



## 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>	
<b>Operator Representative Signature: (Field Issuance Only)</b>	

### INSPECTION INFORMATION

<b>Inspection Start Date:</b> October 22, 2013 <b>Inspection Start Time:</b> 13:30 <b>Inspection End Date:</b> October 23, 2013 <b>Inspection End Time:</b> 16:30	<b>Inspection Type:</b> Coal Partial 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>  Robert D. Zuber, P.E.	<b>Inspector's Signature:</b>  <i>Robert D. Zuber</i>  <b>Signature Date:</b>  10/28/2013

**Inspection Topic Summary**

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

**R** - Air Resource Protection  
**N** - Availability of Records  
**R** - Backfill & Grading  
**R** - Excess Spoil and Dev. Waste  
**R** - Explosives  
**N** - Fish & Wildlife  
**R** - Hydrologic Balance  
**R** - Gen. Compliance With Mine Plan  
**N** - Other  
**NA** - Processing Waste

**R** - Roads  
**R** - Reclamation Success  
**R** - Revegetation  
**NA** - Subsidence  
**N** - Slides and Other Damage  
**N** - Support Facilities On-site  
**R** - Signs and Markers  
**NA** - Support Facilities Not On-site  
**NA** - Special Categories Of Mining  
**R** - Topsoil

**COMMENTS**

A partial inspection was conducted by Rob Zuber of DRMS on October 22 and 23, 2013 (half day on 22nd). Colowyo employees who participated in the field inspection included Elliott Russell (October 22nd and part of October 23rd) and Kurt Blunt (part of October 23rd). The weather was clear on both days. The ground was mostly dry.

Major mining and reclamation activities on site included:

- In the West Pit, the final advance (south end) is underway. Two drill rigs were on site; one was actively drilling in D seam overburden. The 103 dragline was moving spoil in the West Pit during part of the inspection.
- In the southwest corner of South Taylor Pit a truck/loader operation was removing F1 overburden. The floor of the pit (G8 seam) has been leveled for the highwall mining operation. The 114 shovel was idle during the inspection but has been removing overburden to enable the pit to extend to the west.
- Scrapers continue to work on the West Pit spoil pile – reclamation is nearly done in this area (“Hink’s Peak”).
- Blasting – see below.

No unapproved activities were observed in the Lower Wilson area. This area was seen from County Road 51.

**AIR RESOURCE PROTECTION – Rule 4.17:**

Water trucks were seen throughout the inspection controlling dust from the roads.

**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:

As noted in the general narrative, scrapers continue to work on the West Pit spoil pile. Reclamation is nearly done in this area (“Hink’s Peak”).

Number of Partial Inspection this Fiscal Year: 4

Number of Complete Inspections this Fiscal Year: 1

EXCESS SPOIL and DEVELOPMENT WASTE – Rule 4.09 □ Placement; Drainage Control; Surface Stabilization:

Rills have been repaired on the surface of the West Taylor Fill and have not opened up again (as seen from the West Taylor Pond), and vegetation is growing in these areas. The side drains of this fill remain stable.

Colowyo is still working on the upper portion of the West Taylor Fill.

EXPLOSIVES – Rule 4.08 □ Distance Prohibitions 4.08.4; Warnings 4.08.4; Control of Adverse Effects 4.08.4:

An overburden shot (appeared to be F1 Seam) was observed in the South Taylor Pit on October 22. Some safety procedures (sirens, radio communication) were observed; blockers were out of sight but appeared to be in place (the only vehicle moving in the area was a blaster's truck).

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:

Some observed ponds were holding water but not discharging: Section 16, Prospect, and West Pit Pond. The following ponds were discharging: Streeter and West Taylor. The Section 28 pond was dry. For all discharging ponds, no sign of pollutants was observed. No major problems were found with embankments or other structures.

Prospect Pond was being cleaned during the inspection with a long-reach excavator. Per Kurt Blunt, the material was being hauled to an area near Wilson Reservoir. Mr. Blunt also said that a water quality sample was taken when de-watering operations began and that this is in compliance with Water Quality Control Division requirements.

The following observations were made regarding ditches:

- In the Section 29 Ditch, repairs have been made to provide positive drainage.
- The western-most segment of Section 28 Ditch was inspected, and no problems were identified. Regarding the liner at the lower end, rocks have been placed to keep the liner in place. This area must continue to be monitored, and, if the problem gets worse, additional measures may be needed.
- Taylor Tributary Ditch and Taylor Ditch were found to be stable.
- In the lower portion of Prospect Ditch where repairs were performed, wattles have been re-staked. There is no erosion in the channel. Contour ditches in this area are in good shape.

Sump #1 along Taylor Creek has been cleaned.

The following surface water monitoring sites were checked to determine if map locations are accurate: LTC, LGSC, and UWFGSC. This was done using GPS and the water sampling map from the PAP.

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**GENERAL MINE PLAN COMPLIANCE:**

The Colowyo Coal Mine was generally found to be in compliance with the mine plan.

**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):

Haul roads were in good shape.

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

In the East Pit, the rill on the south side of Final East Pit Ditch, which has been noted in past inspections, still requires repair; wet weather has prevented the ability for Colowyo to put equipment in this area without causing problems. The rill near Gulch A (also noted before) has been repaired.

The West Pit reclamation, including the large spoil pile that is near the end of grading operations, was observed from the large runaway truck ramp at the south end. No erosion or other problems were observed.

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

On the West Pit spoil pile (“Hink’s Peak”) the surface had been roughened well to prepare for seeding.

No large patches of weeds were observed other than cheat grass.

**SIGNS AND MARKERS – Rule 4.02:**

Several permit boundary signs were seen along County Road 51, depicting both Lower Wilson and the Collom 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:

The upper ring ditch for topsoil stockpile 16D has blown out in a couple areas near the northeast corner of the stockpile. Also, as reclamation proceeds in the East Pit, the ring ditches may incur more damage. Colowyo staff has indicated that they will repair the damaged areas and consider the need to establish a ring ditch that is closer to the stockpile.

Topsoil depths on the West Pit spoil pile (“Hink’s Peak”) were checked by Elliott Russell during the inspection. The area checked should have four inches of topsoil. The measured depths were greater than four inches at several locations, but the final data will determine if some of it should be removed. Colowyo staff is compiling the data. Mr. Russell’s methodology appeared to be sound as the locations were determined randomly and the interface of topsoil and overburden was determined using adequate criteria (color, texture, and difficulty of digging).

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### **ENFORCEMENT ACTIONS/COMPLIANCE**

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

### **PHOTOGRAPHS**



**West Pit, final advance**

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**Section 29 Ditch – completed repair**



**Section 28 Ditch – damaged liner**

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**Prospect Pond cleaning operations**



**Rills near Final East Pit Ditch**

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**Prospect Ditch wattles**



**West Pit reclamation (from runaway truck ramp)**

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**West Pit reclamation – left side has been disked**

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