

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



# **PERMIT INFORMATION**

Permit Number: C-1981-008 Mine Name: New Horizon Mine Operator: Western Fuels-Colorado, LLC Operator Address:

Mr. Ross L Gubka, P.E. P.O. Box 628 Nucla, CO 81424 County: Montrose Operation Type: Surface Permit Status: Active Ownership: Private

**Operator Representative Present:** 

Ross Gubka

**Operator Representative Signature: (Field Issuance Only)** 

This report was issued electronically from the Division's Durango Field Office.

## **INSPECTION INFORMATION**

Inspection Start Date: August 22, 2013 Inspection Start Time: 08:30 Inspection End Date: August 22, 2013 Inspection End Time: 15:00			<b>Inspection Type:</b> Coal Parti <b>Inspection Reason:</b> Normal <b>Weather:</b> Clear	1
Joint Inspection Agency:		Joint Inspection Contacts:		
None				
Post Inspection Agency:		Post Inspection Contacts:		
None				
Inspector(s):	Inspector's Signature: Signature		Signature Date:	
Marcia L. Talvitie, P.E.	imaucia	L	alvilie	06-Sep-2013

#### Inspection Topic Summary

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

Y - Air Resource Protection
N - Availability of Records
Y - Backfill & Grading
N - Excess Spoil and Dev. Waste
NA - Explosives
R - Fish & Wildlife
R - Hydrologic Balance
R - Gen. Compliance With Mine Plan
N - Other
NA - Processing Waste

R - Roads
R - Reclamation Success
R - Revegetation
NA - Subsidence
NA - Slides and Other Damage
Y - Support Facilities On-site
Y - Signs and Markers
NA - Support Facilities Not On-site
R - Special Categories Of Mining
R - Topsoil

## **COMMENTS**

A partial inspection of the New Horizon Mine was conducted by me, Marcia Talvitie of the Division, on Thursday, August 22, 2013. Skies were clear, and the temperature reached approximately 90 degrees. Ross Gubka was available to represent the operator, Western Fuels-Colorado, LLC, throughout the inspection.

I arrived at the mine office at approximately 8:30 a.m. In addition to Mr. Gubka, I spoke with Rock Wolney, Mine Manager, and Jason Storey, from Western Fuels' Westminster office. Mr. Storey was recently hired as the company's Senior Permit / Compliance Engineer. Kent Crofts, of IME Environmental Consultants, was also on site. WFC is seeking to find a new vegetation reference area for the Dryland Pasture postmining land use.

#### PERMITTING UPDATE:

- <u>RN-06</u>: The Decision Date has been extended to 18-Oct-2013. WFC is currently preparing the adequacy response.
- <u>SL-13</u>: The Division has not yet issued the proposed decision and findings of compliance for this application.
- <u>PR-08</u>: This application will be submitted to the Division once consultation with the Morgans is complete.

FISH and WILDLIFE – Rule 4.18:

• A few ducks and grebes were spotted on Pond 007, and a number of Canada geese were enjoying the puddle that covered much of the bottom of Pond 011 (Photo 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:

- Pond 007 was full and discharging. This summer, the operator has begun aerating the pond with Carbon Dioxide (CO2) just upstream of the discharge, to mitigate any potential issues with elevated pH levels. A cluster of four large canisters were stationed above the discharge pool (Photo 2), and a slender nylon tube carried the gas down to the pool, where it could be seen bubbling (Photo 3). Mr. Gubka said the canisters are supplied from a firm in Grand Junction, and are typically replaced every week.
- Pond 008 was nearly filled, but there was no inflow at the time of the inspection, and no discharge was occurring. As observed during the Division's July 16, 2013 inspection, water is flowing in the concrete box located at the end of the primary spillway culvert. However, the source of the flow continues to be irrigation tailwater, and not discharge from the pond.
- Pond 011 has received a significant amount of runoff with the recent rain showers. A ditch has been graded into the backfilled Bench 1 Surface Spoil for the purpose of collecting runoff from areas east and south of the pond and delivering it to the inlet at the pond's SW corner.
- Pond 013 was full and discharging at a rate of 1.27 cfs. Oil-absorbent booms were installed across the pond's surface at the primary spillway. A pump (running at 0.76 cfs during the inspection) continued to supply water to the pond from a point on Tuttle Draw upstream of the pond's discharge point. This pond was also receiving irrigation tailwater from the IP reclamation on the former Lloyd parcel.
- Pond 009 was completely dry, as was Pond 015. Pond 012, which historically has had a shallow puddle at its western end, fed by seepage from Tuttle Draw, was bone dry (Photo 4). Cattails and other water-loving plants were no longer thriving.

### GENERAL MINE PLAN COMPLIANCE:

- On the WFC parcel in the NW corner of the permit area, a bulldozer and front-end loader were working to load highway haul trucks with the remaining coal for transport to Tri-State's Nucla Generating Station (Photo 5). Mr. Gubka said the coal hauling operation would be completed by the end of August.
- A pump was in operation, dewatering what remains of the "pit" and preventing the coal stockpile area from being flooded. The flow meter on the pump's line read 500 gpm. The water was being directed to Pond 013.

### 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 Northeast Perimeter Haul Road was in good condition and was being properly maintained.

