

**Regional Water Quality Control Board
North Coast Region
Executive Officer's Summary Report
December 2, 2021**

ITEM: 2

SUBJECT: Public Hearing on Order No. R1-2021-0021 to consider adoption of proposed Waste Discharge Requirements for the City of Willits Wastewater Treatment Facility, WDID No. 1B80078OMEN, NPDES No. CA0023060 (Matt Herman)

BOARD ACTION: The Board will consider adoption of Waste Discharge Requirements Order No. R1-2021-0021. The Order will serve as a National Pollutant Discharge Elimination System (NPDES) permit for a period of five years.

BACKGROUND: The City of Willits (Permittee or City) owns and operates a municipal wastewater treatment facility (WWTF or Facility) and associated wastewater collection, reclamation, and disposal facilities that serve a population of 9,000 residential and commercial users. The Facility serves the City of Willits, the Brooktrails Community Services District, and the Meadowbrook Manor Sanitation District.

The Facility includes primary treatment at the headworks building, an enhanced extended aeration activated sludge treatment process with nutrient removal, ultraviolet light (UV) disinfection, followed by enhanced effluent treatment and storage within enhancement wetlands. The Facility is sized and constructed to provide the current required treatment capacity and accommodate anticipated population growth through 2025. Although treatment components of the Facility have been designed to accommodate higher flows, the Permittee has only requested a permitted discharge of an average monthly flow up to 4.0 mgd. Additionally, the City applied for an exception to the waste discharge rate limitation with their March 2007 Variance Request for an Exception to the Water Quality Control Plan for the North Coast Region Discharge Rate Limitation (Exception Request). The Permittee demonstrated consistency with Basin Plan exception requirements for an allowable discharge rate of 10 percent of the receiving water flow.

Septage is received at the Facility from septage haulers who discharge into a solids separator which is diverted directly into the solids handling portion of the facility. Liquids separated from processing the solids are held in the aerobic digester then returned to the headworks for treatment.

From October 1 through May 14, treated wastewater is discharged from Discharge Point 003 to Outlet Creek, downstream of the confluence of Broaddus Creek and Baechtel Creek. From May 15 through September 30 and all other times seasonally appropriate, treated wastewater is recycled via irrigation on adjacent pasture lands. Outlet Creek is tributary to the Eel River within the Outlet Creek Hydrologic Subarea of the Upper Main Eel River Hydrologic Area.

DISCUSSION: Order No. R1-2021-0021 (Proposed Permit) replaces Order No. R1-2015-0039 (Previous Permit). The Proposed Permit continues to prescribe technology-based effluent limitations at Discharge Point 003/Monitoring Location INT-002 (formerly Discharge Point 002) for biochemical oxygen demand (BOD) and total suspended solids (TSS), and water quality based effluent limitations (WQBELs) for total nitrogen to protect groundwater quality within the wetlands treatment system. For Discharge Point 003/Monitoring Location EFF-003, the proposed Order retains WQBELs for ammonia and total nitrogen for discharges into Outlet Creek and incorporates a new WQBEL for zinc due to a finding of reasonable potential to cause or contribute to an exceedance of water quality objectives. Sample results during the Previous Permit's term further indicate that no reasonable potential for bis (2-ethylhexyl) phthalate and copper is present and the WQBELs for these constituents have been removed.

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

1. **Removal of Discharge Point 002.** The Proposed Permit has been updated to reflect that no discharge occurs from Discharge Point 002 by re-classifying this discharge point as a monitoring location, Monitoring Location INT-002. This location is representative of the treated wastewater downstream of the disinfection processes and prior to the enhancement wetland and shall be used to determine compliance with technology based effluent limitations. (Order Section 4.1.1.1.)
2. **Ammonia Impact Ratio.** The effluent limitation for ammonia nitrogen has been replaced with an ammonia impact ratio limitation. (Order Section 4.1.3.1)
3. **Disinfection Process Requirements.** The UV transmittance requirement has been reduced from a minimum of 65 percent to 55 percent. The 65 percent minimum requirement was previously applied to the Previous Permit in error and is not applicable to Disinfected Secondary-23 Recycled Water, as defined in title 22, section 60301.225 of the California Code of Regulations. (Order Section 4.4.1.3 and MRP Section 9.1.1)
4. **Revised Basin Plan receiving water limitations.** Updated dissolved oxygen receiving water limitations and a new Basin Plan groundwater toxicity objective have been added to the Proposed Permit's receiving water limitations to implement the 2016 amendments to the Basin Plan. (Order Sections 5.1.1 and 5.2.6)
5. **Bacteria Provisions.** New receiving water limitations for *E.coli* bacteria have been added to the Proposed Permit to implement provisions of the new bacteria

provisions that were adopted by the State Water Board on August 7, 2018 and amended into the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California. (Order Section 5.1.20)

