WDID No. 1B75028OSON
WASTE DISCHARGE AND WATER RECYCLING REQUIREMENTS
for
BODEGA BAY PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT AND RECLAMATION FACILITY
SONOMA COUNTY

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

Table 1. Discharger Information

Discharger	Bodega Bay Public Utility District
Name of Facility	Bodega Bay Public Utility District Wastewater Treatment and Reclamation Facility
Facility Address	265 Doran Park Road
	Bodega Bay, CA 94923
CIWQS Place ID	209949
ECM Primary Indexing Number	CW-209949
Global ID	WDR100027277

The discharge by the Bodega Bay Public Utility District Wastewater Treatment and Reclamation Facility (WWTF or Facility) from the discharge point 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
001A	Tertiary Treated Municipal Wastewater	N 38.319239	W 122.995962	Bruhn Reservoir

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Discharge Location
001B	Tertiary Treated Municipal Wastewater and Secondary Treated Municipal Wastewater	N 38.329231	W 123.035744	North Site Recycled Water Storage Ponds
001C	Tertiary Treated Municipal Wastewater	N 38.318323	W 123.034939	Treatment Plant Effluent Storage Pond
001D	Tertiary Treated Municipal Wastewater	N 38.315684	W 123.016605	Intermediate Storage Pond
002	Tertiary Treated Municipal Wastewater	N 38.313436	W 123.026340	Pasture Irrigation at the District-owned North Site
003	Tertiary Treated Municipal Wastewater	N 38.329052	W 123.033992	Links at Bodega Harbour Golf Course

IT IS HEREBY ORDERED, that Order No. 91-130 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code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, Valerie Quinto, 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 **June 15 (or 16), 2023.**

Valerie Quinto
Executive Officer

23_0011_Bodega Bay PUD WWTF

I. FACILITY INFORMATION

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

Table 3. Facility Information

Discharger	Bodega Bay Public Utility District (PUD)
Name of Facility	Bodega Bay PUD Wastewater Treatment and Reclamation Facility
Facility Address	265 Doran Park Road
	Bodega Bay, CA 94923
	Sonoma County
Facility Contact, Title, Phone, and email	Janet Ames, District Manager, (707) 875-3332 j.ames@bodegabaypud.com
Mailing Address	P.O. Box 70, Bodega Bay, CA 94923
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	0.32 million gallons per day (mgd) Average Dry Weather Flow (ADWF) 1.17 mgd Peak Wet Weather Flow (PWWF)
Facility Permitted Influent Flow	0.32 mgd ADWF 1.17 mgd PWWF
Facility Permitted Effluent Flow	0.81 mgd[1]

Table Notes:
1. The maximum permitted effluent discharge at Discharge Point 001C for this Facility is limited to 0.81 mgd. This is the highest flowrate through the chlorine contact basins that will meet the California Code of Regulations title 22 disinfection CT (free residual chlorine concentration (C) multiplied by the contact time (T)) requirement of 450 mg-min/L and the modal contact time requirement of 90 minutes.

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 Bodega Bay PUD is currently discharging pursuant to Waste Discharge Requirements Order No. 91-130. An incomplete Report of Waste Discharge (ROWD) for new waste discharge requirements was received on October 3, 2015 and again on August 17, 2017. On February 15, 2019, the Discharger submitted a ROWD, including a Title 22 Recycled Water Engineering Report (Title 22 Engineering Report) that addresses recycled water production, distribution and use on both The Links at Bodega Harbour (LBH) golf course and the Discharger's pastureland. The ROWD also includes a preliminary Irrigation Management Plan and a Biosolids Storage and Disposal Management Plan (Biosolids Management Plan).

The Discharger made minor revisions to the Title 22 Engineering Report to address State Water Resources Control Board (State Water Board) Division of Drinking Water (DDW) comments and resubmitted it on May 31, 2019. DDW accepted the May 31, 2019 Title 22 Engineering Report by letter dated June 13, 2019. The Discharger submitted additional information by emails dated December 4, 2020, May 1, 2021, June 1, 2021, June 8, 2021, July 23, 2021, August 25, 2021, and August 27, 2021. The ROWD was deemed complete on September 1, 2021.

The renewal of these waste discharge requirements (WDRs) is for the discharge of up to 0.32 mgd (ADWF) and 0.81 mgd (PWWF) of tertiary treated wastewater from the existing Facility.

The Discharger owns and operates a wastewater treatment, reclamation, and disposal system that serves the community of Bodega Bay and the Bodega Harbor subdivision. The area served is approximately 60 percent residential and 40 percent commercial (primarily hotels and restaurants). There are no industrial connections. The collection system includes approximately 15 miles of sewers and eight lift stations. The Facility consists of the headworks that includes, a solids separation facility and flow measurement, secondary treatment with two extended air activated sludge basins and four secondary clarifiers, two tertiary treatment cloth media rotating disk filters, and chlorine disinfection using chlorine gas. The Discharger plans to switch from chlorine gas to sodium hypochlorite in the near future for safety. The WWTF uses a Supervisory Control and Data Acquisition (SCADA) system for process monitoring and automation. Lift station high water level alarms are connected to the SCADA system.

The Facility includes 88.9 million gallons of recycled water storage capacity in six earthen-lined recycled water storage ponds, identified in the following table:

Table 4. Storage Pond Capacity

Pond	Capacity, Million Gallons (MG)
Treatment Plant Storage Pond	3.3

Pond	Capacity, Million Gallons (MG)
Intermediate Pond	1.0
Bruhn Reservoir	36.5
North Site Pond 1	14.9
North Site Pond 2	16.6
North Site Pond 3	16.6
Total Capacity	88.9

Historically, the Discharger reserved North Site Pond 1 for storage of disinfected secondary-23 recycled water (as defined in title 22 Section 60301.225) which resulted during periods when the tertiary filters could not handle high winter flows through the Facility. To help address this issue, the Discharger added a second redundant tertiary filter, which provided additional treatment capacity. However extreme high flow events still have the potential to overwhelm the filters' capacity. If high flows are causing turbidity levels to exceed the standards for tertiary treatment, the filters enter continuous backwash mode. If this occurs, the operator diverts secondary treated water to North Site Pond 1 from a wet well located prior to the tertiary filtration tank. Secondary treated water is wastewater that has undergone treatment up to (but not through) the tertiary filters. The secondary treated water is temporarily stored in Pond 1 until flows have subsided to a level where the cloth filters can once again effectively treat the wastewater to tertiary treatment standards. The secondary treated water is then transferred back to the treatment plant to receive treatment to tertiary standards. Having the capability to transfer secondary treated water to temporary storage and back to the treatment plant allows the Discharger to produce disinfected tertiary recycled water from all influent in compliance with title 22 requirements.

Disinfected tertiary recycled water is pumped to the 'Intermediate Pond', thence to Bruhn Reservoir for use at the golf course. Three of the ponds, identified as North Pond Nos. 1, 2, and 3, are located on the Discharger-owned property identified as the North Site. These three ponds have historically been used as secondary storage ponds, but in recent years, all three ponds have been designated for storage of tertiary recycled water.

The Discharger preferentially provides disinfected tertiary recycled water to the LBH golf course for spray irrigation of the golf course greens and fairways on 110 acres. The Discharger is required to maintain a use agreement with the LBH golf course as described in section IV.C.1 of this Order.

The Discharger also uses disinfected tertiary recycled water to irrigate pastureland on 37 acres at the North Site and owns an additional 98 acres adjacent to the pasture that is available to receive recycled water if needed. Irrigation on pastureland occurs primarily when the Discharger has more recycled water than what the golf course needs or following winters when the District has excess recycled water.

A large portion of the wet weather inflow to the Facility is the result of inflow and infiltration (I&I) of rainwater into the collection system and ultimately into the Facility during wet weather events. To address operational challenges associated with receiving excessive I&I into the Facility, the Discharger recently completed a study to prioritize the rehabilitation work on known sources of I&I in the collection system. The study used closed-circuit television (CCTV) cameras to survey 100% of the collection system and divide the rehabilitation work in three phases based on priority and funding. The Discharger is currently implementing the first phase of collection system rehabilitation work that includes about 30 percent of the sewer mains at a cost of around $3 million. The first phase is scheduled to be completed by the end of June 2023. The second two phases will be completed as funding allows with estimated completion dates of 2033 for Phase 2 and 2043 for Phase 3.

This Order includes water recycling requirements that apply to the production, storage, and distribution of tertiary recycled water. The use of recycled water on a privately-owned golf course is permitted through State Water Resources Control Board Order WQ 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use* (Recycled Water General Order). The LBH golf course submitted a Notice of Intent (NOI) on November 8, 2017 to obtain coverage under the Recycled Water General Order. Regional Water Board staff expect to complete the process to enroll the LBH golf course in the Recycled Water General Order by June 30, 2023.

