



OGMCOAL DNR <ogmcoal@utah.gov>

025005 November 2017 Coal Hollow Technical Inspection

Priscilla Burton <priscillaburton@utah.gov>

Tue, Dec 5, 2017 at 10:31 AM

To: Kirk Nichols <knicholes@altoncoal.com>, OGMCOAL DNR <ogmcoal@utah.gov>

Cc: Todd Miller <toddmiller@utah.gov>, Daron Haddock <daronhaddock@utah.gov>, Bob Nead <blbnead@altoncoal.com>

Hello Kirk,

I have attached the report of my technical inspection of the topsoil/subsoil redistribution over Phase 1 bond release areas BRP1-11 and BRP1-12.

We noted BRP1-12 soils were compacted approximately 3 inches below the surface. We discussed allowing a year of freeze-thaw to reduce the compaction and concluded that there will be another opportunity to rip the entire BRP1-12 area during removal of the topsoil pile, if revegetation is not successful (or sooner, if erosion is not controlled). Ripping the surface prior to seeding is required by MRP Section 242.120.

Priscilla Burton, MS, CPSSc
Utah Division of Oil Gas & Mining
Price Field Office

[435-613-3733](tel:435-613-3733)



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State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Inspection Report

Permit Number:	C0250005
Inspection Type:	TECHNICAL
Inspection Date:	Tuesday, November 28, 2017
Start Date/Time:	11/28/2017 12:00:00 PM
End Date/Time:	11/28/2017 3:00:00 PM
Last Inspection:	Tuesday, November 7, 2017

Representatives Present During the Inspection:	
OGM	Priscilla Burton
Company	Kirk Nicholes

Inspector: Priscilla Burton,

Weather: sun 50 F

InspectionID Report Number: 6022

Accepted by:DHADDOCK
12/1/2017

Permittee: **ALTON COAL DEVELOPMENT LLC**
 Operator: **ALTON COAL DEVELOPMENT LLC**
 Site: **COAL HOLLOW**
 Address: **463 North 100 West, Suite 1, CEDAR CITY UT 84720**
 County: **KANE**
 Permit Type: **PERMANENT COAL PROGRAM**
 Permit Status: **ACTIVE**

Current Acreages

1,017.15	Total Permitted
443.00	Total Disturbed
195.00	Phase I
77.00	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:

Mining is ongoing in the North Lease on the West end of Pit 11. Topsoil and subsoil is stored in stockpiles in the North, East and West of Pit 12. Two dozer operators were backfilling the East end of Pit 11 with alluvium and shale from Pit 12.

We observed the reclamation completed this fall and discussed the soil preparation and seeding treatments yet to be accomplished this year on topsoil and subsoil stockpiles and around Pond 2. We walked the North Lease phase 1 bond release area BRP1-12, for which additional laboratory analyses and replacement volume information was received on October 17, 2017.

Refer to Bond release 17-1 application (Task 5504) Figures 1 and 2 for bond release locations. Refer to Dwg 5-76 for spoil sampling locations in the North Lease.

Inspector's Signature:

Priscilla Burton,
Inspector ID Number: 37

Date Thursday, November 30, 2017



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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

1. Permits, Change, Transfer, Renewal, Sale

Phase 1 bond release was approved on September 27, 2017 for BRP1-11 in the South Lease (Pit B1) and BRP1-12 in the North Lease (Pits 3-6). A subsequent Division letter, dated October 5, 2017, requested further documentation of cover in both areas and missing laboratory analysis. A response was received from Alton Coal on 10/17/2017. It was approved and incorporated on 9/27/2017 without technical review. All requested analyses requested were received Previous technical findings remain accurate (Internal file 10052017) with the following addition: Spoil sample location #4 is clay texture and the upper 0-6 inch section has a pH of 7.8, EC of 5.24, SAR = 13.3 and ABP of 54. Therefore it falls in the Fair suitability category (per Utah Guidelines for Management of Topsoil and Overburden) and was counted as part of the surface four feet of cover over more unsuitable spoil.

3. Topsoil

South lease topsoil pile #2 and subsoil pile #2 will not be needed again until final reclamation. They will be seeded with interim mix this fall. The profile of subsoil pile #2 will either be reduced or pocked to encourage vegetation establishment. Subsoil from subsoil pile #2 was recently used for reclamation of the access road to pond 3. The remaining volume of subsoil in subsoil pile #2 will be surveyed and reported in the 2017 Annual report. The MRP chapter 2 will be amended accordingly. Subsoil from Pit B1 was spread over the BRP1-11 and Interim Reclamation Area (total 36 acres) to generate substitute topsoil for reclamation. Topsoil pile #6 from Pit B1 Area was consumed in Phase 2 reclamation of Pits 1, 2, 4, 7 and 8 in the South Lease. (This area was part of the 2015 BRP1-1 bond release, Task 4965.) Consumption of topsoil pile #6 will be documented in the 2017 Annual Report and in the MRP narrative in Chapter 2. The sagebrush/grass mix was seeded on the South Lease Pits 1, 2, 4, 7, 8 area.

