#### **Response to Comments**

City of Craigmont Wastewater Treatment Plant NPDES Permit Number: ID0021288 April 2020

On December 6, 2019, the U.S. Environmental Protection Agency Region 10 (EPA) issued a public notice for the proposed reissuance of the City of Craigmont Wastewater Treatment Plant (WWTP) National Pollutant Discharge Elimination System (NPDES) Permit No. ID0021288. The public comment period closed on January 6, 2019.

During the public comment period, the EPA received comments from the following:

- Idaho Conservation League (ICL)
- City of Craigmont (City)

This document presents the comments received and provides corresponding responses to those comments. As a result of comments received, the following revisions were made to the permit:

Page 6, Section I In Table 1, TSS and BOD<sub>5</sub> monitoring is revised to a frequency of 1/month instead of 1/week.

Page 6, Section I In Table 1, the EPA changed the sample type for TSS and BOD<sub>5</sub> from composite to grab.

Page 6, Section I In Table 1, the EPA added weekly effluent temperature monitoring.

Page 8, Section I The EPA corrected the typographical error in I.C.4 to reference Table 2 rather than Table 3.

Page 8, Section I

Under Surface Water Monitoring Report, the EPA added a sentence "No surface water sample is required if there is no flow in John Dobb Creek."

Page 9, Section I In Table 2, the EPA changed the parameter from NOx to ammonia and the temperature sample type from recorded to grab.

Page 11, Section II In Table 4, the EPA changed the compliance schedule from four years and eleven months to five years and six months.

### **Comment 1 (ICL): Temperature Limits**

We request that the EPA explain why this permit does not included temperature limits given that cold water aquatic life is a listed beneficial use for the receiving water and downstream waters.

## **EPA Response:**

The EPA did not have effluent temperature data for the facility, and therefore the EPA could not conduct a reasonable potential analysis for temperature<sup>1</sup>. Since temperature is a pollutant of concern, the EPA is revising the permit to require effluent temperature monitoring at a frequency of once per week. This will allow the EPA to conduct a reasonable potential analysis when the next permit is issued.

### Comment 2 (ICL): Temperature and pH Monitoring Frequency

We are concerned about the required frequency of surface water monitoring for temperature and pH in the draft permit. These parameters can be highly variable, and while the draft permit requires the permittee to use "sufficiently sensitive analytical methods," they do not stipulate the timing of when a measurement should be taken. We recommend this permit require continuous monitoring of these parameters to provide a robust, scientifically-defensible dataset that avoids human bias.

### **EPA Response:**

The facility discharges to John Dobbs Creek which is an intermittent water. The EPA evaluated stream flow for John Dobbs Creek using the USGS tool "StreamStats" and determined that except during the month of March, the stream flow in John Dobbs Creek is less than 1 cfs, and at times the stream runs dry. Because of these low flow conditions, the EPA is retaining the quarterly surface water monitoring and has not modified the permit to include more frequent monitoring.

Idaho Water Quality Standards (IDAPA 58.01.02.070.06) states: "Application of Standards to Intermittent Waters. Numeric water quality standards only apply to intermittent waters during the optimum flow periods sufficient to support the use for which the water body is designated...For aquatic life uses, optimum flow is equal or greater than (1) cfs." Therefore, in referencing Idaho WQS, the numeric temperature criteria would only apply during the month of March. The primary reason for monitoring temperature and pH in the receiving water is to calculate the ammonia criteria. The quarterly temperature and pH monitoring are adequate for this purpose.

