitted to the Regional Water Board prior to or together with any reports, information, or applications signed by the authorized representative.
 - **5.** Any person signing a document or report under this provision 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."

- **N. Inspections.** The Discharger shall permit authorized staff of the Regional Water Board the following:
 - **1.** Entrance to the premises in which treatment, collection or management of waste occurs, where an effluent source is located or in which any records required by this Order are kept;
 - **2.** Access to inspect and copy any monitoring equipment or records required for compliance with terms and conditions of this Order; and
 - 3. Access to sample any discharge or monitoring location associated with the Facility.
- **O. Noncompliance.** In the event the Discharger is unable to comply with any of the conditions of this Order due to breakdown of waste treatment equipment, accidents caused by human error or negligence, or other causes such as acts of nature, the Discharger shall notify Regional Water Board

staff by telephone as soon as it or its agents have knowledge of the incident and confirm this notification in writing within five (5) business days of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

- **P. Revision of Requirements.** The Regional Water Board will review this Order periodically and may revise requirements when necessary.
- **Q. Operator Certification.** Supervisors and operators of wastewater treatment plants shall possess a certificate of appropriate grade in accordance with title 23, California Code of Regulations, section 3680. The State Water Board may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment plant operator, the State Water Board may approve use of a water treatment plant operator of appropriate grade certified by the State Water Board DDW where water reclamation is involved.
- **R.** Adequate Capacity. If the Discharger's wastewater treatment plant will reach capacity within 4 years, the Discharger shall notify the Regional Water Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies, and the press. Factors to be evaluated in assessing reserve capacity shall include, at a minimum, (1) comparison of the wet weather design flow with the highest daily flow, and (2) comparison of the average dry weather design flow with the lowest 30-day flow. The Discharger shall demonstrate that adequate steps are being taken to address the capacity problem. The Discharger shall submit a technical report to the Regional Water Board showing how flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Water Board, or within 120 days after receipt of Regional Water Board notification, that the Facility will reach capacity within 4 years. The time for filing the required technical report may be extended by the Regional Water Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Water Board itself (title 23, Cal. Code of Regs., section 2232).
- **S.** New Ponds. New ponds associated with the treatment and or storage of wastewater or treated effluent shall be constructed in a manner that protects groundwater. The Discharger shall submit design proposals for new wastewater treatment or storage ponds to the Regional Water Board Executive Officer for review prior to construction and demonstrate that the proposed ponds comply with the Water Code and any other applicable regulations. Pond design and operation plan must include features and best management practices (BMPs) to protect groundwater and prevent exceedances of groundwater quality objectives.

IX. COMPLIANCE DETERMINATION

Compliance with this Order will be determined as specified below.

A. Multiple Sample Data

When determining compliance with an average effluent limitation, and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

- 1. The data set shall be ranked from low to high, ranking the ND concentrations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND and DNQ determinations is not important.
- 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, the median is the average of the two middle values, unless one or both of the points are ND or DNQ, in which case a value of zero shall be used for the ND or DNQ value in the median calculation for compliance purposes only. Using a value of zero for DNQ or ND samples does not apply when performing reasonable potential or antidegradation analyses.

B. Average Dry Weather Flow

Compliance with the average dry weather flow prohibition in section III.I of this Order will be determined each calendar year by evaluating all flow data from Monitoring Locations collected in a calendar year. The flow through the Facility, measured daily and averaged monthly, must be 0.9 mgd or less for the month with the lowest average month flow. Compliance with this prohibition shall be measured continuously at Monitoring Location INF-001 and calculated daily.

C. Average Monthly Effluent Limitation (AMEL)

The arithmetic mean of all samples collected in a calendar month, calculated as the sum of all samples in a calendar month divided by the number of samples. If only one sample is collected in a calendar month, that sample result will constitute the monthly average and daily maximum results for the purpose of determining compliance with effluent limitations.

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, 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 AMEL, 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 compliance determination can be made for that calendar month.

D. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, the median determined by subsection B, above, for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, 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 compliance determination can be made for that day.

E. Instantaneous Minimum Effluent Limitations

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, 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).

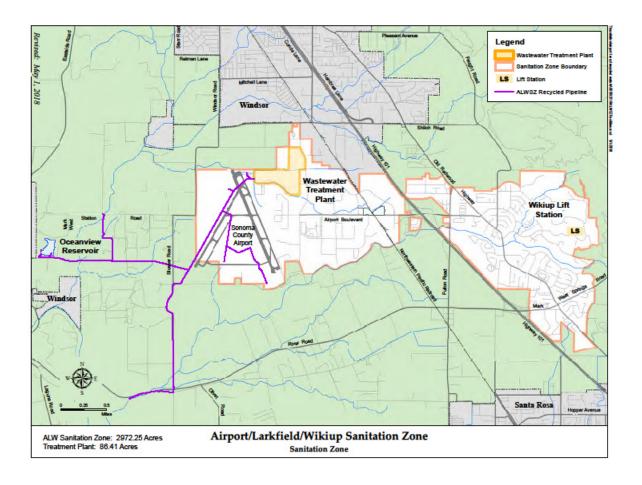
F. Instantaneous Maximum Effluent Limitations

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, 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).

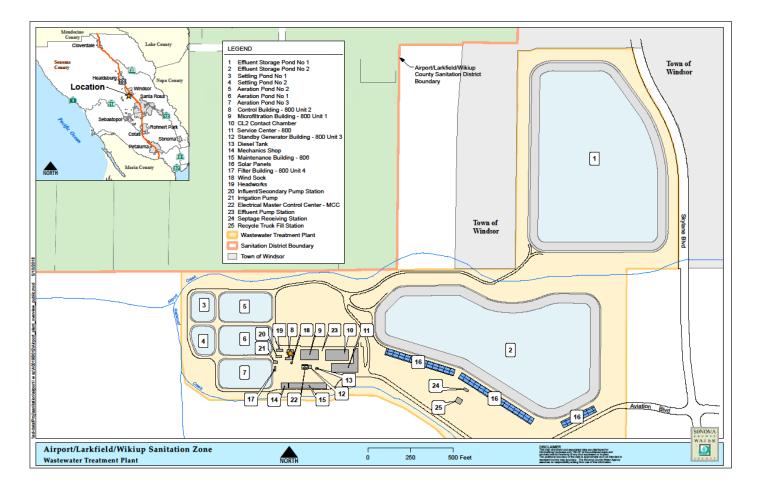
G. Bacteriological Limitations

- 1. Median. The median is the central tendency concentration of the pollutant. The data set shall be ranked from low to high, ranking the ND concentrations lowest, DNQ determinations next, followed by quantified values. The order of the individual ND and DNQ determinations is not important. The median value is determined based on the number of data points in the data set. 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, the median is the average of the two middle values, unless one or both points are ND or DNQ, in which case the median value shall be the lower of the two middle data points. DNQ is lower than a detected value, and ND is lower than DNQ.
- **2.** Compliance with the 7-day median will be determined as a rolling median during periods when sampling occurs more frequently than weekly. During periods when sampling is weekly, this requirement shall apply to each weekly sample.

