
North Coast Regional Water Quality Control Board

Regional Water Quality Control Board North Coast Region Staff Summary Report December 12, 2023

ITEM: 3

SUBJECT: Public Hearing on Order No. R1-2023-0039 to consider adoption of proposed Waste Discharge Requirements and Water Recycling Permit for the City of Crescent City Wastewater Treatment Facility, WDID No. 1A84006ODN, NPDES No. CA0022756 (Matthew Herman)

BOARD ACTION: The Board will consider adoption of Waste Discharge Requirements Order No. R1-2023-0039. The Order will serve as a National Pollutant Discharge Elimination System (NPDES) permit for a period of five years.

BACKGROUND: The City of Crescent City (City or Permittee) owns the Crescent City Wastewater Treatment Facility (Facility) and associated wastewater collection system that serves a population of approximately 15,372 within Crescent City and the surrounding County Service Area (CSA). The CSA has two sub-areas: the Northwest area to the north of the City and the Bertsch Ocean View area to the east of the City. The Facility is located in Crescent City, Del Norte County. Jacobs Engineering Group took over responsibility for the Facility's operations and maintenance in September 2019.

The Facility is currently regulated under Waste Discharge Requirements and Water Recycling Permit, Order No. R1-2017-0002, which serves as a NPDES permit for waste discharges to surface waters.

The Facility treats domestic, commercial, and industrial wastewater and has an average dry weather design treatment capacity of 1.86 million gallons per day (mgd) and a peak wet weather treatment capacity of 6.12 mgd.

The headworks includes a mechanical screen, a Parshall flume, and a wet well in which five pumps are available to lift the flow to the primary clarifiers. Primary treatment consists of two grit removal tanks followed by two rectangular primary clarifiers. Secondary treatment is provided by operating the rotating biological contactors (RBC) and membrane bioreactor (MBR) in parallel. Flow from the RBCs reach three rectangular secondary clarifiers. Flows from the clarifiers and any flow from the MBR

unit are commingled and disinfected using sodium hypochlorite and dechlorinated using sodium bisulfite prior to discharge to the Pacific Ocean at Discharge Point 001. The outfall consists of a 24-inch ductile iron pipe that provides a minimum initial dilution of 29:1 and discharges into a rocky slot in the surf zone adjacent to Battery Point Lighthouse.

The Permittee has the capability of producing tertiary-2.2 recycled water utilizing flow from the MBR and an ultraviolet (UV) light disinfection system that was installed in 2010. The Permittee does not currently have any recycled water use sites but may produce recycled water in the future if recycled water use sites are identified.

DISCUSSION: Order No. R1-2023-0039 (Proposed Permit), replaces Order No. R1-2017-0002 (Previous Permit). The Proposed Permit continues to prescribe technology-based effluent limitations for biochemical oxygen demand (BOD) and total suspended solids (TSS), and effluent limitations for settleable solids, oil and grease, ammonia, dieldrin, copper, total residual chlorine, turbidity, fecal coliform bacteria, and pH based on the California Ocean Plan for discharges to the Pacific Ocean. The proposed Permit also retains requirements for the production of recycled water.

The Proposed Permit further retains the special provisions which require studies and reports to ensure compliance with the operations, recycled water, toxicity, source control, and biosolids disposal requirements. Additionally, a special study requirement for the preparation and submittal of a Sanitary Sewer Evaluation Survey has been included in the Proposed permit. Other noteworthy changes to the Proposed Permit include the following:

1. **Reasonable Potential.** Effluent limitations have been added to the new permit for silver, endosulfan, Endrin, DDT, and heptachlor. This determination is based on monitoring data collected during the term of Order No. R1-2017-0002. Furthermore, the effluent limits for nickel and TCDD Equivalents have been removed. (Section 4.1.1.1)
2. **Effluent Limitations for Bacteria.** Effluent limitations for bacteria have been updated to reflect the 2019 Ocean Plan. Specifically, new effluent limitations for Fecal Coliform and Enterococci have been included for the protection of ocean waters used for water contact recreation. Additionally, new effluent limitations for Total Coliform have been added for the protection of shellfish harvesting standards. (Order Sections 4.1.1.3.1 and 4.1.1.3.2)
3. **Receiving Water Limitations for Bacteria.** Updated receiving water limitations for enterococci, fecal coliform, and total coliform bacteria are included in the Proposed Permit to implement the new bacteria provisions that were adopted by the State Water Board on August 7, 2018 and amended into the California Ocean Plan. (Order Section 5.1.20)

