




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



### PERMIT INFORMATION

<b>Permit Number:</b> C-2009-087 <b>Mine Name:</b> Peabody Sage Creek Mine <b>Operator:</b> Peabody Sage Creek Mining LLC <b>Operator Address:</b> Mr B. Scott Cowman P.O. Box 250 36600 Routt County Road 27 Hayden, CO 81639	<b>County:</b> Routt <b>Operation Type:</b> Underground <b>Permit Status:</b> Active <b>Ownership:</b> Federal
<b>Operator Representative Present:</b>	
<b>Operator Representative Signature: (Field Issuance Only)</b>	

### INSPECTION INFORMATION

<b>Inspection Start Date:</b> March 18, 2013 <b>Inspection Start Time:</b> 12:00 <b>Inspection End Date:</b> March 18, 2013 <b>Inspection End Time:</b> 14:30	<b>Inspection Type:</b> Coal Partial Inspection <b>Inspection Reason:</b> Normal I&E Program <b>Weather:</b> Cloudy
<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>  Leigh D. Simmons  Jason D. Musick	<b>Inspector's Signature:</b>  <b>Signature Date:</b>  March 25 <sup>th</sup> , 2013

**Inspection Topic Summary**

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

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

This was a partial inspection carried out by Leigh Simmons and Jason Musick of Colorado Division for Reclamation, Mining and Safety (DRMS). On arrival at the mine no staff were on-site, so the inspection proceeded unaccompanied. The weather was overcast with gusty winds and occasional light snow. The temperature was around freezing and ground cover was a mix of snow, ice and mud.

No coal was being produced at the mine, with only permitted construction and maintenance activities taking place.

**EXPLOSIVES – Rule 4.08**

Distance Prohibitions 4.08.4; Warnings 4.08.4; Control of Adverse Effects 4.08.4:

The explosives storage area was snow covered. The chain link fence was intact, with the gate locked (see photo 1).

**FISH and WILDLIFE – Rule 4.18:**

No raptors were visible in the nest on the cliff of the Twentymile Sandstone outcrop to the east of road B, although a large bird of prey (possibly a Turkey Vulture) was observed circling nearby.

**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:

**Pond 4** was not inspected.

**Pecoco Pond** was frozen on the surface, but there was a small flow into the Upper Sump through the primary spillway. The embankment and emergency spillway were snow-covered but appeared stable (see photo 2).

The **Upper Sump** was similarly frozen and snow-covered (see photo 3). No problems were observed. A small flow was discharging through the primary spillway. Flow from the Upper Sump is conveyed under Road C through culvert SC-16, then back under Road B through culvert SC-19, to the Lower Sump. The culverts had been buried by snow but were inspected and found to be clear (see photos 4&5).

The **Lower Sump** was holding water and was partially frozen on the surface. The embankments were snow-

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covered and appeared stable. The Lower Sump was not discharging.

**Pond 2** was holding water and mostly frozen on the surface. The combined primary/emergency spillway was discharging water through culvert 9A, beneath Road B, to the wetland area above the confluence of Little Grassy Creek and Grassy Creek (see photos 6&7). The NPDES point at the outlet of the pond 2 combined spillway is subject to a numerical limit for Selenium. Exceedences of this limit have been recorded within the last two years, although recent discharge monitoring reports have shown Selenium levels back below the limit. The values of the numerical limit; the extent to which disturbance at Sage Creek Mine has elevated background Selenium levels; and possible mitigation strategies are the subject of ongoing debate between Mr Cowman, on behalf of Peabody Sage Creek Mining, and the Colorado Water Quality Control Division. DRMS asks to be kept fully informed as the situation develops.

**Pond 3** was holding water and discharging through the NPDES monitoring point. No problems were observed.

As a result of recent warm temperatures, spring melt appears to be underway a little earlier than might be expected (for example, runoff from the road was flowing in the ditch at the entrance to the mine site). In general the ditches and culverts around the site appeared to be in good condition and ready to convey the runoff. In particular:

- Culverts 53A and 64A were clear;
- Culvert SC 18 was clear and undamaged despite the recent disturbance caused by the project to erect the power poles;
- The power pole project has created a muddy mess and compromised the ditch across the area (see photos 8&9). **Ditch FA-D1 should be re-established;**
- A breach had been made in the ditch on the east side of Road B in order to drain the road through a culvert to the north of culvert 9A (see photos 10&11). **The roadside ditch should be re-established, or if that is found to be ineffective, the surface water scheme should be re-designed and the permit revised.**

#### GENERAL MINE PLAN COMPLIANCE:

A culvert just to the north of culvert 9A was conveying water underneath Road B to the wetlands. The culvert is not currently identified on map 2.05.3 M4 Drainage and Sediment Control Plan (see photos 12&13). **The culvert should be identified and the permit updated as necessary.**

Also in this area, straw bales had been stockpiled along the southern bank of Little Grassy Creek. The Division acknowledges that the disturbance caused has been minimized by transporting the bales by snowmobile over frozen ground, however the area where the bales were stockpiled is outside of the currently approved disturbed area boundary, and therefore Peabody Sage Creek Mining is not in compliance with the approved permit.

Retrospective permitting actions are strongly discouraged, but in this case **it would be appropriate to submit an application relating to the stockpiling of the bales.** Note that any deployment of bales into Little Grassy Creek must not take place until an application to revise the permit, together with appropriate supporting evidence, has been received and approved by the Division.

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**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)

Road A was snow-packed and impassable. Roads B, C, D, E-2, F and the Pecoco Embankment Road had been plowed and were in good condition as far as the approved southern disturbance boundary.

**SUPPORT FACILITIES - Rule 4.04:**

The substation pad was inspected. The site appeared stable, the fence was intact and the area secure. Contractors were working to install a power line from the substation up to the million gallon water tank, the muddy conditions meant that a considerable disturbance had been caused, however no off-site impacts seem likely.

**SIGNS AND MARKERS – Rule 4.02:**

Mine ID signs were in place.

**Topsoil stockpiles need to be sign-posted.**

**DOCUMENTS RECEIVED**

N/A

**OTHER (SPECIFY)**

N/A

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**ENFORCEMENT ACTIONS/COMPLIANCE**

No enforcement actions are necessary at this time.

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## PHOTOGRAPHS



Photo 1: Explosives area



Photo 2: Pecoco Pond



Photo 3: Upper Sump



Photo 4: Culvert SC-16 buried



Photo 5: Culvert SC-16 flowing



Photo 6: Pond 2

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Photo 7: Pond 2 discharge



Photo 8: Power pole disturbance



Photo 9: Power pole disturbance (2)



Photo 10: Breach in roadside ditch



Photo 11: Breach in roadside ditch (2)

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Photo 12: Culvert 9A, and Little Grassy Creek wetland



Photo 13: Unidentified culvert just north of 9A, and Little Grassy Creek wetland

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