

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 Ron Thompson 12250 Highway 12	County: Las Animas Operation Type: Underground Permit Status: Temporary Cessation Ownership: Private Operator Representative Present:			
•				
Weston, CO 81091	Ron Thompson			
Operator Representative Signature: (Field Issuance Only)				

INSPECTION INFORMATION

Inspection Start Date: April 29, 2 Inspection Start Time: 13:00 Inspection End Date: May 16, 20 Inspection End Time: 11:00			Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Cloudy
Joint Inspection Agency:		Joint	Inspection Contacts:
None			
Post Inspection Agency:		Post	Inspection Contacts:
None			
Inspector(s):	Inspector	r's Sig	nature: Signature Date:
Leigh D. Simmons Daniel I. Hernandez	H	<i>Y-</i>	5/15/2013

Inspection Topic Summary

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

N - Air Resource Protection R - Roads

 ${f R}$ - Availability of Records ${f N}$ - Reclamation Success

N - Backfill & Grading
 R - Revegetation
 N - Subsidence

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

R - Hydrologic Balance R - Signs and Markers

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

R - Processing Waste R - Topsoil

COMMENTS

This was a complete inspection by Leigh Simmons and Dan Hernandez of Colorado Division for Reclamation, Mining and Safety, (the Division). The inspectors were accompanied by Ron Thompson of New Elk Coal Company, (NECC). The weather was varied: clear on Monday and Tuesday, overcast on Wednesday with a storm in the late afternoon, and clear and cold on Thursday with a couple of inches of new snow.

The New Elk mine continues in Temporary Cessation. No coal is being produced, and stockpiled coal is no longer being shipped to Lyons. Mine staff remain optimistic that a contract with a new customer is imminent, and that the mine will begin producing coal again soon (the suggestion was that a contract could be signed in May or June, and production could begin by mid-July). In the meantime, Cline Mining is going ahead with "the Marret Plan" - a recpitalization plan which should allow the company to remain solvent. A hearing to decide whether or not Cline Mining can continue to be listed on the Toronto Stock Exchange has been postponed to June 25, 2013. Several employees have been hired at the mine, including: Randy Acre, Mine Manager; Mike Valentine, Surveyor/Draughtsman; John Terry, Surveyor; Greg Smith, Technical Service (mining engineering).

Over recent months the staff at New Elk have made a commendable effort to bring the mine into full compliance with the regulations and permit. Many issues brought to light in previous inspection reports have been tackled and resolved, others have been partially addressed, a few more remain outstanding. 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. More revisions to the permit are anticipated as the mine moves towards production. This context lends urgency to the need to ensure that the situation on the ground is in full compliance as soon as possible. In particular, the maps should reflect the physical reality, and vice-versa.

AVAILABILITY OF RECORDS – Rule 5.02.4(1):

Work on the digital record database, described in the October 16, 2012 inspection report, was on-going. In the meantime, NECC continues to maintain paper records. The records were in compliance in Mr. Thompson's office (see attached checklist).

EXCESS SPOIL and DEVELOPMENT WASTE - Rule 4.09

Placement; Drainage Control; Surface Stabilization:

The reclaimed Development Coal Waste Pile (DWDA 1) and the Development Waste Disposal Area (DWDA 2) both appeared stable and well drained. There were no visible signs of erosion or instability. The third Development Waste Disposal Area approved in TR-65 (DWDA 3) did not yet exist on the ground.

EXPLOSIVES - Rule 4.08

Distance Prohibitions 4.08.4; Warnings 4.08.4; Control of Adverse Effects 4.08.4:

There were no explosives on site; NECC no longer holds an explosives permit. The area where explosives were stored previously was in good order.

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:

Surface water and sediment control structures were inspected and are described by location, in keeping with the format used in recent inspection reports. NECC had done significant work on culverts. Their policy going forward is to use only thicker 12 gauge culverts when replacing old or damaged culverts.

