




**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

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**PERMIT INFORMATION**

<b>Permit Number:</b> C-1981-012 <b>Mine Name:</b> New Elk Mine <b>Operator:</b> New Elk Coal Company, LLC <b>Operator Address:</b> Mr. Louis Head 12250 Highway 12 Weston, CO 81091	<b>County:</b> Las Animas <b>Operation Type:</b> Underground <b>Permit Status:</b> Active <b>Ownership:</b> Private
	<b>Operator Representative Present:</b>  Vince Massarotti
<b>Operator Representative Signature: (Field Issuance Only)</b>  	

**INSPECTION INFORMATION**

<b>Inspection Start Date:</b> July 31, 2018 <b>Inspection Start Time:</b> 07:45 <b>Inspection End Date:</b> July 31, 2018 <b>Inspection End Time:</b> 11:50		<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>  		<b>Signature Date:</b>  8/1/2018

**Inspection Topic Summary**

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

N - Air Resource Protection

Y - Roads

N - Availability of Records

Y - Reclamation Success

N - Backfill &amp; Grading

R - Revegetation

R - Excess Spoil and Dev. Waste

N - Subsidence

NA - Explosives

Y - Slides and Other Damage

N - Fish &amp; Wildlife

R - Support Facilities On-site

R - Hydrologic Balance

R - Signs and Markers

Y - Gen. Compliance With Mine Plan

N - Support Facilities Not On-site

N - Other

N - Special Categories Of Mining

R - Processing Waste

R - Topsoil

**COMMENTS**

A partial inspection was conducted by Rob Zuber of DRMS on July 31, 2018. The NECC representative who participated in the field inspection was Vince Massarotti. The weather was clear to partly cloudy, and the ground was mostly dry. Vince indicated that the site received considerable rain over the previous weekend.

**EXCESS SPOIL and DEVELOPMENT WASTE – Rule 4.09**

Placement; Drainage Control; Surface Stabilization:

Erosion on DWDA#2 persists, although the structure is generally stable. The sump below DWDA#2 did not appear to need immediate maintenance. Pond cleaning material at the west end of DWDA#2 needs to be hauled to the RDA as soon as it is dry enough. The placement of this material could be altered to facilitate drying; there was at least one puddle of water within this material.

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:

The Middle Fork of the Purgatoire River was inspected, and no eroding banks or signs of pollutant loading from the New Elk Mine were seen. Particular areas that were inspected include:

- Where Culvert C13 crosses the river and along the raw coal storage area
- Adjacent to Ponds 006A and 007A
- Adjacent to the DWDA#2.

Number of Partial Inspection this Fiscal Year: 1Number of Complete Inspections this Fiscal Year: 0

The two rows of silt fence below the SAE by Pond 007A, as well as BMPs within the SAE, appear to be functioning well. There was no discharge from this outfall, although there was a significant amount of water in the flume, and perhaps there had been a recent discharge. No leaks of fluids from equipment were seen within the SAE.

The riprap outfall below the SAE east of DWDA#2 appeared to be stable, with no erosion or other problems.

Ponds 001A, 006A, 007A, and 08 were inspected. None of them were discharging, but all held at least a small amount of water. This water was mostly turbid due to recent rain/runoff events. NECC staff were not pumping water between ponds during the inspection. No significant issues were seen with the embankments or spillways of any ponds, although the top of the Pond 08 dam is still very bare. The banks of Pond 08 should be watched closely for sluffing or other erosion problems; if problems develop, additional stabilization practices may be warranted.

The water in Pond 08 was approximately 17 feet below the invert (aka spill point) of the emergency spillway; this water level is several feet lower than the maximum level for the pond to have capacity for a 10-year event (the pond met the compliance requirement with room to spare). The impounded water in Pond 007A was below six rows of holes in the primary spillway (indicating that water would flow through the lowest hole if the valve was opened), and Pond 007A was in compliance with need to have capacity for a 10-year event.

Containment Areas 1, 2, and 5 were inspected. There was no sign of problems with these structures. Containment Area 5 was holding significant water, but no signs of past discharges were detected. Containment Areas 3 and 4 were not inspected.

#### 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 interface between the upper and lower portions of the RDA is in good shape: the ditch and sumps appear to be working well to prevent sediment from the upper part impacting the lower (reclaimed) part. In particular, the sumps appear to be preventing excess sediment movement into the riprap of the channels. A small problem is erosion at the east end of the ditch between the lower and upper portions of the RDA (beside the east side channel); some riprap should be added to this segment to prevent further erosion.

On the upper portion of the RDA, a small amount of material needs to be graded. Overall the area appears to be well graded, and no large puddles were seen.

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

The following weeds and their locations were seen around the site:

- Bindweed was seen at many locations, including the SAE by Pond 007A.
- Cheat grass was seen in many locations, but patches are not currently large.

Signs of weed spraying were seen at many locations. For example:

- Poison hemlock west of the C&W Shop.
- Bindweed along the road to the West Portal.

The recently revegetated area near the northwest corner of Pond 007A is still mostly devoid of grasses. The majority of the vegetation includes sunflowers and yellow sweet clover.

**SUPPORT FACILITIES - Rule 4.04:**

The water tank pad and the hill below the water tanks was observed, and no erosion or other problems were seen. At the point where runoff exits the pad, NECC staff have added riprap (replacing silt fence and straw bales), and this improvement appears to be working well. Along the road up to the tank pad, the cut slope was hydromulched, but very little grass is growing on it.

The retaining wall by the Bates Portals appears stable. No problems were seen at the coal storage areas. A very large amount of sediment from Pond 08 has been left to dry on the clean coal storage area. Some of this material slumped into Ditch D24; NECC staff cleaned this during the inspection.

No issues were seen near the C&W Shop or with the West Portal areas.

**SIGNS AND MARKERS – Rule 4.02:**

No problems with signs were observed. Stream buffer signs were seen in several locations, including east of the truck scales. The entrance signs contain the necessary information.

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**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 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**

**Facilities and RDA (taken from water tank pad)**

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**Pond cleaning material seeping off of clean coal storage area**



**Pond cleaning material on clean coal storage area**

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Number of Complete Inspections this Fiscal Year: 0





**Ditch D15 with DWDA#2 in background**



**Outfall below SAE that is east of DWDA#2**

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 0



**Middle Fork of Purgatoire River, adjacent to DWDA#2**



**Pond 001A**

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 0





**Riprap at runoff point for water tank pad**



**Poison Hemlock that has been treated (west of C&W Shop)**

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Number of Complete Inspections this Fiscal Year: 0





**Facilities viewed from RDA road, with water tanks in center of photo.**



**Lower RDA (reclaimed portion)**



**Interface of RDA – reclaimed area to right**

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**Interface of upper and lower portions of RDA -  
East side where additional riprap should be placed**



**RDA and Pond 08**

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 0