### Comment 3 (City): Composite v. Grab Sample

Table 1, Effluent BOD<sub>5</sub> and TSS Sample Type ('composite' vs. 'grab'): Given the type and configuration of wastewater treatment employed by the city, a 'composite' sample is unnecessary. The current two-stage lagoon treatment facility operates at an average hydraulic retention time (HRT) of approximately 60 days. Lagoon effluent is batch discharged into the chlorine contact basin (CCB); when the CCB is full, the effluent is batch discharged into sand filters and then into John Dobb Creek. Given the significant duration HRT in the biological treatment system, coupled with additional HRT in the batch-operated disinfection system, effluent characteristics will certainly be quite consistent and nearly constant. Moreover, the

<sup>&</sup>lt;sup>1</sup> The entry in Table 2 of the Fact Sheet is incorrect. Table 2 contains the effluent characterization that was reported by the City. However, the EPA erred in compiling the table and the temperature data in the table represents ambient temperature.

logistics of collecting a 'composite sample' from the irregularly batched effluent are problematic, pose cost challenges to the city, and present unnecessary permit compliance risk to the city. Finally, modifying the permit to a 'grab' sample would be consistent with proposed Total Ammonia, *E. coli*, TRC, and pH sampling requirements.

40 CFR 122.21(g)(7)(i) on effluent characteristics states: "When paragraph (g)(7) of this section requires analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including E. coli), and Enterococci (previously known as fecal streptococcus at 122.26(d)(2)(iii)(A)(3)), or volatile organics, grab samples must be collected for those pollutants. For all other pollutants, a 24-hour composite sample, using a minimum of four (4) grab samples, must be used unless specified otherwise at 40 CFR Part 136. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours."

The City requests the '8-hour composite' and '24-hour composite' sample type be changed to 'grab.'

# **EPA Response:**

Given the significant hydraulic retention time and consistency of effluent quality, the EPA has determined that grab samples, as opposed to composite samples allow for adequate compliance assessment. Therefore, the EPA has revised the permit to change the "8-hour composite" and "24-hour composite" to "grab".

## **Comment 4 (City): Monitoring Frequency**

Table 1: The city's current permit requires BOD<sub>5</sub> and TSS monitoring 1/month, but the new permit increases the frequency to 1/week. As noted above, the Fact Sheet retains the 1/month requirement.

Given the city's mechanism to achieve wastewater treatment (lagoons) produces near-constant effluent quality, the city requests retainage of a 1/month monitoring frequency.

## **EPA Response**

The EPA agrees the weekly monitoring frequency for BOD<sub>5</sub> and TSS in the draft permit was an error. The EPA intended to retain the monthly monitoring frequency of the existing permit, as was indicated in the Fact Sheet. The EPA has corrected the final permit to include monthly monitoring frequency for the BOD<sub>5</sub> and TSS.

## Comment 5 (City): Surface Water Monitoring

Section I(C): As noted in the fact sheet, there are times of the year when John Dobb Creek has no flow. Therefore, the city requests verbiage in the permit that accordingly addresses surface water sampling requirements – something to the effect of "No samples are required if John Dobb Creek does not have a flow stream; samples shall not be obtained from ponded water."

## **EPA Response:**

The EPA agrees and has added the following statement to the permit: "No surface water sample is required if there is no flow in John Dobb Creek." See Section I.C. of the Permit.

## Comment 6 (City): Surface Water Monitoring

Section I(C)(1) and (3): Related to the above comment, establishing the means to measure flow rate in John Dobb Creek is a financially onerous requirement to impose on the city. The city requests this requirement be changed from a quantitative assessment to a qualitative assessment – for example, "Note if water is flowing in John Dobb Creek at the time of sampling."

## **EPA Response:**

In order to obtain accurate information for future permit issuances, it is important to obtain the flow rate in John Dobb Creek at the point of discharge. This measurement must be a quantitative assessment, not a qualitative assessment as requested by the City. However, Section I.C.3 of the permit does allow for flow to be measured "as near as practicable." No change has been made to the permit as a result of this comment. See also EPA Response to Comment 5.

## Comment 7 (City): Surface Water Sampling.

Section I(C)(4): The parameters are listed in Table 2, not Table 3. Additionally, the city requests additional narrative to protect them in the event that John Dobb Creek has no flow during a given quarter when sampling is required. None of the Table 2 parameters should be measured if there is no flow in the creek.

## **EPA Response:**

The EPA corrected the typographical error in Section I.C.4 of the permit to reference Table 2 rather than Table 3. See EPA's Response to Comments 5 and 6 concerning no flow periods.

