

## **Response to Written Comments**

### **Draft Waste Discharge and Water Recycling Requirements Order No. R1-2018-0046**

### **National Pollutant Discharge Elimination System (NPDES) for the City of Ferndale Wastewater Treatment Plant**

### **Regional Water Quality Control Board, North Coast Region November 14, 2018**

#### **Comment Letter Received**

The deadline for submittal of public comments regarding draft Waste Discharge Requirements for Order No. R1-2018-0046, National Pollutant Discharge Elimination System Permit (Draft Permit) for the City of Ferndale Wastewater Treatment Plant was September 4, 2018. The City of Ferndale (Permittee) provided timely comments. No other comments were received during the public comment period.

In this document, the City's comment is summarized, followed by the Regional Water Board staff response. Text to be added is identified by underline and text to be deleted is identified by ~~strike-through~~ in this document. The terms "Draft Permit" and "Tentative Order" refer to the draft that was sent out for public comment. The term "Proposed Permit" refers to the version of the permit that has been modified in response to comments and is being presented to the North Coast Regional Water Quality Control Board (Regional Water Board) for consideration.

#### **City of Ferndale Comment**

**Comment:** The City's September 4, 2018, letter requests that the requirement for continuous monitoring of turbidity be removed from the Draft Permit. The City is concerned about the cost for the City to set up continuous monitoring capabilities in their SCADA system. The City points out that the current and Draft Permit require the City to monitor continuously for transmittance which is closely related to turbidity.

**Response:** Regional Water Board staff consulted with State Water Board Division of Drinking Water staff, and both agencies find that this is a reasonable request. The Tentative Order has been modified in response to this request as follows:

Order Section IV.D (Effluent Limitations and Discharge Specifications – Other Requirements) has been removed from the Tentative Order. This section of the Order prescribed numeric turbidity limits for the filtration process that are applicable to the production of tertiary-2.2 recycled water. The City produces secondary-23 recycled water which is not subject to tertiary-2.2 requirements. The language deleted from the Draft Permit is as follows:

**D.—Other Requirements**

**1.—Filtration Process Requirements (INT-001)**

**a.—Turbidity.** The effluent from the filtration process shall at all times be filtered such that the filtered effluent does not exceed any of the following specifications at Monitoring Location INT-001:

- 1.—An average of 2 NTU during any 24-hour period; and
- 2.—10 NTU at any time.

Monitoring and Reporting Program (MRP) Section IX.A has been modified in the Tentative Permit to remove monitoring requirements that were tied to the numeric limits that are being removed from Order Section IV.D.1, to require a minimum of daily turbidity monitoring to demonstrate that the filtration process is functioning properly, and to prescribe increased grab sampling requirements in the event of UV disinfection system transmittance requirement excursions. The proposed changes are as follows:

**IX. OTHER MONITORING REQUIREMENTS**

**A. Filtration Process Monitoring (Monitoring Location INT-001)**

Filtration process monitoring for turbidity shall be conducted at Monitoring Location INT-001 at least once daily to demonstrate the efficacy of the filtration process. During periods when the UV transmittance (UVT) results are not in compliance with section IV.D.1.C of the Order and Other Monitoring Requirement IX.B, below, filtration process monitoring for turbidity shall be increased to a minimum of hourly when the treatment plant is staffed to determine the cause of any UVT excursions. compliance with section IV.D.1 (Filtration Process Requirements) of the Order and applies to all treated wastewater flows at Discharge Points 001 and 002. The following filtration process monitoring shall be implemented:

**1.—Effluent Filter Monitoring (Monitoring Location INT-001)**

- a.—Monitoring.** The turbidity of the filter effluent shall be continuously measured and recorded. The recorded data shall be maintained by the Permittee for at least 3 years. The daily maximum and daily average turbidity results shall be reported for monitoring location INT-001.
- b.—Compliance.** ~~Compliance with the daily average effluent turbidity limitation specified in section IV.D.1 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. Exceedances of the maximum turbidity requirement in section IV.D.1 of the Order shall not be considered a violation of these waste discharge requirements if such exceedance does not exceed a duration of one minute. The Permittee shall ensure compliance with the average and maximum daily turbidity requirements by establishing appropriate turbidity set points.~~
- c.—Reporting.** The Permittee shall report the maximum and average daily turbidity readings on its quarterly SMRs.

**B. Disinfection Process Monitoring for UV Disinfection System (Monitoring Location INT-002)**

**1. Monitoring Location INT-002**

- a. Monitoring.** The UV transmittance of the effluent from the UV disinfection system shall be monitored continuously and recorded at Monitoring Location INT-001. The operational UV dose shall be calculated from UV transmittance and flow.
- b. Compliance.** The UV transmittance shall not fall below 55 percent of maximum at any time, unless otherwise approved by DDW. Flow through the UV disinfection system shall not exceed 0.95 mgd as a daily average flow, unless otherwise approved by DDW.
- c. Reporting.** The Permittee shall report daily average and lowest daily transmittance and operational UV dose on its quarterly SMRs. The Permittee shall report daily average and maximum flow through the UV disinfection system. If the UV transmittance falls below 55 percent, the event shall be reported to the Regional Water Board by telephone within 24 hours. Any inadequately treated and disinfected wastewater shall be diverted to a storage basin or an upstream process for adequate treatment. In addition, if UVT drops below 55 percent, the Permittee shall investigate and identify the cause of the low UVT in its quarterly SMRs.

The following Fact Sheet sections have been modified to reflect the changes that are proposed in the Tentative Permit and MRP.

Fact Sheet Section IV.H.1 has been removed from the Tentative Order to correspond to removal of the turbidity limits in Section IV.D.1 of the Draft Permit, as follows:

**H. Other Requirements**

- ~~**1. Filtration Process Requirements.** This Order contains newly established effluent limitations for the filtration system in section IV.D.1 of the Order. These requirements are needed so that the turbidity of the filtered water is low enough to ensure that effective disinfection occurs in the ultraviolet light (UV) disinfection system. The turbidity specifications in section IV.D.1 of the Order are based on the design criteria for the disc filter that is used for filtration.~~

Fact Sheet Section VII.F.2 has been modified to reflect the changes to MRP Sections IX.A and IX.B, as follows:

**F. Other Monitoring Requirements**

- 2. Filtration Process Monitoring (Monitoring Location INT-001).** Filtration process monitoring requirements at Monitoring Location INT-001 are included to assess compliance with the efficacy of the filtration process and to demonstrate that effluent turbidity is low enough to ensure that the UV disinfection system provides proper disinfection and compliance with total coliform effluent limitations in section IV.A.1.c of the Order.