



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



### PERMIT INFORMATION

|                                                                                                                                                                                                                                             |                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Permit Number:</b> C-2010-089<br><b>Mine Name:</b> New Horizon North Mine<br><b>Operator:</b> Western Fuels-Colorado, LLC<br><b>Operator Address:</b><br>Mr. David G. Anderson<br>12050 N. Pecos St., Suite 100<br>Westminster, CO 80234 | <b>County:</b> Montrose<br><b>Operation Type:</b> Surface<br><b>Permit Status:</b> Active<br><b>Ownership:</b> Private |
|                                                                                                                                                                                                                                             | <b>Operator Representative Present:</b><br><br>Ross Gubka                                                              |
| <b>Operator Representative Signature: (Field Issuance Only)</b><br><br>This report was issued electronically from the Division's Durango Field Office.                                                                                      |                                                                                                                        |

### INSPECTION INFORMATION

|                                                                                                                                                                  |                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inspection Start Date:</b> May 1, 2013<br><b>Inspection Start Time:</b> 08:30<br><b>Inspection End Date:</b> May 1, 2013<br><b>Inspection End Time:</b> 11:30 | <b>Inspection Type:</b> Coal Partial Inspection<br><b>Inspection Reason:</b> Normal I&E Program<br><b>Weather:</b> Windy                                                  |
| <b>Joint Inspection Agency:</b><br><br>None                                                                                                                      | <b>Joint Inspection Contacts:</b>                                                                                                                                         |
| <b>Post Inspection Agency:</b><br><br>None                                                                                                                       | <b>Post Inspection Contacts:</b>                                                                                                                                          |
| <b>Inspector(s):</b><br><br>Marcia L. Talvitie, P.E.<br><br>Sandra L. Brown                                                                                      | <b>Inspector's Signature:</b><br><br><br><br><b>Signature Date:</b><br><br>10 May 2013 |

**Inspection Topic Summary**

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

**R** - Air Resource Protection**N** - Availability of Records**NA** - Backfill & Grading**NA** - Excess Spoil and Dev. Waste**NA** - Explosives**Y** - Fish & Wildlife**R** - Hydrologic Balance**R** - Gen. Compliance With Mine Plan**R** - Other**NA** - Processing Waste**Y** - Roads**NA** - Reclamation Success**NA** - Revegetation**NA** - Subsidence**NA** - Slides and Other Damage**NA** - Support Facilities On-site**Y** - Signs and Markers**NA** - Support Facilities Not On-site**NA** - Special Categories Of Mining**R** - Topsoil**COMMENTS**

A partial inspection of the New Horizon North Mine was conducted by Marcia Talvitie and Sandy Brown of the DRMS on Wednesday, May 1, 2013. We arrived at Western Fuels' office (located at the company's nearby New Horizon Mine) at 8:30 a.m. Ross Gubka was available to represent the operator, and escorted us throughout the inspection. Conditions were cool, and a stiff breeze blew intermittently. The inspection focused on development work that has been accomplished in the southern end of the permit area. We also visited the site of the NH1 Spoil Spring and NH1 Pond 001, both located in the pre-law disturbance south of the permit boundary.

**PERMITTING UPDATE:**

**TR-01** Pond NHN-001 As-Built Certification – Proposed Decision issued on May 3, 2013.

**TR-02** Overburden Blasting – The Division's Preliminary Adequacy Review is overdue and will be issued in the near future.

**TR-03** Incidental Boundary Increase – This revision was submitted in response to CV-2013-003 for off-site disturbance (construction of Pond NHN-001 outlet ditch and flume). This was initially determined to be incomplete on April 22, 2013. The public notice was submitted on May 1, and the application will be called complete today, May 10, 2013.

**MR-05** Water Well – This application was deemed complete on April 22, 2013. The Division's decision is currently past due, but will be made in the near future.

**AIR RESOURCE PROTECTION – Rule 4.17:**

- Mr. Gubka said that WFC is continuing to work through the emissions modeling process with the Air Pollution Control Division of the CDPHE as a necessary step in being granted an emissions permit for the mine.
- The area from which topsoil was stripped has been roughened by ripping with a bulldozer (Photo 1). This was done with the goal of reducing any potential erosion of the area by wind or water.
- WFC is the owner of the property immediately south of the permit area. This area was previously mined by the Edna Coal Company (Navajo Mine) and Peabody Coal Company

(Nucla Mine). A sediment pond (001) on this property (Photo 2) was approved as a permanent feature, and WFC may use water from this pond to perform dust control at the New Horizon North Mine. We walked along the pond's dam, and Mr. Gubka showed us the location at the southern end where the company would potentially install a pump. The tentative plan is for water to be pumped out of this pond to be piped northward (a distance of approximately 0.5 miles) along an existing two-track road. The pipeline would then cross beneath AA Road into the permit area.

