

Permit Number: C-1981-035

Mine Name: King Coal Mine

1313 Sherman Street, Room 215, Denver, CO 80203 P 303.866.3567 F 303.832.8106 http://mining.state.co.us

PERMIT INFORMATION

County: La Plata

Operation Type: Underground

4/12/2017

Operator: GCC Energy, LLC Operator Address: Mr. Tom Bird 6473 County Road 120 Hesperus, CO 81326		Permit Status: Active Ownership: Federal Operator Representative Present: None
Operator Representative Signature: (Field Issuance Only)		
INSPECTION INFORMATION		
Inspection Start Date: April 11, 2017 Inspection Start Time: 10:00 Inspection End Date: Inspection End Time:		Inspection Type: Aerial Inspection Inspection Reason: Normal I&E Program Weather: Clear
Joint Inspection Agency: None		tt Inspection Contacts:
Post Inspection Agency: None		Inspection Contacts:
Inspector(s): Harry B. Ranney	Inspector's Si	

Inspection Topic Summary

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

N - Air Resource Protection R - Roads

 ${f N}$ - Availability of Records ${f N}$ - Reclamation Success

N - Backfill & Grading
 R - Excess Spoil and Dev. Waste
 N - Revegetation
 R - Subsidence

NA - Explosives
N - Slides and Other Damage
N - Fish & Wildlife
R - Support Facilities On-site

 ${f R}\,$ - Hydrologic Balance ${f N}\,$ - Signs and Markers

N - Gen. Compliance With Mine Plan
NA - Support Facilities Not On-site
N - Other
NA - Special Categories Of Mining

N - Processing Waste R - Topsoil

COMMENTS

The King Coal Mine was photographed from an airplane by Harry Ranney of DRMS on April 11, 2017. These photos were reviewed by Rob Zuber of DRMS on April 12, 2017. The weather was mostly clear. The ground was clear of snow at both King I and King II.

EXCESS SPOIL and DEVELOPMENT WASTE - Rule 4.09

Placement; Drainage Control; Surface Stabilization:

The upper (un-reclaimed) portion and the lower portion of the Refuse Pile were inspected, and no problems were seen. Some waste material has been temporarily stored below the pile and should be moved to the pile as soon as practical.

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:

At King I, a drill rig was seen. This equipment is likely affiliated with the well completion operations.

At the King I Mine, the East Pond and the West Pond were inspected. Both ponds were holding water but apparently not discharging. No significant problems were seen with embankments. The West Pond is holding a large amount of sediment, and it should be monitored closely in 2017 to determine if it needs to be cleaned.

At the King I Mine, the Clear Water Diversion Ditch was inspected from the Refuse Pile to the lower end of the site (Reach 1 to Reach 5). The ditch looked stable at all locations. No problems were seen with Reach 6 or any other King I ditches (Reach 10 could not be seen because of the camera angle). The area below the SAE at the entrance exhibited no signs of sediment transport off of the SAE.

Number of <u>Partial</u> Inspection this Fiscal Year: 7 Number of <u>Complete</u> Inspections this Fiscal Year: 3 At King II, along the haul road and near the sediment pond, the line of silt fence appears to be effective in preventing material from being washed by runoff into the vegetation below (see photograph).

The East and West Clearwater Ditches at King II appear to be functioning well; no signs of erosion or other problems were seen.

The King II pond contained a small amount of water and was not likely discharging. No issues were found with the embankment. A large percentage of the bottom surface area of the pond is covered with coal fines; this is to be expected, but does indicate that additional erosion control practices in the facilities area would provide additional protection for the water quality of potential discharges. Since the pond almost never discharges, this issue is far from critical.

ROADS – Rule 4.03 Construction 4.03.1(3)/4.03.2(3) Drainage 4.03.1(4)/4.03.2(4) Surfacing and Maintenance4.03.1(5) and (6)/4.03.2(5) and (6) Reclamation 4.03.1(7)/4.03.2(7):

The roads at King II appeared to be in very good shape. No problems were seen with King I roads.

SUBSIDENCE – Rule 4.20:

A relatively new reservoir was seen about one half mile south of the King I facilities area, on the Huntington Irrigation Ditch. This structure should be monitored for subsidence impacts. (It should also be discussed in the PAP, both in the description of surface water (Rule 2.04.7) and in the subsidence section (2.05.6); this should be added to the King I PAP as part of upcoming renewal adequacy responses.)

No damage from subsidence was seen in any of the affected areas.

SUPPORT FACILITIES - Rule 4.04:

No problems were seen at the King I or King II facilities areas.

TOPSOIL - Rule 4.06

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

At King I, the berm around the Plant Growth Medium Storage Area near the old Tipple Bench appears to be functioning well and keeping the soil in place (although, as noted in past reports, a sump at the southeast corner would be an additional BMP that would protect this resource).

No problems were seen with the Topsoil Stockpiles at King II. They appear to be well vegetated, and there are no signs that the soil has been transported off the piles by runoff.

Number of <u>Partial</u> Inspection this Fiscal Year: 7 Number of <u>Complete</u> Inspections this Fiscal Year: 3

ENFORCEMENT ACTIONS/COMPLIANCE

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

PHOTOGRAPHS



King I Mine and portion of Hay Gulch valley

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Pond on affected area -part of Huntington irrigation system



Portion of King II haul road, with silt fence and pond embankment



King II lower facilities



King II upper facilities and portion of affected area