

**Permit Number:** C-1981-012

Mine Name: New Elk Mine

Robert D. Zuber, P.E.

1313 Sherman Street, Room 215, Denver, CO 80203 P 303.866.3567 F 303.832.8106 http://mining.state.co.us

# **PERMIT INFORMATION**

**County:** Las Animas

**Operation Type:** Underground

8/24/2018

Operator: New Elk Coal Company Operator Address: Mr. Louis Head	, LLC	Permit Status: Active Ownership: Private			
12250 Highway 12		<b>Operator Representative Present:</b>			
Weston, CO 81091		Nick Mason			
Operator Representative Signature: (Field Issuance Only)					
INSPECTION INFORMATION					
Inspection Start Date: August 22, Inspection Start Time: 07:40 Inspection End Date: August 23, 2 Inspection End Time: 07:30		Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Cloudy			
Joint Inspection Agency:	Joint	t Inspection Contacts:			
None					
Post Inspection Agency:		Post Inspection Contacts:			
None					
Inspector(s):	Inspector's Signature: Signature Date:				

Phot D. ZL

#### **Inspection Topic Summary**

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

Y - Air Resource Protection R - Roads

R - Availability of Records Y - Reclamation Success

Y - Backfill & Grading
 R - Revegetation
 Y - Subsidence

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

Y - Gen. Compliance With Mine Plan
 R - Support Facilities Not On-site
 Y - Special Categories Of Mining

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

## **COMMENTS**

A complete inspection was conducted by Rob Zuber of DRMS on August 22 and 23, 2018. The primary NECC representative who participated in the field inspection was Nick Mason. The weather was partly cloudy, and the ground was somewhat muddy. NECC staff indicated that the site received rain over the previous days.

AVAILABILITY OF RECORDS – Rule 5.02.4(1):

Some recent quarterly reports were not available: pond inspection reports, waste bank inspection reports.

EXCESS SPOIL and DEVELOPMENT WASTE - Rule 4.09

Placement; Drainage Control; Surface Stabilization:

Erosion on DWDA#2 persists. The sump below DWDA#2 did not need immediate maintenance.

No rills were seen on the Development Coal Waste Pile, and the vegetation remains good on this reclaimed area.

## 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:

Ponds 001A, 004A, 006A, 007A, and 08 were inspected. None of them were discharging, but all held at least a small amount of water. A large amount of water was in Pond 006A, within approximately four feet from top of embankment. The impounded water in Pond 007A was one to two feet below the lowest row of holes in the primary spillway. No water was seen flowing into the ponds from the pipe and pump systems on site. No significant issues were seen with the embankments or spillways of any ponds, although the top of the Pond 08 dam lacks vegetation.

Within the SAE by Pond 007A, BMPs appear to be functioning. There was no discharge from this outfall. No leaks of fluids from equipment were seen within the SAE. No problems were seen with the SAE east of DWDA#2, and the riprap below this area is stable. No problems were seen with the SAE around the slurry injection system.

No issues with ditches were seen. The following ditches were inspected on the ground (several others were viewed from a vehicle): D22A, D22, D32, and D58.

Vince Massarotti was cleaning Ditch D12 during the inspection. Check dams have been added to the ditch below the soil storage area, and these appear to be functioning. Armor has been added to the east end of the ditch between the upper and lower portions of the RDA; this improvement should help reduce sediment loading into Pond 08.

Two culverts were inspected: C12A and C30. Both were clear of sediment.

Containment Area 1 and Containment Area 5 were holding significant water, but no signs of past discharge were detected. Containment Area 2 was mostly dry. Containment Areas 3 and 4 were not inspected. There was no sign of problems with any of the containment areas.

The sediment and erosion BMPs at the former Golden Eagle shaft require considerable maintenance. In particular, there is a large amount of sediment behind a row of straw bales, and this should be removed. The wattles along the fence line are apparently not high enough to divert larger runoff events.

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

Drainage Control; Surface Stabilization; Placement:

There is good vegetation cover on the majority of the reclaimed portion of the RDA. The ditch between the upper and lower portions of the RDA is in good shape. No problems with the upper portion of the RDA were seen. No signs of blowouts below the clear water ditches were seen.

ROADS – Rule 4.03

Construction 4.03.1(3)/4.03.2(3), Drainage 4.03.1(4)/4.03.2(4), Surfacing and Maintenance4.03.1(5) and (6)/4.03.2(5) and (6), Reclamation 4.03.1(7)/4.03.2(7):

No problems with roads were observed.

REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

In general, NECC is controlling weeds on site, although field bindweed was seen in many locations, including the areas around Pond 007A. A small amount of thistle was seen on the Pond 004A dam. At the Jansen Loadout, Mullein and cheat grass were seen. Bill Massarotti was spraying weeds with 2,4-D during the inspection.

#### SUPPORT FACILITIES - Rule 4.04:

The hill below the water tanks was observed from afar, and no erosion or other problems were seen. The retaining wall by the Bates Portals appears stable. No problems were seen at the C&W Train Shop or at the fan within the West Portal area.