6. **Biosolids Discharge Requirements.** The City has requested to incorporate their biosolids disposal into the NPDES permit and to terminate coverage under Order 2004-0012-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultura, Silvicultural, Horticultural, and Land Reclamation Activities (General Order). Biosolids Management requirements and Attachment G, Biosolids Standards and Provisions were added to maintain consistency with the State's biosolids requirements within the Biosolids General Order and to facilitate this request. (Order Section 6.3.5.4)
7. **Compliance Determination Language.** New language for determining compliance with *E coli* bacteria receiving water limitations and the average monthly flow has been added to the Proposed Permit. (Order Section 7)
8. **Monitoring and Reporting Requirements.** Changes to the monitoring and reporting requirements have been made as follows:
 - a. New effluent and receiving water monitoring requirements for *E. coli* bacteria to verify that total coliform effluent limitations result in achievement of Statewide Bacteria Standards. (MRP Sections 4.3.1 and 8.1.1)
 - b. The removal of monitoring requirements for copper and bis(2-ethylhexyl) phthalate at EFF-003. (MRP Section 4.2)
 - c. The inclusion of a new monitoring requirement for zinc at EFF-003. (MRP Section 4.2)
 - d. A reduction to the monitoring frequency of pH and temperature in receiving water locations RSW-001, RSW-002, and RSW-003. (MRP Sections 8.1 and 8.2)
 - e. Additional monitoring requirements for both groundwater and biosolids and updated annual reporting requirements have been included into the MRP to facilitate the inclusion of biosolids disposal into the Proposed NPDES Permit. (MRP Sections 9.3.1, 9.3.3, 10.4.2.7.4.2, and 10.4.2.8)
 - f. A new annual volumetric reporting requirement to implement the requirements of the State Water Board Recycled Water Policy. (MRP Section 10.4.4)

A copy of the Draft Permit was posted on the Regional Water Board website and was available for public comment from September 15, 2021 through October 15, 2021 for

the 30-day comment period. Comments on the Draft Permit were only received from the City of Willits. A full explanation of the comments and Staff's responses is provided in the attached Response to Comments document. The primary comments and Staff's responses are summarized below.

The City identified that the effluent limitation for total coliform is sections 4.1.1.3 and 4.3.2.3 of the Draft Permit had changed from that of their current NPDES Permit (Current Permit). Upon investigation, Staff determined that these limitations, as presented in both the Draft Permit and in the Current Permit, did not match the source regulations for Disinfected Secondary-23 Recycled water. Staff have updated the effluent limitation for total coliform to match these regulations.

The City also requested that the monitoring hours for the daily flow calculation to be modified to more closely align with the hours that they collect these readings. Staff agreed that this was a reasonable request and made this change.

And last, the City expresses a concern with the proposed *E. coli* monitoring that will be required at Discharge Point 003, Monitoring Location EFF-003. They feel that natural sources of bacteria within the enhancement wetland will result in data that is not representative of the Facility's disinfection system and they suggested that these samples be collected at Monitoring Location INT-002 (wastewater from the disinfection system before it enters the enhancement wetlands). Staff has indicated that the specified monitoring location for this sampling is correct because samples collected at this location are representative of the discharge to receiving waters. Staff further suggested that the City may choose to collect additional samples at this location or elsewhere to demonstrate that *E. coli* bacteria measured at this location are not present as a result of incomplete disinfection by the treatment system.

Staff notified the Permittee of the proposed changes to the Proposed Permit. The Permittee's email reply to Staff indicated that Staff's response to the Permittee's comments and changes to the Proposed Permit are acceptable to the Permittee. Staff anticipates that the Proposed Permit will be uncontested.

RECOMMENDATION: Adopt Order No. R1-2021-0021, as proposed.

SUPPORTING DOCUMENTS:

1. Proposed Order R1-2021-0021
2. Notice of Public Hearing
3. Response to Comments (Comment letter available upon request)