



North Coast Regional Water Quality Control Board

#### ORDER No. R1-2022-0004 WDID No. 1B89005RMEN WASTE DISCHARGE REQUIREMENTS AND MASTER RECLAMATION PERMIT for GUALALA COMMUNITY SERVICES DISTRICT WASTEWATER TREATMENT FACILITY AND RECYLED WATER SYSTEM MENDOCINO AND SONOMA COUNTIES

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

#### Table 1. Discharger Information

Discharger	Gualala Community Services District
Name of Facility	Gualala Community Services District Wastewater Treatment Facility
Equility Address	42455 State Highway 1
Facility Address	Gualala, CA 95445

The discharge by the Gualala Community Services District (GCSD) Wastewater Treatment Facility (WWTF or Facility) from the discharge points identified below is subject to waste discharge requirements as set forth in this Order.

#### Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Discharge Location (Receiving Water)
001A	Tertiary Treated Municipal Wastewater	N 38° 45' 53"	W 123° 30' 38"	Tertiary Storage Ponds at GCSD WWTF (Groundwater)

GREGORY A. GIUSTI , CHAIR | MATTHIAS ST. JOHN, EXECUTIVE OFFICER

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Discharge Location (Receiving Water)
001B	Tertiary Treated Municipal Wastewater	N 38° 45' 40"	W 123° 30' 6"	Tertiary Storage Pond at Sea Ranch North WWTF (Groundwater)
002	Tertiary Treated Municipal Wastewater	N 38° 45' 9 "	W 123° 30' 56 "	Recycled Water Irrigation at The Sea Ranch Golf Links (Groundwater)
003	Tertiary Treated Municipal Wastewater	N 38° 45' 26"	W 123° 31' 25"	Percolation pond disposal at The Sea Ranch Golf Links (Groundwater)

IT IS HEREBY ORDERED, that Order No. 92-120 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code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 7-8, 2022.** 

Matthias St. John, Executive Officer

22\_0004\_GUALALA\_CSD\_WDR

# I. FACILITY INFORMATION

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

 Table 3. Facility Information

Discharger	Gualala Community Services District (CSD)
Name of Facility	Gualala CSD Wastewater Treatment Facility
	42455 State Highway 1
Facility Address	Gualala, CA 95445
	Mendocino County
Facility Contact, Title, and	Chris Troyan, 707-785-2331
Phone	ctroyan@gualalacsd.org
Mailing Address	P.O. Box 124, Gualala, CA 95445
Type of Facility	Publicly Owned Treatment Works
	0.131 million gallons per day (mgd) Average Daily
	Dry Weather Flow (ADDWF)
Facility Design Flows	0.151 mgd Average Daily Wet Weather Flow
	(ADWWF)
	0.269 mgd Peak Hour Wet Weather Flow (PHWWF)
	0.131 mgd ADDWF
Facility Permitted Flows	0.151 mgd ADWWF
	0.269 mgd PHWWF

## **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 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 Gualala CSD (hereinafter Discharger, District, or GCSD) is currently discharging pursuant to Waste Discharge Requirements Order No. 92-120, adopted by the Regional Water Board on September 24, 1992. The Discharger submitted incomplete Reports of Waste Discharge (ROWD) and Title 22 Recycled Water Engineering Reports on June 28, 2016, December 12, 2016, December 14, 2017, May 2, 2019, and May 4, 2020. These submittals were modified in response to Regional Water Board comments dated August 8, 2016, January 13, 2017,

February 16, 2017, and July 16, 2019 and State Water Board Division of Drinking Water (DDW) staff comments dated May 4, 2017, February 22, 2018, July 3, 2019, and February 24, 2021. On May 11, 2021, the Discharger submitted a written document titled *GCSD Response to SWRCB DDW review of May 2020 Resubmittal of Title 22 Technical Report* (Response) for DDW review. On July 7, 2021 DDW provided a letter conditionally accepting the May 2020 Title 22 Recycled Water Engineering Report with the update provided by the Discharger's May 11, 2021 Response. On November 23, 2021, the Discharger submitted a revised Engineering Report for the Production, Distribution, and Use of Recycled Water – November 2021 Resubmittal (Title 22 Engineering Report). The November 2021 Title 22 Engineering Report was updated to include the results of a tracer study that the District conducted on its chlorine disinfection system on October 28, 2021. On December 7, 2021 DDW provided a conditional acceptance letter for the November 2021 Title 22 Engineering Report.

The Discharger owns and operates a wastewater treatment, reclamation, and disposal system that serves the community of Gualala in Mendocino County, and the Sea Ranch North Sanitation Zone in Sonoma County, hereinafter referred to as Sea Ranch North. Sea Ranch North wastewater has historically been regulated pursuant to Order No. 94-004. Waste Discharge Requirements for County of Sonoma, County Service Area #6 Sea Ranch North Wastewater Treatment and Disposal Facilities which permitted the Sea Ranch North plant for secondary treatment, followed by disinfection, and storage and provided for transferring the disinfected secondary effluent to the Gualala CSD WWTF for tertiary treatment, disinfection, and storage and subsequent reclamation at The Sea Ranch Golf Links. In addition, Order No. 92-121 for the Gualala Community Services District and Sea Ranch Village Incorporated Sea Ranch Golf Links was adopted concurrently with Order No. 92-120 to permit the use of recycled water at the Sea Ranch Golf Links. Order No. 92-120 is being rescinded through this Order while Order Nos. 92-121 and 94-004 are being rescinded as part of a multi-party WDR rescission order, Order No. R1-2022-0003, Rescinding Waste Discharge Requirements Orders and Associated Monitoring and Reporting Programs that is scheduled for adoption by the Regional Water Board concurrently with this Order.

Each connection to the Gualala collection system includes a (Septic Tank Effluent Pumping) STEP process, which consists of a septic tank to pre-treat the wastewater and a submersible, low-horsepower sump pump which discharges the wastewater to the collection system. The collection system serves GCSD sewer zones 1 and 2, which comprises roughly one-third of the District boundary area. The STEP system consists of 34,600 feet of gravity and 27,900 feet of pressurized mains ranging in diameter from 2 to 6 inches, interceptor tanks, and three lift stations. The service area comprises both residential and commercial uses (restaurants, supermarkets, laundromat, and several small businesses), and consists of approximately 415 EDUs (equivalent dwelling units).

At the terminus of the collection system a fourth lift station, Lift Station #4, pumps the wastewater through a 6-inch diameter force main to the WWTF.

Sea Ranch North wastewater flows are generated from 500 connected parcels. The collection system consists of 14 miles of gravity mains which terminate at the Sea Ranch North WWTF at the north end of the community of The Sea Ranch. Wastewater from the Sea Ranch North community is treated to a primary level (screening and aeration) prior to being pumped through a one mile force main to the Gualala CSD WWTF where it is comingled with wastewater from the community of Gualala prior to treatment.

The Gualala CSD and Sea Ranch North collection systems, including the temporary storage of wastewater at the Sea Ranch North influent pond are enrolled separately under State Water Resources Control Board Order No. 2006-0003-DWQ, Statewide Waste Discharge Requirements for Sanitary Sewer Systems.

The Discharger's wastewater treatment system includes two aerated ponds and two clarifiers for secondary treatment, a travelling bridge and fine screen filter for tertiary treatment, and a chlorine contact chamber for disinfection. The Facility is designed as an extended aeration activated sludge plant.

The Facility also includes four effluent storage ponds with a combined capacity of 28.4 million gallons. Three of the ponds, totaling 20 million gallons of capacity, are located adjacent to the Gualala WWTF. The three ponds adjacent to the Gualala WWTF were designed with subdrain systems that can be monitored to determine if there is leakage from the ponds. The fourth pond, with a capacity of 8.4 million gallons, is located at the Sea Ranch North WWTF site. The recycled water from all four effluent storage ponds is delivered to the 80 acre golf course, The Sea Ranch Golf Links, through an 8-inch diameter pipeline for irrigation of turf grass within the fairways, tee boxes, and greens.

The Discharger's November 2021 Title 22 Engineering Report addresses recycled water production and storage, as well as distribution, and use on The Sea Ranch Golf Links. Thus, this Order includes water recycling requirements that apply to the production, storage, distribution, and use of tertiary recycled water.

The ROWD includes an analysis of recycled water capacity, noting that storage pond capacity is inadequate during periods of above average precipitation. The Discharger is concerned that the cost of constructing additional recycled water storage to address extreme wet weather conditions is not an effective use of its limited financial resources. Gualala's median household income (MHI) of \$56,648<sup>1</sup> is less than 80 percent of the California MHI, which qualifies the area as a disadvantaged community per the State Water Board Division of Financial Assistance (DFA) criteria. Therefore, the Discharger has focused its efforts and limited resources on addressing inflow and infiltration issues in its collection system. The Discharger has requested that this Order provide allowance for use of the approximately 2 MG percolation pond at The Sea Ranch Golf Links during periods of above average precipitation when the storage ponds are filling to capacity. According to the ROWD, the percolation pond has the capacity to percolate up to 600,000 gallons per day. This percolation pond has been used for disposal of disinfected tertiary effluent in recent years when all storage ponds have filled during periods of extreme wet weather and effluent and groundwater monitoring data showed that limited use of the percolation pond for effluent disposal has not resulted in impacts to groundwater. Therefore, this Order includes requirements for temporary use of the percolation pond under specific conditions identified in section IV.E of this Order.

Solids generated during the treatment process are dried in bermed, unlined drying beds, then hauled to Fairfield, CA for further processing at the Lystek biosolids processing facility located adjacent to the Fairfield-Suisun Sewer District WWTF. The Discharger developed a Biosolids Management Plan that describes plans to utilize dewatering bags placed on paved drying beds with a center drain system that returns the permeable liquids from the bags back to the aeration basin via an existing decant return pump station. The bags will be cut open and the contents dried on uncovered paved beds during the summer months for subsequent hauling by a private contractor to a designated landfill.

Attachment A provides a vicinity map showing the location of the Facility, Sea Ranch North WWTF, storage ponds, and The Sea Ranch Golf Links. Attachment B provides a Facility flow schematic. Attachment C provides a map of the percolation pond and groundwater monitoring wells at The Sea Ranch Golf Links.

## C. Legal Authorities

This Order serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 (commencing with section 13260) of the California Water Code (Water Code) and Master Recycling Permit pursuant to article 4, chapter 4, division 7 (commencing with section 13500) of the Water Code.

<sup>&</sup>lt;sup>1</sup> MHI derived from 2018 community block group no .60460111023.

# 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 all waters of the basin. The Basin Plan implements State Water Resources Control Board (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. Thus, beneficial uses applicable to area groundwater within the Gualala 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).

## E. Water Code

The 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."

Water Code section 13260 establishes regulations associated with the prescription of waste discharge requirements and Water Code Chapter 7 (Wat. Code § 13500 et seq) establishes regulations associated with the prescription of reclamation requirements.

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.)

- 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).
- Soil Amendments—Use of nonhazardous decomposable waste as a soil amendment pursuant to applicable best management practices (BMPs), provided that regional water boards may issue waste discharge or reclamation requirements for such use. (Cal. Code Regs., tit. 27, § 20090(f).)

