




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



### PERMIT INFORMATION

<b>Permit Number:</b> C-1981-019 <b>Mine Name:</b> Colowyo Coal Mine <b>Operator:</b> Colowyo Coal Company L.P. <b>Operator Address:</b> Mr. Tony Tennyson 5731 State Highway 13 Meeker, CO 81641	<b>County:</b> Moffat, Rio Blanco <b>Operation Type:</b> Surface <b>Permit Status:</b> Active <b>Ownership:</b> Federal
	<b>Operator Representative Present:</b>  Tony Tennyson
<b>Operator Representative Signature: (Field Issuance Only)</b>  	

### INSPECTION INFORMATION

<b>Inspection Start Date:</b> June 11, 2013 <b>Inspection Start Time:</b> 08:30 <b>Inspection End Date:</b> June 11, 2013 <b>Inspection End Time:</b> 12:00		<b>Inspection Type:</b> Coal Partial Inspection <b>Inspection Reason:</b> Normal I&E Program <b>Weather:</b> Windy	
<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  Daniel I. Hernandez	<b>Inspector's Signature:</b>  		<b>Signature Date:</b>  June 13, 2013

**Inspection Topic Summary**

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

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

**COMMENTS**

This was a partial inspection carried out by Leigh Simmons and Dan Hernandez of Colorado Division of Reclamation, Mining and Safety. Tony Tennyson of Colowyo Coal Company accompanied the inspection throughout. The weather was clear, dry and very windy. The ground surface was dry.

Colowyo is an active surface mine which employs ~250 people in 4 crews, and operates on 2x12 hour shifts. The mine was in active production at the time of the inspection. Work was ongoing to complete the box cut in the South Taylor pit. The large excavator was cutting the G7 seam using a 29 cubic yard bucket. One more seam remains before the box cut is complete. The larger shovel with the 50 cubic yard bucket was not active. The geology of the coal seams has been more rolling than was expected from the exploration data. The steeper dipping seams have made mining using the shovel more difficult since it is unable to operate on grades steeper than 6% without risk of shearing the center pin.

**AIR RESOURCE PROTECTION – Rule 4.17:**

During the inspection operations were shut down due to exceedence of the 100 µg/L air quality standard, caused by very strong winds. This is an internal standard; compliance with the air quality permit is based on a 24 hour average. Dust is controlled around the site by two water trucks which run continuously and were operating throughout the inspection.

**BACKFILL and GRADING – Rule 4.14**

Contemporaneous Reclamation 4.14.1; Approximate Original Contour 4.14.2; Highwall Elimination 4.14.1(2)(f); Steep Slopes 4.14.2, 4.27; Handling of Acid and Toxic Materials 4.14.3; Stabilization of Rills and Gullies 4.14.6:

The West Taylor Valley fill was inspected from above. The bottom of the fill has already been reclaimed. Mr Tennyson plans to grade the upper slope, as far as the road, to its final contour this year.

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Number of Complete Inspections this Fiscal Year: 4

**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:

The erosion in the prospect ditch, noted in a previous inspection report, had been repaired.

**RECLAMATION SUCCESS - Rule 4.15, Rule 3:**

The recently reclaimed area at the southern end of the East Pit showed some erosion on the slope above the contour ditch (see photo 1). Mr Tennyson plans to repair this when the ground is sufficiently dry. From a distance there appeared to be plenty of green cover on the slope. Moving north from there, through successively older reclamation, showed excellent revegetation.

**REVEGETATION – Rule 4.15****Vegetative Cover; Timing:**

Colowyo Coal Company has been pioneering in the use of variable topsoil depths to encourage species diversity (in particular, shrub growth in areas with thinner topsoil depths near the top of ridgelines and slope crests), and received a reclamation award in 2012 for this work. The long term results of these novel practices would make a valuable contribution to the academic literature, should Colowyo wish to publish them.

Vegetation sampling is carried out annually by Cedar Creek Associates, with the results used to inform future reclamation plans and applications for bond release.

**DOCUMENTS RECEIVED**

N/A

**OTHER (SPECIFY)**

N/A

**ENFORCEMENT ACTIONS/COMPLIANCE**

No enforcement actions are necessary at this time.

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**PHOTOGRAPHS**



Photo 1: Erosion at south end of East Pit reclaimed area



Photo 2: Prospect ditch (1)

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Photo 3: Prospect ditch (2)



Photo 4: West Taylor Valley fill

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Photo 5: Excavator loading truck in South Taylor pit



Photo 6: Excavator shut down to protect air quality

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Photo 7: Idle shovel



Photo 8: Loadout

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