ATTACHMENT A - FACILITY MAP

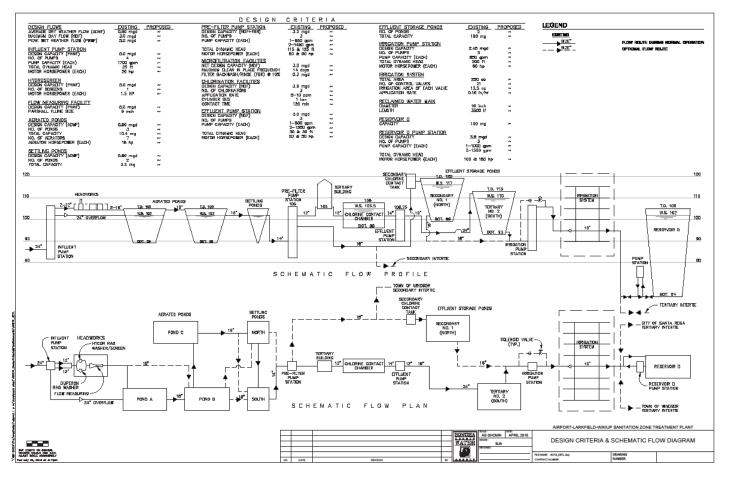


ATTACHMENT B - FACILITY LAYOUT



Order No. R1-2019-0007 Airport-Larkfield-Wikiup Sanitation Zone WWTF

ATTACHMENT C – WASTEWATER FLOW SCHEMATIC



ATTACHMENT D - MONITORING AND REPORTING PROGRAM

California Water Code sections 13267 authorizes the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement California regulations.

I. GENERAL MONITORING PROVISIONS

- **A. Wastewater Monitoring Provision**. Composite samples may be taken by either a time-based or flow-proportional sampling device or by grab samples composited at specific time intervals. In any time-based method or in compositing grab samples, the sampling interval shall not exceed 1 hour.
- **B. Supplemental Monitoring Provision**. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the monthly and annual self-monitoring reports.
- **C. Laboratory Certification**. Laboratories analyzing monitoring samples shall be certified by the State Water Resources Control Board, Division of Drinking Water, in accordance with the provision of Water Code section 13176 and must include quality assurance/quality control data with their reports. The Discharger may analyze pollutants with short hold times (e.g., pH, chlorine residual, etc.) in its on-site laboratory provided that the Discharger has standard operating procedures (SOPs) that identify quality assurance/quality control procedures to be followed to ensure accurate results.
- **D. Minimum Levels**. Compliance and reasonable potential monitoring analyses shall be conducted using commercially available and reasonably achievable detection limits that are lower than the applicable effluent limitation. If no minimum level (ML) value is below the effluent limitation, the lowest ML shall be selected as the reporting level (RL).
- **E. Instrumentation and Calibration Provision**. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated no less than the manufacturer's recommended intervals or one-year intervals (whichever comes first), to ensure continued accuracy of the devices.
- **F. Sample Documentation.** All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Regional Water Board staff.
- **G.** Field test Instruments. Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a California Environmental Laboratory Program (ELAP) certified laboratory or:
 - 1. The user is trained in proper use and maintenance of the instruments;

- **2.** The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
- **3.** Instruments are serviced by the manufacturer or authorized representative at the recommended frequency; and
- 4. Field calibration reports are maintained and available for at least three years.
- **H. Duplicative Monitoring Requirements.** If monitoring requirements listed below duplicate existing monitoring requirements under other orders including WDRs or waivers of WDRs, then duplication of sampling and monitoring activities are not required if the monitoring activity satisfies the requirements of this MRP. In addition to submitting the results under another order, the results shall be submitted in the reports required by the General Order and this MRP.
- I. **Approved Test Methods.** All monitoring must be conducted using approved test methods or other test methods specified in this MRP.
- J. Sampling Method. Collecting composite samples is acceptable in most cases. Due to short holding times, bacteriological samples collected to verify disinfection effectiveness must be grab samples.

II. MONITORING LOCATIONS

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

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	INF-001	Untreated influent wastewater collected at the Facility headworks at a representative point preceding primary treatment
	INT-001	Location for monitoring filtration process turbidity.
001	EFF-001	Disinfected secondary treated recycled water from the Facility following the chlorination disinfection system prior to discharge to secondary recycled water storage pond.
002	EFF-002	Disinfected, tertiary treated recycled water from the Facility following the chlorine disinfection system prior to discharge to tertiary recycled water storage ponds.
	SEP-001	Monitoring of septage at the septage receiving station
	BIO-001	A representative sample of sludge or biosolids generated when removed for disposal.