## 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 Regional Water Board's Basin Plan implements, and incorporates by reference, the State antidegradation policy. The Antidegradation Policy applies when a discharge may degrade high quality waters <sup>2</sup> and requires the following:

- 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 Waste Discharge Requirements 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.

This Order is consistent with the maximum benefit to people of the State because: (i) it allows continued operation of an existing wastewater treatment/water recycling facility; (ii) it requires implementation of agronomic rates and BMPs to ensure protection of groundwater and surface water beneficial uses, and (iii) it requires monitoring to ensure that recycled water quality meets State requirements (Title 22 and Water Code) and is protective of groundwater.

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.

<sup>&</sup>lt;sup>2</sup> The Board interprets "high quality waters" as the best water quality that has existed since the Policy was adopted in 1968 after considering any subsequently authorized degradation that has been allowed in compliance with the Policy.

The economic prosperity of a small disadvantaged community 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 provides 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 application of management measures to treat the discharge of waste that constitutes 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. This Order contains discharge prohibitions, effluent limitations, water recycling requirements, receiving water limitations, and monitoring requirements. These provisions will ensure that the discharge does not result in exceedances of water quality standards and is protective of beneficial uses of groundwater and surface waters within the Gualala Hydrologic Subarea of the Gualala River Hydrologic Area and the Pacific Ocean.

This Order does not authorize an increased volume or concentration of waste, or a decreased level of treatment.

Section IV.C.5 of this Order requires the Discharger to implement a Recycled Water Best Management Practices and Operations and Management Plan to ensure that recycled water is applied at or below nutrient and hydraulic agronomic rates and that BMPs are implemented to ensure protection of the beneficial uses of groundwater and surface water and of public health. Attachment D of this Order requires monitoring of the recycled water for pollutants of concern, including nitrogen, salts (i.e, total dissolved solids), and coliform bacteria and to report nitrogen and hydraulic application rates on an annual basis to ensure that the best practicable treatment or control is effective.

#### H. 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)). State Water Board Resolution No. 2016-0010 identifies the human right to water as a top priority and core value of the State and Regional Water Boards and affirms the Water Boards' commitment to consider how its activities impact and advance the human right to safe, affordable and clean water to support basic human needs. 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 these policies 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

The State Water Resources Control Board (State Water Board) adopted the Policy for Water Quality Control for Recycled Water (Recycled Water Policy) on February 3, 2009, and then amended the Policy on January 22, 2013. The State Water Board approved a second amendment to the Recycled Water Policy on December 11, 2018, with an effective date of April 8, 2019. This Order implements the Recycled Water Policy.

It is the intent of the Recycled Water Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The State Water Board found that the appropriate way to address salt and nutrient management is through developing regional or sub-regional salt and nutrient management plans rather than through imposing requirements solely on individual projects. The Recycled Water Policy calls for the development of locally driven and controlled collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California.

The Regional Water Board finds that a combination of regional management plans and individual or programmatic project requirements are necessary to protect beneficial uses. The Recycled Water Policy recognizes the fact that some groundwater basins in the state contain salts and nutrients that exceed or threaten to exceed water quality objectives in the applicable Basin Plans and that not all Basin Plans include adequate implementation procedures for achieving or ensuring compliance with the water quality objectives for salt or nutrients. However, in the absence of an approved salt and nutrient management plan (SNMP), the Regional Water Board may impose specific requirements to ensure the preservation and maintenance of high-quality groundwater.

This Order includes water recycling requirements that apply to the production, storage, distribution, and use of disinfected tertiary recycled water. The Regional Water Board has incorporated requirements recommended by the State Water Board Division of Drinking Water (DDW) in accordance with the 1996 Memorandum of Agreement (MOA) that sets forth principles, procedures, and agreements to which the agencies committed themselves relative to permitting the use of recycled water in California.

The Discharger's Title 22 Engineering Report addresses the production, storage, distribution, and use of recycled water. DDW staff reviewed the Title 22 Engineering Report and issued conditional acceptance letters on July 7, 2021 and December 7, 2021.

## K. Monitoring and Reporting

Water Code sections 13267 and 13383 authorize 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 impacts of the discharge, 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 Regional Water Board Executive Officer 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 discharges covered under this permit are exempt pursuant to California Code of Regulations, title 14, section 15301 (ongoing or existing projects). The Facility is an existing wastewater treatment facility with 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 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 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 the North Coast Regional Water Quality Control Board <u>Website</u> for notices or will be provided upon request.

(https://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/)

### **III. DISCHARGE PROHIBITIONS**

- **A.** The discharge of waste to the Gualala River or the Pacific Ocean or any tributary thereof, is prohibited.
- **B.** The direct or indirect discharge from recycled water use areas to surface waters is prohibited.
- **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.** The bypass of untreated or partially treated wastewater from the Facility, or any intermediate unit processes, to the point of use is prohibited.
- **E.** Creation of pollution, contamination, or nuisance as defined by section 13050 of the Water Code is prohibited.
- **F.** 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, reclamation, or disposal system is prohibited.
- **G.** 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 is prohibited.
- **H.** 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.
- I. The discharge of waste at any point not described in Table 2 of this Order or authorized by a permit issued by the State Water Board or Regional Water Board is prohibited.
- J. The average daily dry-weather flow of waste through the treatment plant shall not exceed 0.131 mgd, measured daily and averaged over a calendar month. The average daily wet-weather flow of waste through the treatment plant shall not exceed 0.151 mgd, measured daily and averaged over a calendar month. Peak flows shall not exceed 0.269 mgd. Compliance with this prohibition shall be determined as defined in sections IX.B, C, and D of this Order.

- **K.** Discharges of waste that violate any narrative or numerical water quality objectives are prohibited.
- L. The discharge of sludge is prohibited, except as authorized under section VI (Solids Disposal and Handling Requirements) of this Order.
- **M.** The acceptance of trucked waste such as septage, landfill leachate, or other bulk high-strength wastes to a location other than an approved trucked waste receiving station and in accordance with a trucked waste management program approved by the Regional Water Board Executive Officer is prohibited.
- **N.** Discharge of waste classified as "hazardous," as defined in title 23, section 2521 of the California Code of Regulations (CCR), or classified as "designated," as defined in Water Code section 13173, is prohibited.

# IV. WATER RECYCLING EFFLUENT LIMITATIONS, SPECIFICATIONS, AND REQUIREMENTS

# A. Water Recycling Effluent Limitations –Discharge to Tertiary Recycled Water Storage Ponds (Discharge Point 001)

 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 REC-001 as described in the Monitoring and Reporting Program. The disinfected tertiary recycled water shall, at a minimum, be adequately oxidized, filtered, and disinfected as defined in CCR, title 22, division 4, chapter 3.

Parameter	Units	Average Monthly Effluent Limitation	Average Weekly Effluent Limitation	Maximum Daily Effluent Limitation	Instantaneous Minimum Effluent Limitation	Instantaneous Maximum Effluent Limitation
Biochemical Oxygen Demand (5- day @ 20°C) (BOD)	mg/L	10	15	20		
Total Suspended Solids (TSS)	mg/L	10	15	20		
рН	Standard units				6.0	9.0

# Table 4. Recycled Water Effluent Limitations –Discharge to Tertiary Recycled Water Storage Ponds

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
		Effluent	Effluent	Effluent	Effluent	Effluent
		Limitation	Limitation	Limitation	Limitation	Limitation

Table Notes:

1. See Order Section IX. Compliance Determination regarding compliance with average monthly, average weekly, maximum daily, and instantaneous effluent limitations.

- **2.** Total Coliform Bacteria. Disinfected tertiary recycled water discharged at Discharge Point 001 shall not contain coliform bacteria in excess of the following concentrations at Monitoring Location REC-001:
  - **a.** The median concentration shall not exceed an MPN of 2.2 per 100 milliliters (mL), using the bacteriological results of the last 7 days for which analyses have been completed <sup>3</sup>; 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.

# B. Water Recycling Specifications

## 1. Filtration Process Specifications for Tertiary Treatment System – Monitoring Locations INT-001A and INT-001B

- a. All recycled water produced at the Facility shall be filtered using the travelling bridge filter or Nova Disk Filter as described in the November 2021 Title 22 Engineering Report. The Discharger shall not make any changes, additions, or modifications to the filtration treatment unless approval is obtained from DDW and the Regional Water Board. The following performance and operation conditions shall be met:
  - i. Coagulation Prior to Filtration. All recycled water shall be coagulated prior to filtration and the coagulant dosing shall be provided with mandatory and reliability features, including alarms for uninterrupted coagulant feed.

<sup>&</sup>lt;sup>3</sup> See section IX.I of this Order regarding compliance with bacteriological limitations.

- **ii. Traveling Bridge Filter Requirements.** Per section 60301.320 of title 22, the traveling **bridge** automatic backwash filter is subject to the following conditions:
  - (a) Filter Loading not to exceed 2 gallons per minute per square foot of surface area as measured at Monitoring Location INT-001A(1).
  - (b) Turbidity in the filtered water shall not exceed: an average of 2 NTU in a 24-hour period, 5 NTU more than 5 percent of the time within 24-hour period, and 10 NTU at any time as measured at Monitoring Location INT-001B(1).
- **iii. Nova Ultra Screen Filter Requirements.** The Nova Ultra Screen filtration is an acceptable filtration technology, approved by DDW (approval letter dated, November 12, 2009 by previously known as California Department of Public Health) and subject to the following conditions:

#### Filter loading rates up to 6 gpm/ft<sup>2</sup>:

- (a) The filter loading rate shall not exceed 6 gpm/ft<sup>2</sup> as measured at Monitoring Location INT-001A(2).
- (b) The pretreatment process shall be designed and operated to ensure that the turbidity of influent to the filter does not exceed 5 NTU for more than 15 minutes within a 24-hour period and never exceeds 10 NTU as measured at Monitoring Location INT-001A(2).
- (c) Turbidity in the filtered water shall not exceed: an average of 2 NTU in a 24-hour period, 5 NTU more than 5 percent of the time within 24-hour period, and 10 NTU at any time as measured at Monitoring Location INT-001B(2).
- (d) Acceptance of the Nova Ultra Screen filtration technology up to a loading rate of 6 gpm/ft<sup>2</sup> is contingent upon it being complemented with a disinfection process which has been demonstrated to be capable of reliably achieving 4 log inactivation of plague forming unit of F-specific bacteriophage MS2, or polio virus in the filtered wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of demonstration.
- (e) Acceptance of the filter screen specified as AISI 316 steel micronic screen mesh, having a nominal size rating of 20 microns and reportedly can remove particles down to 10 microns when operated using "dynamic tangential filtration".

Other screen materials will require additional demonstration studies prior to individual acceptance by DDW and the Regional Water Board.

- (f) The operations plan shall include scheduled inspections and assessment of the screen condition as an operational safeguard. This should include a routine visual inspection of the filter condition at least monthly, and a more in-depth assessment of the filter condition at least annually. Inspection frequencies may change as filter condition and performance experience is gained with time.
- (g) The operations plans shall provide for assurances that adequate sludge wasting is practiced for ensuring against solids buildup in the filter vessel.

