




## COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY COAL PROGRAM INSPECTION REPORT



### PERMIT INFORMATION

<b>Permit Number:</b> C-1981-035 <b>Mine Name:</b> King Coal Mine <b>Operator:</b> GCC Energy, LLC <b>Operator Address:</b>  Mr. Tom Bird 6473 County Road 120 Hesperus, CO 81326	<b>County:</b> La Plata <b>Operation Type:</b> Underground <b>Permit Status:</b> Active <b>Ownership:</b> Federal
	<b>Operator Representative Present:</b>  Wade Wymore
<b>Operator Representative Signature: (Field Issuance Only)</b>  This report was issued electronically from the Division's Durango Field Office.	

### INSPECTION INFORMATION

<b>Inspection Start Date:</b> May 29, 2013 <b>Inspection Start Time:</b> 12:20 <b>Inspection End Date:</b> May 29, 2013 <b>Inspection End Time:</b> 15:30		<b>Inspection Type:</b> Coal Complete Inspection <b>Inspection Reason:</b> Normal I&E Program <b>Weather:</b> Clear	
<b>Joint Inspection Agency:</b>  None		<b>Joint Inspection Contacts:</b>	
<b>Post Inspection Agency:</b>  None		<b>Post Inspection Contacts:</b>	
<b>Inspector(s):</b>  Marcia L. Talvitie, P.E.	<b>Inspector's Signature:</b>  		<b>Signature Date:</b>  31-May-2013

**Inspection Topic Summary**

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

**R** - Air Resource Protection**R** - Availability of Records**Y** - Backfill & Grading**R** - Excess Spoil and Dev. Waste**NA** - Explosives**Y** - Fish & Wildlife**R** - Hydrologic Balance**R** - Gen. Compliance With Mine Plan**NA** - Other**NA** - Processing Waste**R** - Roads**Y** - Reclamation Success**R** - Revegetation**Y** - Subsidence**Y** - Slides and Other Damage**R** - Support Facilities On-site**Y** - Signs and Markers**NA** - Support Facilities Not On-site**NA** - Special Categories Of Mining**R** - Topsoil**COMMENTS**

A complete inspection of the King Coal Mine was conducted by me, Marcia Talvitie of the Division, on Wednesday, May 29, 2013. The inspection began at 12:20 p.m. with a records check, and concluded at 3:30 p.m. Skies were clear, and temperatures were in the low 70's. Wade Wymore, the mine's Surface Supervisor, accompanied me throughout the inspections of the King I and King II surface facilities.

**AIR RESOURCE PROTECTION – Rule 4.17:**

- The pads surrounding the coal stack tubes are sprayed down with water each morning to help control fugitive emissions. No issues with respect to air resource protection were observed.

**AVAILABILITY OF RECORDS – Rule 5.02.4(1):**

- The mine's permit records were available for review at the King II surface facilities. DRMS permit volumes are kept at Tom Bird's office, while SWMP and SPCC plans are maintained at Mr. Wymore's office. A completed DRMS Availability of Records checklist is attached to this report.

**EXCESS SPOIL and DEVELOPMENT WASTE – Rule 4.09**

Placement; Drainage Control; Surface Stabilization:

- Coal Mine Waste (development waste) is produced by active operations at the King II underground mine. The waste is hauled by tandem axle dump truck to the King I surface facilities where it is either dumped in the yard area for temporary storage, or is trucked to the top of the permitted valley-fill disposal area ("Refuse Pile") for final placement.
- It appears that additional grading work has been conducted on the top surface of the refuse pile since the April 2013 inspection; the surface has a more uniform cross slope to the south. Compaction tests were conducted on April 24, 2013 and submitted to the Division by Email on May 20. The results showed that although the material was drier than optimum, 99 to 100% relative compaction had been achieved.

- During the April 2013 inspection, the Division had observed that there were a number of non-coal waste items (metal and some wood) protruding from the top surface of the refuse pile. A conscientious effort has since been made to collect those materials in a single location (presently a loader bucket – Photo 1) for disposal in an appropriate manner. As we walked across the pile, we saw a few extraneous objects that still remain to be gathered for removal. The condition has dramatically improved, however, over what was observed previously.

#### 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:

- No significant precipitation has been received during the month of May, and the ground surface throughout the region is dry except where irrigated.
- The King I East Sediment Pond had some water in it (Photo 2), but the West Pond was completely dry. The King II Sediment Pond was also dry.
- The dams for all of the ponds appeared to be stable, and no problems were noted with the primary or emergency spillways.
- Diversion ditches and collection ditches throughout the permit area were dry. Grasses are growing in the riprapped west clearwater diversion ditch at King II (Photo 3). Mr. Wymore said they may be trimmed back later this year. Vegetation is sparse in the east clearwater diversion, probably due to the drier conditions that have existed this year.
- Tumbleweeds have collected at various pipe inlets and outlets. Mr. Wymore noted those sites for necessary maintenance.

#### GENERAL MINE PLAN COMPLIANCE:

- Mining at King II is presently active only within the OSM permit area, north of the surface facilities permitted by the DRMS. Mining of coal on the BLM acreage within the DRMS King II permit has not yet commenced.