Table D-1. Monitoring Station Locations

III. INFLUENT MONITORING REQUIREMENTS

A. MONITORING LOCATION INF-001

1. The Discharger shall monitor influent to the Facility at Monitoring Location INF-001 as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	
Influent Flow ¹	mgd	Meter	Continuous	
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	24-hr Composite	Monthly	
Total Suspended Solids	mg/L	24-hr Composite	Monthly	
Table Notes:1. The Discharger shall report the daily average and monthly average flows.				

Table D-2. Influent Monitoring – Monitoring Location INF-001

IV. EFFLUENT MONITORING REQUIREMENTS

A. MONITORING LOCATIONS EFF-001 AND EFF-002

1. When discharging at Discharge Points 001 and 002, the Discharger shall monitor treated effluent to be discharged to secondary or tertiary recycled water storage at Monitoring Locations EFF-001 and EFF-002, respectively, as follows:

Table D-3. Effluent Monitoring – Monitoring Locations EFF-001 and EFF-002

Parameter	Units	Sample Type	Minimum Sampling Frequency
Effluent Flow ¹	mgd	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20ºC)	mg/L	24-hour composite	Weekly
Total Suspended Solids	mg/L	24-hour composite	Weekly
pH	Standard Units	Grab	Daily
Total Coliform Organisms	MPN/ 100 mL	Grab	Daily
Total Chlorine Residual ²	mg/L	Meter ^{3,}	Continuous

Table Notes:

1. Each month, the Discharger shall report the daily average and monthly average flows.

2. Chlorine residual monitoring at Monitoring Locations EFF-001 and EFF-002 shall demonstrate that chlorine residual is present after chlorination. This monitoring shall occur continuously when transferring from the chlorine contact tank to the secondary and tertiary effluent storage ponds.

3. Report minimum daily chlorine residual.

V. OTHER MONITORING REQUIREMENTS

A. FILTRATION PROCESS MONITORING (MONITORING LOCATIONS INT-001)

Filtration process monitoring shall demonstrate compliance with section IV.C.2 (Filtration Process Requirements for Tertiary Treatment System) of this Order and applies to all tertiary treated wastewater flows. The following filtration process monitoring shall be implemented:

1. Effluent Filter Monitoring (Monitoring Location INT-001)

- **a. Monitoring.** The turbidity of the filtered effluent shall be continuously measured and recorded at Monitoring Location INT-001. Should the turbidity meter and recorder fail, grab sampling at a minimum frequency of 1.2 hours may be substituted for a period of up to 24 hours. The recorded data shall be maintained by the Discharger for at least 3 years. The daily maximum and 95th percentile turbidity results shall be reported on the monthly SMRs.
- **b. Compliance.** Compliance with the 95th percentile effluent turbidity limitation specified in title 22, as referenced in section IV.C.2.a.i of the Order, shall be determined using the levels of recorded turbidity taken at intervals of no more than 1.2 hours over a 24-hour period. Exceedances of the maximum turbidity requirement referenced in section IV.C.2.a.ii of this Order shall not be considered a violation of these waste discharge and water reclamation requirements if such exceedance does not exceed a duration of one minute or if the exceedance occurs as a result of membrane cleaning procedures and does not exceed a duration of fifteen minutes.
- **c. Reporting.** If the filtered effluent turbidity exceeds 0.2 NTU for more than 5 percent of the time in a 24-hour period or 0.5 NTU at any time (based on the compliance period defined in section IV.C.2.a), the incident shall be reported in the monthly SMR and to the Regional Water Board and DDW by telephone within 24 hours in accordance with Provision VIII.O of this Order. A written report describing the incident and the actions undertaken in response shall be included in the monthly SMR. Mitigation of the event shall consist of diverting all inadequately treated wastewater to temporary storage or an upstream process or automatically activated chemical addition to comply with title 22 requirements (Sections 60304 and 60307). Any time the filtered effluent turbidity exceeds 0.5 NTU for more than fifteen minutes due to membrane cleaning procedures, the incident(s) shall be described in the applicable monthly SMR cover letter. At a minimum, each incident will be presented in table format and include the maximum turbidity, the duration of the exceedance, and the cause of the exceedance.