#### Filter Loading rates exceeding 6 gpm/ft2 and up to 16 gpm/ft2:

- (h) The filter loading rate shall not exceed 16 gpm/ft2.
- (i) Conditions outlined above: b, c, e, f, and g shall apply.
- (j) Acceptance of the Nova Ultra Screen filtration technology up to a loading rate of 16 gpm/ft2 is contingent upon it being complemented with a disinfection process which has been demonstrated to be capable of reliably achieving 5 log inactivation of plague forming unit of F-specific bacteriophage MS2, or polio virus in the filtered wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of demonstration.
- iv. Non-Compliant Effluent. Filtered effluent in excess of the turbidity specifications in sections IV.B.1.a.ii.(b) and IV.B.1.a.iii.(c), above, shall not enter the recycled water distribution system. Pursuant to title 22 sections 60304 and 60307, the Discharger shall have the capability and shall manage filtered effluent in excess of turbidity specifications to automatically activate chemical addition, divert the wastewater to an upstream treatment process unit 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.N of this Order.

## 2. Disinfection Process Specifications – Monitoring Location REC-001

- **a.** The Discharger shall operate the chlorine disinfection system described in the November 2021 Title 22 Engineering Report in accordance with the following:
  - i. Per section 60301.230(a) of title 22, the recycled water subsequent to filtration shall be disinfected to meet the following criteria:
    - (a) The filtered wastewater has been disinfected by either:
      - (1) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or
      - (2) A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.
  - **ii.** Submersible Pump Operation. The submersible pump(s) in the chlorine contact basin shall be in operation at all times that effluent is being disinfected for recycled water storage and use in order to match the operating conditions used in the October 28, 2021 (or any subsequent) tracer study.
  - iii. Non-Compliant Effluent. In the event of a chlorination system failure and whenever effluent does not meet the CT criteria in section IV.B.2.a.i.(a)(i), or in the event of a submersible pump failure per section IV.B.2.a.ii, above, the Discharger shall cease transfers of inadequately disinfected effluent to storage. Any inadequately disinfected effluent shall be diverted to an upstream treatment process unit or to emergency storage as soon as the Discharger is aware of the problem. The Discharger shall provide notification of non-compliance with disinfection process requirements as required by section VIII.N of this Order.
- b. The Discharger's use of total chlorine for disinfection and minimum CT required shall be maintained based on acceptable tracer study results and operating conditions described in the Title 22 Engineering Report (November 2021 or subsequent revisions) and DDW acceptance letter

and summarized in Table 5, below. The low chlorine alarm set point(s) in the SCADA system shall be established for the respective flow rate(s), modal contact time and final total chlorine residual(s) that is required to meet the disinfection CT value of 450 mg-min/l as measured at Monitoring Location REC-001 and shall be reflected in the operations plan. Table 5 identifies chlorine disinfection system operating conditions for Facility design flows and flow scenarios that have occurred in recent years:

Flow Scenario	Flow (Q) MGD	Flow (Q) GPM	Theoretical Detention Time, minutes (TDT=V <sup>1</sup> /Q)	Modal Contact Time (MCT), minutes (TDT*BF <sup>2</sup> )	Final Total Chlorine Residual (mg/L) required for minimum 450 mg- min/L (450/MCT)
Average Dry Weather Design Flow	0.131	91	251	251	1.80
Average Wet Weather Design Flow	0.151	105	217	217	2.07
Peak Hourly Design Flow	0.269	187	122	122	3.69
Average Dry Weather Flow	0.058	40	570	570	0.79
Peak Dry Weather Flow <sup>3</sup>	0.162	113	202	202	2.23
Peak Hourly Dry Weather Flow <sup>3</sup>	0.219	152	150	150	3.00
Average Daily Wet Weather Flow <sup>3</sup>	0.125	87	262	262	1.72

Table 5.	Chlorine	Disinfectio	on System	Op	erating C	ond	itions

minutes       (MC1),       (mg/L)         (TDT=V <sup>1</sup> /Q)       minutes       required         for       (TDT*BF <sup>2</sup> )       minimum         450 mg-       min/L         (450/MCT)       (450/MCT)	Flow Scenario	Flow (Q) MGD	Flow (Q) GPM	Theoretical Detention Time, minutes (TDT=V <sup>1</sup> /Q)		for minimum 450 mg- min/L
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Table Notes:

- 1. V chlorine contact chamber volume: 22,800 gallons.
- 2. BF baffling factor of 1 established by the October 28, 2021 tracer study.
- 3. This flow scenario represents actual flow scenario using influent flow data from May 2019 to September 2021.
- **c.** The GCSD must update the operations plans for the WWTF, which shall be submitted to DDW and the Regional Water Board for approval as there are changes or modifications to the WWTF chlorine disinfection process and /or its operations.

## C. Water Recycling Requirements

- This Order authorizes the Discharger to reuse treated municipal wastewater that complies with recycled water effluent limitations contained in section IV.A and IV.B of the Order for uses that have been addressed in an approved Title 22 Engineering Report and for which recycled water user agreements have been negotiated. Accordingly,
  - **a.** The Discharger shall be responsible for ensuring that all recycled water meets all terms and conditions of this Order; and
  - **b.** As the recycled water producer, Gualala CSD shall maintain an up-to-date recycled water user agreement with The Sea Ranch Golf Links and any future approved recycled water users.
- **2.** Recycled water production, distribution, and use shall be in compliance with all of the following requirements:
  - **a.** Regulations related to recycled water contained in Water Code sections 13500 13577 (Water Reclamation)

- Regulations related to recycled water (including its subsequent revisions) contained in California Code of Regulations, title 17, sections 7583 7586, sections 7601 7605, and California Code of Regulations, title 22, division 4, chapter 3 (Uniform Statewide Recycling Criteria).
- c. A DDW-approved Title 22 Engineering Report that demonstrates or defines compliance with the Uniform Statewide Recycling Criteria (and any future amendments thereto). A new Title 22 Engineering Report or Engineering Report addendum shall be submitted to DDW and the Regional Water Board for review and approval of any future use of recycled water or expansion of irrigated areas beyond those described in the approved Title 22 Engineering Report.
- **d.** Any applicable Salt and Nutrient Management Plan adopted by the Regional Water Board as a Basin Plan amendment;
- e. Any applicable water quality related CEQA mitigation measure; and
- f. State Water Board Recycled Water Policy.
- 3. The Discharger shall notify the Regional Water Board Executive Officer in anticipation of recycling water at a new location prior to commencement of water recycling activities at the new location and shall revise its Title 22 Engineering Report and receive approval from DDW prior to adding any new recycled water uses not previously identified.
- **4.** Per Articles 8 and 10 of the Recycled Water Criteria, title 22 of CCR, the Discharger shall always maintain the reliability features and contingency measures for the WWTF process and ensure inadequately recycled water is not delivered to the recycled water users.
- 5. The Discharger shall implement the April 20, 2020 Recycled Water Best Management Practices and Operations and Management Plan (or subsequent revisions) that was submitted as part of its May 4, 2020 Title 22 Engineering Report. This Plan shall be maintained and revised as necessary to ensure that it is current with regard to the following elements:
  - **a.** A description of each recycled water use site including, site location, acreage involved, County Assessor Parcel number(s), name of property owner, name of use site supervisor, estimation of the anticipated volume of recycled water to be used,
  - **b.** Information and calculations to demonstrate that recycled water irrigation does not exceed the hydraulic and nutrient agronomic needs of the vegetation being irrigated. The assessment of agronomic rates shall account for the following:

- i. Soil characteristics;
- **ii.** Recycled water characteristics (nutrients, including nitrogen and phosphorus content; specific ion toxicity, including chloride, boron, sodium, bicarbonate, and other parameters);
- **iii.** General requirements of the major plant species being irrigated (e.g., seasonal demand, climate, nutrient requirements);
- **iv.** Climatic conditions (e.g., precipitations, evapotranspiration rate, wind); and
- **v.** Other supplemental nutrient additions (e.g., land-applied biosolids, chemical fertilizers) generally used within the area.
- **c.** Describe BMPs that are implemented at the recycled water use site to prevent runoff, ensure application at agronomic rates, and to address erosion control and dechlorination in the event of a break or leak in the recycled water distribution system. The description should include recycled water management facilities and other BMPs that will be used to ensure compliance with the requirements of this Order.
- **d.** A copy of the Discharger's established rules and/or regulations governing the use of recycled water in accordance with the criteria established in title 22 and this Order.
- **6.** The Discharger shall conduct periodic inspections of the irrigation system, facilities, and operations to monitor and ensure compliance with the conditions of this Order.
- 7. The Discharger shall discontinue all delivery of recycled water for irrigation during any period that there is reason to believe that the requirements for use as specified in this Order are not being met. The delivery of recycled water for irrigation shall not resume until all conditions have been corrected.
- **8.** Any discharge of untreated or partially treated wastewater to the use area, and the cessation of same, shall be reported immediately by telephone to the Regional Water Board, DDW, and the local health officer.
- **9.** The Discharger shall notify recycled water users if recycled water that does not meet the recycled water specifications of this Order is released into the reclamation system.
- **10.** The Discharger shall be responsible for the operation and maintenance of transport facilities and associated appurtenances necessary to convey and distribute the recycled water from the point of production to the point of use.

- **11.** The Discharger shall ensure that each recycled water user properly installs, operates, and maintains the irrigation system to ensure compliance with all requirements of this Order.
- **12.** The Discharger shall designate a Recycled Water Use Supervisor to operate and maintain the recycled water use areas. The Recycled Water Use Supervisor shall be responsible for the recycled water system. Specific responsibilities of the Recycled Water Use Supervisor, at a minimum, shall include the following:
  - a. Proper installation, operation, and maintenance of the irrigation system;
  - **b.** Control of onsite piping to prevent any cross-connections with potable water supplies;
  - **c.** Development and implementation of a set of procedures to verify on an ongoing basis that cross-connections have not occurred between potable water supplies and recycled water supplies;
  - **d.** Routine inspection and maintenance of backflow prevention devices installed to protect potable water supplies, consistent with section 7605 of title 17 of the CCR; and
  - e. General responsibilities to ensure compliance with this Order and continuous implementation of any BMPs identified as necessary to prevent potential hazards to public health and to protect the environment.
- **13.** The use of recycled water for irrigation shall not result in unreasonable waste of water.
- **14.** The use of recycled water for irrigation shall not cause degradation of any water supply.
- 15. There shall be no cross-connection between potable water supply and piping containing recycled water. All users of recycled water shall provide for appropriate backflow protection for potable water supplies as specified in CCR, title 17, section 7604 or as determined by the State Water Board on a case-by-case basis to protect public health.
- 16. The Discharger shall implement the requirements of the California Health and Safety Code (CHSC), section 116815 regarding the installation of purple pipe. CHSC section 116815 requires that "all pipes installed above or below the ground, on or after June 1, 1993, that are designed to carry recycled water, shall be colored purple or distinctively wrapped with purple tape." Section 116815 also contains exemptions that apply to municipal facilities that have established a labeling or marking system for recycled water used on their

premises and for water delivered for agricultural use. The Discharger shall document compliance with this requirement on an annual basis in its annual monitoring report. The Discharger shall continue to implement the requirements of CHSC section 116815 during the term of this Order.

