



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

1313 Sherman Street, Room 215, Denver, CO 80203 P 303.866.3567 F 303.832.8106 <http://mining.state.co.us>

PERMIT INFORMATION

Permit Number: C-1996-084 Mine Name: Lorencito Canyon Mine Operator: New Elk Coal Company, LLC Operator Address: Mr. Louis Head 12250 Highway 12 Weston, CO 81091	County: Las Animas Operation Type: Surface Permit Status: Permanent Cessation Ownership: Private
	Operator Representative Present: Ron Thompson, Nick Mason
Operator Representative Signature: (Field Issuance Only)	

INSPECTION INFORMATION

Inspection Start Date: October 3, 2017 Inspection Start Time: 12:00 Inspection End Date: Inspection End Time:	Inspection Type: Coal Partial 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): Robert D. Zuber, P.E.	Inspector's Signature: <i>Robert D. Zuber</i> Signature Date: 10/10/2017

Inspection Topic Summary

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

NA - Air Resource Protection

N - Availability of Records

NA - Backfill & Grading

R - Excess Spoil and Dev. Waste

NA - Explosives

R - Fish & Wildlife

R - Hydrologic Balance

Y - Gen. Compliance With Mine Plan

N - Other

NA - Processing Waste

Y - Roads

Y - Reclamation Success

R - Revegetation

NA - Subsidence

Y - Slides and Other Damage

NA - Support Facilities On-site

N - Signs and Markers

Y - Support Facilities Not On-site

N - Special Categories Of Mining

N - Topsoil

COMMENTS

A partial inspection was conducted by Rob Zuber and Janet Binns of DRMS on October 3, 2017. Ms. Binns is an expert with reclamation vegetation, and the focus of the inspection was an assessment of the vegetation conditions at the Lorencito Canyon site.

The weather was clear and warm. The ground was somewhat muddy from recent rains. Ron Thompson and Nick Mason of NECC were present for the inspection.

EXCESS SPOIL and DEVELOPMENT WASTE – Rule 4.09

Placement; Drainage Control; Surface Stabilization:

Fills 7, 8, and 9 were inspected. All were generally in good condition.

FISH and WILDLIFE – Rule 4.18:

During the inspection, a large horny toad was observed, along with three mule deer. Sandhill cranes were migrating overhead during the inspection.

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:

Pond 9 was discharging turbid water, and the flow was significant: approximately two inches high within the weir outlet. On the primary spillway riser pipe, four rows of holes were visible. It is not clear in the design for this pond in the PAP if there are supposed to be more holes below these; NECC should work with the Division to determine the number of rows for the riser in the design for this pond. The sediment and erosion control BMPs on the downstream side of the dam of Pond 9 are functioning well.

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 1

REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

The inspection began at the road above (north) of Fill 9. This area is depicted as Fill 9A on the 2008 ARR map. This slope previously had significant rilling and thin vegetative cover. The vegetative cover was in very good condition during this inspection, visually dominated by winterfat, alfalfa, and fourwing saltbush, along with perennial wheatgrasses. This area has healed nicely and visually has established diverse vegetation.

Parcel N-1 is flatter and has shallow puddles from the recent rain storms. Vegetative cover on the flat portion of this parcel is a little thin, but still well-established.

Vegetative cover on the north-facing slope of Parcel N-4 has filled in well. A repaired gully is holding up well. LCC has implemented brush packing for gully repair with positive results. This parcel has good winterfat and fourwing saltbush established. Occasional alfalfa were noted. Vegetative cover is open with bare ground visible within the established community. Erosion appears to have stabilized with the absence of active rilling.

Parcel N-3 contains a relatively flat bench north of ditch D-9. This parcel is heavily used by wildlife (elk) and is heavily trampled and browsed. As a result, the vegetative cover is thin in this area. However, there are no erosional features initiating from this parcel.

The north-facing slope of the knob, Parcel N-2 south of ditch D-9, was well vegetated and stable. Few forbs were visible on this steep slope, but well established grasses (western and intermediate wheatgrasses and Russian wildrye) and woody species exhibited a healthy, stable stand. Noxious weeds were not observed on this location. The northwest “corner” of the knob, still within parcel N-2, continues to contribute sediment to Ditch D-9. The lower portion of this northwest facing slope continues to exhibit rilling and bare conditions.

The north face of Fill 8 continues to have a healthy, stable stand of grass-dominated vegetation. No gullies were observed on the face of this fill. Few woody plants or forb species were observed on this slope.

The soil in the fenced shrub plot was very wet from recent rains. The center of the plot was dominated by sunflowers and robust grass species. Few woody transplants remained viable. The few living woody plants observed were mountain mahogany, Woods’ rose, serviceberry, and fringed sagebrush. Unfortunately, it appears the grass species have out competed the shrub transplants. If NECC conducted efforts to control the grasses within the plot, they should provide this information to the Division. Action was recommended in the Division’s September 1, 2015 inspection report. There was no indication of any replanting of shrubs, or that weed/grass barriers had been installed.

The slope south of the pond cleanings location, parcel W-4, has previously had wattles installed. Vegetation is becoming established on this steep slope between the wattles. Good vegetation establishment will aid in stabilizing this erosive slope.

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 1

The slope east of the road intersection and south of the road, Parcel C-2, has a healthy stand dominated by sagebrush and winterfat.

Vegetation on Fill 7 is well-established and appears stable. This slope is dominated by perennial grasses. The east side of the slope contains a good stand of shrub species.

The lower portion of Fill 9 has good cover. The upper portion tends to have thinner vegetative cover and still exhibits a significant amount of annual species (sunflowers). But the south facing slope of Fill 9 appears stable with no obvious signs of gully formation.

Parcel S-2, located between Fill 9 and Fill 7 has a healthy stand of shrubs.

The reclaimed area vegetation was looking very healthy overall this year. An NECC representative (Ron Thompson) said that they have had three favorable years for precipitation. Noxious species were very few, and only an occasional knapweed was observed. NECC has been effectively managing noxious weeds.

ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions were initiated as a result of this inspection, nor are any pending.

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 1

PHOTOGRAPHS



Fill 9A



Parcel N-1

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 1



East side of “the knob”



Parcel N-3

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 1



Rills at northwest “corner” of knob, which contribute sediment to D9



Fill 8

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 1



Slope south of the pond cleanings location, in parcel W-4



Shrub plot

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 1



Slope south of main intersection (apparently the north end of parcel W-1)



Fill 7 (small southwestern portion in middle of photo)

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 1



Fill 7 (main portion)



Fill 9 – upper portion with some bare areas

Number of Partial Inspection this Fiscal Year: 3

Number of Complete Inspections this Fiscal Year: 1