



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

November 13, 2024

J & T Consulting Inc.

J.C. York, P.E.

305 Denver Avenue, Suite D

Fort Lupton, Co 80621

Transmission via Email: [jcyork@j-tconsulting.com](mailto:jcyork@j-tconsulting.com)

**RE: SLURRY WALL LINER APPROVAL (PROVISIONAL)**  
**IRWIN-THOMAS CELLS 2 AND 3 RESERVOIR (WDID 0504108)**  
**IRWIN-THOMAS GRAVEL PIT, DRMS M-2016-054 (WDID 0505626)**  
**E1/2 OF SECTION 11, T2N, R69W**  
**WATER DIVISION 1, WATER DISTRICT 5, BOULDER COUNTY**

Dear Mr. York:

The purpose of this letter is to provisionally approve the lining of the Irwin-Thomas Cells 2 and 3 Reservoir (“Reservoir”). The Reservoir is primarily located in the E1/2 of Section 11, Township 2 North, Range 69 West of the 6<sup>th</sup> P.M., and is part of the Irwin-Thomas Gravel Pit (DRMS M-2016-054). The Reservoir was lined with a soil bentonite slurry wall. The site is partially mined. The slurry wall liner leak test commenced on July 12, 2024 and concluded on October 9, 2024. A site inspection was performed by our office on July 25, 2024 to review site conditions and the discuss the leak test plan.

Your report dated October 15, 2024 provides the liner summary and leak test results. The test data provided indicates that the liner meets the design standard referenced in the August 1999 State Engineer Guidelines for Lining Criteria for Gravel Pits (1999 SEO



Guidelines). **Meeting the design standard requires that during reservoir operations all water inflows and outflows for the liner perimeter enclosed area be accounted for on a monthly basis.**

This liner approval is applicable only during mining operations at the site and does not classify the structure as a reservoir capable of water storage. However, for the remainder of mining operations, water within the liner boundary is now classified as trapped native ground water. The trapped native ground water may be removed from within the lined area and returned to the stream system through surface flow or ground water recharge without the need for replacement so long as the operator does not put the water to beneficial use. All native trapped ground water remaining that is put to beneficial use (except for the water removed in product) must be replaced by the operator. All inflow of water into the liner boundary from any source, including precipitation and ground water inflows shall be removed by the pit operator so as not to cause out-of-priority storage. **In order for the liner to be approved for water storage the operator must perform a final leak test once mining is complete and the site is at final grade.** The final leak test will be allowed to have a modified duration of 45 to 60 days as long as the liner continues to satisfactorily operate during mining operations.

Please contact me at 303-866-3581 x8246 if you have any questions.

Sincerely,



Ioana Comaniciu, P.E.

Water Resource Engineer

Ec: Shera Sumerford, District 5 Water Commissioner ([Shera.Sumerford@state.co.us](mailto:Shera.Sumerford@state.co.us))

Louis Flink, Diversion Records Coordinator ([Louis.Flink@state.co.us](mailto:Louis.Flink@state.co.us))

WDID File (0504108 & 0505626)