- 17. The installation of recycled water pipeline(s) with respect to water mains shall be in accordance with the separation criteria pursuant to the California Waterworks Standards at CCR, title 22, Division 4, Chapter 16, section 64572 which states:
  - **a.** New water mains and new supply lines shall not be installed in the same trench as and shall be at least 10 feet horizontally from and one foot vertically above, any parallel pipeline conveying disinfected tertiary recycled water.
  - **b.** DDW recognizes that certain conditions may call for the installation of pipelines with less separation distance than what is required by the regulations.

In these situations, the water system may propose an alternative pursuant to CCR, title 22, Section 64551.100 which states: "(a) A water system that proposes to use an alternative to a requirement in this chapter shall: (1) demonstrate to the State Board that the proposed alternative would provide at least the same level of protection to public health; and (2) obtain written approval from the State Water Board prior to implementation of the alternative. The plans for the installation of recycled water pipeline(s) must be submitted to DDW and the Regional Water Board for review and written approval prior to installation.

#### D. Recycled Water Use Site Specifications

- Disinfected tertiary recycled water shall not be irrigated within 50 feet of any domestic water supply well or domestic water supply surface intake, unless the technical requirements specified in CCR title 22, section 60310(a) have been met and approved by DDW. [Cal. Code Regs., tit. 22, § 60310(a)]
- Disinfected tertiary recycled water shall not be impounded within 100 feet of any domestic water supply well or domestic water supply intake. [Cal. Code Regs., tit. 22, § 60310(b)]
- **3.** Any use of recycled water shall comply with the following: [Cal. Code Regs., tit. 22, § 60310(e)]
  - **a.** Recycled water irrigation runoff shall be confined to the recycled water use area unless the runoff does not pose a public health threat and is authorized by the regulatory agency.

- b. Direct or windblown spray, mist, or runoff from irrigation areas shall not enter dwellings, designated outdoor eating areas, or food handling facilities, [Cal. Code Regs., tit. 22, § 60310(e)(2)] roadways, or any other area where the public would accidentally be exposed to recycled water.
- **c.** Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.
- 4. All recycled water use areas shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that states the following: "RECYCLED WATER DO NOT DRINK". Each sign shall display an international symbol like that shown in Figure 60310-A, §60310, title 22 of CCR. DDW may accept alternative signage and wording, or an educational program, provided the applicant demonstrates to DDW that the alternative approach will assure an equivalent degree of public notification. These signs need to be placed in conspicuous places including at each entrance to the recycled water irrigated area. [Cal. Code Regs., tit. 22, § 60310(g)]
- **5.** No physical connection can be made or allowed to exist between the recycled water system and any separate system conveying potable water. [Cal. Code Regs., tit. 22, § 60310(h)] If a swivel-ell device is planned to be used, the construction plan shall be submitted to DDW and the Regional Water Board for review and approval.
- 6. The areas of the recycled water system that are in areas subject to access by the general public shall not include hose bibs. Only quick couplers that differ from those used on the potable water system can be used on the portions of the recycled water piping system in areas subject to public access. [Cal. Code Regs., tit. 22, § 60310(i)]
- 7. Recycled water use site shut down tests shall be performed every four years and reuse site inspections must be performed annually. Each shut down test shall be monitored by County Department of Environmental Health or DDW. The inspections and testing shall be performed by a cross connection control specialist certified by the California-Nevada section of the American Water Works Association or an organization with equivalent certification requirements. The Discharger shall submit a written report documenting the result of the inspection or testing for the prior year to the DDW within 30 days following completion of the inspection or testing. [Cal. Code Regs., tit. 22, § 60316]
- 8. Recycled water shall be applied at agronomic rates as follows:
  - **a.** The May 4, 2020 The Sea Ranch Golf Links Operation and Management Plan (TSRGL O&M Plan), Table 1 demonstrates that recycled water is generally applied to The Sea Ranch Golf Links at volumes less than the

hydraulic agronomic rate. The Discharger shall demonstrate compliance with hydraulic agronomic rate requirements as required by section III.D, Table E-5 of the attached MRP.

- b. TSRGL O&M Plan, includes information that indicates that nitrogen applied through recycled water irrigation at The Sea Ranch Golf Links is generally at or below the nitrogen agronomic demand of the turf grass (12,880 pounds of nitrogen per year based on nutrient uptake rates published within the *EPA Process Design Manual for Land Treatment of Municipal Wastewater Effluents* (EPA Manual)). An annual nitrogen uptake rate of 161 pounds per acre per year (lbs/acre/yr) can be expected for The Sea Ranch Golf Links turf assuming the full water and nutrient demands of the grass are satisfied and favorable soil conditions are present. The Discharger shall demonstrate compliance with the nutrient agronomic rate requirement as required by section III.D, Table E-5 of the MRP.
- **9.** Recycled water shall not be applied during periods when soils are saturated. Specifically, recycled water application to land is prohibited during the following times:
  - **a.** Within 24 hours of a forecasted precipitation event with a greater than 50percent chance of occurring. The discharger must obtain the precipitation forecast information from the National Weather Service Forecast Office;
  - **b.** During a precipitation event;
  - **c.** Within 24 hours after a precipitation event of ½ inch or more precipitation that results in a storm water discharge from the land application area; and
  - **d.** When the land application area surface soil is saturated.
- **10.** Areas irrigated with recycled water shall be managed to prevent ponding and conditions conducive to the proliferation of mosquitoes and other disease vectors, and to avoid creation of a public nuisance or health hazard. The following practices shall be implemented, at a minimum:
  - **a.** Irrigation water shall infiltrate completely within a 48-hour period; and
  - **b.** Low-pressure and unpressurized pipelines and ditches that may be accessible to mosquitoes shall not be used to store recycled water.
- **11.** The Discharger shall ensure that each recycled water user prevents surface runoff of recycled water. The Regional Water Board recognizes that even with diligent implementation of BMPs, incidental runoff events may occur on occasion. Incidental runoff is defined as unintended small amounts of runoff

from recycled water use areas where agronomic rates and appropriate BMPs are being implemented. Examples of incidental runoff include unintended, minimal over-spray from sprinklers that escapes the recycled water use area or accidental breakage of a sprinkler head on a properly maintained irrigation system. Water leaving an irrigation/recycled water use area is not considered incidental if it is part of the facility design, if it is due to excessive application, if it is due to intentional overflow or application, or if it is due to negligence. Incidental runoff events are typically infrequent, low volume, accidental, not due to a pattern of neglect or lack of oversight and are promptly addressed. At a minimum, the following measures shall be implemented to minimize the potential for surface runoff:

- **a.** A minimum 50-foot setback to all surface waters or provide written documentation of appropriate BMPs that will be implemented to prevent or minimize the potential for runoff discharging to surface water;
- Implementation of an Operations and Maintenance Plan that provides for detection of leaks (for example from sprinkler heads), and correction within 72 hours of learning that runoff, or prior to release of 1,000 gallons, whichever comes first;
- c. Proper design and aim of sprinkler heads;
- d. Proper design and operation of the irrigation system;
- e. Refraining from application during precipitation events;
- **f.** Application at an agronomic rate that does not exceed the water or nutrient demand of the crop or vegetation being irrigated;
- **g.** Use of repeat start times and/or multiple water days with short run times to increase irrigation efficiency and reduce runoff potential. The goal of this BMP is to apply the volume of water needed to meet the needs of the crop or vegetation being irrigated by breaking the volume up into smaller volumes. For example, apply one hour of irrigation in four 15-minute applications, separated by an hour each. This will allow more water to soak into the ground and reduce runoff;
- **h.** Maintenance of irrigation infrastructure (pipelines, pumps, etc.) to prevent and minimize breakage and leaks; and
- i. Adequate protection of all effluent storage reservoirs and ponds against overflow, structural damage, or a reduction in efficiency, and notification of the Regional Water Board Executive Officer, if a discharge occurs.

- **12.** Use areas that are spray irrigated and allow public access shall be irrigated during periods of minimal use. Consideration shall be given to allow maximum drying time prior to subsequent public use.
- **13.** All irrigation equipment, pumps, piping, valves, quick couplers and outlets shall be a type or secured in a manner that only permits operation by authorized personnel and shall be appropriately marked to differentiate them from potable facilities.
- **14.** The main shutoff valve of the irrigation system meter shall be tagged with a recycled water warning sign. The valve shall be equipped with an appropriate locking device to prevent unauthorized operation of the valve.

#### E. Land Discharge Requirements – Discharge Point 003

1. Disinfected tertiary treated effluent may be discharged to the percolation pond at Discharge Point 003 when authorized by the Regional Water Board Executive Officer.

The Discharger shall submit written notification to the Executive Officer as far in advance of any discharge to the percolation pond as possible. The Executive Officer may grant authorization under the following conditions:

- **a.** The Discharger demonstrates that recycled water storage and use has been managed to minimize the potential for needing to discharge to the percolation pond and that the discharge is necessary to prevent uncontrolled releases of stored disinfected tertiary treated effluent due to circumstances that are beyond the control of the Discharge. The Discharger shall demonstrate that above average wet weather conditions have caused storage ponds to fill to levels that necessitate use of the percolation pond in order to protect pond berm integrity and prevent uncontrolled spills and that the Discharger has implemented all practical measures to minimize the potential for discharging to the percolation pond. This demonstration shall also include compliance with the monthly reporting of storage capacity requirement as specified in MRP section III.H.1.
- **b.** The Discharger shall demonstrate that the amount of discharge to the percolation pond is the minimum necessary to protect the integrity of the Sea Ranch North and Gualala CSD storage pond berms and to prevent an uncontrolled release of treated wastewater.
- c. The Discharger shall prioritize the assessment and correction of infiltration and inflow (I&I) in the Gualala CSD collection system and work with Sonoma Water toward assessment and correction of I&I in the Sea Ranch North collection system and document I&I reduction work completed each year in its annual self-monitoring reports.

2. During periods of discharge to the percolation pond, the Discharger shall conduct monitoring of the effluent discharged to the percolation pond and groundwater in accordance with sections III.H and IV of the monitoring and reporting program (Attachment D of this Order).