4. **Compliance Determination Language.** New language for determining compliance with enterococci and fecal coliform bacteria receiving water limitations as well as six month median and single sample maximum effluent limitations are included in the Proposed Permit. (Order Section 7.8)
5. **Monitoring and Reporting Requirements.** Noteworthy changes to the monitoring and reporting program (MRP) include the following:
 - a. New Effluent Monitoring for silver, endosulfan, endrin, DDT, heptachlor, total coliform, and enterococci have been added to the Monitoring and Reporting Program. (MRP Section 4.1.1.)

Comments on the Draft Permit were received from Crescent City and Jacobs Engineering. A full explanation of the comments and Regional Water Board Staff's (Staff) responses is provided in the attached Response to Comments document. The Proposed Permit has been revised in response to some of the comments received. The most significant concerns expressed in the comments are summarized in the following enumerated paragraphs with Staff's response and proposed resolution where applicable.

1. **Fecal Coliform Effluent Limitation.** Crescent City questioned the need for retaining fecal coliform effluent limitations for the protection of shellfish harvesting when the Draft Permit also included total coliform effluent limitations for the protection of shellfish harvesting.

Staff agree that the inclusion of both the fecal coliform and total coliform effluent limitations for the protection of shellfish harvesting is duplicative. Therefore, Staff have removed the fecal coliform effluent limitations for the protection of shellfish harvesting in the Proposed Permit. The Proposed Permit still retains the Ocean Plan fecal coliform effluent limitations for the protection of water contact recreation (REC-1) beneficial use.

2. **Effluent Discharge Evaluation.** The City requested that the Effluent Discharge Evaluation requirement (section 6.3.1.5 of the Draft Permit) be removed as they believe there is no technical basis to believe the existing minimum initial dilution ratio would have changed.

Staff agrees that the Permittee is not required to conduct an Effluent Discharge Evaluation during the term of the Proposed Permit. The minimum initial dilution was originally determined by a dye study in 1982. An additional mixing zone model was performed in 2004 and reduced the dilution ratio from 50:1 to 29:1. The 2004 mixing zone model has been determined to be adequate for the Proposed Permit.

3. **Effluent Monitoring.** The City requests that the monthly monitoring requirements for dieldrin, endosulfan, DDT, heptachlor, and silver be reduced.

Appendix III of the Ocean Plan includes monitoring frequency requirements for Table 3 pollutants and states that monitoring for chemical constituents for point sources, at facilities that discharge less than 10 MGD, the monitoring frequency shall be at least once complete scan of the Table 3 pollutants annually.

The constituents requested for reduced monitoring are Table 3 pollutants in the Ocean Plan. Per the City's request and in compliance with Ocean Plan monitoring requirements, the Proposed Permit has been updated to include quarterly monitoring requirements for dieldrin, endosulfan, DDT, heptachlor, and silver.

A copy of the Draft Permit was posted on the Regional Water Board website and was available for public comment from August 1 through August 31, 2023, for an initial 30-day comment period which was later extended for one week to September 7, 2023. Additionally, Regional Water Board staff held a virtual meeting with the Permittee on August 30, 2023 to discuss the Draft Permit.

Staff initiated changes were made to the Proposed Permit to update and provide clarification to the Proposed Order. Staff notified the Permittee of the changes made to the Proposed Permit on November 20, 2023. The Permittee indicated that Staff's response to the Permittee's comments and changes made to the Proposed Permit are acceptable to the Permittee. Staff anticipates that the Proposed Permit will be uncontested.

RECOMMENDATION: Adopt Order No. R1-2023-0039, as proposed.

SUPPORTING DOCUMENTS:

1. Proposed Order R1-2023-0039
2. Notice of Public Hearing
3. Response to Comments Document
4. Copies of the comment letters received regarding this Order are available upon request by emailing Matthew.Herman@Waterboards.ca.gov