



State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Representatives Present During the Inspection:	
OGM	Priscilla Burton Environmental Scientist III

Inspection Report

Permit Number:	C0070001
Inspection Type:	COMPLETE
Inspection Date:	Tuesday, March 31, 2009
Start Date/Time:	3/31/2009
End Date/Time:	4/2/2009
Last Inspection:	Saturday, February 28, 2009

Inspector: Priscilla Burton, Environmental Scientist III

Weather: cold, windy

InspectionID Report Number: 1963

Accepted by: jhelfric
5/5/2009

Permitee: **LODESTAR ENERGY INC**
 Operator: **WILLIAM BISHOP, TRUSTEE**
 Site: **WHITE OAK MINE**
 Address: **2525 HARRODSBURG RD STE 235, LEXINGTON KY 40504-1628**
 County: **CARBON**
 Permit Type: **PERMANENT COAL PROGRAM**
 Permit Status: **RECLAIMED**

Current Acreages

3,906.00	Total Permitted
151.10	Total Disturbed
	Phase I
	Phase II
	Phase III

Mineral Ownership

- Federal
- State
- County
- Fee
- Other

Types of Operations

- Underground
- Surface
- Loadout
- Processing
- Reprocessing

Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:

The site remains inaccessible. Division staff met on April 2, 2009 to discuss options for supplemental reclamation treatments at the White Oak Mine. Three areas of concern were identified: the subsidence hole above the portals, the stream erosion in the lower, steep, reaches, and the erosion off the convex west slopes. A powerpoint of the reclamation progress was created for this team discussion.

Inspector's Signature:

Priscilla Burton, Environmental Scientist III

Inspector ID Number: 37

Date

Monday, April 06, 2009

Note: This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining.

REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENTS

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
 - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
 - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Divison Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS Check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Topsoil

MRP Vol. 3, Chap 9 provides 1997 pond analyses that indicate the pond sediments had 27 ppm B and pH 8.3. If the pond sediments were not cleaned out and placed underground as described in 1997, then AMR directed that the pond sediments be placed in AMR areas 10 and 11 (shown on either side of the channel on Plate D-2 of the AMR specifications) and covered with three feet of fill. Since the pond was the last area to be graded, it is likely that these sediments were placed at the base of the slopes on either side of the stream channel.

12. Backfilling And Grading

Division staff met on April 2, 2009 to discuss options for supplemental reclamation treatments at the White Oak Mine. Four areas of concern were identified: deterioration of the haul road, the subsidence hole above the portals, the stream erosion in the lower, steep, reaches, and the erosion off the convex west slopes. The following information is pertinent to reclamation treatments along the stream channel.

The MRP Vol. 3 Stream Restoration Plan (dated 2001) includes a survey of the pre-existing stream in representative sections to document the cross section, profile, stream bottom size fractions could be reapplied to similar grades during reclamation. It has photos of what the undisturbed creek looked like. The original mining plan did not include mining through the lower section of Whiskey Creek, as evidenced by the 404 permit in Appendix R-2.

The Appendix R-2 Stream Channel Alteration permit approves the channel reconstruction based upon the following designs that were provided by Lodestar Energy:

"...More drop structures will be installed [on steep grades] than in the original stream. The drops would consist of 1 to 2 large drop structures that resemble bedrock drops over a series of steps. In addition to these structures, there will be a series of 1 foot [ladder] drop structures with pools to be incorporated in the steeper reaches.....The base of the channel will be constructed of compacted material and/or the use of fabric material....fabric will not be used extensively..." (p. 2, Stream Restoration Plan in App. R-2)

Maps included Appendix R-2 provide designs and proposed locations for the drop structures, ladders, pools and revetment structures.

The 2001 stream channel alteration permit approved reconstruction that would be similar to the natural stream where steep gradients had less sinuosity, a meander length around 3 to 4 ft. with much less of a radius of curvature and "natural drops consisting of rocks and large amounts of woody debris are every 3 feet, and anywhere from 3 inches to 3 feet high with an average of about 1 foot high. Variability is preferred. Large amounts of woody debris are required to slow velocities provide cover and forage for aquatic wildlife, and to form the functionality of the step-pools and meanders."

Restoration of the Whiskey Creek channel is also described in the MRP Volume 3, Stream Reclamation Plan. The flow rate of the lower section was estimated to be 32.2 cfs with a depth of 0.5 ft., requiring riprap with D50 of 1.5 ft. (pg. R-23 of 37).

Riparian zones were to be planted along the channel with willow slips and clumps in a 5 - 10 ft. width (p. R-27 of 37). A riparian seed mixture is also described (p. R-27-37). The Stream Channel Alteration permit application in Appendix R2 provides suggested riparian species to be seeded and transplanted. Interestingly, the Stream Channel Alteration permit specifies that Kentucky bluegrass is not an approved species for riparian zones. (It was a component of the AMR mixture.)

When Lodestar Energy forfeited the bond, these designs were superceded by the Lodestar Energy Whiskey Creek Mine Reclamation Plan (part of the October 2003 Lodestar Energy Reclamation Agreement between Frontier Insurance co. and the Division). The 2003 Reclamation Plan described the details of stream channel reconstruction such as clay liner, riprap sizing and placement, drop structures in the upper reaches (less than 1% grade) and riprap keyed into the subgrade, three feet below the designed rip rap depth in the steep reaches (greater than 2% grade). The keying in was to begin 20 feet upstream from the steep reach and extended for 50 feet below the point where the stream channel grade decreased. The Plan describes a cascading chute at the lower end of the disturbed area where the channel flows from the main pad to the boulder field at the toe of the [former] sedimentation pond embankment, since it was not possible to develop any ladder or drop structures in the horizontal distance available. This steeper grade is the area of severe erosion observed and photographed on August 2008 (Inspection Report # 1739).

The Division should discuss the stream reclamation designs with the U.S. Army Corps, because the Stream Alteration Permit expired in 2003, and the 14th condition of the expired permit requires Army Corps inspection within 30 days of completion of the project and states, "Failure to provide such notification would invalidate U.S. Army Corps of Engineers General Permit 040, thereby placing the applicant in violation of Section 404 of the Clean Water Act."

AMR construction designs superceded the 2003 Reclamation Plan and are found in the White Oak Mine Project Contract Specifications AMR/007/934. Section 300 O. indicates that rip rap was not keyed in as described above. The riprap channel constructed was designed to be 10 feet wide and depth of three feet. Drawing D5 shows that the geotextile was placed on top of rip rap (depth unspecified) and then covered with an 18 inch layer of rip rap (D50 = 6 in., Dmax = 12 in.)

With regard to the deteriorating condition of the White Oak haul road: MRP vol. 3, p. R-21 of 37 mentions the two road culverts (C-25-36 and C-28-24) in channel crossings that were to be replaced during final reclamation with an "erosion resistant channel." The first reclamation channel (RC 4) collects drainage from 140 acres (the Bowl) and the second reclamation channel (RC 5) collects drainage from 35 acres. Riprap designs for these reclamation channels are described in Appendix R1. Cross section details are on Map 527 Sheets 12 through 16.

Other road channels were to be reclaimed using erosion control matting and tree planting in the channel as described on Page R-22 of 37.

This information should be useful to the Division when designing supplemental reclamation treatments at White Oak.