Solids generated during the treatment process are aerobically digested, dried on sand beds, and used as a soil amendment on 37 acres of irrigated pasture at the North Site in accordance with its Biosolids Management Plan (February 2019 or subsequent revision). The Discharger complies with EPA Part 503 Biosolids Rule (Title 40 of the Code of Federal Regulations, Part 503 (40 CFR Part 503) pathogen reduction requirements by air drying the sludge for a minimum of three months and complies with vector attraction reduction requirements by incorporating all biosolids into the soil at the land application site within 6 hours after placement on the land. Order section VI.E requires the Discharger to submit an updated Biosolids Management Plan to provide a comprehensive document that demonstrates that biosolids treatment, handling, storage, and land application are compliant with all U.S. EPA biosolids requirements.

Attachment A provides a map showing the location of the Facility, the North Site, and the LBH golf course. Attachment B provides a plant site map. Attachment C provides a Facility flow schematic. Attachment D provides a map of the North Site recycled water and biosolids storage and land application area.

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 water recycling requirements pursuant to article 4, chapter 4, division 7 (commencing with section 13500) of the Water Code.

D. Basin Plan

As required by Water Code section 13263(a), these WDRs are crafted to implement the Water Quality Control Plan for the North Coast Region (Basin Plan), and in so doing, the Regional Water Board has taken into consideration the beneficial uses to be protected, the water quality objectives (both numeric and narrative) reasonably required for that purpose, other (including previous) waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241. The Basin Plan contains implementation plans and policies for protecting waters of the basin. The Basin Plan implements State Water 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 Bodega Harbor Hydrologic Area of the Bodega Hydrologic Unit 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.)

1. Sewage—Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to California Code of Regulations, title 23, division 3, chapter 9, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludge or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable State Water Board promulgated provisions of this division. (Cal. Code Regs., tit. 27, § 20090(a).)

2. Wastewater—Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields if the following conditions are met:

   a. the applicable regional water board has issued WDRs, reclamation requirements, or waived such issuance;

   b. the discharge is in compliance with the applicable water quality control plan; and

   c. the wastewater does not need to be managed according to, California Code of Regulations, title 22, division 4.5, chapter 11, as a hazardous waste. (Cal. Code Regs., tit. 27, § 20090(b).

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

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[1] and requires the following:

1. Higher quality water will be maintained until it has been demonstrated to the state that any change will be consistent with the maximum benefit to the people of the state, will not unreasonably affect present and anticipated beneficial use of the water, and will not result in water quality less than prescribed in the policies.

2. Any activity that produces a waste and discharges to existing high quality waters will be required to meet 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 Best Management Practices (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. The economic prosperity of a small 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

[1] 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.

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

In addition, the Order requires the Discharger to submit a Special Study to Evaluate the Potential Impact to Groundwater (MRP section IV.D) that will assess whether the treated wastewater complies with the groundwater limitations set forth in section VII. If the Special Study concludes that the discharge has the potential to violate the groundwater limitations, the Order may be reopened to consider, as appropriate, the addition of effluent limitations for TDS and/or total nitrogen to reduce the potential for degradation consistent with the Antidegradation Policy. If the Special Study concludes that the discharge does not have the reasonable potential to violate the groundwater limitations, new effluent limitations may not be needed. The Special Study and the required follow-up actions will ensure that the discharge does not result in degradation of groundwater, exceedances of water quality standards, or impacts to the beneficial uses of groundwater within the Bodega Harbor Hydrologic Area of the Bodega Hydrologic Unit.

Section IV.C.5 of this Order requires the Discharger to develop and implement an Irrigation Management Plan and section VI.E requires the Discharger to implement a Biosolids Management Plan to ensure that recycled water and biosolids are 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. The Monitoring and Reporting Program (MRP) in Attachment E of this Order requires monitoring of the recycled water for pollutants of concern, including nitrogen, salts (as measured by total dissolved solids), and coliform bacteria and to report nitrogen and hydraulic application rates on an annual basis to demonstrate that the Discharger's use of best practicable treatment or control is effective for the protection of groundwater in areas of recycled water use. It also requires monitoring of the biosolids for pollutants of concern (metals and nitrogen) to demonstrate compliance with U.S. EPA biosolids regulations.

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 that policy by requiring the Discharger to handle and dispose of waste in a manner that will protect water quality objectives, including those that protect drinking water supplies.

I. Endangered Species Act

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A sections 1531 to 1544). The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

J. Recycled Water

The 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 and storage of disinfected tertiary recycled water, as well as the Discharger's distribution and use of disinfected tertiary recycled water on District property. The distribution and use of disinfected tertiary recycled water at the LBH golf course is regulated by the Recycled Water General Order as previously discussed in Order section II.B. The Regional Water Board has incorporated requirements recommended by 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 a conditional acceptance letter on June 13, 2019. The report includes the results of a tracer study conducted to determine the modal contact time of the combined chlorine contact tanks and connecting piping at the range of operating flowrates. The study determined that the highest flowrate through the chlorine contact basins that will meet the title 22 disinfection CT (free residual chlorine concentration (C) multiplied by the contact time (T)) requirement of 450 mg-min/L and the modal contact time requirement of 90 minutes is 0.81 mgd. This Order limits effluent flows of tertiary treated water from the Facility to 0.81 mgd in a prohibition in Order section III.J in accordance with the study results.

To comply with the prohibition when the inflow exceeds 0.81 mgd, the operator transfers secondary treated water to Pond 1 at the North Site for temporary storage. The secondary treated water is then routed back to either the headworks of the Facility or at a location prior to the cloth filters to receive full tertiary treatment and disposal. The prohibition in Order section III.F ensures that no secondary treated water is transferred anywhere except to Pond 1 for temporary storage. Every time secondary treated water is pumped either to or from the North Site, the pipe is flushed afterwards with tertiary treated water for at least an hour. This water is likewise temporarily held in Pond 1 and then delivered back to the treatment plant with the secondary treated water for further treatment. After flushing, the pipe can then be used to discharge tertiary effluent to the North Site Ponds. When influent flows exceed 0.81 mgd, MRP section III.G.2 (Attachment E) requires the Discharger to report the total volume of secondary treated water transferred to Pond 1 as measured at monitoring location POND-001B, the total volume of secondary treated water transferred back to the treatment plant be treated to tertiary standards as measured at monitoring location POND-001C, and an estimate of evaporation and/or seepage that occurred while the secondary treated water was in temporary storage. In this way, the MRP provides the necessary assurance that no secondary treated water is discharged in violation of the prohibition in Order section III.F as long as the total volume of secondary treated water transferred to Pond 1 matches the total volume of secondary treated water returning to the treatment plant (considering losses to evaporation and seepage).

K. Monitoring and Reporting

Water Code section 13267 authorizes the Regional Water Board to require technical and monitoring reports. The MRP (Attachment E) establishes monitoring and reporting requirements to implement State requirements. The MRP is necessary to determine compliance with the conditions of this Order and to determine 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. The Executive Officer is delegated the authority to modify the MRP, 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 WDRs 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 Website (https://www.waterboards.ca.gov/public_notices/petitions/water_quality/) for notices or will be provided upon request.

P. AB 2108 Requirements

The Regional Water Board publicly noticed the Order and provided opportunities for public comment. Public notice was provided to interested persons and public agencies in the region with jurisdiction over natural resources in the affected area, including the Sonoma County Health Department. The Regional Water Board conducted outreach in potentially affected disadvantaged communities and tribal communities. The discharge regulated by this Order is not expected to result in a disproportionate impact to tribal or disadvantaged communities. The Regional Water Board has satisfied the outreach requirements set forth in Water Code section 189.7.

III. DISCHARGE PROHIBITIONS

A. The discharge of waste to Bodega Bay 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 wastewater (receiving a lower level of treatment than described in Order section II.B) from anywhere within the collection, treatment, reclamation, or disposal system is prohibited. One way in which compliance with this prohibition shall be verified is by comparing the total volume of secondary treated water transferred to North Site Pond 1 to the total return volume of secondary treated water returned to the treatment plant based on flow monitoring required in MRP section III.G.2 (Attachment E). Total volumes transferred to Pond 1 shall match total return volumes less any seepage and evaporation to show that no secondary treated water has been discharged in violation of this prohibition.

G. The discharge of waste or distribution of recycled water to land that is not owned by or under agreement to use by the Discharger is prohibited, except as authorized under Order section VI. Solids Disposal and Handling Requirements.

H. 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.

I. The average daily dry-weather flow (ADWF) of waste into the treatment plant shall not exceed 0.32 mgd. The peak wet-weather (PWWF) flow of wastewater into the treatment plant shall not exceed 1.17 mgd. Compliance with this prohibition shall be determined as defined in Order sections IX.B and IX.C.

J. The maximum flow of tertiary treated effluent from the treatment plant and discharged at Discharge Point 001C shall not exceed 0.81 mgd. Compliance with this prohibition shall be determined as defined in Order section IX.D.

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 Order section VI (Solids Disposal and Handling Requirements).