No problems were seen at the coal storage areas. Although a large pile of waste is piled on the north end of the raw coal storage area, an inspection of Ditch D32 indicated that this material is stable. A large amount of sediment from Pond 08 is still on the clean coal storage area. Per Vince Massarotti, this will be moved to the RDA in the autumn of 2018, if weather permits.

#### SIGNS AND MARKERS – Rule 4.02:

The entrance sign was inspected, and it contains the necessary information.

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

No erosion problems were seen at the Jansen loadout. Some weeds were seen as noted in the REVEGETATION section of this report.

#### TOPSOIL – Rule 4.06

Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:

No erosion problems were seen with Topsoil Stockpile #2, although there is little vegetation on it, and some field bindweed was seen. The silt fence below this pile is functioning.

No problems were seen with the topsoil stockpile by Containment Area 1; the vegetation on this pile is excellent.

## **ENFORCEMENT ACTIONS/COMPLIANCE**

No enforcement actions were initiated as a result of this inspection, nor are any pending.

# **PHOTOGRAPHS**



Pond 007A embankment - river is to the right



Ditch D32 with coal waste on Raw Coal Storage area



Erosion control at sediment storage area



Top: Development Coal Waste Pile Bottom: DWDA#2



Road to RDA

Cut slope above Ditch D26



Water tanks and road

# Recently placed riprap



Interface between upper and lower portion of RDA



Top of dam for Pond 08



RDA and Pond 08



Looking up the river at DWDA#2



Outfall below SAE, southeast of DWDA#2



Pad for old North Shaft (was part of Golden Eagle permit)



Clear water ditch at old North Shaft site



Erosion BMPs in need of maintenance at old North Shaft site



Barriers at east end of Jansen Loadout (circled)

# **AVAILABILITY OF RECORDS**

# PERMIT RECORDS

		HYDROLOGIC RECORDS	
DRMS Permit	Expires 2/28/19	NPDES Permit	CDPS C-00906
			(exp. May 2020)
Permit Application w/Revisions	yes	NPDES Records	Through
			July 2018
Findings Document	RN6, June 2017	Stormwater Management Plan	Jan 2016
Insurance Certificate	Exp. 4/24/2019	Spill Prevention Containment & Control Plan	April 2012
Bond Document	\$4,133,137.02	MSHA Pond Inspections	Pond 8, Dec 2017
	(9 cash bonds)		
Phased Bond Release	SL2,	State Engineer's Pond Inspection	n/a
Documents/Findings	Findings 11/15/06		
Air Emission Permits	84LA074F-1, 84LA074F-2	Quarterly Pond Inspections	Through Q1 2018
County Special Use Permits	n/a – see letter in Exhibit 5	Annual Hydrology Reports	2017
UG Mining Landowner Notification	Feb. 2012	<ul> <li>Ground Water Monitoring</li> </ul>	Thru Dec. 2017
Subsidence Monitoring Reports	n/a	<ul> <li>Surface Water Monitoring</li> </ul>	Thru Nov. 2017
Subsidence Monitoring Data	n/a	<ul> <li>Spring &amp; Seep Monitoring</li> </ul>	n/a
Rill & Gully Survey	See 2017 ARR	Mine Water Discharge     Monitoring	n/a
Vegetation Monitoring Data	n/a	• Mine Inflow Study	p. 3-4 of 2014 AHR (old study)
Specific Variance Approvals	n/a	• Water Consumption Records	Thru 8/21/2018
Annual Reclamation Reports	2017	Well Permits	yes
Midterm Review Documents	MT7, 2016		•
DRMS/OSM Inspection	Through		
Reports/Enforcement Actions (3 Years)	July 2018	BLASTING RECORDS	
Transfers/Succession of Operator	To NECC, executed 2/2/2006	Blasting Publication	n/a
Temporary Cessation Notification	n/a	Blasting Records (3 years)	n/a
Reclamation Cost Estimate	Comment 1	ATFE Explosives Permit	n/a
CERTIFICATIONS		Blasting Variances	n/a
Pond Certifications	yes	Pre-Blast Surveys	n/a
Annual Certifications for	Pond 08,		
Impoundments	Mar. 2018		
*			

(continued)

# **AVAILABILITY OF RECORDS** (continued)

## <u>Underground Development Waste</u> <u>Banks</u>

<ul> <li>Quarterly Inspections</li> </ul>	Mar. 2018
<ul> <li>Compaction Testing</li> </ul>	n/a
<ul> <li>Final Certification</li> </ul>	n/a

## **Coal Processing Waste Banks**

Access Road Certifications

<ul> <li>Quarterly Inspections</li> </ul>	Mar. 2018	
<ul> <li>Compaction Testing</li> </ul>	3/7/2016	
<ul> <li>Final Certification</li> </ul>	n/a	
Haul Road Certifications	4/18/2012,	
	7/25/2012	

## **COMMENTS:**

1. RCE from MT-07: \$4,034,998.07, August 2016. NECC needed to add \$9,698.51 from TR-72.

Maps 11 & 12