

July 5, 2017

State of Colorado Division of Reclamation, Mining & Safety 1313 Sherman St., Room 215 Denver, CO 80203

Attn: Rob Zuber, Environmental Protection Specialist II

Re: King I Mine, C-1981-035

Stoner Engineering: Quarterly Inspection: Refuse Pile

2nd Quarter 2017

Dear Mr. Zuber,

Please find enclosed a copy of Stoner Engineering's Quarterly Inspection report of the King I mine refuse pile/embankment for the 2nd quarter of 2017.

Please call Tom Bird at (970) 385-4528 x 6503 if you have any questions or comments.

Sincerely,

Tom Bird Manager, Coal Services

GCC Energy, LLC

Stoner Engineering & Surveying

Engineering, Testing & Surveying

Date:

June 27, 2017

To:

Tom Bird

Manager, Coal Services

GCC Energy, LLC

6473 County Road 120 Hesperus, CO 81326

(970) 385-4528

From:

Ryan Griglak, P.E. Project Manager

Stoner Engineering & Surveying

Re:

King Coal I – Quarterly Waste Pile/Embankment Inspection



On June 26, 2017, Ryan Griglak, P.E. visited the GCC Energy, LLC King I Mine site to conduct the quarterly inspection of the coal waste pile/embankment. Mr. Griglak, P.E. has conducted inspections for the placement of earthwork/embankment fill material for numerous commercial, residential and municipal projects in which buildings, roadways and parking facilities were installed over the placed materials.

The condition of the perimeter ditches located along the north and south sides of the property were generally in good condition (see Pic. 1). The drainage channels were generally clear of debris and there was no damage observed to any of the channel sections.

There had been some work done at the base of the waste pile/embankment. GCC had been asked to install some additional fill material at the base of the embankment/waste pile by the Division of Reclamation, Mining and Safety to ensure that the slope meets the 2.5:1 specified in the original design. You indicated that the slope is currently about 2.2:1. In preparation for placing additional fill material along the base of the embankment, the under drain was exposed. The drain appears to have been uncovered near its endpoint along the south edge of the waste pile (see Pics. 2 and 3). GCC shall carefully excavate the under drain back to an undisturbed portion before repairing and extending the under drain (match existing section) to the west into the existing ditch at the base of the native slope.

There was material stockpiled at the top of the embankment awaiting placement as embankment fill (see Pic. 4). The face of the embankment was in good condition and does not show any signs of excessive erosion, instability or weakness.



Engineering, Testing & Surveying

There are a couple trailers stored on the site just north and east of the old bath house. The only structure with any proximity to the embankment material is the old bath house which is no longer utilized and is abandoned. Personnel are only on-site to bring and/or place material on the embankment or for mine rescue training. The mine rescue training is performed on the north side of the site well away from the embankment material. The site is closed to the public and there is a locked gate at the entrance to keep the public out.

The waste pile has been and continues to be constructed and maintained as specified in the design approved by the Division of Reclamation, Mining & Safety. Potential hazards to life and property are minimal due to the fact that GCC has moved most of their operations to their King II facility.

Please let me know if you have any additional questions or concerns in regards to the issues that are discussed above.

Sincerely,

Ryan M. Griglak, P.E. Project Manager

Stoner Engineering & Surveying

Engineering, Testing & Surveying



Pic. 1 – North channel, good overall condition.



Pic. 2 –Under drain exposed at base (south end) of the embankment/waste pile .

Stoner Engineering & Surveying

Engineering, Testing & Surveying



Pic. 3 –Exposed under drain, existing ditch located to west at base of natural embankment.



Pic. 4 – Embankment material ready for placement at top of embankment.