At the western end of the mine site, from west to east:

- Culvert C49 is outside of the disturbance boundary, it is not NECC's responsibility.
- The "old water tank" and "old substation" SAEs showed no recent disturbance. Each could be a candidate for bond release.
- Ditches and culverts were in good order, unless otherwise noted.
- Containment 2 was fine, but is not shown on map 14. **Non-coal waste should be cleared from the adjacent ditch.**
- The upstream section of armored ditch D28 exists in the natural drainage beside the west fan, as drawn on map 14 dated 7/24/2012, although many of the features shown on this map don't exist on the ground. An earlier version of the map, dated 3/12/2012, more closely reflects the physical reality on the ground in many cases, but neither version is comprehensive.
- The clean water diversion ditch above the west fan exists uphill of the position shown on the 3/12/2012 map, but needs to be cleared of vegetation and reshaped in places.
- Culvert C23a does not exist. Culvert C23 was partially blocked, but has about 2' free at the top. Table 21 specifies that C23 has a minimum diameter of 30", which would give a cross sectional area of 94 square inches. Although C23 is oversized, even a 4' diameter culvert blocked to 2' does not have the cross sectional area to meet the design specification. **C23 should be cleared.**
- Clean water ditch D29 exists but becomes indistinct towards the flat area. D29b is ~50' uphill, draining to the west. The scheme works, but is not as drawn on either version of map 14. **Both ditches need to be cleared.** D29 currently ends in the containment; **the ditch should be extended to the east, into the clean water system.**

- Culverts C51, C52 and C54 do not exist.
- Although it is not clear at this stage whether the slurry injection facility will be used or not, the facility has been constructed. Map 14 must be extended to show the facility, which was approved via MR95 and MR102 and is shown on Map 12 (although map 12 shows two injection wells where only one exists and should be corrected). MR102 describes runoff from the well pad being treated by containment 1 (it is not an SAE). Containment 1 should also be marked on the map. There was no existing diversion from the natural drainage to the south of the slurry well pad, although there was an existing short spur into ditch D29.
- No recent disturbance was observed at the core lab SAE. This area could potentially be phase 1 bond released, and the natural drainage from the south re-established.
- Redundant sections of culvert C2 had been excavated, leaving just a single concrete culvert. The downstream section of the ditch, on the north side, runs into a wetland. Some scrap aluminium should be removed and the berm should be re-shaped. On the south side of C2, a berm should be established to prevent shop area runoff from entering the clean water system.
- The explosives area was clean and in good shape. There was a clean water diversion ditch to the south that is not marked on map 13, which joins ditch D7. Some timber should be cleared from it, and the ditch re-shaped in places.
- Culvert C4 had been removed. The cut where it used to be should be deepened to prevent the ditch acting as an impoundment. Timber and vegetation should be cleared from ditch D7. The first section of culvert C3 had been replaced, replacement of the second section is pending the delivery of new culverts. The ditch from C3 to the river had been cleaned and was in excellent shape.
- Some non-coal waste should be cleared from ditch D9 and the inlet to culvert C5.
- Pond 4 was dry. The embankments and spillways were in good order.
- Clean water culvert C37 was partially blocked and should be cleaned out.
- The reclaimed DWDA (DWDA 1) was stable, with no signs of erosion. Ditches and culverts surrounding it were clear and in good order.
- The "new water tank" SAE appeared to be well drained and stable, however some non-coal waste should be cleared and a low spot in the berm should be built up.
- The clean water diversion ditch D18 exists as shown on map 13. It was clear and well defined. An unlabelled culvert is shown under the road to the water tanks on an earlier version of map 13 (4/2/2012), but was removed on the later approved version (7/25/2012). The culvert does not exist on the ground and is not required.
- Clean water diversion ditch D26 does not exist as shown on map 13, and may be impossible to construct
 without compromising the road above. The short leg of the ditch west of the natural drainage has a very
 small watershed and may not be necessary. East of the drainage, the ditch needs to be cleaned of rocks,
 non-coal waste and vegetation, and should be shaped and graded to ensure it functions as designed.
 The old section of ditch, running south east from the lower water tank pad, should be reclaimed.
- A defunct water pipe and an old electrical cable were compromising ditch D26. These items should be removed.
- Ditch D39aa does not exist on the ground, and the highwall behind the substation has not been constructed as shown on map 13. In the same area, the parking lot has not yet been added to map 13. **An unmarked**

culvert in the same area should be removed. Ditches D39a and D39aa do not appear to be necessary on the ground.

