




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



PERMIT INFORMATION

Permit Number: C-1981-012 Mine Name: New Elk Mine Operator: New Elk Coal Company, LLC Operator Address: Mr Mark Haywood 12250 Highway 12 Weston, CO 81091	County: Las Animas Operation Type: Underground Permit Status: Temporary Cessation Ownership: Private
	Operator Representative Present: Vince Masarotti
Operator Representative Signature: (Field Issuance Only) 	

INSPECTION INFORMATION

Inspection Start Date: October 1, 2013 Inspection Start Time: 15:00 Inspection End Date: October 3, 2013 Inspection End Time: 16:30	Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Clear
Joint Inspection Agency: None	Joint Inspection Contacts:
Post Inspection Agency: None	Post Inspection Contacts:
Inspector(s): Leigh D. Simmons	Inspector's Signature:  Signature Date: October 9, 2013

Inspection Topic SummaryNOTE: **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**R** - Excess Spoil and Dev. Waste**NA** - Explosives**Y** - Fish & 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**Y** - Support Facilities On-site**R** - Signs and Markers**R** - Support Facilities Not On-site**Y** - Special Categories Of Mining**R** - Topsoil**COMMENTS**

This was a complete inspection by Leigh Simmons of Colorado Division for Reclamation, Mining and Safety, (the Division). The inspection was accompanied by Vince Masarotti of New Elk Coal Company, (NECC). The weather was fine. The weather had been mostly dry over the preceding few weeks, following a very wet monsoon season.

Consistent with the format of recent inspection reports, items needing action will be highlighted using bold text. Where possible, these items should be addressed before the next inspection.

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

Two enforcement actions are in the process of being abated; progress is detailed under the heading **ENFORCEMENT ACTIONS**.

NECC had focused resources on repair and maintenance of ditches, roads and culverts at the Lorencito Canyon mine and work to abate enforcement actions at the New Elk mine over recent weeks. At the time of the inspection only 6 or 7 people were on-site, with most of the NECC employees taking part in a mine rescue competition in Idaho Springs.

AVAILABILITY OF RECORDS – Rule 5.02.4(1):

The records had been moved to a new office in the Technical Services building. The jumble of box files had been filed into a large filing cabinet, making the files much easier to navigate. Detailed comments are at the end of this report.

EXCESS SPOIL and DEVELOPMENT WASTE – Rule 4.09

Placement; Drainage Control; Surface Stabilization:

The reclaimed Development Waste Pile (DWDA 1) was stable and well vegetated. The erosion on the south side of the pile will continue to be monitored. No action is necessary at present.

The Development Waste Disposal Area (DWDA 2) appeared stable however surface erosion was evident. This continues to cause maintenance issues in the surrounding ditches.

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The third Development Waste Disposal Area (DWDA 3), which was approved by TR65, has not yet been bonded for and construction of it has not begun. It is not yet clear whether it will be constructed or an alternative plan will be developed.

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. The date by which this abatement must be complete had previously been extended to November 4, 2013.
- The upland diversion ditch had been surveyed, and the survey data submitted to the Division.
- Culvert C41 had been restored, and the area around it filled and graded. Although work continues in the same area, the work necessary to abate the violation had been completed.

At the west end of the site:

- Culvert C21 had not yet been cleaned. **C21 should be cleaned at the inlet, at least, as soon as possible.**
- The old water tank and substation SAEs showed no new disturbance.
- 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.**
- The ditch around the explosives area ties in above the willows above culvert C3; it appears to be mis-located slightly on the draft version of Map 13.
- Culverts C2 and C3 were both clear. There was a little more work to do at the inlet to C3, which will involve moving some material around, but also taking some away. **The surplus material should be moved away when the work is complete.** It was agreed that the small stand of willows above the inlet was a good thing, as long as the ditch is able to convey the necessary amount of water.
- The slurry injection well was inspected. There was no new disturbance. The diversion ditch around the slurry well SAE should be constructed in such a way that it does not cross the SAE. The map should be updated accordingly.
- The water monitoring sites were inspected. No problems were noted.
- The new water tanks were inspected. No problems were noted.
- The diversion ditch D26 was inspected. Some rocks had recently fallen into the ditch. **The rocks should be cleared.** The trash in the concrete section of the ditch was removed during the inspection.

North of the highway:

- The RDA diversion ditch was inspected and was in good shape. The results of the survey will be studied

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separately from this inspection.

- The cell phone pads were inspected, no problems were observed.
- Culvert C41 had been restored. The related projects are yet to be completed (moving soil, re-grading road, cut small road ditch, build water bar, fill gullies above pond 8 and re-seed repairs). Mr Masarotti estimated that there was a weeks worth of work for 3 people in order to complete everything.
- Containment 5 and pond 8 were both holding water – the sediment levels of each will need to be assessed when the water level drops.
- The rock drain on the eastern side of pond 8 shows a little movement between the first and second benches, but does not warrant repair.
- The RDA access road and all the culverts underneath it were in good shape.