#### 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 haul road at King II has been treated with Magnesium Chloride this year to control fugitive emissions and reduce the amount of water that must be applied. The road surface was in excellent condition.

#### REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

- At King II, near the crushed gravel storage area alongside the haul road, we observed an area of Hoary Cress (commonly known as Whitetop) that was in full bloom. This weed is on the State's "List B" for noxious weeds. This weed should be eradicated from the site in order to

prevent the development of a larger infestation. La Plata County weed management information may be found at the following website:

[http://co.laplata.co.us/departments\\_elected\\_officials/general\\_services/weed\\_office](http://co.laplata.co.us/departments_elected_officials/general_services/weed_office)

- Canada thistle rosettes were beginning to appear on the revegetated water line corridor at King II. This weed is also on the State's List B and requires continued management in order to be eradicated from the site.

#### SUPPORT FACILITIES - Rule 4.04:

- A number of the miscellaneous items located at the King II material storage area north of the water tank had been marked with orange spray paint. Those items so marked will be placed into the mine's scrap metal bin for salvage. The current bin was completely filled with scrap metal, but a new bin was delivered to the site during the inspection.
- Work continues on construction of the office/bath/storage building at King II.

#### 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 topsoil stockpile for the King II Sediment Pond was nicely vegetated, and stable with respect to erosion (Photo 4). A containment berm surrounds the pile to prevent any loss of the resource.
- Identification signs for the stockpile have been posted on two trees located between the pile and the haul road. We discussed the possibility of posting signs directly on the pile itself, one at each end, to further identify the pile's contents.

### **ENFORCEMENT ACTIONS / COMPLIANCE**

No enforcement actions were issued as a result of this inspection, and none are pending.





Photo 1 – Collection of non-coal waste from refuse pile



Photo 2 – East Sediment Pond at King I

Number of Partial Inspection this Fiscal Year: 7

Number of Complete Inspections this Fiscal Year: 4





Photo 3 – West Clearwater Diversion Ditch at King II, looking south



Photo 4 – King II Sediment Pond topsoil stockpile, looking S (pond on left, haul road on right)

Number of Partial Inspection this Fiscal Year: 7

Number of Complete Inspections this Fiscal Year: 4

**AVAILABILITY OF RECORDS****PERMIT RECORDS**

DRMS Permit	Yes
Permit Application w/Revisions	Yes
Findings Document	Yes (RN-06)
Insurance Certificate	Yes(Exp.9/1/2013)
Bond Document	Yes
Phased Bond Release Documents/Findings	n/a
Air Emission Permits	Yes
County Special Use Permits	n/a
UG Mining Landowner Notification	Yes
Subsidence Monitoring Reports	Yes
Subsidence Monitoring Data	n/a
Rill & Gully Survey	n/a
Vegetation Monitoring Data	n/a
Specific Variance Approvals	n/a
Annual Reclamation Reports	Yes (thru 2012)
Midterm Review Documents	Yes (MT-06)
DRMS/OSM Inspection Reports/Enforcement Actions (3 Years)	Yes
Transfers/Succession of Operator	Yes (SO-1,2 & 3)
Temporary Cessation Notification	n/a
Reclamation Cost Estimate	Yes (RN-06)
<b>CERTIFICATIONS</b>	
Pond Certifications	Yes
Annual Certifications for Impoundments	Yes
Fill Certifications for Excess Spoil or Underground Development Waste	n/a
• Quarterly Inspections	Yes
• Compaction Testing	Yes
• Final Certification	n/a
Coal Processing Waste Banks	n/a
Haul Road Certifications	Yes
Access Road Certifications	Yes

**HYDROLOGIC RECORDS**

NPDES Permit	Yes(Exp.6/30/2013)
NPDES Records	Yes (2013-Q1)
Stormwater Management Plan	Yes
SPCC Plan	Yes
MSHA Pond Inspections	n/a
State Engineer's Pond Inspection	n/a
Quarterly Pond Inspections	Yes (2013-Q1)
Annual Hydrology Reports	Yes (2012)
• Ground Water Monitoring	Yes
• Surface Water Monitoring	Yes
• Spring & Seep Monitoring	n/a
• Mine Water Discharge Monitoring	n/a
• Mine Inflow Study	n/a
• Water Consumption Records	Yes
Well Permits	Yes (#260656)

**BLASTING RECORDS**

Blasting Publication	n/a
Blasting Records (3 years)	n/a
ATFE Explosives Permit	n/a
Blasting Variances	n/a
Pre-Blast Surveys	n/a

**ADDITIONAL RECORDS (specify)**

Refuse Pile Underdrain	Yes (1993)	—
Monthly Stormwater Insp'n	Yes (May-2013)	—
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**COMMENTS:**

The Storm Water Management Plan (SWMP) and Spill Prevention, Control and Countermeasure (SPCC) plans have been updated within the last couple of years. Mr. Bird said that obsolete versions of the SWMP and SPCC would be removed in order to avoid potential contradictions.