



January 3, 2023

Eric Scott
CO DRMS
1313 Sherman Street, Room 215
Denver, CO 80203

RE: M-2003-016 Heit Sand and Gravel Mine
Technical Revision-05 Slurry Wall Setback

Dear Mr. Scott,

Pioneer is submitting this request for a Technical Revision (TR) regarding the setback from the center line of the slurry wall. In 2004, the Division approved TR-01 that increased the setback from the center line of the slurry wall to 30 ft. from 10 ft. that was approved initially. The 30 ft. setback was based on an interior mine wall of 0.5H:1V.

Pioneer requests, with the City of Broomfield's concurrence, that the setback be reduced to 12 ft. from the center line of the slurry wall. At the request of Broomfield, all interior mine walls are sloped at 3H:1V or gentler. The center line of the slurry wall was staked in December based on the Slurry Wall Alignment As-Built dated September, 2007 that is provided herein. In addition, the Deere & Ault Slope Stability Analysis dated April 19, 2007 is provided indicating the safety factor is 2.62 for a 3H:1V slope with a 12 ft. center line offset.

In summary, Pioneer is submitting this Technical Revision that will reduce the setback from the center line of the slurry wall from 30 ft. to 12 ft. with interior mine walls sloped at 3H:1V slopes or gentler.

Please feel free to contact me directly with any questions.

Respectfully submitted

Angela M. Bellantoni Ph.D.