




COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

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PERMIT INFORMATION

Permit Number: C-1981-035 Mine Name: King Coal Mine Operator: GCC Energy, LLC Operator Address: Mr. Tom Bird 6473 County Road 120 Hesperus, CO 81326	County: La Plata Operation Type: Underground Permit Status: Active Ownership: Federal
	Operator Representative Present: Don McGovern, Wade Wymore, Jessica Luna
Operator Representative Signature: (Field Issuance Only) 	

INSPECTION INFORMATION

Inspection Start Date: August 31, 2017 Inspection Start Time: 08:00 Inspection End Date: Inspection End Time:		Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Clear	
Joint Inspection Agency: None		Joint Inspection Contacts: 	
Post Inspection Agency: None		Post Inspection Contacts: 	
Inspector(s): Robert D. Zuber, P.E.	Inspector's Signature: 		Signature Date: 9/6/2017

Inspection Topic Summary

NOTE: Y=Inspected N=Not Inspected R=Comments Noted V=Violation Issued NA=Not Applicable

Y - Air Resource Protection

R - Roads

Y - Availability of Records

R - Reclamation Success

Y - Backfill & Grading

Y - Revegetation

R - Excess Spoil and Dev. Waste

Y - Subsidence

NA - Explosives

Y - Slides and Other Damage

Y - Fish & Wildlife

R - Support Facilities On-site

R - Hydrologic Balance

Y - Signs and Markers

Y - Gen. Compliance With Mine Plan

NA - Support Facilities Not On-site

N - Other

NA - Special Categories Of Mining

NA - Processing Waste

R - Topsoil

COMMENTS

A complete inspection was conducted by Rob Zuber of DRMS on August 31, 2017. Don McGovern, Wade Wymore, and Jessica Luna of GCC accompanied Rob in the field (at different times). The weather was clear and the ground was dry.

The King I entrance area is being used as a staging area for the road improvement project (CR 120). Trucks, culvert pipe, and other equipment were seen.

EXCESS SPOIL and DEVELOPMENT WASTE – Rule 4.09

Placement; Drainage Control; Surface Stabilization:

The un-reclaimed portion of the Refuse Pile (upper portion) needs to be graded to spread the piles of waste rock. This is not yet an urgent matter but should be done as soon as practical. Very little trash was seen in the recently graded area, and almost no large rocks (bigger than 18 inches in length) were seen. No puddles were seen on the surface of the Refuse Pile.

No flow was seen from the underdrains of the refuse pile. Nor did stains or other evidence indicate past flow from the underdrains.

Past inspection reports indicated that GCC is adding material to the lower portion of the Refuse Pile (and extending the underdrain) because the slope of this portion is steeper than the design. Per Wade Wymore, this project has been temporarily halted to find the proper rock for the underdrain. It should be resumed soon to assure that the pile is in agreement with the design specifications.

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1

HYDROLOGIC BALANCE - Rule 4.05

Drainage Control 4.05.1, 4.05.2, 4.05.3; Siltation Structures 4.05.5, 4.05.6; Discharge Structures 4.05.7, 4.05.10; Diversions 4.05.4; Effluent Limits 4.05.2; Ground Water Monitoring 4.05.13; Surface Water Monitoring 4.05.13; Drainage – Acid and Toxic Materials 4.05.8; Impoundments 4.05.6, 4.05.9; Stream Buffer Zones 4.05.18:

Dan McGovern of GCC indicated that the King I and II sites had experienced recent rains.

At the King I Mine, the East Pond was dry. Work on this pond needs to continue. This includes cleaning up the vehicle entrance and making sure the pond meets the PAP specifications. The West Pond was muddy on the bottom; no problems were seen with the West Pond's structures. Neither pond was discharging, nor were there any signs that water has discharged from them in recent times.

No issues were found at the SAE near the King I entrance; the silt fences appear to be in good shape. It will be essential that GCC monitor these BMPs closely and frequently if the area continues to be a construction staging area.

At King I, Reach 1 was inspected and found to be in compliance. The inlet at the upper end of Reach 7 has been cleared of sediment. Other drainage structures required repairs at the time of the inspection:

*At the lower end of Reach 3, the larger holes in the pipe have been patched. Additional work is recommended (patching of smaller holes) to prevent clear water from entering the surface water system that drains to the sediment ponds.

* Reach 10 (near the southwest corner of the Refuse Pile) has eroded, and riprap improvements are recommended.

At King II, the silt fence by the entrance road appeared to be functioning.

The East Clearwater Ditch at King II (CWD-2) was found to be generally in good shape. The West Clearwater Ditch at King II (CWD-1) was also found to be generally in good shape. The BMPs below this ditch (sumps at the King II entrance) appear to be functioning well.

Only a small amount of water was in the King II pond, and no problems were seen with the structures.

ROADS – Rule 4.03

Construction 4.03.1(3)/4.03.2(3)

Drainage 4.03.1(4)/4.03.2(4)

Surfacing and Maintenance 4.03.1(5) and (6)/4.03.2(5) and (6)

Reclamation 4.03.1(7)/4.03.2(7):

The road to the Refuse Pile is generally in good shape, and the culverts along the road were clear of sediment. Large rocks have been placed in the drainage ditch along this road to protect trucks. These need to be monitored as they are not the best form of ditch armor; they do not prevent erosion as well as well-placed smaller rocks.

