

September 14, 2017

Mr. Raymond Lazuk  
Environmental Manager  
Climax Molybdenum Company- Climax Mine  
Highway 91 – Fremont Pass  
Climax, CO 80429

Subject: Mayflower (5 Dam) Seepwater Return Pipeline Leak, Mayflower Tailings Storage Facilities, Climax Mine, Permit No. M-1977-493

Dear Mr. Lazuk:

AECOM serves as the Engineer of Record (EOR) for Mayflower Tailings Storage Facilities (TSF) at the Climax Mine, near Fremont pass Colorado. In this capacity AECOM was recently requested by Climax Molybdenum Company to review the Mayflower Seepwater pipeline leak and evaluate any present and potential future dam safety impacts on 5 Dam stability.

The Mayflower Seepwater pipeline pumps seepwater from the toe of 5 Dam up to the seepwater pond and pumpstation near the toe of 3 Dam (Tenmile). This 14-inch HDPE pipeline is located outside of the structural shell of the dam. The leak was first observed on September 5, 2017 and is shown in the photo below taken during AECOM's site visit on September 7, 2017. The leak is located near the edge of the existing Mayflower pond, over 2,000 feet upstream from the current dam crest and approximately 200 feet from the shoreline with a visible surface feature of approximately 10 feet in diameter. The leak is believed to be a result of a faulty valve buried approximately 12 to 15 feet below the tailings surface in this area.



Photo 1- Seepwater Pipeline Leak Location (shown with arrow) near Mayflower Decant Pond



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After inspecting the area, reviewing pipeline and dam construction drawings, and considering the location of the leak, it is our opinion that the Mayflower seepwater pipeline leak identified has no impacts on 5 Dam stability, either currently or for the foreseeable future. The leak is located a significant distance from the current crest, not located within the structural dam shell and is close to the decant pond with the seep water flowing towards the decant pond water. AECOM will continue to work with the Climax team to monitor this leak as part of the regular review of the TSF's performance and will advise Climax if and when it should abandon the portion of line where the leak is occurring.

AECOM represents that our services are performed within the limits prescribed by the Client in a manner consistent with the level and skill ordinarily exercised by other consultants under similar circumstances. No representation to the Client, expressed or implied, and no other warranty or guarantee is included or intended.

**Closing**

Please do not hesitate to call us with any questions or comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lisa Yenne".

Lisa R. Yenne, PE  
Project Manager

A handwritten signature in blue ink, appearing to read "Richard Davidson".

Richard R. Davidson, PE  
Senior Principal Engineer