## **V. OTHER SPECIFICATIONS**

- **A. Storage Ponds.** The following requirements apply to treatment, effluent, and recycled water storage ponds.
  - 1. Pond Management, Operation, and Maintenance. Ponds shall be managed, operated, and maintained to protect containment integrity, prevent overtopping or structural failure, and prevent damage from burrowing animals. Pond containment damage shall be repaired as soon as possible.
  - **2. Pond Construction.** Ponds used for the storage of wastewater and recycled water shall be constructed in a manner that protects groundwater.
  - **3. Pond Freeboard.** The Discharger shall always maintain at least 2 feet of freeboard in all treatment, effluent, and recycled water storage ponds.
- **B.** Full Treatment. Excess influent flows and/or off specification process flows temporarily diverted to ponds must be returned to the headworks for full treatment.
- **C. Winter Months.** The Facility shall have sufficient treatment, storage, and recycled water use to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary infiltration and inflow during the winter months.
- **D. Objectionable Odor.** The Discharger shall prevent objectionable odors originating at the Facility from being perceivable beyond the limits of the wastewater treatment, recycled water use, and disposal areas.
- **E. Discharge.** No waste constituent shall be released, discharged, or placed where it will be released or discharged in a concentration or in a mass that causes violation of the Basin Plan's water quality objectives for groundwater.
- **F. Public Contact.** The Discharger shall preclude or control public contact with wastewater and recycled water through such means as fences and signs, or other applicable alternatives.
- **G. Vector Control.** The Discharger shall manage the Facility and effluent disposal area to prevent the breeding of mosquitos. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes or other vectors. Specifically:

- **1.** An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.
- **2.** Weeds shall be minimized through control of water depth, harvesting, or herbicides.
- **3.** Dead algae, vegetation, and debris shall not accumulate on the water surface.
- **4.** The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.
- **H. Technical Reports.** All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of person registered to practice in California pursuant to California Business and Professions Code (sections 6735, 7835, and 7835.1).

To demonstrate compliance with sections 415 and 3065 of title 16, CCR, all technical reports shall contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports shall bear the signature(s) and seal(s) of the registered professional(s) in a manner that demonstrates that all work can be clearly attributed to the professional responsible for the work.

## 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 tertiary wastewater treatment processes. Solid waste refers to grit and screenings generated during preliminary treatment. Biosolids refers to sludge that has been treated, tested, and demonstrated to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities.
- **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 biosolids generated by the Discharger shall be used or disposed of in compliance with the applicable portions of 40 CFR 257, 258, and 503. The Discharger is responsible for assuring that all biosolids produced at the Facility are used or disposed of in accordance with these rules, whether the Discharger uses or disposes of the biosolids itself or transfers them to another party for

further treatment and use or disposal. The Discharger is responsible for informing subsequent preparers, appliers, and disposers of the requirements that they shall meet under these rules, and any monitoring requirements, including required frequencies of monitoring and maximum hold times for pathogen and indicator organism samples.

- D. Sludge or biosolids that are disposed of in a municipal solid waste landfill or used as daily landfill cover shall meet the applicable requirements of 40 CFR Part 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 or biosolids.
- **E.** The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that may adversely affect human health or the environment.
- F. The treatment, storage, transport, disposal and/or application of sludge or biosolids shall not cause or threaten to cause pollution or nuisance, such as objectionable odors or flies, and shall not adversely affect beneficial uses of groundwater or cause an exceedance of any applicable Basin Plan water quality objectives for groundwater or surface water.
- **G.** 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 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.
- **H.** The treatment and storage of sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment or storage site and deposited in waters of the state.
- I. Residual sludge and solid waste shall be disposed of in a manner approved by the Regional Water Board Executive Officer and consistent with requirements in title 27, division 2 of the CCR (Consolidated Requirements for Treatment, Storage, Processing, or Disposal of Solid Waste).
- **J.** For the land application of biosolids as soil amendment, the Discharger shall submit a report of waste discharge or the Discharger may dispose of biosolids at another appropriately permitted facility.
- K. If biosolids are stored for over two years from the time they are generated by the Discharger or their contractor, the Discharger shall submit a written notification to U.S. EPA with the information in 40 C.F.R.CFR part 503.20 (b), demonstrating the need for longer temporary storage.

L. All sludge applied to land shall meet the ceiling concentrations for pollutants in the first column of Table 2-1 of 40 C.F.R. 503. The ceiling concentrations are the maximum concentration limits for 10 heavy metal pollutants in biosolids; specifically, arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc. If a limit for any one of the pollutants is exceeded, the sludge cannot be applied to land until such time as the ceiling concentrations limits are no longer exceeded.

# VII. RECEIVING WATER LIMITATIONS

## A. Groundwater Limitations

- The collection, treatment, storage, and disposal of wastewater or use of recycled water shall not cause 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 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 the treated wastewater or use of recycled water shall not cause or contribute to levels of chemical constituents in groundwater that exceed the primary and secondary maximum contaminant levels (MCL and SMCL, respectively) 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, § 64431, 64444 and § 64449.).
- 3. The collection, treatment, storage and disposal of the treated wastewater or use of recycled water shall not cause or contribute to levels of radionuclides in groundwater in concentrations that cause nuisance or adversely affect beneficial uses, nor 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 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 shall not cause the median concentration of coliform organisms over any 7day period to exceed 1.1 MPN per 100 milliliters or 1 colony per 100 milliliters in groundwater used or potentially used for domestic and municipal supply (MUN).
- **6.** The collection, treatment, storage and disposal of wastewater 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. 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 administrative civil liability or civil liability, under the Water Code.

#### C. Severability

Provisions of these waste discharge 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

- 1. The Discharger shall at all times properly operate and maintain all facilities and systems of collection, treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes 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.
- 2. 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. O&M Manual revisions shall be submitted to DDW and the Regional Water Board for approval upon any changes or modifications to the WWTF process and /or its operations. 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.
- **3.** A preventive maintenance program shall be maintained for the Facility to ensure all equipment is kept in a reliable operating condition.

## F. Source Control Provisions

The Discharger shall perform source control functions and provide a summary of source control activities conducted in the Discharger's Annual Report (due March 1st of each year). Source control functions and requirements shall include the following:

- 1. 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.
- 2. 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.
- **3.** Perform public outreach to educate industrial, commercial, and residential users about the importance of preventing discharges of industrial and toxic wastes to the collection system or Facility

**4.** Perform ongoing inspections and monitoring, as necessary, to ensure adequate source control.

### G. 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.

#### H. Change in Control or Ownership

In the event of any change in control or ownership of land or waste discharge facilities presently owned, controlled, or used 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, 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.

#### I. 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.

#### J. Monitoring and Reporting

The Discharger shall comply with the Monitoring and Reporting Program (MRP), Attachment D of this Order, 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 the State of California Environmental Laboratory Accreditation Program The Discharger may analyze pollutants with short hold times (e.g., pH, chlorine residual, etc.) with field equipment or its on-site laboratory provided that the Discharger comply with the specifications in the MRP.

## K. Records Retention

The Discharger shall maintain records of all operating and monitoring information required by this Order, including calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, analyses specified in the MRP in Attachment D of this Order, records of operational problems, plant and equipment breakdowns, diversions to emergency storage or disposal, and all corrective or preventive action(s) taken, 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.

#### L. 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 requirement;
  - 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);
  - **c.** the written 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 under paragraph (a) or (b) of 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."

# M. 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.

### N. Noncompliance

- 1. 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.
- **2.** Process or equipment failures triggering an alarm shall be recorded and maintained as a separate record file. The recorded information shall include the time and cause of failure and corrective action taken.
- **3.** Any discharge of untreated or partially treated wastewater to the use area, and the cessation of same, shall be reported immediately by telephone to the Regional Water Board, DDW, and the local health officer.

**4.** The Discharger shall report all violations of this Order in the Discharger's recycled water/irrigation monitoring reports, including incidental runoff events that the Discharger is aware of.

### **O.** Revision of Requirements

The Regional Water Board will review this Order periodically and may revise requirements when necessary.

# P. 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 Division of Drinking Water where water reclamation is involved.
- The Discharger must always provide a sufficient number of qualified personnel to operate the Facility effectively to achieve the required level of treatment. Qualified personnel must be those meeting requirements of Division 7, Chapter 9 (commencing with Section 13625) of the California Water Code.

### Q. 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 Regional Water Board Executive Officer, and longer extensions may be granted by the Regional Water Board itself (title 23, Cal. Code of Regs., section 2232).

# R. 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 storage ponds to the Regional Water Board Executive Officer for review prior to construction, complete any necessary environmental review to comply with the California Environmental Quality Act (CEQA), and demonstrate that the pond design and operation plan includes features and BMPs to protect groundwater and prevent exceedances of groundwater quality objectives.

# S. 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 Discharger shall submit a Disaster Preparedness Assessment Report and Action Plan to the Regional Water Board by **June 1**, **2024** review and approval by the Regional Water Board Executive Officer.

The Discharger 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, 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.

# 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 Daily Dry Weather Flow (ADDWF)

Compliance with the ADDWF prohibition in section III.J of this Order will be determined once each calendar year by evaluating all flow data collected in a calendar year. The flow through the Facility, measured daily and averaged monthly, shall be 0.131 mgd or less for the month with the lowest average monthly flow. Compliance with this prohibition shall be measured continuously at Monitoring Location INF-001 and calculated daily.

### C. Peak Daily Wet Weather Flow (PDWWF)

The PDWWF is the maximum flow rate that occurs over a 24-hour period. Compliance with the PDWWF prohibition in section III.J of this Order will be determined once daily by measuring the daily average flow at Monitoring Location INF-001. If the measured daily average flow exceeds 0.151 mgd the discharge is not in compliance with Prohibition III.J of this Order.

# D. Peak Hourly Wet-Weather Flow (PHWWF)

The PHWWF is the maximum flow rate that occurs over a one hour period. Compliance with the PHWWF in section III.J of this Order will be determined once daily during periods of wet weather by measuring the hourly flows. If the measured peak hourly flow on any day exceeds 0.269 mgd, the discharge is not in compliance with Prohibition III.J of this Order.

# E. Average Monthly Effluent Limitation (AMEL)

- 1. 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.
- 2. 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 results 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.
- **3.** If there are ND or DNQ results for a specific constituent in a calendar month, the Discharger shall calculate the median of all sample results within that month for compliance determination with the AMEL as described in section VII.B, above.
- **4.** For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

# F. Average Weekly Effluent Limitation (AWEL)

- 1. The arithmetic mean of all samples collected over a calendar week, calculated as the sum of all samples in a calendar week divided by the number of samples. If only one sample is collected in a calendar week, that sample result will constitute the weekly average and daily maximum results for the purpose of determining compliance with effluent limitations.
- 2. If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter.

If only a single sample is taken during the calendar week and the analytical results for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs.

- **3.** If there are ND or DNQ results for a specific constituent in a calendar week, the Discharger shall calculate the median of all sample results within that week for compliance determination with the AWEL as described in section VII.B, above.
- **4.** For any calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

# G. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, the median determined by subsection A, 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 one day only within the reporting period. For any one day during which no sample is taken, no compliance determination can be made for that day.