## Comment 8 (City): Ammonia Monitoring

### Table 2:

We believe that the EPA intended to require ammonia monitoring, not nitrate-nitrite (NOx). The Fact Sheet discusses ammonia, not NOx. Moreover, the new permit imposes ammonia, not NOx limits. The city requests that the requirement to monitor nitrate-nitrite (NOx) in John Dobb Creek upstream of the facility discharge be eliminated and replaced with ammonia.

We request temperature Sample Type be changed to "grab," not "recording."

## **EPA Response:**

The EPA intended to require ammonia monitoring, not nitrate-nitrite  $(NO_x)$  sampling. Table 2 has been corrected to require ammonia sampling rather than nitrate-nitrite  $(NO_x)$ .

The EPA intended for the sample type to be grab rather than recorded/continuous, and has corrected the final permit to reflect this intent. See also EPA Response to Comment 2.

## **Comment 9 (City): Compliance Schedule Deadlines**

Table 4: The city requests longer timelines to complete the required tasks. At a minimum, an additional year is needed in between Task 1 and Task 2 to allow the city to secure funding and potentially secure additional property. An approximate 6-year compliance schedule is more in line with other permits recently issued by EPA (see Kendrick, Genesee, and Culdesac, Idaho).

### **EPA Response:**

The EPA has made changes to the ammonia compliance schedule in the permit as a result of this comment. In a letter to the EPA dated February 19, 2020, the City stated that the extended timeline is needed to develop the necessary funding package and a two-year construction window to compensate for the difficult winter construction, with a total project time of 5 and a half years. The EPA has made the following changes to the ammonia compliance schedule: (1) Task 2 has been changed to Preliminary Engineering Design and Funding from Final Design; (2) Task 3 has been changed to Final Design and Award Bid for Construction from Award Bid for Construction; (3) Task 4 is now required to be completed in five years instead of four years and six months; and (4) the City is now required to meet the final ammonia limits within five years and six months instead of four years and eleven months.

## Comment 10 (City): Fact Sheet Errors

Fact Sheet, Draft Permit: There are numerous inconsistencies between and within the two documents that should be corrected/addressed. In particular:

Fact Sheet: Table 2, under *E. coli*, what is meant by the "(3/100mL)"?

Table 4 - it is requested that the number of samples used to calculate the values presented therein be cited.

Fact Sheet, Table 7: The current permit does include BOD5 % removal requirements of 85% (I(A)(4)).

Fact Sheet, Table 7: The current permit does include 65% TSS removal, monthly average; this is not included in Table 7.

In many instances, Table 1 (permit) is not the same as Table 6 (fact sheet).

### **EPA Response:**

The EPA acknowledges inconsistencies between the draft permit and the fact sheet and apologizes for any confusion this may have caused.

The TSS effluent limitations of 30 mg/L for Average Monthly and 45 mg/L for Average Weekly in Table 1 of the draft permit are correct. These are also set forth in Table 7 of the Fact Sheet. However, Table 7 of the Fact Sheet did not list the current TSS removal rate of 65% and the proposed TSS removal rate of 85%. The basis for these limits are explained in Appendix E of the Fact Sheet. Table 1 of the permit reflects the correct BOD<sub>5</sub> and TSS effluent limits and also includes the correct monitoring frequency of once per month instead of once per week.

With regards to inconsistencies in the Fact Sheet, it is the EPA Region 10's policy not to revise the Fact Sheet; instead, upon issuance of the Permit, this response to comment document serves as an addendum to the Fact Sheet that clarifies issues as necessary. The following errors/inconsistencies in the Fact Sheet and Permit are noted below.

### Fact Sheet

Page 11, Section II The "3/100mL" for *E. Coli* is a typographical error. It should read as "#/100mL".

Page 13, Section III The values in Table 4 can be found in Appendix B, Part B of the Fact Sheet. Page 17, Section IV Secondary treatment effluent limits for BOD and TSS (including minimum percentage removal) are listed in Table 8 of the Fact Sheet.