#### 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 Hydrology for the permit area is depicted on Map 2.05.3(4)-1 of the PAP. Pond NHN-001 is the only pond that has been constructed for the mine, to date. This pond provides sediment control for those portions of the permit area that lie to the south of the historical location of the Second Park Lateral irrigation ditch (Sub-Watershed 1).
- Construction of Pond NHN-001 was completed in the fall of 2012. As-built certification for the pond was provided through the submittal of TR-01 (and the precedent MR-02). The Division issued its proposed decision to approve TR-01 on May 3, 2013.
- Surface runoff is transported to Pond NHN-001 via two collection ditches. Ditch NHN-001-East follows the eastern and southeastern perimeter of the permit area and flows into the SE corner of the pond. Ditch NHN-001-West is situated along the western side of the permit, and enters the pond at its SW corner.
- Construction of these ditches was also accomplished in 2012. The original design (found in Appendix 2.05.3(4)-1 of the PAP) called for a flat-bottom ditch, rip-rapped where the gradient was greater than 2 percent. The ditches were constructed in a V-bottom configuration, and are lined throughout most of their length (Photo 3). Lining consists of a base layer of woven geotextile, followed placement of a celled material approximately four inches deep. The cells were then filled with crushed gravel that appears to have been washed. For the steeper segments, where the ditches enter the pond, further protection is provided by the installation of 36-inch corrugated metal half-pipes (Photo 4).
- Field measurements made on the West ditch showed that the lined sections are approximately 9 feet wide, with the depth varying between 12 and 16 inches. The run-down into the SW corner of the pond was 8%, while the East ditch's drop into the pond's SE corner was sloped at 26%.
- Because the construction of the ditches is different than what was originally approved, updated information will need to be included in the PAP. ***Please submit an application for a Technical Revision to the permit to address the as-built configuration of Ditches NHN-001-East and -West.***
- The three Monitoring Wells located along the western permit boundary were left somewhat exposed once the surrounding topsoil had been stripped away. WFC has subsequently built-up the area immediately adjacent to the wells, both for protection of the wells and to enable access for sampling (Photo 5).

- The southern portion of the permit area was previously mined with Peabody's Nucla Mine. The spoil spring for this area is located approximately 0.23 miles south of AA Road, due south of Pond NHN-001. Mr. Gubka showed us the spring's location on our way to the old Pond 001. The flow is expressed along the northern side of a west-east trending drainage. Cattails and other water-loving plants are present, and although no single point source can be identified, the operator has attempted to condense the flow to a single stream with the use of straw bales, for the purpose of sampling (Photo 6).

#### GENERAL MINE PLAN COMPLIANCE:

- Mr. Gubka discussed some potential changes to the Mine Plan that will be made necessary by compliance with air emission standards. These changes will be covered in an upcoming Permit Revision application, and may include the replacement of the perimeter haul roads with a single, central haul road.

#### OTHER (IRRIGATION):

- The CCC Ditch was flowing at the time of the inspection, and Mr. Gubka informed us that the modifications made to the Second Park Lateral division box (as discussed in the March 29 inspection report) were successful. He also said that a pressure regulator had been installed on the 24" HDPE pipeline, and that it was improving the operation and performance of the pipeline for the downstream users.

#### TOPSOIL – Rule 4.06

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

- Two topsoil stockpiles have been constructed: one for the higher-quality Progresso ("81 PRO") soils, and the other for the lower-quality soils ("REC") that had been previously disturbed and redistributed across the reclaimed Nucla / New Horizon 1 Mine.
- Each of the topsoil stockpiles was posted with signs identifying its contents and warnings to "Keep Off" (Photo 7).
- Pile surfaces were roughened to combat erosion and encourage the development of vegetative cover.
- Containment berms had been constructed around the perimeters of the piles to prevent any loss of the resource.
- Mr. Gubka said that the piles had been seeded last fall, with the seed having been broadcast by hand. Little to no vegetative cover has yet appeared on the piles, but it is still somewhat early in the season. Between the stockpiles, a number of grasses have germinated.
- In spite of the somewhat blustery conditions, no soil was being picked up by the wind. It appears that the surface of the piles developed a "crust" during the preceding winter, and that the topsoil resource was being adequately protected from loss due to wind erosion.
- Along the northern edge of the area from which soil has been salvaged, we were able to observe the variability in topsoil thickness. Soils are thin to non-existent atop the rocky area toward the eastern side of the permit area, but the thickness increased to as much as three feet (estimated) in parts of the central and western portions (Photo 8).

**ENFORCEMENT ACTIONS/COMPLIANCE****Infraction Number:** CV2013003

Inspection Date: March 29, 2013

Date Issued: April 9, 2013

Primary Topic: Off-site Damage

Secondary Topic: None

Tertiary Topic: None

Description: Failure to confine surface coal mining and reclamation operations to lands within the permit area.

Abatement #: 1

Abatement Due Date: 4/26/2013

Abatement Description: In accordance with 2.08.4(2)(c), submit a Technical Revision application for an incidental permit boundary revision to incorporate the disturbed area into the permit. The application shall comply with the requirements set for in 2.03.6.

**Notes:**

***An application for Technical Revision No. 3 (TR-03) was received on April 12, 2013 in response to Abatement #1, which was terminated on that date. The application was deemed Incomplete for purposes of filing on April 22, 2013 because no proposed Public Notice was provided with the application. The Public Notice was submitted on May 1, 2013, and the application will be deemed Complete by May 10, 2013, at which point the violation will be terminated.***



Photo 1 – Surface roughening, looking NE toward REC stockpile



Photo 2 – Nucla Mine Pond 001, looking south

Number of Partial Inspection this Fiscal Year: 10

Number of Complete Inspections this Fiscal Year: 3



Photo 3 – V-Bottom Ditch Lining



Photo 4 – 36-inch half-pipe run-down – SW corner of Pond NHN-001

Number of Partial Inspection this Fiscal Year: 10

Number of Complete Inspections this Fiscal Year: 3



Photo 5 – Monitoring wells, and flatter portion of Ditch NHN-001-West, looking south



Photo 6 – Spoil Spring

Number of Partial Inspection this Fiscal Year: 10

Number of Complete Inspections this Fiscal Year: 3



Photo 7 – Topsoil sign – Progresso soil



Photo 8 – Topsoil depth – northern limit of area that has been stripped

Number of Partial Inspection this Fiscal Year: 10

Number of Complete Inspections this Fiscal Year: 3