### H. 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).

### I. 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 for the sample will be considered.

### J. Bacteriological Limitations

**1.** 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,

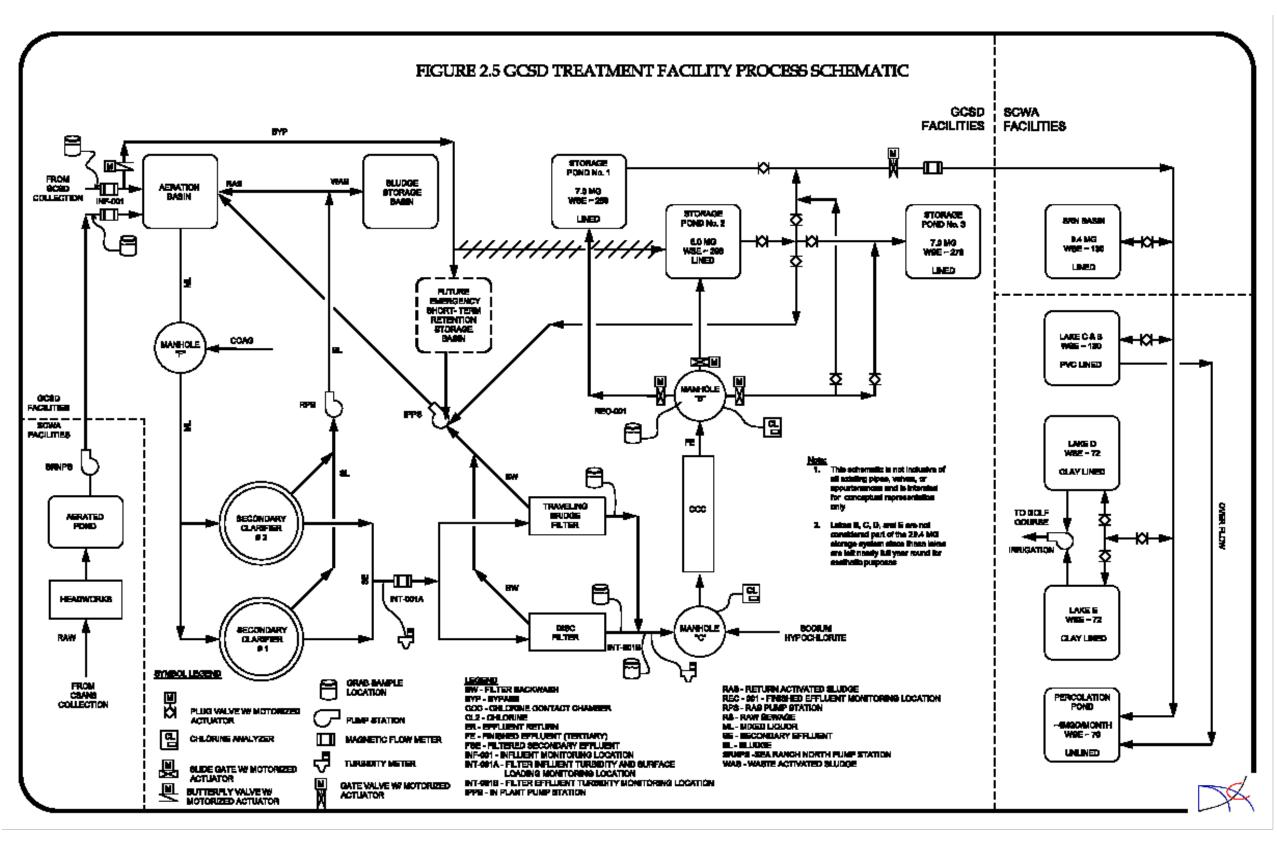
DNQ determinations next, followed by quantified values. The order of the individual ND and DNQ determinations is not important. The median value is determined based on the number of data points in the data set. If the data set has an odd number of data points, then the median is the middle value. If 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.

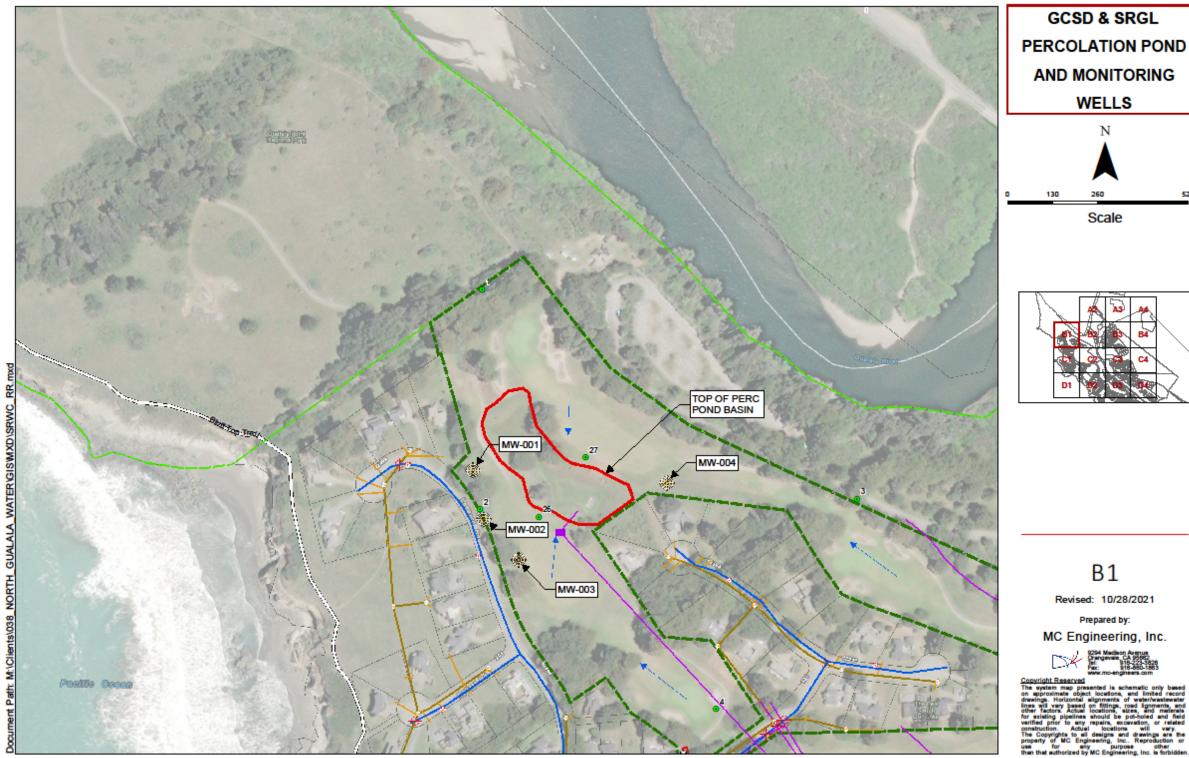
**2.** Compliance with the 7-day median will be determined as a rolling median using the bacteriological results of the last 7 days for which analyses have been completed.

# ATTACHMENT A - FACILITY LOCATION MAP



# ATTACHMENT B - FACILITY FLOW SCHEMATIC





# ATTACHMENT C - PERCOLATION POND AND MONITORING WELL LOCATIONS



### ATTACHMENT D - MONITORING AND REPORTING PROGRAM NO. R1-2022-0004

This MRP is issued pursuant to California Water Code (Water Code) section 13267 which authorizes the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. The technical and monitoring reports required by this Order are necessary to ensure compliance with the Order No. R1-2022-0004 and to protect human health and waters of the state. The costs of the technical or monitoring reports required by this Order bear a reasonable relationship to the need for these reports and the benefit to be gained by these reports.

This MRP establishes monitoring and reporting requirements, which are necessary to assure the discharges of waste that could impact water quality complies with waste discharge requirements and water quality objectives. This MRP may be modified, as necessary by the Regional Water Board Executive Officer. Pursuant to Water Code section 13268, failure to submit the report(s) as described by this Order is a misdemeanor and may subject the Discharger to an administrative civil liability if the reports are not received by the deadline.

# I. GENERAL MONITORING PROVISONS

### A. Wastewater Monitoring Provision

Composite samples may be taken by a proportional sampling device or by grab samples composited in proportion to flow. 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 of California Environmental Laboratory Accreditation Program (ELAP), in accordance with Water Code section 13176, and must include quality assurance/quality control data with their reports.
- 2. The Discharger may analyze pollutants with short hold times (e.g., pH, chlorine residual, etc.) with field equipment or its on-site laboratory provided that the Discharger has written standard operating procedures (SOPs) that identify quality assurance/quality control procedures to be followed to ensure accurate results.

The Discharger shall keep a manual onsite containing the steps followed in this program and must demonstrate sufficient capability to adequately perform these field tests (e.g., qualified and trained employees, properly calibrated and maintained field instruments). The program shall conform to approved guidelines or procedures (i.e., U.S. EPA, Standard Methods, etc.).

# 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. Monitoring Equipment Calibration Provision

All monitoring and analysis instruments and devices used by the Discharger to fulfill this MRP shall be properly maintained and calibrated as recommended by the manufacturer 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 an 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 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 monitoring locations identified in Table E-1 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 INF-001(A) INF-001(B)(2) INF-001(C)	Influent wastewater at a representative point preceding treatment. Sampling location INF-001 shall represent influent coming in from the Gualala CSD collection system (INF-001(A)) and Sea Ranch North (INF- 001(B)(2)) each day and shall not include flows being brought back in from storage or plant recirculation flows. The volume of any septage, landfill leachate or other trucked waste to the plant shall be recorded each day of delivery (INF-001C). Any flows brought back from storage and/or plant recirculation flows shall be recorded and identified separately from influent flow.

Table E-1. Monitoring Station Locations

Dieekarra	Manifaring			
Discharge Point	Monitoring Location	Monitoring Location Description		
Name	Name			
	INF-001(B)(1)	Influent wastewater to the Sea Ranch North influent storage pond shall represent influent from the Sea Ranch North collection system. This monitoring location shall also be used to record the influent storage pond freeboard and volume in accordance with Table E-6.		
	INT-001A(1) INT-001a(2)	Location for monitoring surface loading rate through tertiary filters and pretreatment process monitoring prior to the tertiary filters. INT-001A(1): prior to the travelling bridge filter INT-001A(2): prior to the NOVA filter		
	INT-001B(1) INT-001b(2)	Treated wastewater immediately following the tertiary filters for monitoring the turbidity of the tertiary treated effluent prior to chlorination. INT-001B(1): following the travelling bridge filter INT-001B(2): following the NOVA filter		
001A 001B	REC-001	Effluent monitoring location following tertiary treatment and disinfection to demonstrate compliance with water recycling effluent limitations in Order section IV.A. and Disinfection Process Requirements in Order section IV.B.2, prior to discharge to recycled water storage ponds at GCSD (Discharge Point 001A) and Sea Ranch North (Discharge Point 001B).		
002	REC-002	Effluent monitoring location following tertiary storage and prior to distribution to The Sea Ranch Golf Links for water recycling.		
003	LND-001	Effluent monitoring location following recycled water storage ponds representing disinfected tertiary effluent discharged to the percolation pond at The Sea Ranch Golf Links.		
	Pond-001 Pond-002 Pond-003 Pond-004	Recycled water storage ponds located at the Gualala CSD WWTF (Ponds 001 through 003) and the Sea Ranch North WWTF (Pond 004) to be monitored in accordance with Tables E-6 and E-7. Any future addition of storage ponds shall be identified and numbered for reporting.		
	GW-001 GW-002 GW-003 GW-004	Monitoring wells in the vicinity of the percolation pond at The Sea Ranch Golf Links to be monitored immediately prior to, during and following any discharge to the percolation pond.		