Topsoil pile at the North Lease Area was recently moved and covers 3 acres of BRP1-12. It includes topsoil recently salvaged from Pit 11. It will be shaped on its South and East sides and seeded with the interim mix. The subsoil pile at the North Lease is an active pile. Subsoil from Pit 12 has been cleared and is stored on the North, West and East sides of Pit 12. Mr. Nicholes has told equipment operators that it is not to be placed as backfill. It will either be live-hauled to Pits 7-10 or placed in the subsoil pile this year.

Alton Coal's letter dated 10/13/2017 (received 10/17/2017) states that 18 inches of topsoil was applied over 24-30 inches of subsoil in BRP1-12 depending on the spoil quality. To confirm soil replacement depth, an attempt was made to auger through the topsoil and subsoil column in the BRP1-12 spoil sample locations 4 and 11, shown on Dwg 5-76. The auger could penetrate only 3 -4 inches. Beneath this depth, a compacted clay soils could be broken only with effort. Earlier this fall, Mr. Nicholes had a trackhoe dig a trench to confirm the depth of cover over the spoil, but stated that it was difficult to distinguish the redistributed clay soil from the shale spoil and impossible to see a demarcation of topsoil over subsoil. The loose 3-4 inch surface of BRP1-12 had been seeded and mulched, but the compact layer had not been ripped prior to the seeding. Ripping the compacted surface is required (MRP Section 242.120). We compared the loose structure of the adjacent 2016 bond release area (North Lease BRP1-10 (Pits 1, 2 and portion of 3) where the surface six inches was loose and the auger easily penetrated soil column. Mr. Nicholes suggested that after a winter of freeze and thaw, the soil over pits 3-6 in BRP1-12 would also become loose and granular.

On the East side of the recently placed North Lease topsoil pile, where truck traffic was concentrated, ripping was completed by the reclamation contractor. This area still had sizeable, slick compacted areas. The MRP clearly states that compacted areas will be ripped. If revegetation suffers due to compaction, there will be another opportunity to rip the entire BRP1-12 area during final reclamation when the topsoil

pile is replaced.

4.a Hydrologic Balance: Diversions

UD-14 has been installed on the East side of Area 2 on Ferril and Dorothy Heaton property. The ditch will require further work to function as designed. Construction of this ditch exposed the surface 0-4 ft of soil. The white clay subsoil has yellow-orange mottling.

4.c Hydrologic Balance: Other Sediment Control Measures

Disturbed and open area around Sediment pond 3 was seeded with the interim reclamation mix used on the adjacent Pit B1 area.

Disturbed and open area around sediment pond 2 will be tilled and seeded with interim mix this fall.

11. Contemporaneous Reclamation

Alton Coal will backfill North Lease pits 7, 8, 9, and 10 to grade for bond release in January 2018. If possible, the subsoil and topsoil from Pit 12 will be live-hauled over the area.

ATTACHMENT A – Photos

Coal Hollow Inspection November 28, 2017



PHOTO 1 Looking East from pond 3 access road across the Interim Reclamation Area (former excess spoil storage area)



PHOTO 2 Looking South from pond 3 access road at BRP1-11 (Pit B1) and Interim Reclamation Area with subsoil surface



PHOTO 3 Topsoil from pile 6 was spread over the South half of BRP1-1(South Lease Pits 1, 2, 4, 7, 8).



PHOTO 4 North Lease topsoil pile berm with subsoil stockpile in the distance



ATTACHMENT A



PHOTO 5 The North face of the North Lease topsoil pile



PHOTO 6 North Lease BRP1-10 (2016) on left with sunflower stalks and BRP1-12 (2017) on right



PHOTO 7
Looking across North Lease BRP1-12 at the West face of topsoil pile



PHOTO 8
BRP1-12 has a 3 inch deep loose surface over compacted soil.

ATTACHMENT A



PHOTO 9 North Lease BRP1-12 (2017) mulched and seeded surface over compacted soils.



PHOTO 10 North Lease BRP1-12 visible compaction near recently placed topsoil pile



PHOTO 11

North Lease West end of Pit 11 mining and subsoil on West, North and East. Darker topsoil on North



PHOTO 12

North Lease East end of Pit 11, dozer pushing alluvium from Pit 12 into Pit 11.



ATTACHMENT A



PHOTO 13 North Lease ditch UD 14 looking Southeast



PHOTO 14 Atlatl family soils. Ditch UD-14 is in the vicinity of soil sample location 12AS025



PHOTO 15
North Lease UD 14 is on Ferril and Dorothy Heaton property.



PHOTO 16
North Lease looking North across prime farmland towards Pit 12