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RECLAMATION SUCCESS - Rule 4.15, Rule 3:

Many Mullein plants were seen around the site (King I and King II). Yellow-flowered plants (likely yellow toadflax), thistle, and tamarisk were seen near the coal storage pile at Coal Stack Tube #2. Thistle was also seen near the southeast corner of the King II pond. GCC staff should spray all of these weeds. It is highly recommended that GCC coordinate with La Plata County weed control professionals regarding the control of weeds at King I and II. This coordination should result in GCC having better knowledge of weeds (e.g., available herbicides, when to spray).

SUPPORT FACILITIES - Rule 4.04:

The primary cut slopes at the mine appear to be stable. This includes the King I facilities area (where portals were located) and the King II portal areas.

Construction of the new fan site has begun –concrete footers are in place. This project was discussed with Jordan McCourt in the office. Jordan indicated that a revised design of the fan will create a new disturbed area, probably less than 0.01 acres. The Division requires that a permit revision (MR) be submitted to show the new disturbed boundary and revised fan configuration. This can be done after the construction is complete; however, before construction continues erosion control must be in place to protect the hillside below this area.

The coal pile near the King II loadout (Stack Tube #1) was not well contained; coal was on the verge of falling into DD1. The coal at Stack Tube #2 was well contained, and no coal was spilling onto the undisturbed area.

TOPSOIL – Rule 4.06

Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:

The vegetation cover on the topsoil stockpile beside Stack Tube #2 at King II is good, however the ring ditch could use some work: the culvert at the south side of the pile is filling with sediment, and the wattles above this culvert should be trenched in better (they are basically sitting on top of the ground but should be two inches or more deep). The existing wattles could be left in place, and new ones added next to them on the up hill side (new ones should be trenched in).

At King I, the recent earth work on the Plant Growth Medium Storage Area (ring ditch) by the old portals looks to be adequate. No sign of erosion or sediment transport off the pile was seen.

ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions were initiated as a result of this inspection, nor are any pending.

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PHOTOGRAPHS

Lower Refuse Pile where material will be added to reduce slope



King I

Surface water system – area where recent maintenance was performed

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King I – erosion in Reach 10



Refuse Pile at King I

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King II – culvert in topsoil stockpile ring ditch



King II – sediment sump near entrance

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AVAILABILITY OF RECORDS**PERMIT RECORDS**

DRMS Permit	Exp. Aug. 2017 *Comment 1
Permit Application w/Revisions	Yes, Thru MR-46
Findings Document	MT07 (Feb 2015) RN06 (Mar 2013)
Insurance Certificate	Exp. Sept. 2017
Bond Document	*Comment 2
Phased Bond Release	NA
Documents/Findings	
Air Emission Permits	Yes (Sept. 2013)
County Special Use Permits	*Comment 3
UG Mining Landowner Notification	Yes
Subsidence Monitoring Reports	2017 Q2
Subsidence Monitoring Data	NA
Rill & Gully Survey	NA
Vegetation Monitoring Data	NA
Specific Variance Approvals	NA
Annual Reclamation Reports	2016
Midterm Review Documents	MT-07
DRMS/OSM Inspection Reports	Thru June 2017
Enforcement Actions	CV-2015-01
Transfers/Succession of Operator	Yes (2007/2008)
Temporary Cessation Notification	NA
Reclamation Cost Estimate (Appendix 12)	MT07 (Feb. 2015) TR26 (Apr. 2016)
CERTIFICATIONS	
Pond Certifications	*Comment 4
Annual Certifications for Impoundments	2016 Q3
Fill Certifications for Excess Spoil or Underground Development Waste	Yes
• Quarterly Inspections	2017 Q2
• Compaction Testing	June 2016
• Final Certification	NA
Coal Processing Waste Banks	NA
Haul Road Certifications	Yes 2009
Access Road Certifications	Yes 2012

HYDROLOGIC RECORDS

NPDES Permit	Exp. June 2013 (Admin extensn.)
NPDES Records	2017 Q2
Stormwater Management Plan	Sept 2012
SPCC Plan	Revised April 2016
MSHA Pond Inspections	NA
State Engineer's Pond Inspection	NA
Quarterly Pond Inspections	2017 Q2
Annual Hydrology Reports	2016
• Ground Water Monitoring	2017 Q2
• Surface Water Monitoring	2017 Q2
• Spring & Seep Monitoring	In progress
• Mine Water Discharge Monitoring	NA
• Mine Inflow Study	NA
• Water Consumption Records	Thru April 2017
Well Permits	Yes

BLASTING RECORDS

Blasting Publication	NA
Blasting Records (3 years)	NA
ATFE Explosives Permit	NA
Blasting Variances	NA
Pre-Blast Surveys	NA

**ADDITIONAL RECORDS
(specify)**

COMMENTS:

***1 RN-07 pending. GCC has right of successive renewal.**

***2 Total bond of \$908,672.76 (includes \$908,107 with Travelers and two small cash bonds).**

***3 Appendix 2(1) of PAP.**

***4 King I ponds in 1998. King II ponds in 2009.**

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