B. DISINFECTION PROCESS MONITORING FOR TERTIARY CHLORINE DISINFECTION SYSTEM

Tertiary disinfection process monitoring shall demonstrate compliance with section IV.C.3.b (Disinfection Process Requirements for Chlorine Disinfection System – Discharge Point 002) of this Order and applies to all tertiary treated wastewater flows. The following disinfection process monitoring requirements must be implemented:

1. Disinfection Process Monitoring (Monitoring Location EFF-002)

- **a. Monitoring.** The chlorine residual of the effluent from the chlorine contact chamber shall be monitored continuously and recorded, and the modal contact time shall be determined at the same point.
- **b. Compliance.** The chlorine disinfection CT (the product of total chlorine residual and modal contact time) shall not fall below 450 mg-min/L, with a modal contact time of at least 90 minutes.

Each day, the Discharger shall calculate the CT values for the following conditions:

- i. Modal contact time under highest daily flow and corresponding chlorine residual.
- ii. Modal contact time under lowest daily flow and corresponding chlorine residual.
- **iii.** Lowest chlorine residual and corresponding modal contact time.
- iv. Highest chlorine residual and corresponding modal contact time.

The lowest calculated CT value under the aforementioned conditions shall be reported as the daily CT value on the monthly SMR.

c. Reporting. If the chlorine disinfection CT is less than 450 mg-min/L or if the chlorination equipment fails, the event shall be reported in the monthly SMR and the incident shall be reported to the Regional Water Board and DDW by telephone within 24 hours in accordance with Provision VIII.O of the Order. A written report describing the incident and the actions undertaken in response shall be included in the monthly SMR. The report shall describe the measures taken to bring the discharge into compliance. Upon discovery of any equipment failure or failure to achieve 450 mg-min/L after disinfection, inadequately treated and disinfected wastewater shall be diverted to a temporary storage basin or an upstream process for adequate treatment.

2. Sludge Monitoring (Monitoring Location BIO-001)

- **a.** Sludge sampling shall be conducted according to the requirements specified by the location and type of disposal activities undertaken.
- **b.** Sampling records shall be retained for a minimum of 5 years. A log shall be maintained for sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary however, the log must be complete enough to serve as a basis for developing the Sludge Handling and Disposal report that is required as part of the Annual Report.

3. Septage and Trucked Wastewater Monitoring (Monitoring Location SEP-001)

a. The Discharger shall monitor and report the volume of wastewater and septage accepted in its monthly SMRs. Reporting shall include the name of the hauler, location from which the trucked waste came, and volume of trucked waste received.

b. For each septage load delivered to the Facility, the Discharger shall require the hauler to collect and report a pH value representative of the load. Additional monitoring shall be conducted, as needed, to ensure that the Discharger does not accept any septage loads that could cause upset conditions at the Facility or pass-through of pollutants.

VI. REPORTING REQUIREMENTS

A. Self-Monitoring Reports (SMRs)

- **1.** The Discharger shall submit monthly SMRs including the results for all monitoring specified in this MRP. 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 monthly SMRs.
- **2.** Monthly SMRs shall be submitted by the first day of the second calendar month, following the month of sampling. All monitoring results shall include complete laboratory data sheets for each analysis and be submitted in conjunction with the monthly SMR. Annual summary reports shall be submitted by March 1 each year.
- **3.** Monitoring periods for all required monitoring shall be completed according to the following schedule:

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
Daily	Permit Effective Date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 st day of calendar month through last day of calendar month
Annually	January 1 following (or on) permit effective date	January 1 through December 31

