




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



PERMIT INFORMATION

Permit Number: C-1981-014 Mine Name: Southfield Mine Operator: Energy Fuels Coal, Inc. Operator Address: Mr George Patterson P.O. Box 459 Florence, CO 81226	County: Fremont Operation Type: Underground Permit Status: Permanent Cessation Ownership: Private
	Operator Representative Present: George Patterson
Operator Representative Signature: (Field Issuance Only)	

INSPECTION INFORMATION

Inspection Start Date: September 17, 2012 Inspection Start Time: 12:00 Inspection End Date: September 28, 2012 Inspection End Time: 10:00	Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Cloudy
Joint Inspection Agency: None	Joint Inspection Contacts:
Post Inspection Agency: None	Post Inspection Contacts:
Inspector(s): Janet H. Binns Dan Hernandez Leigh D. Simmons	Inspector's Signature:  Signature Date: 9/25/12

Inspection Topic Summary

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

Y - Air Resource Protection

R - Availability of Records

Y - Backfill & Grading

NA - Excess Spoil and Dev. Waste

NA - Explosives

Y - Fish & Wildlife

R - Hydrologic Balance

R - Gen. Compliance With Mine Plan

NA - Other

R - Processing Waste

R - Roads

R - Reclamation Success

R - Revegetation

R - Subsidence

Y - Slides and Other Damage

Y - Support Facilities On-site

R - Signs and Markers

R - Support Facilities Not On-site

NA - Special Categories Of Mining

Y - Topsoil

COMMENTS

This was a complete inspection conducted by Janet Binns of CDRMS. Mr. Dan Hernandez and Mr. Leigh Simmons of DRMs accompanied the inspection as well. Mr. George Patterson of Energy Fuels Coal, Inc met the inspectors on site. Mr. Patterson stayed while the inspectors were conducting the MW-NW inspection with the borehole camera. Mr. Patterson left prior to the inspectors continuing the inspection on the portal area and RDA. The records were inspected at the EFCI Florence office on September 21st. Mr. Gary Carroll met the inspector at the EFCI Florence office and provided access to the records.

AVAILABILITY OF RECORDS – Rule 5.02.4(1):

Mine records were checked in the EFCI office on 9/21/2012. Mr. Gary Carroll provided access to the records. Records were found complete and up to date.

Liability insurance policy expires October 1, 2012. A new certification needs to be submitted to the Division and stored with the public records to remain in compliance with rule 2.03..9, prior to expiration of the current policy.

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:

On August 28, 2012, EFCI provided documentation to the Division that the cable had been removed from MW-NW. The Division used a borehole camera to confirm the removal of the cable and document the status of the monitoring well.

The camera showed intact casing throughout the monitoring well. The cable had previously been encountered at 334 ft. below the top of the well casing. The cable had been successfully removed. At 352.5 ft. below the casing, EFCI's water probe was encountered. The probe consisted of a piece of wooden 2x4 (approximately 8 to 10 inches long according to George) with a rope threaded through it then connected to a 1/16 inch steel cable. a small piece of steel cable could be seen below the wooden 2x4. The 2x4 is setting at the 352.5 foot level. It was unclear

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what the “probe” is sitting on. It appears that there may be rocks or other obstructions below the probe. The camera was limited by the wooden 2x4 from seeing below the wooden 2x4. George stated that the probe became stuck on March 22, 2012 when he was monitoring the MW-NW well. The well appeared dry at the level of the probe. No standing water was observed at the base of the probe at the level of the obstruction. The Division successfully recorded a DVD video of the condition of the well and the obstruction of the probe using the borehole camera. Please note that EFCI’s letter dated August 28, 2012, reports the probe and obstruction depth at 356 ft. below the top of the casing. This is a variance of 3.5 ft or 1% error between the Division’s measurement and EFCI’s.

Pond 4 was dry. No problems were observed with Pond 4.

Pond 5 was dry. Although the vegetative cover on the east side of the pond is thin, all material is contained in the pond.

Ditches within the permit area boundary are functional and performing in accordance with their design.

Both ponds at the load out were dry. No trash has been deposited in either pond. The primary spillway at Load out Pond 1 (east pond) needs material dug away from the top of the discharge inlet. Material from the pond embankment is sloughing off and into the primary riser. EFCI needs to assure that dirt and soil material does not spill into the discharge structure and needs to remove material that has sloughed into the pipe. The primary riser is also missing the decant gated valve. EFCI needs to repair the primary riser to the approved design. (Map 26)

SAE’s at the Monarch fan site, former rock dust tank area, and at the substation are well vegetated and functional.

GENERAL MINE PLAN COMPLANCE:

EFCI has removed the portable fuel tank and the 5 gal. gas jugs from the site. Minor oil leaks (drips) from the grader and the backhoe were confined to small area immediately under the machinery. EFCI commits to cleaning up hydrocarbon affected material and disposing properly prior to final bond release. All areas with equipment drain to Pond 5.

PROCESSING WASTE/COAL MINE WASTE PILES – Rule 4.10 and 4.11 Drainage Control; Surface Stabilization; Placement:

The RDA appeared stable. There were no signs of gullyng, slumping, or subsidence in the area of the RDA. Vegetation for the most part looked good. The growing season started out very dry with moisture coming late in the growing season. The southwest slope exhibits thinner vegetation than observed previously as a result of the dry early season conditions. Perennial species are still present, though in reduced size. The slopes are remaining stable and not eroding. Good species diversity was evident on the top and north slopes of the RDA.

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):

EFCI has reinforced the road cut immediately north of the access road turn off to the Monarch fan road. Runoff from the Southfield access road enters the drainage north of Pond 5 at this location.

