




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



## PERMIT INFORMATION

<b>Permit Number:</b> C-1982-056 <b>Mine Name:</b> Foidel Creek Mine <b>Operator:</b> Twentymile Coal, LLC <b>Operator Address:</b> Mr Jerry Nettleton 29515 Routt County Road No. 27 Oak Creek, CO 80467	<b>County:</b> Routt <b>Operation Type:</b> Underground <b>Permit Status:</b> Active <b>Ownership:</b> Federal
	<b>Operator Representative Present:</b>  Brian Watterson
<b>Operator Representative Signature: (Field Issuance Only)</b>  	

## INSPECTION INFORMATION

<b>Inspection Start Date:</b> March 19, 2013 <b>Inspection Start Time:</b> 08:00 <b>Inspection End Date:</b> March 19, 2013 <b>Inspection End Time:</b> 16:00		<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>  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 &amp; Grading

NA - Excess Spoil and Dev. Waste

N - Explosives

Y - Fish &amp; Wildlife

R - Hydrologic Balance

R - Gen. Compliance With Mine Plan

R - Other

R - Processing Waste

R - Roads

N - Reclamation Success

N - Revegetation

Y - 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). Brian Watterson of Twentymile Coal accompanied the inspection throughout. The weather was sunny with temperatures around freezing. Mining was in progress in the Western Mining District.

Foidel Creek Mine produced ~8 million tons of coal last year, and expects to produce a similar amount this year. Approximately 450 people are currently employed at the mine.

At the time of the inspection, the longwall was nearing the end of panel 14, and continuous miners were extending the gate road of panel 13 and establishing access to panel 12. Permit Revision No. 9 was still under review by DRMS. Technical Revision No.82 had been submitted and found complete and adequate; the proposed decision to approve the revision was made on Thursday 3/14/2013. A public notice was posted in the Steamboat Pilot & Today on Sunday 3/17/2013. If no comments are received by members of the public in the subsequent 10 days, TR82 will be approved on Wednesday 3/27/2013 at 5pm.

**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 Foidel Creek Mine permit boundary is within the Twentymile Park synclinal basin. Groundwater generally flows towards the north-east, although there are piezometric head gradients in other directions within the permit area. There are three perennial streams within the permit boundary, Foidel Creek, Trout Creek and Fish Creek, which also flow towards the north-east. According to Mr Watterson, most of the water used at the Foidel Creek Mine is used within a closed loop, but the mine is probably a net discharger of water as opposed to a net consumer. Mining was completed in the Eastern Mining District in the mid '90s, but these workings continue to be dewatered to prevent flooding other parts of the mine. The water extracted is held in an MSHA permitted impoundment near to the 6 Main North ventilation shaft. The water does not discharge from this impoundment, but is pumped to the main facilities area for use in the wash plant, and to a million gallon holding tank from which water is used for

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

dust control. The embankments of this impoundment were stable, (see photos 1&2).

Runoff from the 6 Main North Ventilation Shaft pad reports to a sediment pond north of the million gallon water tank. According to Mr Watterson, this pond rarely discharges, (it didn't discharge in the big spring melt of 2011), but if it were to discharge water would flow through an NPDES monitoring point, through a small tributary to a stock pond, which in turn would discharge to Fish Creek. The banks of the pond were snow-covered, no problems were observed.

Fish Creek Tipple was not inspected.

The Fish Creek Borehole dewater the old workings of the Western Mining District (the oldest part of the mine). The water used to be treated with sodium hydroxide to raise the pH sufficiently to precipitate metals, before discharging to Fish Creek. The current scheme has the mine water treated by electro-coagulation before passing through a series of three baffled ponds with the aim of removing Iron and Manganese so that the water can be used for dust control without causing scaling of the equipment. Discharge to Fish Creek is avoided; overflow from the third pond runs back into the mine workings. The ponds were full, the embankments were sound but the baffles appeared to be in need of maintenance, (see photo 3).

The 18-Left Ventilation Shaft area is similar in configuration to the 6 Main North area. It serves the current mining area (the new Western Mining District). Runoff from the pad is treated by a series of sediment ponds with an NPDES point at a flume below them. The ponds rarely discharge, through an unnamed tributary, to Fish Creek. No problems were observed in this area.