On the north side of the highway:

- The upland diversion ditch above the RDA was clear and in good order. There was no evidence of breaching. The results of the January survey should be included with the next quarterly fill report.
- There was no sign of recent disturbance at the cell phone tower pad, or the lower pad located immediately to the north.
- The unlabelled culvert under the road on the east side of the RDA was clear.
- The damaged section of the culvert under the conveyor, C41, had been replaced and the area around it filled and restored. Delivery of a final 30' section of culvert is holding up the completion of this project. The final section should be placed and the surrounding area backfilled around it.
- Mr. Thompson discussed plans to make provision for maintenance of the area around the junction of the two conveyor belts near C41, before the mine gets back to production. This is strongly encouraged
- Culverts under the haul road up the west side of the RDA were clear, except for the lowest one. **The** lowest culvert should be cleared at the inlet.
- Pond 8 was holding water ~20' below the primary discharge level. The embankments and spillways of pond 8 were sound.
- New bales had been added beneath the conveyor, above the highway, and containment 5 had been cleaned out.

Between the highway and the river:

- The large clean water culvert C6 had been cleared.
- The newer DWDA (DWDA 2) was stable, with no signs of erosion. The ditches around the pile (D12, 13 and 14) had been re-shaped and looked good, although a little water was ponding before culvert C13. The culvert was clear.
- Culvert C26 had been removed and an open channel to the river restored. The clean water system comprising ditches D11 and D19, and culverts C14, C14a and C30 had been re-routed. Neither of the recent versions of Map 13 reflects the reality on the ground exactly, but the system appears effective.
- The topsoil stockpile SAE was good at the western end, but needs to be built up at the eastern end, and a silt fence should be installed.
- Culverts C70 and C71 had been removed and an open channel restored from the double culverts from the pond 8 emergency spillway to the river. **This area is to be hydromulched**.
- Containments 3 and 4 had been cleaned.
- A black pipe not shown on map 13 was discharging to the river beside the footbridge upstream from C13. This is the overflow from the old storage cistern.

South of the river:

• Ditches D5 and D6 were clear and well defined. Equipment had been moved back inside the area treated by D5 and the ditch was no longer compromised.

- No problems were noted around the soil storage area.
- Culverts C9 and C9a were clear.
- The gabion at the outlet of ditch D10 had been replaced with rock armoring. The new work looked excellent.
- Culvert C72 was clear at both ends, but C73 needs to be cleaned at the outlet. Some work at the pumphouse was still to be completed. The berms in the area should then be completely restored, the stream buffer zone protected and clearly indicated and the ground hydromulched. Culvert C74 had been pulled; the decision had not yet been made whether to replace it to allow access to the cistern. Below C74 ditch D15 should be re-shaped. The remainder of the system (D32, C64, D32a, C65, D32b) were all clear, although PVC pipes in D32b should be removed.
- The upstream leg of ditch D16 needs to be re-shaped, but the downstream leg has been successfully rerouted past the power pole.
- The C16 system of culverts is ineffective. The culverts are due to be replaced.
- Culverts C19 and C22 both need to be cleaned. D22 and C32 were good.
- No problems were observed with Pond 6. Mr. Thompson expected to solicit bids for lining the pond in June.
- At the time of the inspection culvert C20 was being cleaned by Bobby Steele and Dick Tribble.
- Pond 7 was holding water, but not discharging. The embankments and spillways were in good order.
- The two "railroad culverts" at the eastern end of the disturbance boundary both need to be cleaned
- The berm at the eastern end of the SAE south of pond 7 had been restored. The boundary of this SAE does not match that shown on map 13. The position of the unlabelled clean water diversion ditch should also be verified and the ditch re-established on the ground. No bales are needed in the ditch.
- The intention is for the western end of the SAE to transition into a swale and be diverted to pond 7 via D24a.
- The entire surface water scheme around the silos and the Bates portals is the subject of a revision (described below). Steps have been taken to avoid the risk of offsite impacts while this revision is in progress.
- Drop inlets 2 and 3 both need to be cleaned.
- The culvert running into drop inlet 3 needs to be identified and cleaned. (In this area, the conveyor is incorrectly drawn on map 13, leading to confusion with identification of features on the ground)

GENERAL MINE PLAN COMPLANCE:

The response of NECC to the mid-term permit review (MT6, 10/29/2012) is still pending. Several maps should be redrawn as part of this response. Inspections continue identify many inconsistencies with the approved maps. Some examples of features that should be updated on maps 11, 13 or 14 include:

- Containments 1& 2 and nearby topsoil pile
- Ditches D6, D11, D16, D19, D26, D28, D29, D29b, D39a, D39aa
- Unlabelled clean water diversions south of west fan, south of explosives area, south of pond 7
- Culverts C2, C12, C14, C14a, C17, C23, C23a, C26, C30, C51, C52, C54, C70, C71, (C74?)