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 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

A. Water Recycling Effluent Limitations – Discharge to Tertiary Recycled Water Storage Ponds (Discharge Points 001A, 001B, 001C, and 001D)

1. The Discharger shall maintain compliance with the following water recycling 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 MRP. The disinfected tertiary recycled water shall, at a minimum, be adequately oxidized, filtered, and disinfected as defined in title 22, division 4, chapter 3.

Table 5. Recycled Water Effluent Limitations – Discharge to Tertiary Recycled Water Storage Ponds)

Parameter	Units	Average Monthly Effluent Limitation	Average Weekly Effluent Limitation	Instantaneous Minimum Effluent Limitation	Instantaneous Maximum Effluent Limitation
Biochemical Oxygen Demand	mg/L	10	15	--	--

Parameter	Units	Average Monthly Effluent Limitation	Average Weekly Effluent Limitation	Instantaneous Minimum Effluent Limitation	Instantaneous Maximum Effluent Limitation
(5-day @ 20°C) (BOD)					
Total Suspended Solids (TSS)	mg/L	10	15	--	--
pH	Standard Units	--		6.0	9.0
	Table Notes: 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 Points 001A and 001B shall not contain coliform bacteria in excess of the following concentrations:

   a. The median concentration shall not exceed an MPN of 2.2 per 100 milliliters (mL), using the bacteriological results of the last 7 days for which analyses have been completed[2]; 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

   All recycled water produced at the Facility must be filtered using the Aqua Aerobic Submerged Cloth-Media Rotating Disk filter technology (Cloth Media Disk Filter) manufactured by Aqua-Aerobic Systems, Inc, as described in the May 2019 Title 22 Engineering Report. The Discharger shall not make any changes, additions, or modifications to the Facility unless approval is obtained from DDW and the Regional Water Board. The Aqua Disk filter technology, Cloth Media Disk Filter is an alternative

[2] See Order section IX.H regarding compliance with bacteriological limitations.

treatment technology and has been approved by DDW subject to the performance and operation conditions as follows:

a. **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.

b. **Filtration Rate.** The rate of filtration through the tertiary filters, as measured at Monitoring Location INT-001A, shall not exceed six (6) gallons per minute per square foot of surface area or other filtration rates authorized in writing by the Executive Officer and under conditions recommended by DDW.

c. **Effluent Turbidity.** The effluent from the tertiary filters shall at all times be filtered such that the filtered effluent does not exceed any of the following specifications at Monitoring Location INT-001B prior to discharge to the disinfection unit:

   i. An average of 2 Nephelometric Turbidity Units (NTU) during any 24-hour period;

   ii. 5 NTU more than 5 percent of the time during any 24-hour period; and

   iii. 10 NTU at any time.

d. **Non-Compliant Effluent.** Filtered effluent in excess of the turbidity specifications in Order section IV.B.1.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 Order section VIII.N.

2. **Disinfection Process Requirements for Chlorine Disinfection System**

The Discharger shall operate the chlorine disinfection system described in the May 2019 Title 22 Engineering Report in accordance with the following:

a. Tertiary Recycled Water - Discharge Points 001A and 001B, Monitoring Location REC-001

As measured at the end of the tertiary chlorine contact basin at Monitoring Location REC-001, tertiary recycled water shall be disinfected in a manner that ensures effective pathogen reduction as described in the following specifications, with compliance measured at Monitoring Location REC-001:

i. The chlorine disinfection process shall at all times provide a CT value of not less than 450 milligram-minutes per liter (mg-min/L) with a modal contact time of at least 90 minutes, based on peak daily dry weather design flow.

ii. **Non-Compliant Effluent.** In the event of a chlorination system failure and whenever effluent does not meet the CT criteria in Order section IV.B.2.a., above, the Discharger shall cease transfers of inadequately disinfected effluent to storage, except to temporary storage at North Site Pond 1. Any inadequately disinfected effluent shall be diverted to an upstream treatment process unit, emergency storage, or temporary storage in Pond 1 as soon as the Discharger is aware of the problem. The Discharger shall provide notification of non-compliance with disinfection requirements as required by Order section VIII.N.

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 (May 31, 2019 or subsequent revisions) and DDW acceptance letter. 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 and modal contact time of 90 minutes as measured at Monitoring Location REC-001.

c. By **December 1, 2023**, the Discharger shall update the Operations and Maintenance Plan, which shall include details regarding low chlorine alarm set point(s) in the SCADA system for the permitted flow rates identified in Table 3 of this Order as well as modal contact time and final total chlorine residuals that are required to meet the disinfection CT of 450 mg-min/L at Monitoring Location REC-001. At a minim
um, the O&M Manual shall include the following chlorine disinfection system operating conditions:

Table 6. Chlorine Disinfection System Operating Conditions

Flow Scenario	Flow (Q) MGD	Flow (Q) GPM	Theoretical Detention Time, minutes (TDT=V[1]/Q)	BF	Modal Contact Time (MCT), minutes (TDT*BF[2])	Final Total Chlorine Residual (mg/L) required for minimum 450 mg-min/L (450/MCT)
Average Dry Weather Design Flow	0.32	222	466	0.45	210	2.14
Peak Wet Weather Design Flow	1.17	812.5	127	0.49	62	7.25
Maximum Permitted Flow [3]	0.81	564	184	0.49	90	5

Table Notes:
1. V – chlorine contact chamber volume: 103,560 gallons.
2. BF – the August 2006 Tracer Study report identified contact efficiencies for various flows which are equivalent to a baffling factor (BF)
3. The maximum permitted flow through the chlorine contact chamber that meets both the disinfection CT requirement of 450 mg-min/L and modal contact time of 90 minutes is 0.81 mgd, as addressed in Table 3 and the prohibition in Order section III.J.

C. Water Recycling Requirements. The following water recycling requirements apply to the Discharger's distribution and use of recycled water on District property identified as the North Site. The use of recycled water at the LBH golf course is permitted through the State Recycled Water General Order.

1. This Order authorizes the Discharger to reuse treated municipal wastewater that complies with water recycling effluent limitations and specifications contained in Order sections IV.A and IV.B for uses that have been addressed in the Title 22 Engineering

Report (May 31, 2019 or subsequent revisions) 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, the Discharger shall maintain an up-to-date recycled water user agreement with the LBH golf course.

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)

   b. Regulations related to recycled water (including its subsequent revisions) contained in CCR, title 17, sections 7583 – 7586, sections 7601 – 7605, and CCR, 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 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 must always maintain the reliability features and contingency measures for the WWTF process and ensure inadequately recycled water is not being delivered to the recycled water users.

5. The Discharger shall submit an Irrigation Management Plan to the Regional Water Board within 18 months of the adoption of this Order. The plan shall be implemented,

maintained, and revised as necessary to ensure that it is current regarding the following elements:

a. A description of the North Site 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., precipitation, 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 inspections of the irrigation system, facilities, and operations at least annually 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 properly install, operate, and maintain 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 a 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. The following recycled water use site specifications apply to the Discharger's use of recycled water on District property identified as the North Site. The use of recycled water at the LBH golf course is permitted by the Recycled Water General Order.

1. 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)]

2. 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 must 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.

    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 must be protected against contact with recycled water spray, mist, or runoff.

4. All recycled water use areas must 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 must 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 must 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 shall be applied at hydraulic and nutrient agronomic rates as described in the Irrigation Management Plan and as specified in MRP section III.C, Table E-5, Table Note 9.

8. 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 50-percent probability 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.

9. 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.

10. The Discharger shall prevent 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;

    b. 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 Executive Officer, if a discharge occurs.

11. 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.

12. 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.

13. 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.

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 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 and disposal areas.

E. Discharge. No waste constituent shall be released or 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 must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must 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 or biosolids generated by the Discharger shall be used or disposed of in compliance with the applicable portions of 40 CFR Parts 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. In the annual self-monitoring report, the Discharger shall report the amount of sludge or biosolids used at the North Site, disposed of, or transferred to another party, including the name of the landfill or disposal site or the third party that received the sludge or biosolids.

D. This Order authorizes the Discharger to land apply biosolids as a soil amendment on the Discharger's North Site. The treatment, storage, disposal and/or application of biosolids shall be confined to the Facility property, and shall be conducted in a manner that precludes infiltration of waste constituents into soil in a mass or at concentrations that would adversely affect beneficial uses of groundwater or cause an exceedance of any applicable Basin Plan water quality objectives for groundwater or surface water.

E. By January 1, 2024, the Discharger shall submit for Executive Officer approval, a Biosolids Management Plan that demonstrates that biosolids treatment, handling, storage, and land application are compliant with U.S. EPA biosolids requirements at CFR Part 503, including the land application limits in Order section VI.R, Table 7 and application at correct agronomic rates for the crop being grown. The Biosolids Management Plan shall be reviewed annually and revised as necessary to remain up to date.

F. 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.

G. 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.

H. Residual sludge and solid waste shall be disposed of in a manner approved by the 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).

