Regional Water Quality Control Board North Coast Region Executive Officer's Summary Report June 15 and 16, 2023

ITEM: 7

SUBJECT: Public Hearing on Order No. R1-2023-0011 (Proposed Order) to consider adoption of Waste Discharge and Water Recycling Requirements for Bodega Bay Public Utility District Wastewater Treatment and Reclamation Facility, WDID No. 1B75028OSON (Ben Zabinsky).

BOARD ACTION: The Board will consider adoption of Waste Discharge and Water Recycling Requirements (WDRs) Order No. R1-2023-0011.

BACKGROUND: The Bodega Bay Public Utility District (BBPUD) owns and operates the Bodega Bay Public Utility District Wastewater Treatment and Reclamation Facility (Facility), a domestic wastewater treatment plant that serves the community of Bodega Bay and the Bodega Harbour subdivision in Sonoma County.

The Facility has an average dry weather design treatment capacity of 0.32 million gallons per day (mgd) and a peak hour wet weather treatment capacity of 0.81 mgd. 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 WWTF uses a Supervisory Control and Data Acquisition system for process monitoring and automation. The Facility includes 88.9 million gallons of recycled water storage capacity in six earthen-lined recycled water storage ponds.

Disinfected tertiary recycled water is temporarily stored in the 'Treatment Plant Effluent Storage Pond' before being pumped to either the 'Intermediate Pond' at 'The Links at Bodega Harbour' (LBH) golf course or to one of three storage ponds on BBPUD property called the 'North Site'. Recycled water in the 'Intermediate Pond' is pumped to the Bruhn Reservoir – the main storage pond at the LBH golf course – and can then be spray irrigated on 110 acres of golf course greens and fairways. BBPUD preferentially provides disinfected tertiary recycled water to the golf course and the Proposed Order requires BBPUD to maintain a use agreement with LBH. BBPUD 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.

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, BBPUD has recently completed a study to prioritize the

rehabilitation work on known sources of I&I in the collection system. BBPUD 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. Two additional phases will be completed as funding allows with estimated completion dates of 2033 for Phase 2 and 2043 for Phase 3.

Since 1991, the Facility has been regulated by Order No. 91-130 (Previous Order). Proposed Order No. R1-2023-0011 will replace the Previous Order.

DISCUSSION:

The Proposed Order continues to prescribe technology-based effluent limitations for biochemical oxygen demand (BOD) and total coliform bacteria. Effluent limitations for settleable solids have been removed. The Proposed Order further includes special provisions which require studies and reports to ensure compliance with the operations, recycled water, source control, and biosolids disposal requirements.

Noteworthy changes to the Proposed Order from the Previous Order include the following:

- 1. **Effluent Limitations.** The Proposed Order includes a new effluent limitation for pH. The maximum daily Effluent Limitation for Total Coliform Organisms has been changed from 230 MPN/100 mL to 240 MPN/100 mL. Increasing this limitation brings the effluent limitations into conformance with the disinfection standards for secondary-23 recycled water set forth in title 22.
- 2. **Discharge Prohibitions.** The Proposed Order contains new prohibitions to make it consistent with new standard permitting language for WDRs. It also adds a prohibition to ensure no secondary treated water is transferred anywhere except to the North Site for temporary storage (Order Section III).
- 3. Recycled Water Requirements. This Proposed Order includes water recycling requirements that apply to the production and storage of disinfected tertiary recycled water, as well as the distribution and use of recycled water on BBPUD property. The distribution and use of recycled water at the LBH 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).
- 4. Disinfection Process Requirements. The Proposed Order adds title 22 chlorine disinfection requirements for recycled water, as specified in section IV.B.2 of the Proposed Order. The BBPUD's title 22 Engineering 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 Proposed Order limits effluent flows of tertiary treated water from the Facility to 0.81 mgd in a prohibition in section III.J of the Proposed Order in accordance

with the study results (Order Section IV.B.2).

- 5. **Solids Disposal and Handling Requirements.** The Proposed Order adds new requirements for the handling and disposal or solids including compliance with the applicable portions of 40 CFR Parts 257, 258 and 503 and a new requirement that the pH of soils at the North Site be maintained at a level greater than 5.0 (Order Section VI).
- 6. **Revised Basin Plan receiving water limitations.** A new Basin Plan groundwater toxicity receiving water objective is included in the Proposed Order to implement the 2016 amendments to the Water Quality Control Plan for the North Coast Region (Order section VII.F).
- 7. **Monitoring and Reporting Requirements.** Important changes and additions to the monitoring and reporting program (MRP) have been made as follows:
 - a. MRP Table E-3 requires monitoring of ammonia, nitrate, nitrite, organic nitrogen, sodium, chloride, boron, disinfection contact time, and title 22 pollutants in the treated effluent. These parameters have been added to monitor compliance with effluent and groundwater limitations and to ensure treatment systems are functioning properly.
 - b. MRP Tables E-4 and E-6 require monitoring of flow, ammonia, nitrate, nitrite, organic nitrogen, total dissolved solids, sodium, chloride, and boron at the Bruhn Reservoir and at the North Site ponds to monitor compliance with groundwater limitations. These data are also used to calculate the application rates required in Table E-5 and as part of the LBH golf course's compliance with the State Recycled Water General Order.
 - c. When influent flows exceed 0.81 mgd, MRP section III.G.2 requires BBPUD to report the total volume of secondary treated water transferred to the North Site, the total volume of secondary treated water transferred back to the treatment plant be treated to tertiary standards, 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 transferred anywhere except to the North Site for temporary storage.
 - d. The MRP includes a new annual volumetric reporting requirement to implement the requirements of the State Water Board Recycled Water Policy (MRP section IV.B.2.g).
 - e. The MRP includes another provision requiring a Special Study to Evaluate the Potential to Impact Groundwater (Special Study). This provision requires BBPUD to submit a work plan to the Regional Water Board Executive Officer within 18 months of adoption of the Proposed Order that includes work tasks to complete the Special Study and a final report to present the results (MRP section IV.D).

f. The MRP includes a special study requirement for the preparation and submittal of a Disaster Preparedness Assessment Report and Action Plan (MRP section IV.E).

A copy of the Draft Order was posted on the Regional Water Board website and was available for public comment from January 26, 2023 through February 27, 2023; a 30-day comment period. Regional Water Board staff (staff) did not receive any comments on the Draft Order during the public comment period.

After the end of the public comment period, staff identified several items in the Draft Order that required correction. The changes were all editorial in nature except for the addition of information regarding the LBH golf course enrollment in the State Recycled Water General Order, the removal of duplicative language regarding the implementation of AB 2108, and the continuation of regulatory coverage under the renewed Statewide General Order for Sanitary Sewer Systems. Regional Water Board staff communicated with BBPUD representatives after the public review period regarding staff-initiated changes to the Proposed Order and they did not have any comments.

Staff anticipates that the Proposed Order will be uncontested.

RECOMMENDATION: Adopt Order No. R1-2023-0011, as proposed.

SUPPORTING DOCUMENTS:

- 1. Proposed Order R1-2023-0011
- 2. Notice of Public Hearing
- 3. Response to Written Comments Document