




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



### 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 Mark Haywood 12250 Highway 12 Weston, CO 81091	<b>County:</b> Las Animas <b>Operation Type:</b> Underground <b>Permit Status:</b> Temporary Cessation <b>Ownership:</b> Private
	<b>Operator Representative Present:</b>  Greg Smith
<b>Operator Representative Signature:</b> (Field Issuance Only)	

### INSPECTION INFORMATION

<b>Inspection Start Date:</b> September 17, 2013 <b>Inspection Start Time:</b> 13:40 <b>Inspection End Date:</b> September 19, 2013 <b>Inspection End Time:</b> 13:00	<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	<b>Inspector's Signature:</b>  <b>Signature Date:</b>  September 30, 2013

**Inspection Topic Summary**

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

N - Air Resource Protection

N - Availability of Records

N - Backfill &amp; Grading

R - Excess Spoil and Dev. Waste

N - Explosives

N - Fish &amp; Wildlife

R - Hydrologic Balance

R - Gen. Compliance With Mine Plan

N - Other

R - Processing Waste

R - Roads

N - Reclamation Success

R - Revegetation

N - Subsidence

N - Slides and Other Damage

N - Support Facilities On-site

R - Signs and Markers

N - Support Facilities Not On-site

N - Special Categories Of Mining

R - Topsoil

**COMMENTS**

This was a partial inspection by Leigh Simmons of Colorado Division of Reclamation, Mining and Safety, (the Division). Greg Smith of New Elk Coal Company, (NECC) accompanied the inspection throughout. The weather was fine.

The New Elk mine continues in Temporary Cessation. No coal is being produced, and none is stockpiled. The parent company of NECC, Cline Mining, continues to search for investors and customers.

The staff at New Elk are working to bring the mine into full compliance with the regulations and permit, and to abate the outstanding enforcement actions. Although some previously identified maintenance items have not yet been addressed, NECC have dedicated people and equipment to the task and are making good progress whilst attempting to prioritise the different jobs.

Several permitting actions are in progress, these are detailed under the heading GENERAL MINE PLAN COMPLIANCE.

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

Placement; Drainage Control; Surface Stabilization:

The channel of the contour ditch on the south side of DWDA 1 had been cleared. The erosion beneath the contour ditch had not been repaired, but given that the damage is fairly minor it was agreed that an attempt to repair it may cause more harm than good, therefore time will be allowed to for vegetation to fill in. **The erosion should be monitored.**

DWDA 2 appeared to be stable, although the very wet summer had caused considerable erosion of the surface in places, putting strain on the ditches and culverts conveying runoff from the pile.

DWDA 3 has been approved, but not yet bonded for. NECC is actively exploring alternatives to constructing a third development waste pile, the options being considered include: (1) hauling development waste up to the RDA by truck (which would require upgrading the RDA access road to a haul road); and (2) installing a conveyor to drop development waste onto the RDA conveyor

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1

## 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;

NECC had chosen to prioritize those items related to the abatement of enforcement actions; those items were inspected first:

- No further work had taken place to re-grade ditch D14, because the ground was judged to have been too soft. The ditch had not breached again, although accumulated sediment had risen to within 6-8” of the top of the ditch.
- Culverts C73 and C19 had been cleared, (the final flushing of C19 was in progress).
- The channel where culvert C4 used to be had been graded to prevent the impoundment of water.
- The berm at the new water tank SAE had been restored.
- No further work had taken place in the area of culvert C41, although people and equipment were scheduled to begin work up there shortly.
- The upland diversion ditch above the RDA had been cleared of rocks and trees, and re-graded.
- The upland diversion ditch had not yet been surveyed, this should be completed by September 30, 2013, and the survey data submitted to the Division as soon as possible.