I. 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.

J. 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.

K. All sludge applied to land must meet the ceiling concentrations for pollutants in the first column of Table 2-1 of 40 CFR Part 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.

L. All biosolids having a water content that is capable of leaching liquids shall be transported in leak-proof vehicles.

M. Land-applied biosolids shall be incorporated into the soil within six hours in order to meet Vector Attraction requirements in 40 CFR Part 503.33.

N. There shall be no discharge of biosolids from the storage or application areas to adjacent land areas not regulated by this Order, to surface waters, or to surface water drainage courses.

O. The application of biosolids at rates in excess of the nitrogen requirements of the vegetation or at rates that would degrade groundwater is prohibited.

P. The application of biosolids to water-saturated or frozen ground or during periods of precipitation that induces runoff from the permitted site is prohibited.

Q. If biosolids are stored for over two years from the time they are generated by the Discharger or their contractor, the Discharger must submit a written notification to U.S. EPA with the information in 40 CFR Part 503.20 (b), demonstrating the need for longer temporary storage.

R. Biosolids applied to land at the North Site shall not exceed the following pollutant concentrations and soil pH at the site shall not go below the following threshold value:

Table 7. Biosolids maximum pollutant concentrations and minimum soil pH at North Site

Parameter	Units (dry weight)	Limit
Arsenic	mg/kg	75[1]
Cadmium	mg/kg	85[1]
Copper	mg/kg	4300[1]
Lead	mg/kg	840[1]
Mercury	mg/kg	57[1]
Molybdenum	mg/kg	75[1]
Nickel	mg/kg	420[1]
Selenium	mg/kg	100[1]
Zinc	mg/kg	7500[1]
Fecal Coliform	MPN/gram	< 2,000,000[2]
Soil pH	Standard Units	≥ 5.0[3]
Table Notes:		

Parameter	Units (dry weight)	Limit
1. Ceiling concentration for Class B biosolids from CFR Part 503, section 503.16, Table 1. 2. Calculated as a geometric mean of 7 grab samples that are individually analyzed. 3. The Discharger shall demonstrate that the pH of soils in areas receiving biosolids is maintained at a level greater than or equal to 5.0, which is consistent with limits on the land application of biosolids found in State Water Resources Control Board Order No. 2004-0012-DWQ General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities.		

VII. RECEIVING WATER LIMITATIONS

A. 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.

B. 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.).

C. 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.).

D. 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.

E. The collection, treatment, storage and disposal of the treated wastewater shall not cause the median concentration of coliform organisms over any 7-day period to exceed 1.1 MPN per 100 milliliters or 1 colony per 100 milliliters in groundwater used or potentially used for domestic and municipal supply (MUN).

F. 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 MRP 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 shall apply for coverage under Order Nos. 2006-0003-DWQ and WQ-2013-0058-EXEC and any future revisions thereto for operation of its wastewater collection system.

On December 6, 2022, the State Water Board adopted State Water Board Order No. 2022-0103-DWQ, Statewide Waste Discharge Requirements General Order for Sanitary

Sewer Systems. Order No. 2022-0103-DWQ requires that all public agencies that currently own or operate sanitary sewer systems certify and continue coverage under Order No. 2022-0103-DWQ within 60 days prior to the effective date of the Order. The Discharger certified the continuation of existing regulatory coverage from Order 2006-0003-DWQ to Order 2022-0103-DWQ on April 5, 2023.

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. The next O&M Manual update shall be completed **by December 1, 2023** to ensure it is consistent with current operating requirements, procedures, and maintenance needs. 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 must 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 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 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 MRP (Attachment E), and any modifications to these documents as specified by the 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 E 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 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 must be recorded and maintained as a separate record file. The recorded information must 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, must 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 and Adequate Staffing

1. 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.

2. 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 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 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.

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 (ADWF)

Compliance with the ADWF prohibition in section III.I 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, must be 0.32 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 Wet Weather Flow (PWWF)

The PWWF is the maximum flow rate that occurs over a 24-hour period. Compliance with the prohibition in section III.I of this Order concerning PWWF will be determined daily by measuring the daily average flow at Monitoring Location INF-001. If the measured daily average flow exceeds 1.17 mgd, the discharge is not in compliance with the prohibition.

D. Maximum Effluent Flow

The maximum effluent flow is this maximum flow rate that occurs over a 24-hour period. Compliance with the prohibition in section III.J of this Order will be determined daily by

measuring the daily average flows at Monitoring Location REC-001. If the measured daily average flow exceeds 0.81 mgd, the discharge is not in compliance with the prohibition.

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 Order section IX.A, 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 Order section IX.A, 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. Instantaneous Minimum Effluent Limitations

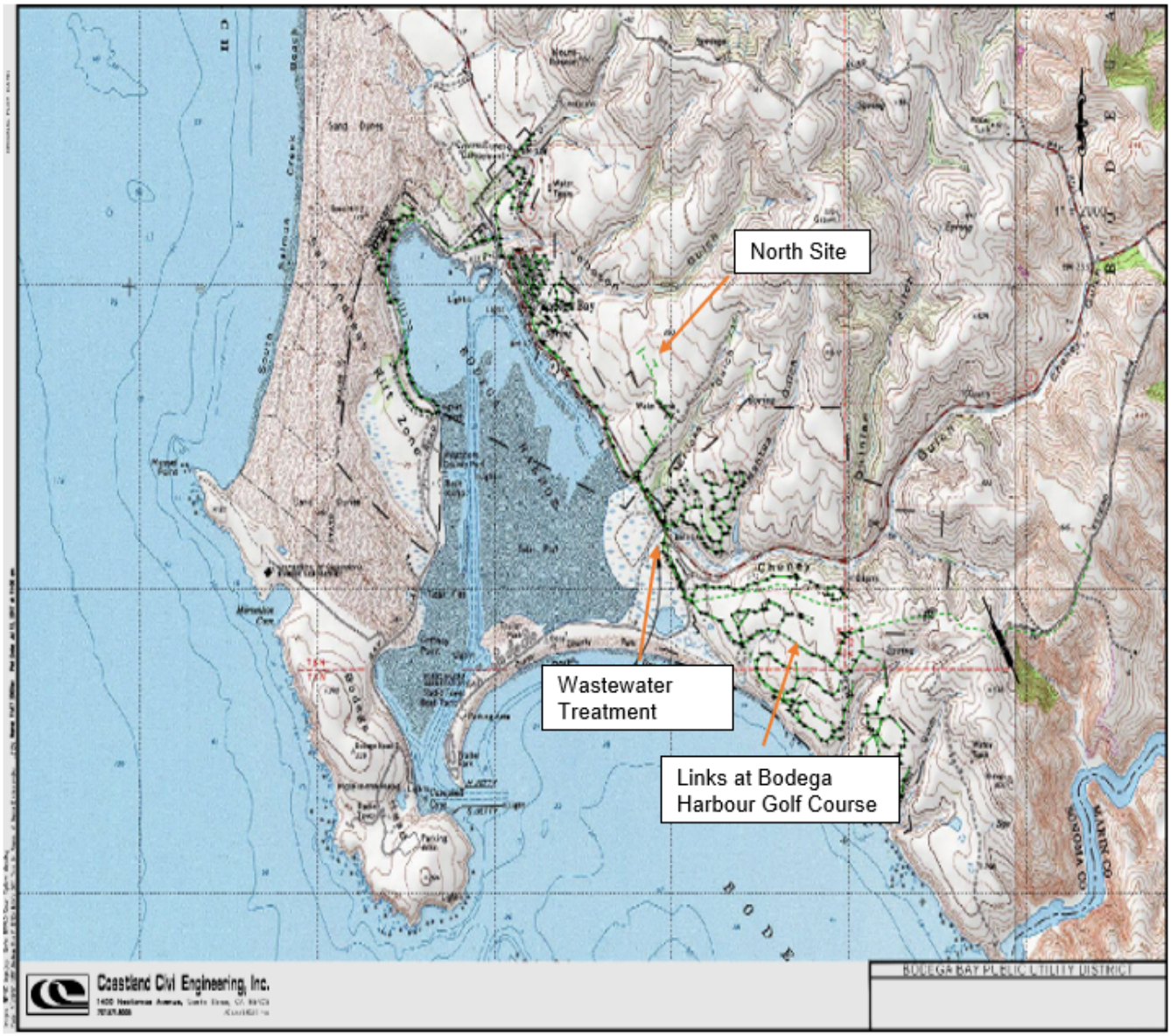
If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results 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).

H. 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 during periods when sampling occurs more frequently than weekly. During periods when sampling is weekly, this requirement shall apply to each weekly sample.

