

September 13, 2019

Mr. Peter S. Hays  
Environmental Protection Specialist  
Division of Reclamation Mining and Safety  
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Re: **Iverson Mine Reclamation  
112c Permit, File No. M-2011-001  
Water Division 1, Water District 3  
Weld County, Colorado  
Tetra Tech Letter dated July 29, 2019**

Dear Mr. Hays:

We have the following comments regarding the letter from Tetra Tech dated July 29, 2019.

1. The As-Constructed survey conducted by Lamp Rynearson dated 1-03-2018 indicates there is a low area extending from the bank of the Poudre River across the riverside berm to the lake with elevations ranging from 4685.39' to 4685.85'. This low area is where the berm has been overtopped and breached in the past. The grade in this area should be raised to a minimum of 4686.0'.
2. The riverbank protection is recommended to protect the berm in the vicinity of high river velocities. This recommendation is supported by UDFCD guidelines to prevent breaching of the berm and capture of the gravel pit during flood events.
3. The HECRAS model of the Poudre River and constructed spillways indicates that the spillway flow during flood events flow is inadequate to equalize the water levels between the river and the lake in a reasonable amount of time. The spillway width should be increased and designed using HECRAS to provide adequate equalization. The recommendations by the UDCFD are a good starting point for the design.

Please contact us if you have any questions or comments.

Sincerely,



John D. Allis, Jr., P.E.  
Senior Project Manager

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