At the west end of the site:

- Culvert C49 was clear (but outlets into a much smaller culvert, owned by the Division of Parks and Wildlife); C21 had not yet been cleaned. **C21 should be cleaned at the inlet, at least, as soon as possible.**
- Pond 4 had a small amount of water, but was not discharging. Vegetation had grown up to the point that access to the spillway was difficult. **The vegetation should be cleared before the winter.**
- Ditch D29 had been extended to the east, into the clean water system.
- Ditch D5 had not yet been re-cut. This does not appear to be an urgent task since precipitation over the last few weeks has clearly drained in the intended manner, but **the ditch should be inspected by NECC and re-cut if necessary when people and materials are available to do it.**
- The ditch/berm around the explosives area had not yet been restored. This is not an urgent task since there is minimal disturbance in this area, and no explosives on site, however **the project should still be tackled when people and materials are available to do it.**
- The material left over from the C3 work had not yet been cleaned up - **this should be addressed as soon as possible.**
- Culvert 37 was partially blocked. **C37 should be cleared as soon as possible.**

North of the highway:

- The clean water diversion ditch at the east side of the RDA extends beneath the power poles. This area was previously identified as susceptible to erosion at the far east end. Work had been done to grade the ditch. Whilst it is not clear that this has prevented any runoff from exiting the ditch at the same spot, this is

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not necessarily a problem: the runoff is not from a disturbed area, and it will ultimately be conveyed by C41 to pond 8, in any case.

- Culvert C88 had been repaired.
- Erosive gullies between the RDA conveyor belt and pond 8 had been partially repaired. Heavy rain had washed out some of the repairs. **These repairs will be made more permanent as part of the “C41 project”.**
- Culverts C39 and C-A were inspected. No problems were observed.
- All culverts on the road to the RDA were clear.

Between the highway and the river:

- The sump at the inlet to C13 was inspected and looked to be in good shape. South of the highway, the culvert across the gateway (C14?) was partially blocked. **C14 and the ditch below should be cleaned.**
- From the outlet of culvert C30 to the river, including the section where C26 was removed, sediment is currently being caught by what is effectively a large rock-check dam. It was agreed with Mr. Smith that a long term solution for this area would be to remove all the bales and flow control devices, and armor the entire length of that section of channel. **This should be tackled when people and equipment are available to do it.**

South of the river

- The PVC pipes in D32b had not been removed. **Their function should be assessed and they should be removed if appropriate.**
- **The “C16 system” of culverts and ditches should be redesigned** - as previously stated. This will need to be handled as part of TR68 which is already in progress. In the meantime, the system is just about functional. C16a was clear; C16b was half full; C16c was redundant since it is too high - instead flow is conducted through a section of black pipe (the outlet of which is buried), the head caused by the sump pump discharge was sufficient to cause water to up-well from the buried pipe; C16 was clear; D16 will need to be cleaned soon.
- The unidentified culvert at the outlet of C16 had not yet been addressed.
- Work was in progress to re-grade and clean ditch D22.
- Sediment had continued to accumulate in the very long culvert, C17. **Culvert C17 should be flushed as soon as it is practical to do so.**
- Culvert C61 and the ditch below had not yet been cleaned. **These structures should be cleaned as soon as it is practical to do so.**
- The unidentified culvert with an outlet into drop inlet 3 had not yet been addressed.
- Culvert C11 had not been addressed, the inlet was completely obscured. This does not appear to be critical since the recent rain has been successfully conveyed to pond 7 without significant noticeable damage. Regardless, **the surface drainage of this area should be re-designed, with the design handled in TR68.**

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**GENERAL MINE PLAN COMPLIANCE:**

TR68 is still not yet complete, the Division is still waiting for updates to maps 10, 11 and 15, as well as a map showing all drill holes within the permit area before the submission can be found complete and any review can take place. Submission of these items should be considered very high priority.

Other permitting actions are ongoing, and deadline dates have been extended to the end of October.

NECC are interested in partially bonding for a sediment drying area that has already been approved. In the meantime, material that has been excavated from ditches, culverts and ponds is being allowed to dry at the west end of the soil storage area, on the understanding that it will be moved as soon as a permanent location for it is available.

Significant progress had been made towards the abatement of the outstanding enforcement actions. Two of the abatement steps have been extended to November 4, 2013.

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

Drainage Control; Surface Stabilization; Placement:

The RDA was stable and well-drained. Some refuse that had spilled off the RDA conveyor belt had not yet been cleared. **It was agreed that this could be shoveled back onto the conveyor when the belt is run to winterize the wash plant.**

**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):

Roads were generally in good shape, with the exception of the road to the water tanks. **This road should be graded as soon as it is practical to do so.**

NECC also plan to repair the light use road on the east side of the RDA to allow access to the conveyor.

