THE CITY OF
EUREKA
PUBLIC WORKS

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November 15th, 2021

US EPA
Region IX-Pacific Southwest Region
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Clean Water Act Inspection of Elk River Wastewater Treatment Plant

To Whom It May Concern:

This letter is to serve as a written response to the Areas of Concern from the June 7, 2021 Clean Water Act inspection of the City of Eureka's Elk River Wastewater Treatment Plant NPDES No. CA0024449.

AREAS OF CONCERN

1. According to the CIWQS database, the Facility reported 23 effluent violations between June 1, 2018 and March 31, 2021 (see Table 3). As stated previously, 15 of the 23 effluent violations reported by the Permittee in CIWQS over the three years prior to the inspection were total ammonia exceedances. Facility representatives stated that the Permittee is working with its consulting engineer and the Regional Board to determine appropriate Facility upgrades to comply with current and future ammonia limits and the requirements of CDO No. Order No. R1-2020-0020. According to EPA's ECHO database2, the Facility was in a state of SNC during the 4th quarter of 2018 through the 3rd quarter of 2019 as well as the 1st quarter of 2021.

   Response: The City continues to work with the Regional Board to find a pathway to compliance for ammonia. The above listed CDO continues to have its deadlines extended due to delays with the Water Board that the City does not have control over.

2. The Deputy Director stated that the City's collection system has significant inflow and infiltration (I/I) impacts and has experienced influent flows as high as 32 mgd in the past. These I/I impacts result in high influent flows to the Facility and increased occurrences of secondary treatment bypassing and discharges to the Overflow Marsh. The Permittee provided records showing bypasses on seven days between April 1, 2020 and the date of the inspection (i.e., the 12 most recently reported months). The Permittee also provided data showing BOD and TSS were monitored five times during

these bypass events. The data show bypasses occurred on three straight days from January 26 through 28, 2021, and samples were taken on January 28 (see Table 4). Table E-7 of the Permit only requires weekly monitoring of BOD and TSS when bypass flows occur (to be coordinated with effluent sampling).....

Response: The Regional Water Board is working with the City to find a compliance pathway to end "bypassing" of secondary treatment. The upgrades needed to make this happen are related to Area of Concern #1 and are tied up in the CDO. When the pathway becomes apparent, the City is ready to begin the tasks needed to reduce or eliminate bypasses. The City is also putting money towards I and I projects which can be seen in the previously provided CIP document.

3. At the time of the inspection, the Permittee had 174 open work orders generated in the Facility's computerized maintenance management system (CMMS), Facility Dude (mostly preventive maintenance). Of the open orders, 101 were within their scheduled timeframe for completion and 73 were past due. The majority of the past due orders were less than one year old. The oldest outstanding work order had been open for 521 days and was for pumping down the Overflow Marsh for inspection. Facility representatives stated that previous efforts to drain the marsh back to the effluent holding pond were only partially successful as the overflow marsh could only be drained so far. At the time of the inspection, the EPA Inspection Team observed the Overflow Marsh to be mostly drained and filled with vegetation (see Photograph 21). Facility representatives stated that some of the outstanding orders may have been completed but were never closed out. They stated that they would need to review the backlog and cleanup any of the entries that were no longer applicable.

   Response: Past due work orders have been removed from the system. The majority of the open work orders were not closed out in the computer, but were completed. We have retrained the staff on how to complete work orders in the Facility Dude program.

4. At the time of the inspection, algae and vegetation was observed accumulated in the weirs and effluent trough of the secondary clarifiers (see Photographs 13 and 14). Facility representatives stated the weirs are hosed down weekly.

   Response: Secondary clarifier effluent troughs were cleaned and will be monitored and cleaned more frequently going forward.

5. At the time of the inspection, effluent was not flowing evenly over the weirs in either of the secondary clarifiers. In some locations, no effluent was flowing over the weirs, and in other locations effluent was flowing heavily over the weirs (see Photographs 12 through 14). Facility representatives stated that the tanks either had not been installed level or had settled over time. It is unclear if this condition was impacting how solids settle and are collected in the clarifiers.

   Response: Some repairs were made to the effluent weirs, after the inspection, which improved flow to the trough. Weirs and troughs are slated for replacement in the next several years as seen in the CIP document.

6. At the time of the inspection, the EPA Inspection Team observed that the wall of the chlorine contact chamber was leaking near its influent end, into the effluent holding pond (see Photograph 17). As a result, wastewater was entering the holding pond before completing the designed contact time.

   Response: The leak observed, is coming from a slide gate on the chlorine contact channel. The City has plans to replace all of the slide gates and tracks on multiple sites. Because the chlorine contact channel must be bypassed to isolate the gate location, the project has difficulties that don't allow for a quick and easy fix. Future CIP documents will outline the City's plan for replacement.

7. At the time of the inspection, the EPA Inspection Team observed solids built up in the Facility's south sludge lagoon to the point sludge piles had breached the surface (see Photograph 22). Facility representatives stated that they had recently begun dredging the lagoon and sending solids to the biosolids storage tanks (see Photograph 24). Facility representatives also stated they had recently completed a project to dredge the north lagoon (see Photograph 23). They stated that the north lagoon had 8 to 10 inches of freeboard over the solids at the time of the inspection.
   Facility representatives stated that the Facility's centrifuge did not have enough capacity to dewater solids to keep up with demand from the digesters and lagoons. They stated that they are planning to upgrade the solids processing at the Facility to achieve Class A solids, which includes making improvements to increase dewatering capacity. After the inspection, the Permittee provided a copy of the City of Eureka's 2021–2026 capital improvement plan, which includes line items for Class A solids and dewatering system upgrades (see Attachment 3). Per the CIP, the biosolids project is planned to occur in 2024-2026 but it is unclear if the funds for the project have been allocated yet.

   Response: The north lagoon has 8 to 10 feet of watercap over the solids, not 8 to 10 inches of freeboard over the solids. The south lagoon had vegetation removed after the inspection, and is now being dredged daily. Half of the lagoon has 6+ feet of watercap over the solids, while the other half is currently being processed. We expect to have 8 to 10 feet of watercap on the south lagoon by spring.
   The centrifuge that the City owns and operates has plenty of capacity to keep up with current demand as well as significantly decreasing the stockpile that has built up over time in the lagoons.
   Funding for Class A solids, as seen in the CIP document, is in an account, but will not be specifically allocated to a project until the annual budget is released for the year. We do not anticipate having funding issues with this project.