ATTACHMENT A - Facility Location Map



ATTACHMENT B - Facility Site Map

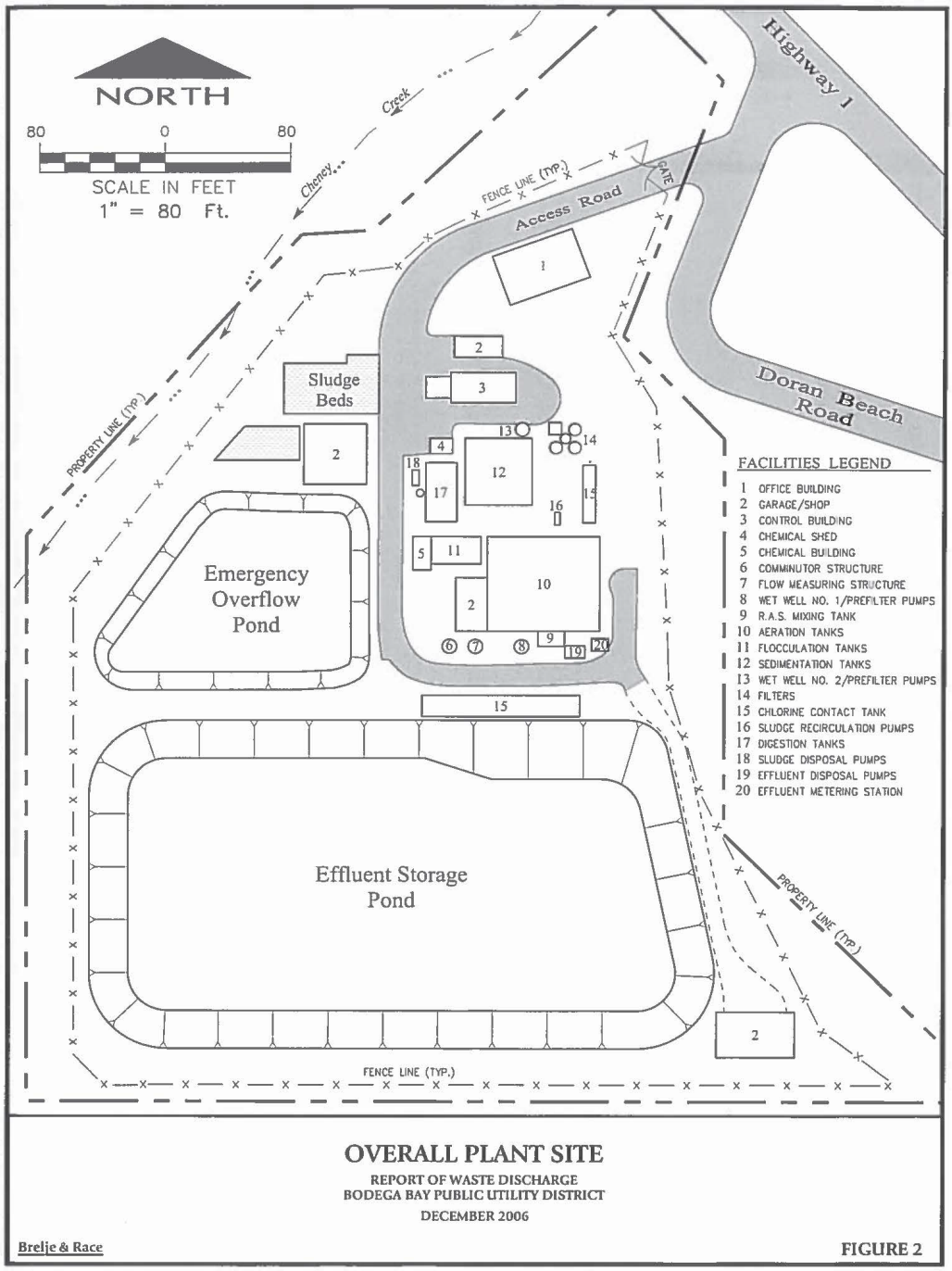


Figure 2. Overall Plant Site. The effluent storage pond shown in the figure is the 'Treatment Plant Effluent Storage Pond' identified in Table 2.

ATTACHMENT C - Facility Flow Schematic

WASTEWATER TREATMENT PLANT DESIGN CRITERIA, FLOWS, AND EQUIPMENT

TREATMENT PLANT CAPACITY

Peak Daily Flow Capacity	1.17 MGD
Design Average Inf. Flow	0.32 MGD
Design Peak Hourly Inf. Flow	1.8 MGD

RAW SEWAGE CHARACTERISTICS

Inf. Suspended Solids	725 mg/L (AVG)
Inf. BOD	300 mg/L (AVG)

INFLUENT SCREEN	
Peak Design Flow	1.8 MGD
Design Upstream Water Depth	16.5"
Max. Allowable Upstream Depth	28.5"
Freeboard at Max Allowable Upstream Depth	41.0"
Screen Openings	0.25"
Screen Angle	45.0°
Channel Width	24.0"
Channel Depth	68.0"
Equipment	(1) 1.5 HP Motor (Screen)
	(1) 3 HP Motor (Washer)

INFLUENT PUMPS	Pumps Nos. 1 & 2
Capacities	240 to 950 GPM
Peak Capacity	2.74 MGD

R.A.S. MIXING TANK	
Dimensions (L x W x D)	9' x 15' x 12.7'
Volume	12,900 GAL
Equipment	(1) 3 HP Direct Drive Mixer

EXTENDED AERATION BASINS	Basin 1	Basin 2
Dimensions (L x W x D)	60' x 29' x 12'	80' X 37' X 12'
Volume	156,200 GAL	220,000 GAL
ADF Capacity	0.42 MGD	
Peak Capacity	1.95 MGD	
Equipment	(2) 20 HP Aerators	(2) 20 HP Aerators

CLARIFIERS	Units 1, 3 & 4	Unit 2
Dimensions (L x W x D)	40' x 8' x 9.5'	40' x 10' x 9.75'
Volume	23,300 GAL	29,175 GAL
Surface Area	320 ft2	400 ft2
Design Flowrate	190 GPM	240 GPM
Peak Surface Overflow Rate	860 GAL/ft2/day	
ADF Capacity	0.42 MGD	
Peak Capacity	1.17 MGD	
Weir Loading	11,500 GAL/LF/day	

R.A.S. PUMPS	Pump Nos. 1 & 2
Capacity	250 GPM

FLOCCULATION TANK	
Dimensions (⌀ x D)	12' x 12.5'
Volume	10,000 GAL
Equipment	(1) 1 HP Flocculation Mixer

PREFILTER PUMPS	Pump Nos. 1 & 2
Capacity	700 GPM

CLOTH FILTER	
Number of Filters	1
Number of Disks	4
Cloth Type	PES 14 Pile Cloth Media
Total Filter Area	215.2 ft2
Design Loading Rate	3 GPM/SF
Peak Loading Rate	6 GPM/SF
Avg Design Flow Rate	0.828 MGD
Peak Design Flow Rate	1.808 MGD
Backwash Frequency	12 Hours
Backwash Volume	300 GAL

TERTIARY EFFLUENT PUMPS	Effluent Disposal Pump 1	Effluent Disposal Pump 2 & 3
Capacity	205 GPM @ 248 FT TDH	135 GPM @ 240FT TDH
Motor HP	20 HP, 3520 RPM	15 HP, 3450 RPM

TERTIARY CHLORINE CONTACT TANKS	Unit 1	Unit 2
Dimensions (L x W x D)	38' x 8' x 8'	198' x 11' x 5.7'
Volume	16,500 GAL	85,500 GAL
Peak Capacity	1.37 MGD	
Disinfection Requirements	CT of 450 Mg-min/L	

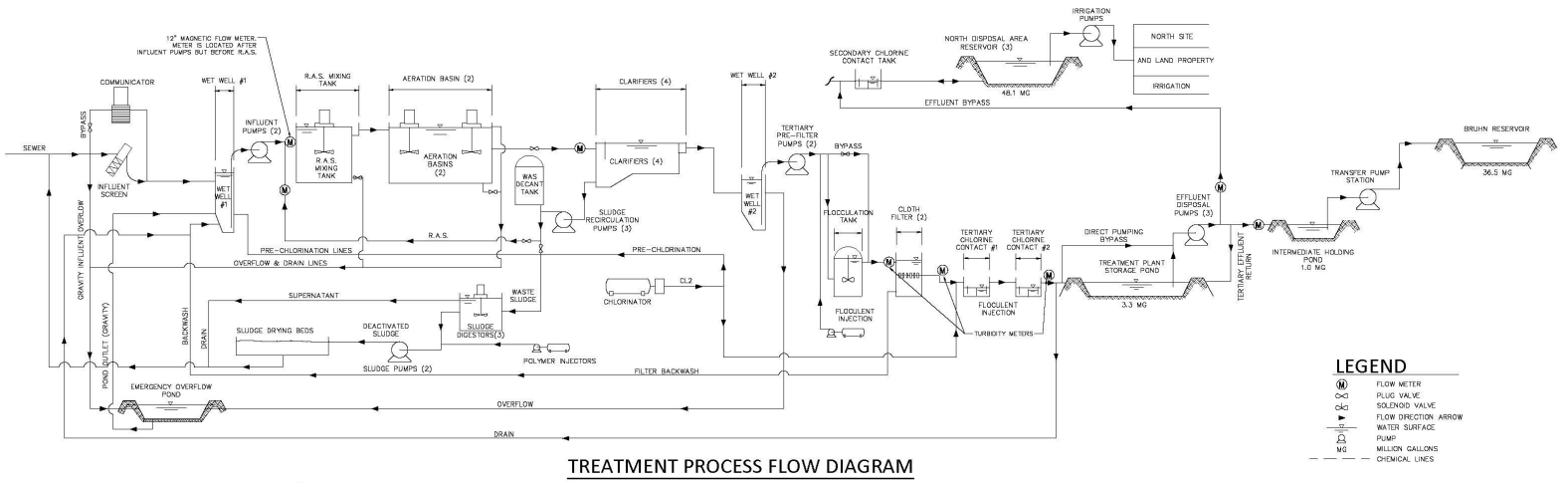
SECONDARY EFFLUENT PUMPS	Pump Nos. 1 & 2
Capacity	500 GPM w/VFD
Motor HP	60