The main RDA access road was in good shape. NECC have been investigating whether it is viable to upgrade to a haul road. No final decision has yet been made.

**REVEGETATION – Rule 4.15**

Vegetative Cover; Timing:

NECC plans to hire Arcadis to conduct vegetation sampling around the site.

**SIGNS AND MARKERS – Rule 4.02:**

Most mine ID signs had been replaced with permanent signs. **The new signs need a phone number for the Division (303 866 3567) in order to be fully compliant with the regulations.**

**TOPSOIL – Rule 4.06**

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

**The topsoil stockpile near containments 1 and 2 should be clearly marked with a permanent sign, or moved.**

**The topsoil stockpile on the SAE between the highway and the river should be marked with a permanent sign, or moved.**

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**DOCUMENTS RECEIVED**

N/A

**OTHER (SPECIFY)**

N/A

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**ENFORCEMENT ACTIONS/COMPLIANCE****Infraction Number:** CV2013007

Inspection Date: July 23, 2013

Date Issued: August 22, 2013

Primary Topic: Hydrologic Balance

Secondary Topic:

Tertiary Topic:

Description: Failure to treat surface drainage from a disturbed area before leaving the permit area, in violation of Rule 4.05.2(1)

Abatement #: 1

Abatement Due Date: 9/16/2013

Abatement Due Extended Date: **11/4/2013**

Abatement Description: Ditch D14 should be restored to the approved design.

**Infraction Number:** CV2013008

Inspection Date: July 23, 2013

Date Issued: August 22, 2013

Primary Topic: Hydrologic Balance

Secondary Topic:

Tertiary Topic:

Description: Failure to maintain ditches, culverts and berms in compliance with the approved design, in violation of Rule 2.07.7(7).

Abatement #: 1

Abatement Due Date: 9/16/2013

Abatement Description: Clear culverts C73 and C19 of accumulated sediment to restore them to the approved design

**Abated**

Abatement #: 2

Abatement Due Date: 9/16/2013

Abatement Description: Establish a berm to the south of culvert C2 that will prevent runoff from the shop area flowing into the clean water diversion system

**Abated**

Abatement #: 3

Abatement Due Date: 9/16/2013

Abatement Description: Grade the channel where culvert C4 was removed to prevent the impoundment of water

**Abated**

Abatement #: 4

Abatement Due Date: 9/16/2013

Abatement Description: Restore the berm at the "new water tank" SAE to its approved design

**Abated**Number of Partial Inspection this Fiscal Year: 2Number of Complete Inspections this Fiscal Year: 1

Abatement #: 5

Abatement Due Date: 9/30/2013

Abatement Description: Clear vegetation, rocks and non-coal waste, and reshape and grade the following ditches as necessary to restore them to the approved design: clean water diversion ditch above West Fan; D29; D29B; D7; D9; D26

**Abated**

Abatement #: 6

Abatement Due Date: 9/30/2013

Abatement Due Extended Date: **11/4/2013**

Abatement Description: Restore culvert C41 to its approved design, and backfill and grade around the inlet

Abatement #: 7

Abatement Due Date: 9/30/2013

Abatement Description: Clear the upland diversion ditch above the RDA of fallen rocks and trees

**Abated**

Abatement #: 8

Abatement Due Date: **9/30/2013**

Abatement Description: Survey the entire length of the upland diversion ditch above the RDA to allow comparison of constructed ditch with the approved design

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**PHOTOGRAPHS**

Photo 1: Mine ID sign



Photo 2: C73 cleaned



Photo 3: Graded channel where C4 used to be



Photo 4: Berm at water tank SAE



Photo 5: RDA upland diversion



Photo 6: C88 repaired

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Photo 7: C21



Photo 8: Pond 4 overgrown vegetation



Photo 9: Repaired contour ditch on DWDA 1



Photo 20: C13 inlet



Photo 41: D14



Photo 32: Ditch below C30

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Photo 63: C14



Photo 54: Upwelling from buried culvert bypassing C16c

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