

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



PERMIT INFORMATION

Permit Number: C-1996-084 Mine Name: Lorencito Canyon Mine Operator: New Elk Coal Company, LLC Operator Address: Mr Mark Haywood 12250 Highway 12 Weston, CO 81091 **County:** Las Animas **Operation Type:** Surface **Permit Status:** Permanent Cessation **Ownership:** Private

Operator Representative Present:

Greg Smith

Operator Representative Signature: (Field Issuance Only)

INSPECTION INFORMATION

Inspection Start Date: September Inspection Start Time: 09:00 Inspection End Date: September Inspection End Time: 15:00			Inspection Type: Coal Partial Inspection Inspection Reason: Normal I&E Program Weather: Clear
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	1A	}-	September 26, 2013

Inspection Topic Summary

NOTE: Y=Inspected N=Not Inspected R=Comments	s Noted V=Violation Issued NA=Not Applicable
NA - Air Resource Protection	R - Roads
N - Availability of Records	N - Reclamation Success
NA - Backfill & Grading	R - Revegetation
R - Excess Spoil and Dev. Waste	NA - Subsidence
NA - Explosives	NA - Slides and Other Damage
N - Fish & Wildlife	NA - Support Facilities On-site
R - Hydrologic Balance	R - Signs and Markers
R - Gen. Compliance With Mine Plan	N - Support Facilities Not On-site
N - Other	N - Special Categories Of Mining
NA - Processing Waste	N - Topsoil

COMMENTS

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

NECC had three people working at the Lorencito Canyon mine: Bobby Steele, Vince Masarotti and Ron Tokar had done a commendable job of repairing damaged roads and ditches to ensure that no further damage would be caused by storm run-off. No repairs had been made to existing gullies and no re-seeding had been done; these activities are scheduled to take place after the work to abate enforcement actions at the New Elk mine is complete.

EXCESS SPOIL and DEVELOPMENT WASTE - Rule 4.09

Placement; Drainage Control; Surface Stabilization:

Fills 7, 8 and 9 were all well vegetated. There was no evidence of damage caused by drainage problems. Mr. Masarotti had cleaned some accumulated sediment from the highest bench of fill 8, and planned to work on the down-drain over the next few days.

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 spillways and embankments on all 6 ponds were in good shape.

Pond 9 was discharging by drips. The very large gully south of the pond (below the outlet of culvert C19) had been repaired using large rocks. The smaller gullies around the pond had not been touched. The silt fence below the emergency spillway had been repaired.

Pond 8 was discharging at a trickle.

Pond 5 was discharging by drips. The pond was just accessible by road, since new water bars had been built. Above the drainage to pond 5, the flat area that had previously been armored will need to be monitored and

maintained to ensure that no disturbed area run-off gets into the drainage if the pond is to be a candidate for bond release.

Pond 6 was discharging at a rate of approximately one drip every 5 seconds. The flat area beside the

emergency spillway must be carefully monitored to ensure that no off-site disturbance is allowed to occur. Pond 7 was not discharging.

Pond 9a was discharging by drips.

Culverts were inspected as follows:

C1 had been cleared at the inlet. Recent rain had washed more sediment into it. **The culvert should be flushed and slight damage to the ends repaired when it is practical to do so**.

C2 had been cleaned (or replaced) and was in excellent shape.

C3 had been cleared at both ends - the small amount of sediment left in the culvert was not significant.

C4 had been cleaned at both ends, but **the culvert should be flushed before the accumulated sediment hardens up**.

ardens up.

C5 appeared to be slightly mis-located on the draft map. The culvert was clear. Could the culvert be used somehow to help prevent the erosion plaguing the east facing slope above the shrub plot?

C6 and C7 were both clear.

C8 had had a sump excavated at the inlet, but the culvert itself will need to be flushed.

C9, 10, 11, 12 were all clear.

Considerable work had been done on ditch maintenance. Ditches were inspected as follows:

The ditch downstream of C2, which becomes the down-drain on the east side of fill 9, was in excellent shape even after all of the heavy rain. No maintenance was needed and the ditch can serve as a model for a successful armored channel.

