Response to Comments on the Draft Modified NPDES Permit for Hecla Limited Grouse Creek Unit

U.S. EPA Region 10, Water Division May 2019

Overview

On March 28, 2019, the EPA issued a draft modification of the NPDES Permit for the Hecla Limited Grouse Creek Unit for public review and comment. The public comment period closed on April 29, 2019. The EPA received comments from the Idaho Conservation League and Hecla Limited.

Response to Comments on the Draft Permit

Comment #1

With regards to the permit modification at hand, we disagree with the EPA's decision to eliminate requirements for continuous temperature monitoring in the receiving water during the months that have the potential to exceed applicable temperature standards.

Waters designated for salmonid spawning, such as Yankee Fork Creek in this permit, are subject to the following temperature criteria during the time spawning and incubation occurs:

Water temperatures of thirteen (13) degrees C or less with a maximum daily average no greater than nine (9) degrees C (IDAPA 58.01.02.250.02.f.ii).

As noted in the EPA's Fact Sheet, Yankee Fork Creek is home to several salmonid species with overlapping spawning and incubation periods, meaning that spawning or incubation of at least one species is likely to occur year-round. Thus, the salmonid spawning temperature criteria apply year-round.

The EPA is proposing to remove continuous temperature monitoring requirements during months that have not historically exceeded the 9 °C daily average water quality criterion for salmonid spawning. The EPA is making this decision based upon now corrected records of temperature measurements at Station S-9 and S-10. Upon reviewing the temperature data presented in Appendix A, we are concerned with this conclusion based on the time-of-day at which temperature measurements were taken. During the sample period, receiving water temperatures at Station S-9 were collected between 8:05 am and 11:45 am, while measurements at Station S-10 were collected between 7:55 am and 11:40 am. Temperature measurements were all collected in the morning hours, which would inevitably bias the temperatures low. A number of months, namely June and October at Station S-9 and October at Station S-10, are on the cusp of breaching the 9 °C daily average water quality criterion for salmonid spawning. These months could have very well exceeded this criterion if temperature measurements were taken closer to peak daily temperatures (i.e. in the afternoon hours).

In light of this, it appears inappropriate for the EPA to continue with removal of continuous temperature monitoring for every month listed in the Fact Sheet. We ask that the EPA consider the likelihood that certain months would have exceeded – or have a high likelihood of exceeding in the future – the 9 °C daily average water quality criterion for salmonid spawning should data collection occur at later times in the day. After this consideration, we request that the EPA reevaluate their decision, and provide justification supporting their final decision once they have selected which months will receive continuous temperature monitoring.

Response #1

The commenter is correct that the temperature grab samples collected at stations S-9 and S-10 were collected between 7:55 am and 11:40 am, and temperatures measured in the afternoon would likely be higher. However, it should be noted that the 9 °C temperature criterion is not an instantaneous maximum temperature never to be exceeded. The instantaneous maximum temperature criterion is 13 °C, and, as explained in the fact sheet, none of the temperature grab samples show an excursion above this criterion.

The 9 °C criterion is a maximum allowable daily average temperature. The definition of the term "daily mean" in the Idaho water quality standards states that, "(f)or ambient monitoring of temperature, the daily mean should be calculated from equally spaced measurements, at intervals such that the difference between any two (2) consecutive measurements does not exceed one point zero (1.0) degree C" (IDAPA 58.01.02.010.19.d). A proper measurement and calculation of the daily average temperature would therefore include measurements taken at night, when the water temperature is coldest. Thus, the fact that individual grab samples for temperature were close to 9 °C does not necessarily mean that the daily average temperature would have exceeded the 9 °C criterion, even though the samples were collected in the morning.

In addition, since this permit modification did not become effective before the unmodified permit's continuous temperature monitoring requirements took effect on May 1, 2019, the permittee will collect continuous temperature data for Yankee Fork Creek (stations S-9 and S-14) during May and June of 2019.

Regarding October, it should be noted that most of the temperature measurements for October were collected early in the month, when water temperatures are likely to be warmer. At stations S-9 and S-10, 8 of the 10 October samples were collected in the first 7 days of October, and none of the results exceeded the 9 °C daily average criterion. Thus, the existing grab sample data indicate that violations of temperature criteria are unlikely to occur in October.

The EPA therefore believes continuous temperature monitoring in May and June of 2019 (as required by the unmodified permit), combined with ongoing continuous monitoring from July through September and ongoing grab samples collected in April, June, and October, will adequately characterize the temperature of Yankee Fork Creek.

No changes have been made to the draft modified permit.

Comment #2

Hecla Limited Grouse Creek Unit supports the proposed permit modification of its NPDES Permit concerning the frequency of temperature monitoring in the Yankee Fork between May 1 to June 30 and

October 1 - October 31 for the reasons outlined in our letter to you dated October 22, 2018. The prior continuous temperature monitoring requirements in the Yankee Fork in the existing permit from May 1 to June 30 and October 1-31 were based on erroneous data. Also, the proposed modification will avoid safety issues associated with continuous monitoring during high flows between May 1 to June 30 as previously pointed out in our October 22 letter. Thank you for considering these comments.

Response #2

Thank you for your comment.

Other Changes to the Permit

After the public comment period began, the EPA underwent a regional realignment, which resulted in changes to Region 10's office and division names and mail stops. The EPA has therefore made the following changes to the permit:

- "Office of Water and Watersheds" was changed to "Water Division"
- "Office of Compliance and Enforcement" was changed to "Enforcement and Compliance Assurance Division"
- "NPDES Permits Unit" was changed to "NPDES Permits Section."
- Mail stops and zip plus 4 codes were updated.