Table D-4. Monitoring Periods and Reporting Schedule

- **4.** The Discharger shall report with each sample result the applicable ML, the RL and the current MDL, as determined by the procedure in Standard Methods.
- **5.** 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 reported ML 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 as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). 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.** The Discharger shall 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.
- **6.** The Discharger shall submit self-monitoring reports (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 effluent limitations and other WDR requirements.
 - **b.** The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:
 - i. Facility name and address;
 - ii. WDID number;
 - iii. Applicable period of monitoring and reporting;
 - **iv.** Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation);
 - v. Corrective actions taken or planned; and
 - vi. The proposed time schedule for corrective actions.
 - c. The monthly SMRs and Annual Report must be submitted to the Regional Water Board, signed and certified as required by the Order Provision VIII.L, to: <u>NorthCoast@waterboards.ca.gov</u> or on disk (CD or DVD) in a Portable Document Format (PDF) file in lieu of paper-sourced documents. The guidelines for electronic submittal of documents can be found on the Regional Water Board website at: <u>https://www.waterboards.ca.gov/northcoast/publications_and_forms/available_document_s/pdf/2014/ECM_Letter-Guidelines.pdf</u>

At any time during the term of this permit, the Regional Water Board may notify the Discharger to electronically submit both technical and Self-Monitoring Reports (SMRs) to the State Water Board's GeoTracker database in searchable Portable Document Format (pdf). In addition, analytical data will be required to be uploaded to the GeoTracker database under a site-specific global identification number that will be assigned to the Discharger. Information on the GeoTracker database is provided on the State Water Board website at:

https://www.waterboards.ca.gov/resources/data_databases/groundwater.shtml

B. Other Reports

1. Special Study Reports and Progress Reports. As specified in the Provisions contained in section VIII of the Order, special study and progress reports shall be submitted in accordance with the following reporting requirements.

Order Section	Special Provision Requirement	Reporting Requirements
General Provision VIII.F.1	Source Control and Pretreatment Provisions, Annual Report	March 1, annually
General Provision VIII.F.2.a	Source Control and Pretreatment Provisions, Notification of Discharges that Trigger Pretreatment Requirements	Within 30 days of discharges that trigger pretreatment requirements
General Provision VIII.F.2.b	Source Control and Pretreatment Provisions, Revised Report of Waste Discharge and Pretreatment Program	Within 1 year of discharges that trigger pretreatment requirements
General Provision VIII.F.4.a	Local Limits Study Report	June 1, 2022
General Provision VIII.F.4.b	Updated Sewer Use Ordinance Evaluation Report	February 1, 2023
General Provision VIII.F.4.b	Updated Sewer Use Ordinance	February 1, 2025
General Provision VIII.G	Disaster Preparedness Assessment Report and Action Plan	June 1, 2022
General Provision VIII.H	Any material change in discharge	Promptly
General Provision VIII.0	Non-compliance reporting	Verbal – as soon as aware of incident Written – within 5 business days of telephone notification
General Provision VIII.R	Adequate Capacity, Technical Report	Within 120 days of notification that the Facility will reach capacity within 4 years
General Provision VIII.S	New Pond Design Proposal	Prior to construction
MRP Influent Monitoring Requirement III.A.1	CTR Priority Pollutant Monitoring	Calendar years 2020, 2025, 2030 , etc. (once every 5 years)
MRP Reporting Requirement VI.C	Notification of spills and unauthorized discharges	Oral reporting as soon as possible after becoming aware of spill

Table D-5. Reporting Requirements for non-SMR Reports Specified in the Order and MRP

- **2. Annual Report.** The Discharger shall submit an annual report to the Regional Water Board for each calendar year. The report shall be submitted by March 1 of the following year. The report shall, at a minimum, include the following:
 - **a. Monitoring Data Summaries.** Both tabular and, where appropriate, graphical summaries of the monitoring data and disposal records from the previous year. If the Discharger

monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculation and report of the data submitted in the SMR.