Ditches 2, 3 and 4 had all been cleaned and graded, and the damage to D4 above C3 had been repaired. Work was in progress on D10, near to C4. Mr. Steele plans to continue the armoring to the top of the

down-drain on the east side of fill 7.

Ditches 19 and 20 above pond 6 had been repaired and the flow control structures had been restored. Ditch 18 and the adjacent contour ditch had been re-cut.

GENERAL MINE PLAN COMPLIANCE:

NECC is planning to hire vegetation sampling contractors imminently, in order to establish progress towards the standards needed for bond release.

At present two permitting actions are progress:

- RN3 The Division received a response to the adequacy letter of July 16, 2013 on September 13, 2013 but has not yet completed its review.
- TR18 The Division is awaiting a response to the adequacy letter of May 29, 2013.

As noted in previous inspection reports, identification of the important features at the Lorencito Canyon site is a difficult task, exacerbated by the lack of a complete map or maps. This problem is being addressed by the permit renewal process (RN3).

The map(s) must clearly identify all features, but in particular:

- Roads and culverts that NECC is responsible for, and those that are maintained by third parties.
- Ponds, as identified on the NPDES permit (what has been referred to as "pond 9" in the DRMS permit is apparently "pond 9b" in the NPDES permit)

Until the permit renewal process is completed map 1 from the 2008 Annual Reclamation Report may be used for reference. In this inspection report some structures are referred to as they are labeled on the draft map for RN3. During the inspection several GPS waypoints were collected in order to verify the location of structures shown on the draft map.

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):

The roads around the site were in good to adequate condition. In particular the roads to ponds 5 and 6 had received attention. Both were passable by car.

REVEGETATION - Rule 4.15

Vegetative Cover; Timing:

The shrub plot was inspected. Several of the new transplants were observed, although no measurement was made to estimate their survival rate.

In general, vegetation around the site continued to look relatively lush and healthy for the region. It is expected that some vegetation sampling will occur before the first frost.

SIGNS AND MARKERS – Rule 4.02:

New signs had been produced and were being erected during the inspection. The signs contain all of the required information, except that the phone number for the Division should be added (303,866 3567).

DOCUMENTS RECEIVED N/A

OTHER (SPECIFY) N/A

ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions are necessary at this time.

LDS

PHOTOGRAPHS



Photo 1: New Mine ID sign



Photo 2: Restored silt fence below pond 9 embankment



Photo 3: Pond 9, showing repaired gully (1)



Photo 4: Pond 9, showing repaired gully (2)



Photo 5: Pond 9, showing repaired gully (3)



Photo 6: Gully access to be re-seeded



Photo 7: C1 to be flushed and repaired



Photo 8: C1 outlet



Photo 9: C2 looking good



Photo 10: D4 repair above C3



Photo 11: Fill 7



Photo 12: C3 inlet - recent work



Photo 13: C3 outlet - recent work



Photo 14: C4 – work in progress



Photo 15: Shrub plot and nearby erosion



Photo 16: C8 to be flushed (1)



Photo 17: C8 to be flushed (2)



Photo 18: Repairs to highest terrace of fill 8





Photo 19: Pond 8

Photo 20: Pond 5



Photo 21: Flat area above pond 5 drainage (1)



Photo 22: Flat area above pond 5 drainage (2)



Photo 23: Road to pond 6 and D20 (1)



Photo 24: Road to pond 6 and D20 (2)



Photo 25: Erosion to monitor below pond 6



Photo 26: D18 improvements (1)



Photo 27: D18 improvements (2)



Photo 28: Contour ditch between ponds 6 and 7 (1)



Photo 29: Contour ditch between ponds 6 and 7 (2)



Photo 30: Pond 7



Photo 31: Contour ditch between ponds 7 and 9a (1)



Photo 32: Contour ditch between ponds 7 and 9a (2)



Photo 33: Pond 9a