### RECLAMATION SUCCESS - Rule 4.15, Rule 3:

• Kochia has suddenly appeared across most of the bare ground within the permit area. This includes pond banks, graded surface spoil, and some topsoil stockpiles. This rapid growth is presumably due to the recent rains that have hit the area. While Kochia is not a noxious weed, requiring control, its prevalence may create a maintenance issue once the weeds mature and "tumble" throughout the coming fall and winter. *Ditches and culverts should be* 

# inspected regularly, to ensure that the weeds to not have an adverse impact on the ability of these structures to carry their design flows.

• We noted that Tamarisk trees located along Tuttle Draw, along the permit's northern boundary, appear to be dying off. It may be that the beetles released several years ago along the Dolores River have migrated upstream into the Nucla area.

# **REVEGETATION – Rule 4.15**

Vegetative Cover; Timing:

- We walked the length of the Irrigated Pasture (IP) Reference Area which is located adjacent to the SE corner of the permit area. Mr. Gubka said that the grass has been cut once, previously, this summer, and is ready for the second cutting. No livestock were present.
- The NW corner of the IP reference area was treated for a Quackgrass infestation in 2010. In 2011, there were a significant number of weedy species noted. During this inspection, I observed that the weedy species, other than some chicory and buckhorn plantain, have been almost entirely crowded out by seeded grasses. The patch is virtually indistinguishable from the remainder of the reference area.
- We looked at the portion of the IP reference area field which has always been excluded from sampling: the SW corner. The mine appears to be making some progress in restoring this area to productive use, and desirable grasses are making headway.
- Overall, the IP Reference Area was in beautiful condition (Photo 6). Mr. Gubka said the area had been receiving regular afternoon thundershowers in recent weeks, which were having a positive effect on vegetation growth.
- The second cutting of hay was in progress on the reclaimed IP areas east of 2700 Road. The process was complete for the fields south of 5th Road. On the Guire (former SMPA) property, cutting and windrowing (by Staats) was taking place. Benson-East had been baled, and the farmer was beginning to pick up the bales. Burbridge had been cut and windrowed, but not yet baled. Haying had been already completed (by Garvey) on the WFC parcel, which was being irrigated using sideroll sprinklers during the inspection.
- West of 2700 Road, two separate IP areas have been established. Irrigation is accomplished using a system of gated pipe and furrows.
- For Benson-West, bales from the first (ever) cutting were on the ground and in the process of being collected by the contract farmer (Photo 7).
- On the former Lloyd property, irrigation was occurring for the first time. A flow meter installed on the pipe supplying the field gave a rate of 250 gpm being supplied to the field. Protective sleeves were installed at each one of the pipe gates to protect the soil from erosion (Photo 8). The field was lush in appearance (Photo 9), with oats and some alfalfa.
- The north-facing slopes along the north side of the permit area, above Tuttle Draw, have been reclaimed to a post-mining land use of Dryland Pasture. These slopes continue to exhibit very nice vegetative cover, and this year, perhaps due to recent precipitation, the Four-wing saltbush appears especially vigorous.

SPECIAL CATEGORIES OF MINING – Rules 4.22 through 4.27: Rule 4.25 - Prime Farmland

- Much of the area covered with Bench 1 Surface Spoil has been surface-roughened (Photo 10) using a motor grader. Mr. Gubka said this aided greatly in controlling runoff from this area during the recent rain events. This roughening should also serve to increase infiltration of water into the surface spoil.
- The Lift A, Lift B, and Mixed topsoil stockpiles have not been disturbed. It is anticipated that no further reclamation of the Morgan property be initiated until PR-08 is approved.

## TOPSOIL - Rule 4.06

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

- Topsoil stockpiles are identified on Map 2.04.9-2 of the permit.
- Four topsoil stockpiles are located south of the office and shop area, and were constructed in the earliest phases of the mine's development. Stockpiles C, D and E consist of "Mixed" topsoil. Vegetative cover on each of these piles consists predominantly of annual weed species. Stockpile H, the largest of the four, contains "Lift A" soil. Crested wheatgrass is the predominant species covering this pile.
- We observed a patch of Russian knapweed on the NW flank of Stockpile E. Individual plants have also appeared on the southern end of Stockpile H. Weed control efforts must be diligently employed to eliminate the presence of State-listed noxious weeds from these piles and protect the topsoil resource.
- Topsoil stockpiles F and G, also containing "Mixed" soil, are located adjacent to the Northeast Perimeter Haul Road. These piles appeared to be well vegetated and stable.

### **ENFORCEMENT ACTIONS/COMPLIANCE**

No enforcement actions were issued as a result of this inspection, and none are pending.



Photo 1 – Canada geese at Pond 011, looking SE



Photo 2 – CO2 canisters at Pond 007

MLT



Photo 3 – Pond 007 discharge pool



Photo 4 – Pond 012, looking ENE



Photo 5 – Loading coal into highway haul truck



Photo 6 – IP Reference Area, looking SW



Photo 7 – Collecting bales on Benson-West, looking NW



Photo 8 – Gated pipe, with protective sleeves in furrows

MLT



Photo 9 – IP on former Lloyd parcel – first season of irrigation, looking West



Photo 10 – Surface roughening on Morgan spoil, looking SW