SECONDARY CHLORINE CONTACT TANK	
Dimensions (L x W x D)	26.3' x 13.5' x 5.25'
Volume	10,000 GAL
Design Detention Time	30 min (with transfer piping)

W.A.S DECANT TANK	
Dimensions (⌀ x D)	10'ø x 12'
Volume	6,250 GAL

SLUDGE DIGESTION TANKS	Tank 1	Tank 2 & 3
Dimensions (L x W x D)	30' x 18' x 11.1'	18' x 18' x 10'
Volume	39,825 GAL	24,250 GAL
Design Detention Time	40 Days	
Target Suspended Solids Concentration	3%	
Air Supply	180 SCFM	100 SCFM
Equipment	(2) 10 HP Blower w/ Coarse Bubble Diffusers	(2) 7.5 HP Blower w/ Coarse Bubble Diffusers

SLUDGE PUMPS	Pump Nos. 1 & 2
Sludge Pumping Capacity	100 GPM
Motor HP	5



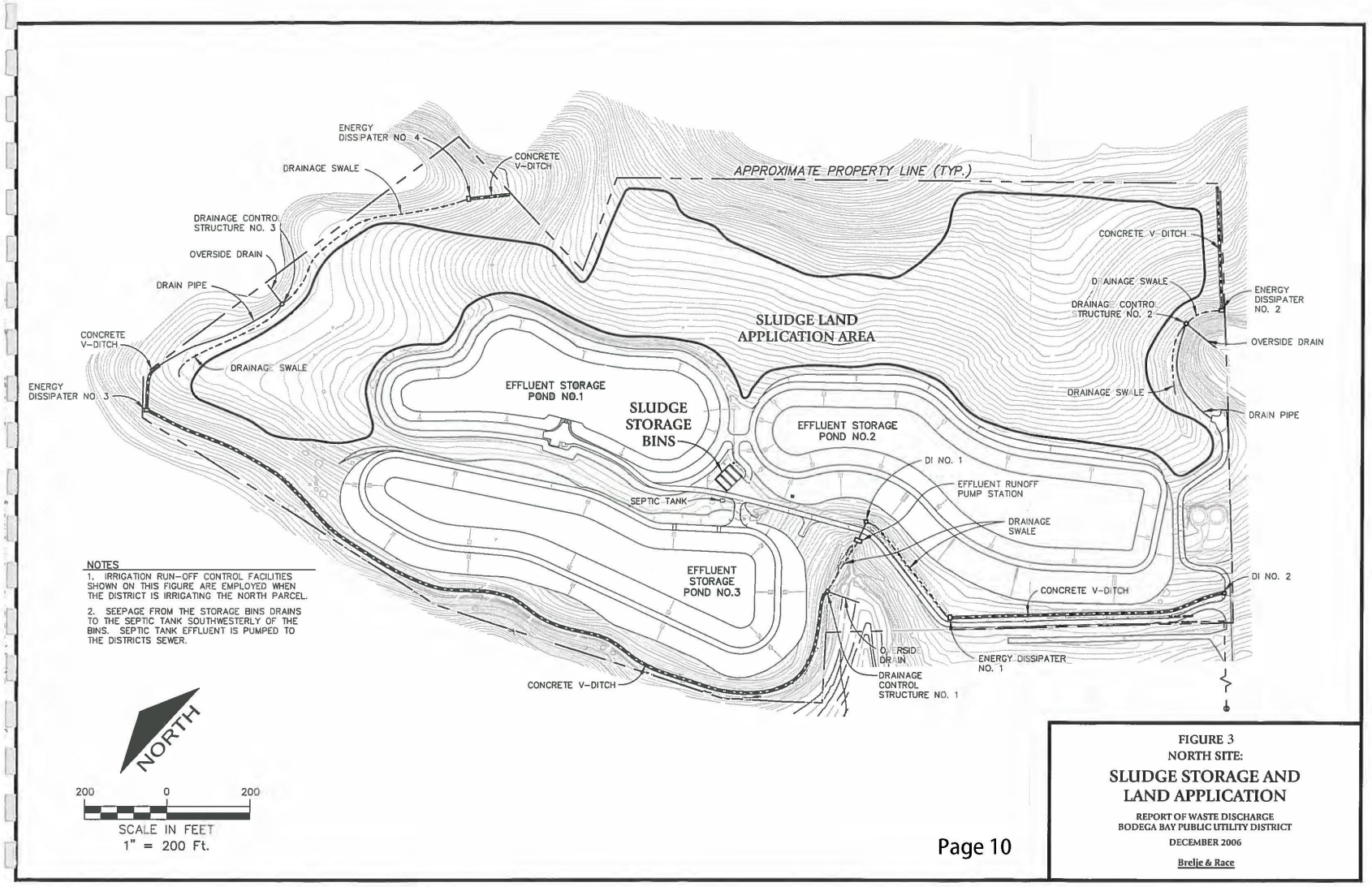
TREATMENT PROCESS FLOW DIAGRAM

COASTLAND | DCCM
COASTLAND | DCCM
1400 Neotomas Avenue Santa Rosa, CA 95405
707.571.8005 | coastlandcivil.com

BODEGA BAY PUD

FIGURE 7 - DESIGN CRITERIA AND SCHEMATIC FLOW DIAGRAM

ATTACHMENT D - North Site Recycled Water and Biosolids Storage and Application Area



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ATTACHMENT E - MONITORING AND REPORTING PROGRAM

This Monitoring and Reporting Program (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 Order No. R1-2023-0011 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 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

1. 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, settleable solids, electrical conductivity, temperature etc.) in its on-site laboratory provided that the Discharger has standard operating procedures (SOPs) that identify quality assurance/quality control procedures to be followed to ensure accurate results. 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 following monitoring locations to demonstrate compliance with the discharge prohibitions, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	Influent wastewater collected at the headworks at a representative point preceding treatment. This sampling location shall represent all influent coming to the plant from the collection system each day and shall not include flows being brought back in from storage or plant recirculation flows
--	INT-001A	Location for monitoring surface loading rate through the tertiary filters
--	INT-001B	Treated wastewater immediately following the tertiary filters for monitoring the turbidity of the tertiary treated effluent prior to chlorination

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001A (Bruhn Reservoir) 001B (North Site Recycled Water Storage Ponds)	REC-001	Effluent monitoring location following tertiary treatment and disinfection to demonstrate compliance with Recycled Water Effluent Limitations in Order section IV.A. and Water Recycling Specifications in Order section IV.B., prior to discharge to tertiary storage
002	REC-002	Effluent monitoring location following tertiary storage at the North Site and prior to distribution to pasture at the North Site for water recycling
003	REC-003	Effluent monitoring location following tertiary storage at Bruhn Reservoir and prior to distribution to the Links at Bodega Harbour Golf Course for water recycling
--	BRUHN-001	Location for monitoring flow to the Bruhn Reservoir
--	POND-001A	Location for monitoring flow of tertiary treated wastewater to North Site Pond 1 from the Treatment Plant Effluent Storage Pond
--	POND-001B	Location for monitoring flow of secondary treated wastewater to North Site Pond 1
--	POND-001C	Location for monitoring return flows of secondary treated wastewater from North Site Pond 1 to the treatment plant
--	POND-002	Location for monitoring flow to North Site Pond 2
--	POND-003	Location for monitoring flow to North Site Pond 3
--	BIO-001	A representative sample of biosolids before land application

III. MONITORING REQUIREMENTS

A. Influent Monitoring – Monitoring Location INF-001

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

Table E-2. Influent Flow – Monitoring Location INF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Influent Flow [1]	mgd	Meter	Continuous
Table Notes: 1. The Discharger shall report the daily average and monthly average flows.			

