

# 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: None
Operator Representative Signature: (Field Issuan	nce Only)

# **INSPECTION INFORMATION**

Inspection Start Date: October 9, Inspection Start Time: 09:30 Inspection End Date: Inspection End Time:	2013		Inspection Type: Coal Partial Inspection Inspection Reason: Normal I&E Program Weather: Clear	
Joint Inspection Agency: Join		Inspection Contacts:		
None				
Post Inspection Agency: Po		Post	Post Inspection Contacts:	
None				
Inspector(s):	Inspector's Signature: Signature Date:			
Robert D. Zuber, P.E.	Ph	et_	D. 7/_ 10/10/13	

#### **Inspection Topic Summary**

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

N - Air Resource Protection R - Roads

N - Availability of Records

R - Reclamation Success

N - Backfill & Grading
NA - Excess Spoil and Dev. Waste

R - Revegetation
N - Subsidence

NA - Explosives
N - Slides and Other Damage
N - Fish & Wildlife
N - Support Facilities On-site

 ${f R}\,$  - Hydrologic Balance  ${f R}\,$  - Signs and Markers

N - Gen. Compliance With Mine Plan

R - Support Facilities Not On-site

N - Other

NA - Special Categories Of Mining

**R** - Processing Waste **R** - Topsoil

### **COMMENTS**

A partial inspection was conducted by Rob Zuber of DRMS on October 9, 2013. The weather was clear, and the ground was dry.

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:

Well MW-NW was observed. After the steel cap was removed, a notice from the Colorado Division of Water Resources (DWR) and a metal tag were seen on the casing. The notice indicates that diversion of water from the well is prohibited. The tag number is 1205400.

Another well near MW-NW was observed during the inspection, and is likely the other well recently observed by a representative of DWR (and discussed in a 10/7/2013 e-mail by landowner Linda Saunders). The well includes three PVC pipes, a 4' x 4' metal box at the surface, and an electrical breaker box on a pole. The location of this second well can be described as follows:

- Approximately 150 feet west of Newlin Creek
- Approximately 200 feet east of County Road 15
- More or less due south of a pump station (apparently owned by the Town of Florence).

Based on a review of Map 12 in the PAP, this second well is in the same location as the Zenith 2 well.

The reach of Newlin Creek below the fence (where a landowner has indicated that the reach is a losing reach) was inspected. The creek bed was completely dry above, within, and below the reach in question. No cracks or other indications of mining impacts were seen.

Some observed ponds were holding water from recent storms: Pond 5 and Pond 4. Neither of these ponds was discharging. At the loadout, ponds L-1 and L-2 were dry at the time of the inspection.

No major problems were found with embankments or spillways. Some additional observations regarding the ponds:

- The primary spillway of Pond 5 is half full of sediment at the downstream end and requires maintenance.
- The primary spillway of Pond 4 contains bullet holes that should be plugged.

Culvert 40 was clear. Culvert 39 was half full of sediment at the downstream end and requires maintenance.

Near the truck tunnel, there was no sign that rills have been repaired but there was not significant sediment on the concrete apron.

The wattles near the gravel parking lot in the facilities area require maintenance: sediment needs to be removed from behind them. Stability of this hillside would be more likely if more wattles were added.

No erosion or other problems were identified in or near the following ditches:

- The Magpie Creek Diversion
- Permanent Diversion Ditch #1 (west of the RDA), including the California drain pan
- The ditches at the RDA (west, north, and south).

In the ditch near the truck tunnel, there is no significant erosion at the check dams, but this should be monitored. These structures are more likely to continue functioning if more riprap is added (there is a pile across the road).

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

The perimeter of the RDA was driven; no rills or other problems were seen.

ROADS – Rule  $4.03 \square$  Construction  $4.03.1(3)/4.03.2(3) \square$  Drainage  $4.03.1(4)/4.03.2(4) \square$  Surfacing and Maintenance 4.03.1(5) and (6)/4.03.2(5) and  $(6)\square$  Reclamation 4.03.1(7)/4.03.2(7):

Roads to the facilities area and the RDA were in good shape. The road to Well MW-NW was also in good shape.

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

The rock dust storage SAE was inspected and no problems were seen.

REVEGETATION – Rule 4.15 □ Vegetative Cover; Timing:

No large weed patches were seen at any location on the mine site.

#### SIGNS AND MARKERS – Rule 4.02:

At the mine site, the mine sign is in place, legible, and contains the necessary information. At the loadout, the sign is still obscured by graffiti.

#### OFFSITE SUPPORT FACILIITES - Rule 4.04, 4.28:

Trash should be removed at the loadout, including a box spring below pond L-2 and a pile of concrete rubble.

TOPSOIL – Rule 4.06□ Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:

Topsoil stockpiles were observed and no problems were identified. These include the one near the gravel parking lot in the facilities area and the one at the northwest corner of the RDA.

## **ENFORCEMENT ACTIONS/COMPLIANCE**

No enforcement actions were taken as a result of this inspection. The following is pending.

**Infraction Number:** CV2013002

Inspection Date: January 23, 2013 Date Issued: January 28, 2013 Primary Topic: Hydrologic Balance

Secondary Topic: Tertiary Topic:

Description: Failure to ensure that water monitoring well MW-NW continues to function as designed.

Abatement #: 1

Abatement Due Date: 4/1/2013

Abatement Due Extended Date: 6/20/2013

Abatement Description: Remove the obstruction from MW-NW or establish a replacement water monitoring well that intercepts the Southfield Mine workings in the Red Arrow or Jack O' Lantern Coal seam.

Abatement #: 2

Abatement Due Date: 4/1/2013

Abatement Due Extended Date: 6/20/2013

Abatement Description: Provide evidence to the Division that Energy Fuels Coal Inc. has applied for a monitoring well permit with CDWR in accordance with Rule 2.03.10.

# **PHOTOGRAPHS**



Well near MW-NW (possibly Zenith 2 Well)



Well near MW-NW (possibly Zenith 2 Well)



Well MW-NW (notice and tag appear to be recently attached to casing)



Pond 5 primary spillway below dam



Wattles in facility area (near gravel parking lot)



Check dam near truck tunnel