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 as soon as possible.**
- 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.** At the time of the inspection the structure was still effective.
- The silt fence at the western end of the SAE had been reinforced with extra wooden stakes and was functional.

South of the river

- Pond 1 was inspected. The embankments and spillways were in good order. All ditches and culverts in the area were clear and functional.
- Ponds 6 and 7 were both inspected; no problems were observed with the pond structures. Pond 6 had not yet been lined. Pond 7 had a very high water level and the gate valve on the primary spillway outlet was closed. The following text is taken from page 2.05-10a of the permit:

A staff gage will be installed on or adjacent to the riser pipe of Pond 007 identifying the water level (7337.3 ft) adequate to retain a 10 year 24 hour storm without discharging over the emergency spillway.

It is critically important that NECC maintain the designed capacity in pond 7 in order to deal with the runoff from future storms. As shown in photo 5, the level of water in the pond is almost to the top of the primary spillway riser, and no staff gauge is visible. **Water should be discharged from the pond, following treatment with a flocculant if necessary, as soon as possible until the required capacity is restored.** Photo 6, taken in October, 2012, shows the riser at a much lower water level – no staff gauge is visible. **If not already present, the staff gauge should be constructed so that the pond level may be easily monitored.**

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- At the far eastern end of the site, culverts C86 and C87 were overgrown. **The vegetation should be cleared from around the culverts and they should be cleaned if necessary.**
- Culvert C22 had been cleaned at both ends.
- 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. The details of the re-design are a matter for NECC to discuss, however one suggestion is to install a new culvert from the inlet of C16a under the road, to D22. C16b may then be sufficiently sized to convey the much smaller flow and C16c could be pulled to leave a ditch. The structures downstream from D22 would need to be large enough to convey the increased flow. 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.
- 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.**
- Around the Bates portals, the surface water structures had been pretty much finished, and were largely as shown on the draft version of Map 13, with the following comments:
 - Ditch D24c1 does not really exist and is not needed
 - Sheet flow to the inlet of C34 is preferable given the high voltage power lines and other facilities in the area
 - The conveyor lines still need to be brought up to date on Map 13
 - The new structures will need to have supporting designs submitted with TR68

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.

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Significant progress had been made towards the abatement of the outstanding enforcement actions, with all of the abatement steps for NOV CV2013-008 now complete.

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 previously 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 condition. However the road up to the water tanks has not yet been re-graded (but was still passable). The light use road beside the RDA conveyor is scheduled to be repaired to allow access to the belt (at the time of the inspection it was impassable).

REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

Arcadis had recently been on-site to conduct vegetation sampling. The results had not yet been analysed.

SIGNS AND MARKERS – Rule 4.02:

Mine ID signs have not yet been brought into full compliance. See photos 1-4. **All the signs must be the same; they must all be durable; and they must all show the phone number for the Division (303 866 3567), while the mine remains in temporary cessation.**

OFFSITE SUPPORT FACILITIES - Rule 4.04, 4.28:

The Jansen loadout was inspected.

The Mine ID sign was complete.

Vegetation around the site was dense and shoulder high. **The vegetation should be cleared.**

Coal had spilled over the retaining wall. **The spilled coal should be cleaned up.**

The gate had been damaged. **Access to the site should be secured.**

The Apache Canyon airshafts were inspected.

Both sites were in good condition, with no signs of recent disturbance. Some soil had been deposited at the second airshaft to fill in the small holes around the concrete pad.

The mine ID signs had not yet been replaced. Although all required information was shown, the temporary alterations had deteriorated. **The signs should be replaced with permanent signs.**

The groundwater monitoring sites were inspected. There was no sign of any recent disturbance.

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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:

The sign on the topsoil pile near containments 1 and 2 had been permanently fixed.

The topsoil stockpile on the SAE between the highway and the river should be marked with a permanent sign, or moved. This issue was raised several months ago.

The soil storage area was in good order, with the different piles distinct from each other. The ditch cleanings continue to be stored at the far western end of the soil storage area - **it must be stressed that this is a temporary measure.**

DOCUMENTS RECEIVED

A copy of the survey results of the RDA diversion ditch was received on September 30, 2013.

A copy of the up to date insurance certificate was received on October 7, 2013. (Proof of insurance was demonstrated during the inspection, but the certificate was not available).

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).

All abatement actions have now been completed.

A notice and order to pay fixed penalty has been sent to NECC by registered mail.