B. Recycled Water Monitoring – Monitoring Locations REC-001

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

Table E-3. Recycled Water Effluent Monitoring – Monitoring Location REC-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow [1]	mgd	Meter	Continuous
BOD	mg/L	8-hour composite[2]	Weekly
TSS	mg/L	8-hour composite[2]	Weekly
pH	Standard Units	Grab	Daily
Chlorine, Total Residual	mg/L	Meter [3]	Continuous
Total Coliform Organisms	MPN/ 100 mL	Grab	Daily
Disinfection CT[4]	mg-min/L	Calculation	Daily
Title 22 Pollutants[5]	ug/L	Grab	Annually[6]
Ammonia, as N	mg/L	Grab	Monthly[7]
Nitrate, Total, as N	mg/L	Grab	Monthly[7]
Nitrite, Total as N	mg/L	Grab	Monthly[7]
Organic Nitrogen as N	mg/L	Grab	Monthly[7]
Nitrogen, Total (as N)[8]	mg/L	Calculated	Monthly[7]
Total Dissolved Solids	mg/L	Grab	Monthly[7,9]
Sodium	mg/L	Grab	Monthly[7,9]

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chloride	mg/L	Grab	Monthly[7,9]
Boron	mg/L	Grab	Monthly[7,9]

Table Notes:
1. Each month, the Discharger shall report the daily average and monthly average recycled water effluent flows.
2. Samples shall be taken a minimum of hourly over an 8 hour period and composited.
3. Report minimum daily chlorine residual.
4. Disinfection CT shall be recorded continuously. Detailed monitoring requirements are described in section III.F of this MRP.
5. Table 64431-A, MCLs – Inorganic Chemicals (§ 64431) and Table 64444-A, MCLs – Organic Chemicals (§ 64444).
6. The first sampling event must take place in May 2024. After the third annual sample, the frequency and requirements for subsequent monitoring events maybe be modified by the Executive Officer based on the results of the special study required in MRP section IV.D of this Order.
7. The Discharger shall monitor these parameters monthly when recycled water is being applied at Discharge Points 002 or 003.
8. Total nitrogen shall be calculated as the sum of ammonia nitrogen, nitrate-nitrogen, nitrite-nitrogen, and organic nitrogen.
9. The monitoring frequency for these parameters may be reduced or eliminated by the 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 protecting groundwater.

C. Recycled Water Monitoring – Monitoring Location REC-002

When recycled water is being applied at Discharge Points 002, the Discharger shall monitor treated effluent at Monitoring Locations REC-002, as follows:

Table E-4. Recycled Water Monitoring – Monitoring Locations REC-002

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily)[1]	mgd	Meter	Continuous
Ammonia, as N	mg/L	Grab	Monthly[2]
Nitrate, Total, as N	mg/L	Grab	Monthly[2]
Nitrite, Total as N	mg/L	Grab	Monthly[2]

Parameter	Units	Sample Type	Minimum Sampling Frequency
Organic Nitrogen as N	mg/L	Grab	Monthly[2]
Nitrogen, Total (as N)[3]	mg/L	Calculated	Monthly[2]
Total Dissolved Solids	mg/L	Grab	Monthly[2,4]
Sodium	mg/L	Grab	Monthly[2,4]
Chloride	mg/L	Grab	Monthly[2,4]
Boron	mg/L	Grab	Monthly[2,4]

Table Notes:
1. Each month, the Discharger shall report the daily average and monthly average flows.
2. These parameters shall be monitored through December 2025 at a minimum (monthly when recycled water is applied).
3. Total nitrogen shall be calculated as the sum of ammonia nitrogen, nitrate-nitrogen, nitrite-nitrogen, and organic nitrogen.
4. The monitoring frequency for TDS, Sodium, Chloride, and Boron may be reduced or eliminated by the 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 protecting groundwater.

Table E-5. Recycled Water Production and Use[1] – Monitoring Location REC-002

Parameter	Units	Sample Type	Minimum Frequency[2]
Recycled Water Flow[3]	gpd[4]	Meter[5]	Monthly
Acreage Applied	acres	Calculated	Annually
Application Rate (hydraulic)	inches/acre/year	Calculated	Annually
Total Nitrogen Application Rate[6, 7]	lb N/acre/year	Calculation	Annually
Rainfall	inches	Gauge	Daily
Soil Saturation/Ponding	--	Gauge	Daily
Discharge Off-Site	--	Observation	Monthly
Nuisance/Vectors	--	Observation	Monthly
Notification Signs[8]	--	Observation	Monthly

Parameter	Units	Sample Type	Minimum Frequency[2]
Maximum Allowable Hydraulic Agronomic Rate[9]	inches	Calculation	--
Maximum Allowable Nitrogen Agronomic Rate	lb N	Calculation	--

Table Notes:

1. Recycled water production and use area monitoring shall be reported with the annual report (MRP section IV.B.2). Non-compliance incidents shall be reported as specified in Order section VIII.N and MRP section IV.C.
2. Or less frequently if approved by the 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. gpd denotes gallons per day.
5. Meter requires meter reading, a pump run time meter, or other approved method.
6. Nitrogen application rate shall consider nitrogen content of the recycled water at REC-002.
7. Nitrogen concentrations shall be calculated and reported "as N". For example, nitrate-nitrogen = 27 mg/L as NO3 shall be converted and reported as nitrate-nitrogen = 6.1 mg/L as N using a conversion factor of' 14.067 (N)/62.0049 (NO3).
8. Notification signs shall be consistent with the requirements of California Code of Regulations, title 22, section 60310(g).
9. Maximum allowable hydraulic agronomic rates for each recycled water use site will be calculated as follows:

$$\text{Irrigation water requirement (inches)} = \frac{(ETo*Kc)-Peff}{(1-LR)*Eu}$$

Where:

- 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 CIMIS website (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.

Parameter	Units	Sample Type	Minimum Frequency[2]
• Kc = Crop growth coefficient for pasture grasses at the North Site • Peff = Effective precipitation (amount of rainfall in inches available to pasture grasses, UC Davis Bodega Ocean Observing Node (BOON) station) • 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. • Eu = Unit application irrigation efficiency			

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 confirm proper operation of the recycled water system and associated BMPs. The Discharger shall record 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 shall be recorded and included in the Discharger's Annual Recycled Water Report.

D. Recycled Water Monitoring – Monitoring Location REC-003

When recycled water is being applied at Discharge Points 003, the Discharger shall monitor treated effluent at Monitoring Locations REC-003, as follows:

Table E-6. Recycled Water Monitoring – Monitoring Locations REC-003

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily)[1]	mgd	Meter	Continuous
Ammonia, as N	mg/L	Grab	Monthly[2]
Nitrate, Total, as N	mg/L	Grab	Monthly[2]
Nitrite, Total as N	mg/L	Grab	Monthly[2]
Organic Nitrogen as N	mg/L	Grab	Monthly[2]
Nitrogen, Total (as N)[3]	mg/L	Calculated	Monthly[2]
Total Dissolved Solids	mg/L	Grab	Monthly[2,4]

Parameter	Units	Sample Type	Minimum Sampling Frequency
Sodium	mg/L	Grab	Monthly[2,4]
Chloride	mg/L	Grab	Monthly[2,4]
Boron	mg/L	Grab	Monthly[2,4]

Table Notes:
1. Each month, the Discharger shall report the daily average and monthly average flows.
2. These parameters shall be monitored through December 2025 at a minimum (monthly when recycled water is applied).
3. Total nitrogen shall be calculated as the sum of ammonia nitrogen, nitrate-nitrogen, nitrite-nitrogen, and organic nitrogen.
4. The monitoring frequency for TDS, Sodium, Chloride, and Boron may be reduced or eliminated by the 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 protecting groundwater.

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

Filtration process monitoring shall demonstrate compliance with Order section IV.B.1 (Filtration Process Specifications 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 Order section IV.B.1.b. 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 section IV.B.1.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 or an upstream process for adequate treatment, or automatically activated chemical addition to comply with title 22 requirements (sections 60304 and 60307).

F. Disinfection Process Monitoring for Chlorine Disinfection System

Tertiary disinfection process monitoring shall demonstrate compliance with section IV.B.2 (Disinfection Process Requirements for Chlorine Disinfection System – Discharge Points 001A and 001B) of this Order. The following disinfection process monitoring requirements must 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 VII.N of the Order. A written report describing the incident and the actions undertaken in response shall be included in the quarterly 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.

G. Storage Pond Monitoring

1. The Discharger shall monitor all recycled water storage ponds (Bruhn Reservoir and North Site Ponds 1, 2, and 3) as described in Table E-7.

Table E-7. Storage Pond Monitoring Requirements

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

2. The Discharger shall monitor the following locations for flow as described in Table E-8.

Table E-8. Storage Pond Flow Monitoring – Monitoring Locations BRUHN-001, POND-001A, POND-001B, POND-001C, POND-002, POND-003.