The 16-Left Utility borehole pad is permitted as an SAE. The pad was generally in good shape; however a slump had occurred in the berm on the south side, possibly as a result of snow-plowing, (see photo 4). **The berm on the outside of the pad should be re-built.** Also on this pad was an uncovered pail for the disposal of oil-soaked diapers, (see photo 5). **The pail should be covered.**

Within the facilities area, "the pit" and ponds D, E, C, B and A were inspected. The embankments of all appeared to be stable. The Pit is not permitted as a sediment pond and is incised rather than impounded by embankments. It receives road run-off and the outflow of the down drain under the RDA. The pit discharges to pond D, which was observed to be discharging through its NPDES monitoring point, (see photo 6). Ponds E and C were not discharging. Pond B could have been discharging, but the outlet was blocked by snow/ice and a definitive observation could not be made (see photos 9&10). **The outlet to pond B should be cleared.**

Pond A has been approved as permanent and received bond release. The NPDES permit was removed from its outlet. Peabody stocks the pond with trout for the benefit of employees and a dam controlled discharge helps to maintain a perennial flow in Foidel Creek. Water from pond A is also pumped to the old million gallon tank.

The 12" culvert underneath the road to the SE of the Brown Palace was clear.

The unidentified culvert(s) east of pond C were covered with snow at the inlet side. On the outlet side there was some evidence of erosion through the berm on the road-side (see photos 7&8). **Maintenance is needed in this area.**

#### GENERAL MINE PLAN COMPLIANCE:

At the time of the inspection Twentymile Coal was out of compliance with the approved mine plan. The continuous miners operating in the gate road of panel 13-Left and the main of panel 12-Left were outside of the approved mining boundary. No mining had taken place beyond the approved permit boundary. Technical Revision No. 82, which, barring public comment, will be approved on 3/27/2013, revises the mining boundary and permit boundary to allow for the extension of panel 13-Left and the addition of panel 12-Left and will bring the mine into

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

compliance. Bill Bennet, Mine Manager of Twentymile Coal, and David Berry, Coal Program Director of DRMS, agreed that Twentymile Coal would proceed with mining. A Notice of Violation would not be issued on this occasion, given the mitigating circumstances. DRMS wishes to advise Twentymile Coal that such leniency should not be expected.

**OTHER (SPECIFY):**

In the portal area, dumpsters have been brought in to hold non-coal waste. **The dumpsters need to be moved onto the concrete pad, where they are permitted to be.**

**PROCESSING WASTE/COAL MINE WASTE PILES – Rule 4.10 and 4.11**

Drainage Control; Surface Stabilization; Placement:

The RDA, as permitted, is sufficient to see Foidel Creek Mine to the end of its life, and also to take the first few years worth of refuse from the Peabody Sage Creek Mine when it begins production. Refuse was being deposited on the second lift. The pile was stable and the down drain was inspected, with no problems observed, (see photos 11&12).

**SUPPORT FACILITIES - Rule 4.04:**

The old wash plant is used for storage of recyclable material and hazardous waste. No problems were observed.

**SIGNS AND MARKERS – Rule 4.02:**

Mine ID signs were in place.

Topsoil piles were identified by signposts.

**DOCUMENTS RECEIVED**

N/A

**OTHER (SPECIFY)**

N/A

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

**ENFORCEMENT ACTIONS/COMPLIANCE**

No enforcement actions are necessary at this time.

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

## PHOTOGRAPHS



Photo 1: 6-Main North impoundment



Photo 2: 6-Main North ventilation shaft



Photo 3: Overflow from third pond at Fish Creek Borehole



Photo 4: Slump in berm at the 16-Left Utility borehole pad SAE



Photo 5: Uncovered pail at the 16-Left Utility borehole pad SAE



Photo 6: Discharge from pond D

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3





Photo 7: Covered culverts near pond C



Photo 8: Erosion near pond C



Photo 9: Muddy road near pond B



Photo 10: Pond B



Photo 11: RDA down drain



Photo 12: RDA

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3