

Regional Water Quality Control Board
North Coast Region

Executive Officer's Summary Report
Wednesday, November 14, 2018
Regional Water Board Office
Santa Rosa, California

ITEM: 2

SUBJECT: Public Hearing on Order No. R1-2018-0046 to consider adoption of proposed Waste Discharge Requirements for City of Ferndale Wastewater Treatment Plant, WDID No. 1B83136OHUM, NPDES No. CA0022721 (*Cathleen Goodwin*)

BOARD ACTION: The Board will consider adoption of Waste Discharge Requirements and Water Recycling Requirements Order No. R1-2018-0046. The Order will serve as a National Pollutant Discharge Elimination System (NPDES) permit for a period of five years.

BACKGROUND: The City of Ferndale (Permittee) owns and operates a municipal wastewater treatment plant and associated wastewater collection and disposal facilities (Facility) for treating primarily domestic wastewater for a population of approximately 1,400 residential users in the City of Ferndale. The Facility also serves several small commercial facilities, such as restaurants.

The Facility is currently regulated under Waste Discharge Requirements Order No. R1-2012-0097, which serves as an NPDES permit for waste discharges to surface waters and water recycling requirements for recycling of disinfected secondary effluent.

The Facility has an average dry weather design treatment capacity of 0.55 million gallons per day (mgd), and a peak average daily wet-weather treatment capacity of 0.95 mgd. The treatment system consists of a headworks with a comminutor and bar screen, Aero-Mod secondary treatment and solids stabilization system, disc filtration, and ultraviolet light (UV) disinfection.

Aerobically digested sludge is pumped to a belt press for dewatering. The dewatered sludge is currently removed off-site for disposal at a permitted landfill and the Permittee is exploring options to produce Class A biosolids for land disposal on local farms.

The Permittee may discharge disinfected secondary effluent to the Salt River at Discharge Point 001, between October 1 and May 14. The Permittee discharges treated wastewater to an 80-acre agricultural irrigation site located adjacent to the Facility from May 15 to September 30 at Discharge Point 003.

The Permittee is currently seeking grant funding to facilitate improvements to its collection system, increase wet-weather storage, and to increase its sludge treatment to produce Class A biosolids that can be used for land application.

The Proposed Order contains several noteworthy requirements including the following:

1. New calculation-based ammonia effluent limitations when discharging to the Salt River and an ammonia study to determine if freshwater mussels are present in the receiving water. The new ammonia effluent limitations are dependent on variable in-stream temperature and pH samples taken concurrently with the ammonia effluent sample. The U.S. EPA approved Ammonia Impact Ratios (AIRs) are the ammonia effluent limitations designed to track these new “floating limits”. The AIR, or final effluent limitation, is determined by dividing the concentration of ammonia in the effluent by the appropriate ammonia standard which varies with receiving water pH and temperature. The AIR always has a limit of 1.0. If the AIR is greater than 1.0 then the Permittee is not in compliance with the AIR effluent limitation. The Permittee will be provided with an AIR calculator (in excel format with embedded formulas) to determine compliance with the new AIR effluent limitations included in the Proposed Order.
2. Expanded water recycling requirements to ensure that the use of recycled water on a local dairy pasture complies with California Code of Regulations, Title 22 Water Recycling Requirements.
3. Modified UV disinfection requirements. The previous Order, Order No. R1-2012-0097, included stringent UV disinfection requirements that are applicable to tertiary-2.2 recycled water application. The UV disinfection requirements in the Draft Permit were modified to recognize that the Permittee supplies recycled water strictly to a pasture that only requires secondary-23 recycled water.
4. Modified receiving water limitations, including a revised surface water dissolved oxygen limitation and a new groundwater toxicity limitation. In addition, surface water limitations for total dissolved solids (TDS) and specific conductance (SC) are not included in the Proposed Order because these receiving water limitations were inappropriately included in the previous Order through misapplication of the tributary rule. The TDS and SC limits in the previous Order were based on TDS and SC limits prescribed in the Basin Plan for the Eel River that are applicable to non-saline waters and not to estuarine waters such as the Salt River.
5. New septage handling requirements to ensure that septage is properly received and handled to prevent treatment plant upsets or pass-through of pollutants.
6. A new narrative effluent limitation for chronic toxicity due to a finding that the discharge from this Facility has the potential to exceed applicable chronic toxicity limits.

Public Comment. Staff received timely comments on the Draft Permit from the Permittee and made several changes to the Proposed Order in response the Permittee’s single request to remove continuous turbidity monitoring requirements. Continuous turbidity requirements have been reduced to routine daily monitoring that is required to increase to

hourly during periods when ultraviolet light (UV) disinfection requirements for transmittance are not met. A full explanation of the changes that were made to the Draft Permit in response to the Permittee's comment is documented in the attached Response to Comments document.

After discussing the proposed changes with the Permittee, the Permittee indicated that proposed changes are acceptable. Staff anticipates that the Proposed Permit will be uncontested.

RECOMMENDATION: Adopt Order No. R1-2018-0046, as proposed.

**SUPPORTING
DOCUMENTS:**

1. Proposed Order No. R1-2018-0046
2. Staff Responses to Written Comments
3. City of Ferndale Comment Letter
4. Public Notice