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A large sediment fan remains at the locked green access gate across the County Road. This gate is located east of the Southfield permit area boundary. The source of the sediment appears to be from the north side of the County road east of the permit area boundary.

Runoff from the access road to the Monarch fan still needs to be managed and armoring the point where the runoff is directed northward into the drainage is necessary.

EFCI has cut water bars into the access road. These water bars have been effective in directing runoff into the subsequent ditches, which report to Pond 5.

RECLAMATION SUCCESS - Rule 4.15, Rule 3:

Some rilling was noted on the slope north of the gravel pad area at the portal reclamation area. Rill repair is warranted in this location. (photo)

Erosion control measures are needed at the top of the slope on the northeast side of the truck tunnel. Runoff is concentrating and running down this slope. Dispersion of the flow path and rill mitigation is recommended at this location (photo)

REVEGETATION – Rule 4.15 Vegetative Cover; Timing:

Vegetation throughout the reclaimed portal area is diverse and appears robust. Late season moisture has benefited warm season grasses. Shrubs and small trees, pinyon, ponderosa and juniper, were present throughout the reclaimed portal area.

SUBSIDENCE – Rule 4.20:

The subsidence features previously noted south of the Thompson driveway have not yet been repaired. Section 4.20.3 of the Southfield permit commits EFCI to "restore affected lands to a condition comparable to that existing prior to subsidence." To date, EFCI has not provided the Division with a plan for mitigation of the identified subsidence holes.

SIGNS AND MARKERS – Rule 4.02:

Disturbance area boundary markers are needed at the reclaimed rock dust storage area. Disturbance area marker along the access road to the substation have been knocked down and need to be reinstalled. The damaged marker at the turnoff from the substation road to the Thompson ranch is broken as to present a vehicle tire hazard and needs to be removed and replaced.

OFFSITE SUPPORT FACILITIES - Rule 4.04, 4.28:

The load out was inspected. The site was dry. Gates to both the east and west side of the load out were open. Rail cars were being stored on the tracks. Although no damage was noted, recent trespass tire tracks were evident on the west side of the property. The berms at the previous permit boundary trespass points appear effective and have not been damaged. Vegetation on the reclaimed portions of the load out appears stable and

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effective. No erosional features were noted. Maintenance is needed on the primary spill way of Pond L1.

DOCUMENTS RECEIVED NA

OTHER (SPECIFY)

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ENFORCEMENT ACTIONS/COMPLIANCE

The Division was notified of the subsidence features in November 2011. The Division documented the location and extent of these features in December 2011. EFCI provided a description of a meeting held with the landowner in June 2012. At this time EFCI has failed to mitigate these surface features.

EFCI has removed the cable from monitoring well MW-NW, but a wooden block and other obstruction remain in the well.

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PHOTOGRAPHS



Photo 1: investigation of MW-NW with bore hole camera.



Photo 2: wooden probe @ 352.0 ft. in MW-NW



Photo 3: rock armoring at Access rd. drainage



Photo 4: fuel tank removed.

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Photo 5: gas cans and barrels removed



Photo 6: NE corner of truck tunnel needs erosion control measure.



Photo 7: Slope north of portal area gravel pad, needs rill mitigation



Photo 8: Sub station



Photo 9: boundary marker needs replacement Intersection substn. Rd. & ranch driveway



Photo 10: gated valve missing from pond L1 riser @ loadout

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Photo 11: slope sloughing into pond L1 riser



Photo 12: material sloughing into Pond L1 riser



Photo 13: Pond L2 at load out.

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AVAILABILITY OF RECORDS**PERMIT RECORDS**

DRMS Permit	Exp. 7/30/2014
Permit Application w/Revisions	X
Findings Document	RN5 5/21/2009
Insurance Certificate	Exp. 10/1/2011
Bond Document	16-66-96
Phased Bond Release	RN5
Documents/Findings	SL2
Air Emission Permits	cancelled
County Special Use Permits	CUP-98-3
UG Mining Landowner Notification	X
Subsidence Monitoring Reports	due in 2012
Subsidence Monitoring Data	due in 2012
Rill & Gully Survey	2011 ARR
Vegetation Monitoring Data	2010
Specific Variance Approvals	NA
Annual Reclamation Reports	X
Midterm Review Documents	2007
DRMS/OSM Inspection	Thru Aug 2012
Reports/Enforcement Actions (3 Years)	
Transfers/Succession of Operator	X
Temporary Cessation Notification	X--
Reclamation Cost Estimate	RN5
CERTIFICATIONS	
Pond Certifications	X
Annual Certifications for Impoundments	X
Fill Certifications for Excess Spoil or Underground Development Waste	NA
• Quarterly Inspections	
• Compaction Testing	
• Final Certification	
Coal Processing Waste Banks	RDA Term.2010
Haul Road Certifications	X
Access Road Certifications	X

HYDROLOGIC RECORDS

NPDES Permit	6-30-2013
NPDES Records	Thu 6-30-12
Stormwater Management Plan	terminated 5/25/04
SPCC Plan	Co-0036595
MSHA Pond Inspections	NA
State Engineer's Pond Inspection	NA
Quarterly Pond Inspections	Thru 5-23-12
Annual Hydrology Reports	2011
• Ground Water Monitoring	6-13-12
• Surface Water Monitoring	4-12-12
• Spring & Seep Monitoring	
• Mine Water Discharge Monitoring	
• Mine Inflow Study	
• Water Consumption Records	
Well Permits	

BLASTING RECORDS

Blasting Publication	NA
Blasting Records (3 years)	NA
ATFE Explosives Permit	NA
Blasting Variances	NA
Pre-Blast Surveys	NA

**ADDITIONAL RECORDS
(specify)**

Subsidence 11/2006	

COMMENTS:

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