



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: Michael McFarland
Operator Representative Signature: (Field Issuance Only)	

INSPECTION INFORMATION

Inspection Start Date: January 18, 2018 Inspection Start Time: 08:00 Inspection End Date: Inspection End Time:	Inspection Type: Coal Partial 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: 1/22/2018

Inspection Topic Summary

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

- | | |
|------------------------------------|-------------------------------------|
| Y - Air Resource Protection | R - Roads |
| N - Availability of Records | R - Reclamation Success |
| Y - Backfill & Grading | N - Revegetation |
| R - Excess Spoil and Dev. Waste | N - Subsidence |
| NA - Explosives | Y - Slides and Other Damage |
| N - 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 partial inspection was conducted by Rob Zuber of DRMS on January 18, 2018. Michael McFarland of GCC accompanied Rob in the field. The weather was clear and the ground was mostly dry with a small amount of snow in shaded areas.

The King I entrance area is not currently being used as a staging area for the road improvement project.

EXCESS SPOIL and DEVELOPMENT WASTE – Rule 4.09

Placement; Drainage Control; Surface Stabilization:

The un-reclaimed portion of the Refuse Pile (upper portion) had no piles of waste rock, and was in good condition. No puddles were seen on the surface of the Refuse Pile.

A pipe has been added below the rock underdrain of the Refuse Pile. Most of the channel below this pipe has positive grade to move water from the pile, except near the pipe. A small amount of earth work should be done in the channel to improve this situation. Because of the ice and snow in the channel, it could not be seen if stains were present on the soil.

Significant material has been added to the lower portion of the Refuse Pile, and it appears to be well compacted. It appears to be waste from King II and not roadway material.

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 2

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:

As noted in the December 2017 inspection report, near the King I entrance, activities by the road contractor (Four Corners) created a source of sediment that could be transported off site. This problem has been addressed with a berm to direct runoff to a silt fence sump, and hydroseed has been sprayed on the slope between the entrance road and the adjacent pasture. No issues were seen with the sumps and silt fence at the entrance area.

Some of the sediment control wattles near the King I ponds need to be trenched in where they are currently just resting on the ground.

At the King I Mine, the West and East Ponds were dry. No problems were seen with the West Pond's structures (e.g., no rills on the embankment, no obstruction of the spillways).

Other observations of King I structures were made. Below the Reach 10 culvert, the hillside appeared stable. No problems were identified with the portion of Reach 5 that has recently been improved.

Water and ice were in the King II pond (well below the primary spillway outlet), and ice was seen below the pond in the outlet pipes. No problems were seen with the embankment.

The BMPs at the King II entrance appear to be functioning well.

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):

No issues were seen with any roads. The silt fence between the King II entrance road and the pond is functioning well.

RECLAMATION SUCCESS - Rule 4.15, Rule 3:

Some plant near the silt fence along the King II entrance are not especially desirable species (such as perennial grasses), but they do not appear to be noxious weeds. The Division suggests that GCC cut down plants (for example, kochia) that are not in the seed mix or otherwise desirable reclamation species.

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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.

Potential problems were seen with erosion and sediment loading onto the hill below the newly constructed fan. There is a small rill below the culvert that is below the conveyor, and measures should be taken to keep this from getting worse. Branches or wattles in the rill would likely be effective. As recommended in the past, a sump above the culvert would help reduce sediment loading from this area.

The coal at Stack Tube #2 was well contained, and no coal was spilling onto the undisturbed area. At the time of the inspection, there was a relatively small amount of coal at this location.

TOPSOIL – Rule 4.06

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

Vegetation cover is good on the topsoil stockpiles at King II, and no erosion was seen.

At King I, no significant problems were identified with the Plant Growth Medium Storage Areas.

ENFORCEMENT ACTIONS/COMPLIANCE

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

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PHOTOGRAPHS



Hillside below new fan where erosion control is recommended



New fan structure and cut slope above

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Erosion control near King I entrance



Reconstructed embankment of East Pond (King I)

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New material at toe of Refuse Pile



Upper portion of Refuse Pile

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King I facilities

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