- The slurry injection facility
- The substation/parking lot area
- The SAE south of pond 7
- The culvert running into drop inlet 3
- The area around the silos and bates portals, including contours and the positions of the conveyors
- The contours around the RDA haul road and the explosives storage area

(Note that this list is not intended to be comprehensive – it should be viewed in conjunction with the items described in the findings document of MT6)

MR119, dealing with the construction of a parking lot and walkway, was recently approved.

MR120, dealing with an extension to the bath house building, is in progress.

MR121, dealing with changes to the surface water management scheme around the silos and Bates portals, was withdrawn and will be re-submitted as a technical revision.

TR64, dealing with a ventilation shaft, and TR67, dealing with two de-watering wells, are both in progress.

PR4, dealing with an expansion of the permit boundary to the east, is in progress.

Dumpsters had been brought in to hold non-coal waste. They were lined up along the northern edge of the road, adjacent to ditch D5.

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

Drainage Control; Surface Stabilization; Placement:

No water was pooled on the RDA. The benches and faces appeared to be stable. Rock drains were in place ready for further expansion.

Topsoil is to be stripped from the slopes above the RDA as the pile grows towards its planned final configuration. A brief visual inspection of the slopes above from the clean water diversion ditch suggested that only approximately a quarter of the slopes held any significant topsoil. Depths were variable and difficult to assess. The section of the permit that deals with topsoil stripping was last updated in 1997 and estimates that 6-12 inches of topsoil will be recovered. This section is under review by Gorham Energy Consultants in response to MT6.

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 on the mine site were generally well drained and maintained, although the road up to the water tanks will need to be regraded soon.

REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

Recent wet weather meant that vegetation was beginning to show new growth. No noxious weeds were observed.

SIGNS AND MARKERS - Rule 4.02:

A mine ID sign at the entrance to pond 8 off the highway is needed.

The mine ID sign on the RDA haul road needs the address and phone number to be updated.

Disturbed area boundary markers were not obvious in the region of ditch D34bbb, around the explosives area or in the vicinity of ditch D26. **Markers should be clearly visible**.

OFFSITE SUPPORT FACILIITES - Rule 4.04, 4.28:

The Jansen Load-out was inspected on Tuesday 30th. Weeds and non-coal waste had been cleared from the site. The berm had been restored. Boundary markers were in place. Both sumps were clear.

The Apache Canyon airshafts were inspected on Tuesday 30th. The phone number on the mine ID sign at the second airshaft needs to be updated. Some repairs had been made at the second airshaft, but a new hole had opened up around the base of the concrete pad, near a small tree. The hole must be filled.

Offsite monitoring wells were inspected on Tuesday 30th. All were well maintained and identified.

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 shown on the 7/25/2012 version of map 14 does not exist and may not be constructed.

A second topsoil stockpile, in the area of containments 1 and 2 is not shown on map 14. **The sign on the pile should be replaced**.

DOCUMENTS RECEIVED

n/a

OTHER (SPECIFY)

n/a

ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions are necessary at this time.

PHOTOGRAPHS



Photo 1: D26



Photo 2: Water lines compromising D26



Photo 3: Non-coal waste outside disturbance boundary



Photo 4: Non-coal waste



Photo 5: Non-coal waste



Photo 6: Vegetation to be cleared from D7



Photo 7: Vegetation to be cleared from D7 (2)



Photo 8: C3 work in progress



Photo 9: C4 removed, ditch currently acting as impoundment



Photo 10: Completed work at C2



Photo 11: Berm needed to protect C2 inlet



Photo 12: Containments and core lab SAE area





Photo 13: D29

Photo 14: Pre-law non-coal waste



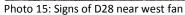




Photo 16: Indistinct diversion ditch near west fan



Photo 17: Diversion ditch near west fan to be cleared



Photo 18: C23 to be cleared







Photo 20: New bales beside the refuse conveyor



Photo 21: Containment 5



Photo 22: Berm at edge of disturbed area north of containment 3



Photo 23: Inlet to C13



Photo 24: Open channel replacing C26



Photo 25: C14 repositioned



Photo 26: East end of topsoil stockpile SAE needs to be built up



Photo 27: Open channel in place of C70



Photo 28: Armoring to replace gabion at D10 outlet



Photo 29: Re-routed D16



Photo 30: PVC to be removed from D32b





Photo 31: C19 to be cleaned

Photo 32: C22 to be cleaned



Photo 33: "Railroad culvert", needs to be cleaned



Photo 34: C48 in the background, unidentified culvert conveying disturbed area runoff in front