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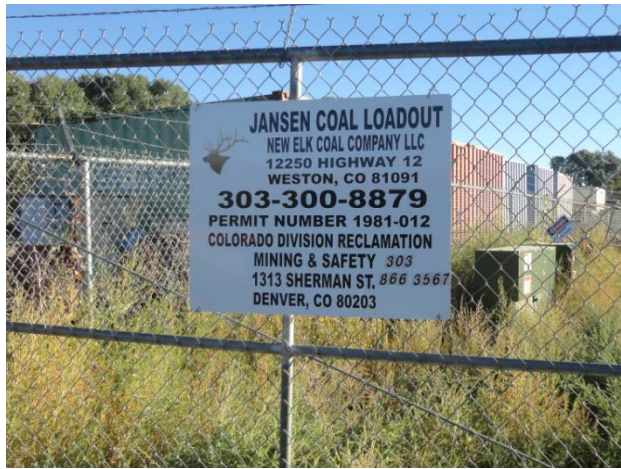
PHOTOGRAPHS

Photo 1: Mine ID sign at Jansen Loadout (in compliance)



Photo 2: Mine ID sign at west of permit boundary (not in compliance)



Photo 3: Mine ID sign at first Apache Canyon airshaft (not in compliance)



Photo 4: Mine ID sign at second Apache Canyon airshaft (not in compliance)

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Photo 5: Pond 7 needs to discharge



Photo 6: Overgrown vegetation at Jansen Loadout



Photo 7: Spilled coal at Jansen Loadout

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Photo 8: RDA



Photo 9: Pond 8



Photo 10: Erosion around pond 8, scheduled for repair

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Photo 11: Pond 8 from above, showing where temporary gully repair had partially washed out



Photo 12: Restored culvert C41



Photo 13: Damaged light use road, scheduled for repair

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Photo 14: Sediment traps above containment 5



Photo 15: Containment 5



Photo 16: Fallen rocks to clear from D26



Photo 17: Inlet of C21 to be cleared



Photo 18: Inlet of C3 work in progress



Photo 19: Ditch cleanings temporarily stored next to subsoil pile

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Photo 20: Surface erosion of DWDA2



Photo 21: D14

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AVAILABILITY OF RECORDS**PERMIT RECORDS**

DRMS Permit	Expires 2/28/2014
Permit Application w/Revisions	(Binder)
Findings Document	MT6, 10/29/2012
Insurance Certificate	Exp 9/23/2013*1
Bond Document	\$4,133,137.02
Phased Bond Release Documents/Findings	SL2, 12/26/2006
Air Emission Permits	84LA074F-1 84LA074F-2 (Bonding file) 09LA0590 (Jansen, filing cabinet)
County Special Use Permits	See Exhibit 5 & 3/2012 application re. Bosque del Oso (PR4)
UG Mining Landowner Notification	2/27/2012 *2
Subsidence Monitoring Reports	n/a
Subsidence Monitoring Data	n/a
Rill & Gully Survey	5/17/2013*3
Vegetation Monitoring Data	n/a
Specific Variance Approvals	n/a
Annual Reclamation Reports	2012
Midterm Review Documents	10/29/2012
DRMS/OSM Inspection Reports/Enforcement Actions (3 Years)	Complete through 6/2013*4
Transfers/Succession of Operator	Exhibit 1
Temporary Cessation Notification	8/7/2012
Reclamation Cost Estimate	MT6, 10/29/2012
CERTIFICATIONS	
Pond Certifications	(Permit file)
Annual Certifications for Impoundments	(Sediment pond file) 4/2/2013

HYDROLOGIC RECORDS

NPDES Permit	(Bonding file) CDPS C-00906*5
NPDES Records	(DMR file) Through Q2 2013
Stormwater Management Plan	(Bonding file) COR-040192 *6
Spill Prevention Containment & Control Plan	(Spiral bound) 4/5/2012
MSHA Pond Inspections	(Sediment pond inspection file) Pond 8, 4/2/2013
State Engineer's Pond Inspection	n/a
Quarterly Pond Inspections	Through Q2 2013
Annual Hydrology Reports	2011
• Ground Water Monitoring	Y
• Surface Water Monitoring	Y
• Spring & Seep Monitoring	Y
• Mine Water Discharge Monitoring	Y
• Mine Inflow Study	Y
• Water Consumption Records	Y
Well Permits	Y

BLASTING RECORDS

Blasting Publication	n/a
Blasting Records (3 years)	n/a
ATFE Explosives Permit	*7
Blasting Variances	n/a
Pre-Blast Surveys	*2

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Fill Certifications for Excess Spoil
or Underground Development Waste

- Quarterly Inspections Through Q2 2013
- Compaction Testing 5/28/2012 in
Q2 2013 report
- Final Certification DWP 1

Coal Processing Waste Banks

Through Q2 2013

Haul Road Certifications

4/18/2012,
7/25/2012
(Permit file)

Access Road Certifications

Maps 11 & 12

ADDITIONAL RECORDS
(specify)

COMMENTS:

*1 Although the insurance certificate in the binder was out of date, proof of insurance through 4/24/2014 was demonstrated, and the certificate was forwarded to the Division

*2 No permission for residence pre-subsidence surveys yet

*3 Monthly surveys through the summer, in accordance with exhibit 29: The Rill and Gully Plan, had not been documented.

*4 DRMS inspection reports for July, August and September had not been filed, but the reports were available

*5 Expires 11/30/2013; application for renewal sent 4/29/2013

*6 Administratively continued

*7The permit and the explosives have been removed from the New Elk mine site.

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