

"Safety as a Value"

December 3, 2019

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

Attn: Janet Binns, Environmental Protection Specialist III

Re: King I Mine, C-1981-035 Stoner Engineering: Quarterly Inspection: Water Quality Improvements 4th Quarter 2019

Dear Mr. Bowles,

Please find enclosed a copy of Stoner Engineering's Quarterly Inspection report of the King I mine water quality improvements for the 4th quarter of 2019.

Please call Tom Bird at (970) 385-4528 x 6503 or (970) 769-1160 (cell) if you have any questions or comments.

Sincerely,

Tom Bird Manager, Coal Services GCC Energy, LLC

Stoner Engineering & Surveying

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Date: December 2, 2019

- To: Jordan McCourt Project Coordinator 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 Water Quality Improvements Inspection

On November 25, 2019, Ryan Griglak, P.E. visited the GCC Energy, LLC King I Mine site to conduct the quarterly inspection of the water quality features installed to prevent contaminated storm water runoff from escaping the site in events smaller than the 100-year storm event.

Both ponds had some moisture as a result of the recent snow at the time of the inspection (see Pic. 1). The ponds both appeared to generally be in good condition. There is additional sediment in the ponds and the periodic cleaning of the ponds may be necessary in the coming spring depending on winter moisture levels. The sedimentation gages show the ponds are not yet it need of cleaning. The ponds should continue to be monitored after storm events to ensure that excess sediment does not reduce the required storage capacity available for storm water runoff.

The sedimentation traps at the entrance to the site are in good condition. The work to the upper portion of Reach 1 has been completed. The realignment of the lower portion of Reach 1 has been staked for construction. The steep section of channel connecting the upper and lower sections of Reach 1 has had the concrete channel installed to protect against excessive erosion (see Pic. 2). The section of Reach 10 where runoff is escaping from the channel section and causing erosion along the side of the channel is still in need of some repairs. While this runoff is still routed to the sediment ponds, it will result in excessive erosion to the existing hillside and should be repaired.

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The installation of the new under-drain system has been completed for the TR-27 waste pile expansion. The extended under-drain was terminated into the area inlet just east of the old bath house. The west clean water ditch has been constructed along the west portion of the property (see Pic. 3). Reach 8 is being prepped for the installation of the new culvert for the new haul road. The area inlet connecting Reach 7 to the under-drain has experienced some sedimentation as a result of the ongoing construction operations and the recent snowfall. While the area has been protected with berming and soil erosion control logs, the surrounding grading currently directs the majority of the surface runoff into the area inlet (see Pic. 4). The erosion control measures around the area inlet should either be improved or the surface water flows from the upstream stockpiling area should be rerouted around the inlet to prevent excessive sediment from entering Reach 7.

The drainage for the overall site appears to be functioning as designed. The drainage features have been constructed and will continue to function as stated in the drainage plan submitted to the Division of Reclamation, Mining & Safety once the ongoing maintenance work resulting from the significant snow accumulation has been completed.

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



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Pic. 1 – East pond.



Pic. 2 – Concrete channel section from new upper section of Reach 1.

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Pic. 3 - New clean water channel for Reach 3 relocation.



Pic. 4 – Erosion control above area inlet of Reach 7/under-drain interface.

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