Photo 35: Looking east down clean water diversion south of pond 7



Photo 36: Drop inlet 3 to be cleaned







Photo 38: Inlet to C12



Photo 39: New parking lot and walkway



Photo 40: improved berm at Jansen Loadout



Photo 41: Slumping at airshaft pad to be filled



Photo 42: Sign at second Apache Canyon airshaft

AVAILABILITY OF RECORDS

PERMIT RECORDS		HYDROLOGIC RECORDS	
DRMS Permit	Expires 2/28/2014	NPDES Permit	(Bonding file) CDPS C-00906
Permit Application w/Revisions	(Binder)	NPDES Records	(DMR file) Through Q4 2012 *2
Findings Document	MT6, 10/29/2012	Stormwater Management Plan	(Bonding file) COR-040192 *3
Insurance Certificate	(Bonding file) Expires 9/23/2013	Spill Prevention Containment & Control Plan	(Spiral bound) 4/5/2012
Bond Document	\$4,133,137.02	MSHA Pond Inspections	(Sediment pond inspection file) Pond 8, 4/3/2012
Phased Bond Release Documents/Findings	(Box file) SL2, 12/26/2006	State Engineer's Pond Inspection	n/a
Air Emission Permits	84LA074F-1 84LA074F-2 (Bonding file) 09LA0590 (Jansen, box file)	Quarterly Pond Inspections	Through Q1 2013
County Special Use Permits	See Exhibit 5 & (Windowsill) 3/2012 application re. Bosque del Oso	Annual Hydrology Reports	2011
UG Mining Landowner Notification	2/27/2012 *1	 Ground Water Monitoring 	Y
Subsidence Monitoring Reports	n/a	• Surface Water Monitoring	Y
Subsidence Monitoring Data	n/a	• Spring & Seep Monitoring	Y
Rill & Gully Survey	(Bonding file) 9/29/2012	Mine Water Discharge Monitoring	Y
Vegetation Monitoring Data	n/a	Mine Inflow Study	Y
Specific Variance Approvals	n/a	 Water Consumption Records 	Y
Annual Reclamation Reports	(Windowsill) 2012	Well Permits	(Windowsill)
Midterm Review Documents	(Windowsill) 10/29/2012		
DRMS/OSM Inspection	Complete through		
Reports/Enforcement Actions (3 Years)	3/13/2013	BLASTING RECORDS	
Transfers/Succession of Operator	(Binder 1)	Blasting Publication	n/a
Temporary Cessation Notification	(Windowsill) 8/7/2012	Blasting Records (3 years)	n/a
Reclamation Cost Estimate	MT6, 10/29/2012	ATFE Explosives Permit	*4
CERTIFICATIONS		Blasting Variances	n/a
Pond Certifications	(File)	Pre-Blast Surveys	*1
Annual Certifications for	(To be filed)		

Number of <u>Partial</u> Inspection this Fiscal Year: 6 Number of <u>Complete</u> Inspections this Fiscal Year: 4

Impoundments

4/2/2013

Fill Certifications for Excess Spoil or Underground Development Waste

of enderground bevelopment waste	
 Quarterly Inspections 	Through Q1 2013
 Compaction Testing 	Through Q1 2012
 Final Certification 	DWP 1
Coal Processing Waste Banks	Through Q1 2013
Haul Road Certifications	4/18/2012,
	7/25/2012
Access Road Certifications	Maps 11 & 12

ADDITIONAL RECORDS

(specify)

Annual pond certification report for 2012 is pending

COMMENTS:

^{*1} No permission for residence pre-subsidence surveys yet

^{*2} Q1 2013 with PE

^{*3} Administratively continued

^{*4} The explosives permit is held by the contractor TK Mining. The permit and the explosives have been removed from the New Elk mine site.