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily)[1]	mgd	Meter	Continuous
Total Volume[2]	gallons	Meter	Continuous
Seepage/Evaporation Volume Estimate[3]	gallons	Estimated	Monthly

Table Notes:
1. Each month, the Discharger shall report the daily average and monthly average flows.
2. Each month, the Discharger shall report the total daily volume and the total monthly volume of secondary treated water for monitoring locations POND-001A, POND-001B and POND-001C.
3. Each month, the Discharger shall estimate the total volume of secondary treated water lost to seepage and/or evaporation while in temporary storage in Pond 1.

H. Biosolids Monitoring (Monitoring Location BIO-001)

1. Biosolids sampling shall be conducted in compliance with CFR Part 503 and shall include monitoring as described in Table E-7.

Table E-9. Biosolids Monitoring – Monitoring Location BIO-001

Parameter[1]	Units	Sample Type	Minimum Sampling Frequency
Arsenic	mg/kg[2]	Composite[3]	Annual
Cadmium	mg/kg[2]	Composite[3]	Annual
Copper	mg/kg[2]	Composite[3]	Annual
Lead	mg/kg[2]	Composite[3]	Annual
Mercury	mg/kg[2]	Composite[3]	Annual
Molybdenum	mg/kg[2]	Composite[3]	Annual
Nickel	mg/kg[2]	Composite[3]	Annual
Selenium	mg/kg[2]	Composite[3]	Annual
Zinc	mg/kg[2]	Composite[3]	Annual
Total Nitrogen	mg/kg[2]	Composite[3]	Annual

Parameter[1]	Units	Sample Type	Minimum Sampling Frequency
Ammonia Nitrogen, as N	mg/kg[2]	Composite[3]	Annual
Total Phosphorus, as P	mg/kg[2]	Composite[3]	Annual
Total Potassium	mg/kg[2]	Composite[3]	Annual
Total Solids	percent	Composite[3]	Annual
pH	Standard Units	Composite[3]	Annual
Soil pH	Standard Units	Grab[4]	Annual
Fecal Coliform	MPN/gram[5]	Grab	Annual

Table Notes:
1. Samples shall be analyzed using SW-846 methods listed in 40 CFR Part 136.
2. Samples to be analyzed and reported as dry weight.
3. During each monitoring event, several representative samples of stored biosolids to be land applied shall be collected and composited for submittal to the analytical laboratory.
4. Soil samples shall be taken from within the top 20 inches of soil where biosolids are applied.
5. Calculated as a geometric mean of 7 grab samples that are individually analyzed.

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. The frequency of entries is discretionary however, the log must be complete enough to serve as a basis for developing the biosolids handling and disposal reporting required as part of the Annual Report (MRP section IV.B.2.h).

IV. 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 no later than 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:

Table E-10. Monitoring Periods and Reporting 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	1st day of calendar month through last day of calendar month
Annually	January 1 following (or on) permit effective date	January 1 through December 31

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.

c. 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.

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

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

6. The Discharger shall submit 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: NorthCoast@waterboards.ca.gov or on disk (CD or DVD) in a Portable Document Format (PDF) file in lieu of

paper-sourced documents. The guidelines for electronic submittal of documents can be found on the Regional Water Board website. (https://www.waterboards.ca.gov/northcoast/publications_and_forms/available_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 State Water Board website. (https://www.waterboards.ca.gov/resources/data_databases/groundwater.html)

B. Other Reports

1. **Special Study Reports and Progress Reports.** As specified in this Order, special study and progress reports shall be submitted in accordance with the following reporting requirements.

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

Order Section	Special Provision Requirement	Reporting Requirements
Recycled Water Specification Order Section IV.C.5	Submit Irrigation Management Plan. Update and maintain Irrigation Management Plan.	**Within 18 months of adoption of this Order.** As necessary thereafter.
Solids Disposal and Handling Requirement Order Section VI.E	Submit a Biosolids Management Plan. Update and maintain Biosolids Management Plan.	**By January 1, 2024** As necessary thereafter.
Provision VIII.E.2	Update O&M Manual	**By December 1, 2023** As necessary thereafter.
Provision VIII.F	Source Control Annual Report	March 1, annually

Order Section	Special Provision Requirement	Reporting Requirements
Provision VIII.G	Any material change in discharge	Promptly
Provision VIII.H	Any change in control or ownership	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
MRP Reporting Requirement IV.C	Notification of spills and unauthorized discharges	Oral reporting as soon as possible after becoming aware of spill
MRP Reporting Requirement IV.D	Workplan for Special Study to Evaluate the Potential Impact to Groundwater	**Within 18 months of adoption of this Order.**
MRP Reporting Requirement IV.E	Submit Disaster Preparedness Assessment Report and Action Plan	**By July 1, 2025**

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 trucked waste management program approved by the 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 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 section 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 to demonstrate compliance with Order sections IV.B and IV.C, including:

i. A compliance summary and discussion of the compliance record for the prior calendar year including a comparison of total volumes at POND-001B to POND-001C to ensure that, in compliance with the prohibition in Order section III.F, secondary treated water is kept separate from tertiary treated water and any wastewater not treated to tertiary standards is returned to the treatment plant for full tertiary treatment.

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 MRP section III.C.

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. **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 each 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:

i. **Influent.** Monthly volume of wastewater collected and treated by the Facility.

ii. **Production.** Monthly volume of waster treated, specifying level of treatment.

iii. **Discharge**. Monthly volume of treated wastewater discharged to each of the following, specifying level of treatment:

(a) Inland surface waters, specifying volume required to maintain minimum instream flow, if any; and

(b) 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.

iv. **Reuse.**

(a) Monthly Volume of treated wastewater distributed.

(b) 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:

(i) Agricultural irrigation: pasture or crop irrigation.

(ii) 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.

(c) Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.

(d) Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.

(e) Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered.

(f) Geothermal energy production: augmentation of geothermal fields.

(g) Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments.

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 to demonstrate compliance with Order section VI, Solids Disposal and Handling Requirements. 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 quantity of biosolids generated and disposed during the year, in dry metric tons and percent solids, and the amount used or disposed by each use site and/or disposal practice;

iii. Results of all monitoring required under MRP section III.H. All results must be reported on a 100% dry weight basis. Locations of sample collection shall be reported on a map of the land application area.

iv. Documentation of those operational parameters used to demonstrate compliance with pathogen reduction and vector attraction reduction, and certifications.

v. For land application sites (unless submitted separately by land application contractor):

(a) Name of each field; location, ownership, size in acres;

(b) Actual dates of applications, seedings, harvesting;

(c) Number of truckloads to each field;

(d) Actual tonnage applied to field, in actual and dry weight; and

(e) Calculated agronomic rate.

vi. Identification of any violations and corrective actions taken or planned to bring the discharge into compliance with WDRs.

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 [3] 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

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

Resources Control Board Order No. 2022-0103-DWQ (Statewide General WDRs for Sanitary Sewer Systems) and any revisions thereto.

3. **Recycled Water Spills.** Notification and reporting of spills and unauthorized discharges of recycled water discharged in or on any waters of the state, as defined in Water Code section 13050, shall be conducted in accordance with the following:

   a. Tertiary Recycled Water[4]

      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.

D. Special Study to Evaluate the Potential Impact to Groundwater

The Discharger shall assess the potential for the discharge of treated municipal wastewater and applications of biosolids to the Pasture Irrigation at the North Site to impact groundwater and to exceed the groundwater limitations established in Order section VII. At a minimum, the Special Study must include a work plan that includes work tasks and a schedule of implementation to complete the evaluation, and a final report that presents the results and conclusions of the evaluation. The evaluation shall be informed by the results of monitoring required in MRP section III (Attachment E).

The Discharger shall submit the final report with either:

1. Appropriate technical information supporting a demonstration that discharge at existing total nitrogen and TDS effluent concentrations and concentrations in applied biosolids will not cause or contribute to violations of the groundwater limitations established in Order section VII. Upon Executive Officer written concurrence with the demonstration, this provision shall be considered satisfied and the Order may be reopened to consider, as

[4] Tertiary Recycled Water means “disinfected tertiary recycled water” as defined by CCR, title 22, section 60301.230.

appropriate, the addition of new effluent limitations for total nitrogen and/or TDS in Table 4, or

2. A proposed total nitrogen effluent limitation and/or TDS effluent limitation and appropriate technical information supporting a demonstration that discharge at the proposed limitation will not cause or contribute to violations of the groundwater limitations established in Order section VII. The proposed effluent limitations and technical information shall also be accompanied by a work plan and time schedule describing measures the Discharger will implement to comply with the proposed limitation. Upon Executive Officer written concurrent with the results, the Order may be reopened for consideration of the proposed limitation.

The work plan for the Special Study shall be submitted to the Executive Officer for approval within 18 months after Order adoption. The Discharger shall implement the approved work plan per the schedule of implementation contained in the work plan and, if applicable, per the compliance schedule set forth in the final report to bring the discharge into compliance with the proposed effluent limitations.

E. 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 July 1, 2025, for Executive Officer review and approval.

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.