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	BIO-001	A representative sample of the sludge or biosolids generated when removed for disposal.

#### **III. MONITORING REQUIREMENTS**

# A. Influent Monitoring – Monitoring Locations INF-001, INF-001A, INF-001B, and INF-001C

**1.** The Discharger shall monitor influent wastewater from Gualala CSD and Sea Ranch North to the Facility at Monitoring Locations INF-001A and INF-001B, respectively, as follows in Table E-2:

### Table E-2. Influent Flow – Monitoring Locations INF-001A and INF-001B

Parameter	Units	Sample Type	Minimum Sampling Frequency	
Influent Flow <sup>1</sup>	mgd	Meter	Continuous	
Biochemical Oxygen Demand (5-day @ 20°C) (BOD)	mg/L	Grab	Monthly	
Total Suspended Solids (TSS)	mg/L	Grab	Monthly	
Table Notes:1. The Discharger shall report the daily average, monthly average, and peak				

hourly flows.

- **2.** The Discharger shall also report the combined flows of INF-001A and INF-001B as INF-001.
- **3.** The Discharger shall also report the volume of any trucked waste into the Facility at INF-001C.

# B. Recycled Water Monitoring – Discharge Points 001A and 001B - Monitoring Location REC-001

The Discharger shall measure and record the volume of recycled water effluent and monitor recycled water effluent at Monitoring Location REC-001 as follows:

Table E-3.	Recycled Water Monitoring – Discharge Points 001A and 001B -
	Monitoring Location REC-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow <sup>1</sup>	Mgd	Meter	Continuous
BOD	mg/L	24-hour composite	Weekly
TSS	mg/L	24-hour composite	Weekly
рН	Standard Units	Grab	Daily
Chlorine, Total Residual	mg/L	Meter <sup>2</sup>	Continuous
Total Coliform Organisms	MPN/ 100 mL	Grab	Daily
Disinfection CT <sup>3</sup>	Mg-min/L	Calculation	Daily
Table Notes:			

- 1. Each month, the Discharger shall report the daily average and monthly average flows.
- 2. Report minimum daily chlorine residual.
- 3. Disinfection CT shall be based on continuous flow and chlorine residual data. Detailed monitoring and reporting requirements are described in section III.F of this MRP.

# C. Recycled Water Monitoring – Discharge Point 002 - Monitoring Location REC-002

When recycling at Discharge Point 002, the Discharger shall monitor treated effluent at Monitoring Location REC-002, as follows:

# Table E-4. Recycled Water Monitoring – Discharge Point 002 - Monitoring Location REC-002

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily) <sup>1</sup>	mgd	Meter	Continuous
Ammonia, as N	mg/L	Grab	Monthly
Nitrate, Total as N	mg/L	Grab	Monthly
Nitrite, Total as N	mg/L	Grab	Monthly
Organic Nitrogen as N	mg/L	Grab	Monthly

Parameter	Units	Sample Type	Minimum Sampling Frequency
Nitrogen, Total (as N) <sup>2</sup>	mg/L	Calculated	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly <sup>3</sup>
Sodium	mg/L	Grab	Monthly <sup>3</sup>
Chloride	mg/L	Grab	Monthly <sup>3</sup>
Boron	mg/L	Grab	Monthly <sup>3</sup>

#### Table Notes:

- 1. Each month, the Discharger shall report the daily average and monthly average flows.
- 2. Total nitrogen shall be calculated as the sum of ammonia nitrogen, nitratenitrogen, nitrite-nitrogen, and organic nitrogen.
- 3. The monitoring frequency for TDS, Sodium, Chloride, and Boron may be reduced or eliminated by the Regional Water Board Executive Officer through the modification of this MRP if monitoring data demonstrates that concentrations of these constituents are consistently lower than water quality objectives for protection of groundwater.

# D. Recycled Water Production and Use – Discharge Point 002 - Monitoring Location REC-002

1. When recycled water is being applied at The Sea Ranch Golf Links (Discharge Point 002), the Discharger shall monitor recycled water at Monitoring Location REC-002, as described in Table E-5.

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>2</sup>
Recycled Water User			
Recycled Water Flow <sup>3, 4</sup>	gpd <sup>5</sup>	Meter <sup>6</sup>	Monthly
Acreage Applied	Acres	Calculated	Annually
Application Rate (hydraulic)	inches/acre/year	Calculated	Annually
Total Nitrogen Application Rate <sup>7, 8</sup>	lbs/acre/year	Calculation	Annually
Rainfall	Inches	Gage	Daily
Soil Saturation/Ponding		Gauge	Daily

# Table E-5. Recycled Water Production and Use <sup>1</sup>

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>2</sup>
Discharge Off-Site		Observation	Monthly
Nuisance/Vectors		Observation	Monthly
Notification Signs <sup>9</sup>		Observation	Monthly
Maximum Allowable Hydraulic Agronomic Rate <sup>10</sup>	Inches	Observe	Monthly
Maximum Allowable Nitrogen Agronomic Rate	lbs	Calculation	

#### Table Notes:

- 1. Recycled water production and use area monitoring shall be reported with the annual report (section V.B.2.e of this MRP). Non-compliance incidents shall be reported as specified in Order section VIII.N and MRP section V.C.
- 2. Or less frequently if approved by the Regional Water Board Executive Officer through modification of this MRP.
- 3. Estimation of the volume of recycled water shall not include other potable or non-potable "make-up" water used in conjunction with recycled water.
- 4. At this time, there is one recycled water user, The Sea Ranch Golf Links, but if any new users are added in the future, the Annual Recycled Water Report shall include the daily volume of recycled water by each user, by type of use(s), and any observations indicating non-compliance with the provisions of this Order.
- 5. gpd denotes gallons per day.
- 6. Meter requires meter reading, a pump run time meter, or other approved method.
- 7. Nitrogen application rate shall consider nitrogen content of the recycled water, based on effluent monitoring data.
- Nitrogen concentrations shall be calculated and reported "as N". For example, nitrate-nitrogen = 27 mg/L as NO<sub>3</sub> shall be converted and reported as nitrate-nitrogen = 6.1 mg/L as N using a conversion factor of 14.067 (N)/62.0049 (NO<sub>3</sub>).
- 9. Notification signs shall be consistent with the requirements of California Code of Regulations, title 22, section 60310(g).

10. Maximum allowable hydraulic agronomic rates for each recycled water use site will be calculated as follows:
(ETo*Kc)-Peff
Irrigation water requirement (inches) =
(1-LR)*Eu
Where:
<ul> <li>ETo = Reference evapotranspiration (in inches) is defined as the amount of water used by the plants (transpiration) and evaporated from the soil (evaporation)(and is based on the consumptive water use of a local grass field, measured by the California Department of Water Resources, CIMIS database for CIMIS Zone 1 at <u>CIMIS website</u> (https://cimis.water.ca.gov/App_Themes/images/etozonemap.jpg). Real time ETo data for CIMIS Zone 1 is collected from CIMIS Station 259 located in the Ferndale Plain.</li> <li>Kc = Crop growth coefficient for golf course turf, as summarized in Table 1 of the Gualala CSD Recycled Water Best Management Practices and Operations and Management Plan (April 20, 2020 or subsequent</li> </ul>
<ul><li>revisions)</li><li>Peff = Effective precipitation (amount of rainfall in inches available to</li></ul>
golf course turf, 9based on rain gauge at the Facility)
<ul> <li>LR = Leaching Requirement, 0% (a conservative estimate) is the fraction of irrigation water (irrigation plus precipitation), required to leach the excess salt out of the root zone, to reduce salt stress on the plant root zone. LR is based on the salt concentration of the applied water and the salt tolerance of the crop.</li> </ul>
• Eu = Unit application efficiency for golf course sprinklers, 85%

2. Visual observations of the recycled water use areas shall be recorded a minimum of monthly during periods of recycled water use in order to verify compliance with recycled water requirements in this Order and shall confirm proper operation of the recycled water system and associated BMPs and include a record of any malfunctions or findings of improper operation, including, but not limited to, observations for evidence of ponding that exceeds 24 hours, runoff, odors, vectors, leaks or breaks in equipment, proper identification of recycled water infrastructure, proper signage, etc. Visual observations may be performed by recycled water users in accordance with the Discharger's recycled water user agreements. Visual observations shall be recorded and included in the Discharger's Annual Recycled Water Report.

### E. Filtration Process Monitoring (Monitoring Locations INT-001A and INT-001B)

Filtration process monitoring shall demonstrate compliance with section IV.B.1 (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-001A)

- **a. Monitoring.** The Discharger shall calculate, on a daily basis, the surface loading rate in gallons per minute per square foot and report the maximum surface loading rate and any exceedances of the surface loading rate limitations specified in sections IV.B.1.a.ii.(a) and IV.B.1.a.iii.(a) of the Order. The rate of flow through the tertiary filters shall be measured at Monitoring Location INT-001A.
- **b. Compliance.** Compliance with the maximum daily filter surface loading rate, as specified in section 60301.320 of the CCR Water Recycling Criteria (title 22), shall be calculated based on the flow rate through each filter unit.
- **c. Reporting.** The maximum daily filter surface loading rate shall be reported on the monthly SMRs.

### 2. Effluent Filter Monitoring (Monitoring Location INT-001B)

- **a. Monitoring.** The turbidity of the filtered effluent shall be continuously measured and recorded at Monitoring Location INT-001B. 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 sections IV.B.1.a.ii.(b) and IV.B.1.a.iii.(c) 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. 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.
- **c. Reporting.** If the filter effluent turbidity exceeds an average of 2 NTU during a 24-hour period, 5 NTU more than 5 percent of the time during a

24-hour period, or 10 NTU at any time, the incident shall be reported in the monthly self-monitoring report and the incident shall be reported to the Regional Water Board and DDW by telephone within 24 hours in accordance with Provision VIII.N of the Order. A written report describing the incident and the actions undertaken in response shall be included in the monthly self-monitoring report. Mitigation of the event shall consist of diverting the non-compliant effluent to a storage basin for temporary storage or an upstream process for adequate treatment, land application at Discharge Point 003, or automatically activated chemical addition to comply with title 22 requirements (sections 60304 and 60307).

# F. Disinfection Process Monitoring for Tertiary Chlorine Disinfection System

Tertiary disinfection process monitoring shall demonstrate compliance with section IV.B.2 (Disinfection Process Requirements for Chlorine Disinfection System – Discharge Point 001) of this Order. The following disinfection process monitoring requirements shall be implemented:

# 1. Disinfection Process Monitoring (Monitoring Location REC-001)

- **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.N 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 storage basin or an upstream process for adequate treatment.

2. Submersible Pump Operation. The Discharger shall verify that all submersible pumps used to provide circulation in the disinfection system in accordance with the August 17, 2017 (or subsequent) tracer study are operating at all times that recycled water is being produced and include a statement to this effect in the cover letter of the monthly SMR.