- **b. Compliance Reporting.** A comprehensive discussion of the Facility's compliance (or lack thereof) with all effluent limitations and other WDRs, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Order.
- **c. Instrumentation Calibration Reporting.** A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.
- **d. Solids Reporting.** A summary report of solids pumping, handling and disposal. If the Discharger is required to monitor sludge prior to final disposal, the results of this monitoring shall be included in the summary report.
- e. Septage/Trucked Wastewater Reporting. A summary report of septage and trucked wastewater received during the year. This will be a summary of information and data submitted in the monthly SMRs.
- **f. Source Control Activity Reporting.** The Discharger shall submit a description of the Discharger's source control activities performed during the calendar year, as required by General Provision VII.F of the Order, including:
 - i. A copy of any source control standards;
 - ii. A description of any waste hauler permit system;
 - **iii.** A summary of compliance and enforcement activities during the past year. The summary shall include the names and addresses of any industrial or commercial users under surveillance by the Discharger, an explanation of whether they were inspected, sampled, or both, the frequency of these activities at each user, and the conclusions or results from the inspection or sampling of each user.
 - **iv.** A summary of public outreach activities to educate industrial, commercial, and residential users about the importance of preventing discharges of industrial and toxic wastes to the Facility.
 - **v.** An updated inventory of all of the industrial and commercial users in the service area.

C. Spill Notification

1. Spills and Unauthorized Discharges. Information regarding all spills and unauthorized discharges (except SSOs) that may endanger health or the environment shall be provided orally to the Regional Water Board¹ within 24 hours from the time the Discharger becomes aware of the circumstances and a written report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances of the spill or unauthorized discharge.

¹ The contact number of the Regional Water Board during normal business hours is (707) 576-2220. After normal business hours, spill reporting to the California Governor's Office of Emergency Services Warning Center (CalOES) will satisfy the 24-hour spill reporting requirement for the Regional Water Board. The contact number for spill reporting for the CalOES is (800) 852-7550.

Information to be provided verbally to the Regional Water Board includes:

- a. Name and contact information of caller;
- **b.** Date, time, and location of spill occurrence;
- **c.** Estimates of spill volume, rate of flow, and spill duration, if available and reasonably accurate;
- d. Surface water bodies impacted, if any;
- e. Cause of spill, if known at the time of the notification;
- **f.** Cleanup actions taken or repairs made at the time of the notification and actions taken or planned to prevent similar spills or unauthorized discharges in the future; and
- g. Responding agencies.
- 2. Sanitary Sewer Overflows. Notification and reporting of sanitary sewer overflows is conducted in accordance with the requirements of State Water Resources Control Board Order No. 2006-0003-DWQ (Statewide General WDRs for Sanitary Sewer Systems), as amended by State Water Resources Control Board Order No. WQ 2013-0058-EXEC, and any revisions thereto.
- **3. Recycled Water Spills.** Notification and reporting of spills and unauthorized discharges of recycled water discharged in or on any waters of the state, as defined in Water Code section 13050, shall be conducted in accordance with the following:

a. Secondary Recycled Water

i. For unauthorized discharges of more than 1,000 gallons of secondary recycled water, the Discharger shall immediately notify the Regional Water Board as soon as (a) the Discharger has knowledge of the discharge or probable discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures.

b. Tertiary Recycled Water²

- i. For unauthorized discharges of 50,000 gallons or more of tertiary recycled water, the Discharger shall immediately notify the Regional Water Board as soon as (a) the Discharger has knowledge of the discharge or probable discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures.
- **ii.** For unauthorized discharges of more than 1,000 gallons, but less than 50,000 gallons of tertiary recycled water, the Discharger shall notify the Regional Water Board as soon as possible, but no longer than 3 days after becoming aware of the discharge.

² Tertiary Recycled Water means "disinfected tertiary 2.2 recycled water" as defined by DDW or wastewater receiving advanced treatment beyond disinfected tertiary 2.2 recycled water.