# G. Storage Pond Monitoring

1. The Discharger shall monitor all influent (POND-001(B)(1) and recycled water storage ponds and impoundments (currently POND-001 through POND-004) as described in Table E-6.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Reporting Frequency
Freeboard	0.1 feet	Measurement	Daily	Monthly
Odors		Observation	Daily	Monthly
Berm Condition		Observation	Monthly	Monthly
Pond Subdrains <sup>1</sup>		Observation	Monthly	Monthly

### Table E-6. Storage Pond Monitoring Requirements

Table Notes:

1. Pond subdrains shall be monitored for evidence of pond leakage. If water is detected in the subdrain system, it shall be monitored for the parameters in Table E-7.

**2.** Samples of any water flowing from each of the pond subdrains shall be monitored as described in Table E-7:

### Table E-7. Storage Pond Subdrain Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Reporting Frequency
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Nitrate, Total as N	mg/L	Grab	Monthly	Monthly

Parameter	Units	Sample Type	Minimum Sampling Frequency	Reporting Frequency
рН	Standard Units	Grab	Monthly	Monthly
Specific Conductance	µmhos/cm	Grab	Monthly	Monthly

## H. Wet-Weather Storage and Land Discharge (Percolation Pond) Requirements – Discharge Point 003 – Monitoring Location LND-001

- When stored effluent reaches 85 percent of total storage capacity, or when stored effluent exceeds 67 percent of total storage capacity on January 1st, the Discharger shall submit a report, on a monthly basis, detailing contingency measures taken to ensure adequate and safe freeboard within all storage ponds and to minimize the potential for needing to use the percolation pond for disposal.
- 2. When discharging to the percolation pond at Discharge Point 003, the Discharger shall monitor the discharged effluent in accordance with Table E-8. The effluent discharge to the percolation pond shall be sampled at the initiation of discharge and weekly thereafter until the discharge ceases, at a location before the effluent enters the percolation pond.

# Table E-8. Land Discharge Monitoring to Percolation Pond – Discharge Point 003 - Monitoring Location LND-001

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>
Flow	Mgd	Meter	Continuous
Nitrate, Total (as N)	mg/L	grab	Weekly
Total Dissolved Solids	mg/L	grab	Weekly
Specific Conductance	mg/L	grab	Weekly
Chloride	mg/L	grab	Weekly
рН	pH Units	grab	Weekly

# I. Sludge Monitoring (Monitoring Location BIO-001)

**1.** Sludge sampling shall be conducted according to the requirements specified by the location and type of disposal activities undertaken.

2. 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.

### **IV. RECEIVING WATER MONITORING - GROUNDWATER MONITORING**

 During periods of discharge to the percolation pond at Discharge Point 003, the Discharger shall monitor groundwater in accordance with the requirements in Table E-9. Groundwater monitoring shall begin prior to initiation of discharge to the percolation pond to establish pre-discharge baseline conditions, then shall continue weekly thereafter and continuing for two weeks after the discharge has been ceased.

Parameter	Units	Sample Type	Minimum Sampling Frequency
Depth to Groundwater <sup>1</sup>	0.01 feet	Measured	Weekly
Nitrogen, Nitrate (as N)	mg/L	Grab	Weekly
Total Dissolved Solids	mg/L	Grab	Weekly
Specific Conductance	mg/L	Grab	Weekly
Chloride	mg/L	Grab	Weekly
рН	pH Units	Grab	Weekly

# Table E-9. Groundwater Monitoring – Monitoring Wells GW-001, and GW-002, GW-003, and GW-004

Table Notes:

- 1. Groundwater elevation (in feet and hundredths, M.S.L) shall be measured prior to purging the wells to establish groundwater depth and direction of flow. The information shall include top of casing elevation, the calculated depth to groundwater, and water table elevation for each monitoring well.
- 2. Future additional groundwater monitoring may be required if any future monitoring of agronomic rates (hydraulic and nutrient) demonstrates that the hydraulic and/or nutrient agronomic needs of the golf course turf grass is being exceeded.

# V. 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 SMR.

- 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 1st 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
Continuous	Permit Effective Date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
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 <sup>st</sup> 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 E-10. 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.** Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- **6.** The Discharger shall submit monthly 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, Annual Report, and Source Control Activity Report shall be submitted to the Regional Water Board, signed and certified as required by the General Provisions, 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 <u>Regional Water Board website</u>. (https://www.waterboards.ca.gov/northcoast/publications\_and\_forms/avail able\_documents/pdf/2014/ECM\_Letter-Guidelines.pdf)
- d. 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 <u>State Water Board website</u>. (https://www.waterboards.ca.gov/resources/data\_databases/groundwater. html)

# 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
Recycled Water Specification IV.C.5	Update and maintain Recycled Water Best Management Practices and Operations and Management Plan	As necessary
Land Discharge Requirement IV.E.1	Notification in advance of discharge to percolation pond	In advance of discharge to percolation pond

# Table E-11. Reporting Requirements for non-SMR Reports Specified in the Order and MRP

Order Section	Special Provision Requirement	Reporting Requirements
Provision VIII.E	Update O&M Manual	As necessary
Provision VIII.F	Source Control Annual Report	March 1, annually
Provision VIII.G	Any material change in discharge	Promptly
Provision VIII.N	Non-compliance reporting	Verbal – as soon as aware of incident
		Written – within 5 business days of telephone notification
Provision VIII.Q	Adequate Capacity, Technical Report	Within 120 days of notification that the Facility will reach capacity within 4 years
Provision VIII.R	New Ponds	As necessary
Provision VIII.S	Disaster Preparedness Assessment Report and Action Plan	June 1, 2024
MRP Reporting Requirement V.B.3	Volumetric Reporting	April 30 each year
MRP Reporting Requirement V.C	Notification of spills and unauthorized discharges	Oral reporting as soon as possible after becoming aware of spill

- **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.

- i. 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.
- **ii.** The Discharger shall include trucked waste (i.e., septage, leachate) monitoring data in accordance with a written trucked waste management program approved by the Regional Water Board Executive Officer to demonstrate that accepted trucked wastes are appropriate for discharge to the Facility.
- **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. Staffing and Emergency Contacts.

- i. The names and general responsibilities of all persons employed at the Facility.
- **ii.** The names and telephone numbers of persons to contact regarding the Facility for emergency and routine situations.
- **d. 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.
- e. Source Control Activity Report. The Discharger shall submit a Source Control Activity Report, as per section VIII.F, to the Regional Water Board for each calendar year. The report shall describe source control activities performed by the Discharger during the calendar year, as required by General Provision VIII.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.
- **f. Recycled Water Report.** The Discharger shall submit a Recycled Water Report to the Regional Water Board for each calendar year. The report shall describe recycled water activities performed by the Discharger during the calendar year, including:
  - i. A compliance summary and discussion of the compliance record for the prior calendar year;
  - **ii.** In the event of noncompliance, the report shall also discuss the corrective actions taken and planned to bring the recycled water program into full compliance with this Order;
  - **iii.** Certification that all reasonable BMPs and management practices were implemented to ensure efficient and compliant operation of the recycled water system;
  - **iv.** Identification of any other problems that occurred in the recycled water system during the prior year, including repeated occurrences of incidental runoff of which the Discharger is aware, and plans to rectify those problems in the coming year.
  - **v.** A description of agronomic rate compliance, pursuant to section III.D of the MRP.
  - **vi.** A summary of major repairs scheduled or completed that affected the recycled water system appurtenances and irrigation areas;
  - **vii.** Documentation of compliance with the purple pipe requirement in California Health and Safety Code section 116815 (per Order section IV.C.16).
  - **viii.** Monitoring activities that occurred during the previous year, and identification of any problems and how the problems were addressed; and
  - **ix.** If applicable, a summary of all cross-connection testing and back-flow prevention activities (inspections, maintenance) and a summary of any problems identified, or certification that no problems occurred.
- **g.** Sanitary Sewer System Reporting. The Discharger shall submit a description of Discharger's activities to assess the collection system and to correct deficiencies and reduce inflow and infiltration (I&I) into the collection system. The report shall include, but not be limited to the following:

- i. A description of any assessment work to characterize the collection system and identify deficiencies;
- **ii.** A description of replacement and rehabilitation of the collection system, including details about replaced/rehabilitated infrastructure, including pipeline, manholes, lift stations, etc.
- **iii.** A description of any changes in the Discharger's ordinances and programs to address I&I.
- **iv.** The financial resources spent on the Discharger's collection system assessment, rehabilitation, and repair work during the calendar year, and the amount of financial resources budgeted for the upcoming calendar year.
- **h. Biosolids Handling and Disposal Activity Reporting.** The Discharger shall submit a description of the solids handling, disposal, and reuse activities during the calendar year. At a minimum, the report should include:
  - i. A schematic showing sludge handling facilities (e.g., digesters, thickeners, drying beds, storage, land application areas, etc.), if any, and solids flow diagram;
  - **ii.** The amount of biosolids generated and disposed that year, in dry metric tons and percent solids, and the amount used or disposed by each use site and/or disposal practice;
  - **iii.** If the Discharger is required to monitor sludge prior to final disposal, the results of this monitoring shall be included in the summary report.
- **3. Annual Volumetric Reporting.** The Discharger shall electronically certify and submit an annual volumetric report, containing monthly data in electronic format, to State Water Board's GeoTracker system by **April 30** of the following year. Required data shall be submitted to the GeoTracker database under a site-specific global identification number. The Discharger shall report in accordance with each of the items in Section 3 of the Recycled Water Policy as described below:
  - **a. Influent.** Monthly volume of wastewater collected and treated by the Facility.
  - **b. Production.** Monthly volume of wastewater treated, specifying level of treatment.

- **c. Discharge**. Monthly volume of treated wastewater discharged to each of the following, specifying level of treatment:
  - i. Inland surface waters, specifying volume required to maintain minimum instream flow, if any; and
  - **ii.** Land, where beneficial use is not taking place, including evaporation or percolation ponds, overland flow, or spray irrigation disposal, excluding pasture or fields with harvested crops.

### d. Reuse.

- i. Monthly Volume of treated wastewater distributed.
- **ii.** Annual volume of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, title 22 in each of the use categories listed below:
  - (a) Agricultural irrigation: pasture or crop irrigation.
  - (b) Landscape irrigation: irrigation of parks, greenbelts, and playgrounds; school yards; athletic fields; cemeteries; residential landscaping, common areas; commercial landscaping; industrial landscaping; and freeway, highway, and street landscaping.
- **iii.** Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.
- **iv.** Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.
- **v.** Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered.
- vi. Geothermal energy production: augmentation of geothermal fields.
- **vii.** Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments.

# **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 verbally to the Regional Water Board <sup>4</sup> 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.

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;
- **g.** Actions taken to prevent the spill or unauthorized discharge from reoccurring; and
- **h.** 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:

<sup>&</sup>lt;sup>4</sup>. The contact number of the Regional Water Board during normal business hours is (707) 576-2220. After normal business hours, spill reporting <u>to the California</u> <u>Governor's Office of Emergency Services Warning Center (CalOES)</u> will satisfy the 24 hour spill reporting requirement for the Regional Water Board. The contact number for spill reporting for the CalEMA is (800) 852-7550.

# a. Tertiary Recycled Water<sup>5</sup>

- 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.

<sup>&</sup>lt;sup>5</sup> 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.