

C/025/005 Incoming



## Alton Coal Development, LLC

463 North 100 West, Suite 1

Cedar City, Utah 84720

Phone (435) 867-5331 • Fax (435) 867-1192

Task #4505

February 3, 2014

Daron R. Haddock  
Coal Program Manager  
Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

RECEIVED  
FEB 04 2014  
DIV. OF OIL, GAS & MINING

**Subject: Response to NOV #10135/ Request for additional time for rough backfilling and grading of Pit 9, Coal Hollow Project, Kane County, Utah, C/025/0005**

Dear Mr. Haddock,

Alton Coal Development, LLC as requested in the Modification of NOV #10135 is providing Plate 5-10B which shows the scenario of temporarily leaving Pit # 9 open for access of the highwall miner. This is a written request for additional time for rough backfilling and grading of Pit 9. In accordance with R645-301-553, the Division may grant additional time for rough backfilling and grading. At this time, coal has been recovered from Pit 9 and in accordance with the approved MRP would be backfilled with the spoils from Pit 10. Currently, DOGM has received for review an amendment "Incidental Boundary Change and Highwall mining alternative". Under this amendment, the Coal Hollow Mine is adding the alternate mining method of a highwall miner. As described in the amendment under section 528.200 on page 5-42, "Dependent upon the arrival of the highwall machine, another option would be to utilize it in an active pit, for example Pit 9 is currently active with an exposed highwall. Highwall mining would begin from this pit and surface disturbance of the successive pit (pits 10-15 going east) would not occur."

Allowing Pit 9 to remain open for a time frame that would allow the utilization of the highwall miner to recover coal as described above would be consistent with R645-301-522 which states "..... coal mining and reclamation operations are conducted so as to maximize the utilization and conservation of the coal, while utilizing the best technology currently available to maintain environmental integrity, so that re-affecting the land in the future through coal mining and reclamation operations is minimized."

Technical review for the "Incidental Boundary Change and Highwall mining alternative" is anticipated to be complete February 17, 2014, at which time it is anticipated the amendment/highwall option is incorporated into the permit. This is consistent with the estimated arrival of Coal Hollows highwall miner. Upon arrival the miner will require

assembly (two to three weeks). Potential coal recovery from highwall mining in the current configuration of Pit 9 would be 4 panels or forty highwall holes. Recovery, with the highwall miner, would be approximately 306,000 tons of coal with no additional surface disturbance to the area intended for pits 10 through 15. Highwall mining would be completed in Pit 9 by approximately July 25, 2014 at which time the highwall miner would be relocated to the next available wall and rough backfilling could resume in Pit 9.

We appreciate your consideration in this matter. Please do not hesitate to contact me if you have any questions 435-691-1551.

Sincerely

A handwritten signature in blue ink, appearing to read "B. Kirk Nicholes".

B. Kirk Nicholes  
Environmental Specialist

## APPLICATION FOR COAL PERMIT PROCESSING

Permit Change  New Permit  Renewal  Exploration  Bond Release  Transfer

**Permittee:** Alton Coal Development, LLC

**Mine:** Coal Hollow

**Permit Number:** C/025/0005

**Title:** Addition of Drawing 5-10B

**Description,** Include reason for application and timing required to implement:

Drawing 5-10B added to show the scenario of temporarily leaving Pit #9 open for access of Highwall miner.

**Instructions:** If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- |   |   |
|---|---|
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ <input type="checkbox"/> increase <input type="checkbox"/> decrease. |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 2. Is the application submitted as a result of a Division Order? DO# _____  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?                                     |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 4. Does the application include operations in hydrologic basins other than as currently approved?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 6. Does the application require or include public notice publication?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 7. Does the application require or include ownership, control, right-of-entry, or compliance information?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?   |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 9. Is the application submitted as a result of a Violation? NOV # <u>10135</u>  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 10. Is the application submitted as a result of other laws or regulations or policies?  |
| <i>Explain:</i> _____   |   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 11. Does the application affect the surface landowner or change the post mining land use?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)                                |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 13. Does the application require or include collection and reporting of any baseline information?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 15. Does the application require or include soil removal, storage or placement?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 16. Does the application require or include vegetation monitoring, removal or revegetation activities?  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 17. Does the application require or include construction, modification, or removal of surface facilities?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 18. Does the application require or include water monitoring, sediment or drainage control measures?  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 19. Does the application require or include certified designs, maps or calculation?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 20. Does the application require or include subsidence control or monitoring?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 21. Have reclamation costs for bonding been provided?   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 23. Does the application affect permits issued by other agencies or permits issued to other entities?   |

**Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you.** (These numbers include a copy for the Price Field Office)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein:

B. Kirk N. Choles  
Print Name

B. Kirk N. Choles, Env. Specialist, 1-31-14  
Sign Name, Position, Date

Subscribed and sworn to before me this 31 day of January, 2014

Marty Nicholes  
Notary Public  
My commission Expires: Sept 11, 2014 }  
Attest: State of Utah } ss:  
County of Iron



<b>For Office Use Only:</b>	<b>Assigned Tracking Number:</b>	<b>Received by Oil, Gas &amp; Mining</b>



553.800	Backfilling and Grading: Thick Overburden	5-76
560.800	Performance Standards	5-81

## **APPENDICES**

5-1	Geotechnical Analysis - Sediment Impoundments and Excess Spoil Structure
5-2	Sediment Impoundment and Diversion Structure Analysis
5-3	Robinson Creek Culvert and Diversion Analysis
5-4	Coal Hollow Mine Blasting Plan
5-5	Reclamation Slope Stability Evaluation/Analysis
5-6	Post-Mining Roads Backfill Analysis
5-7	Location of & Standards and Specifications for ASCAs and ASCMs in use at Coal Hollow Mine
5-8	Feasibility of Highwall Mining the Smirl Seam at the Alton Coal Development, LLC Coal Hollow Mine

## **DRAWINGS**

### **General**

5-1	Pre-mining Topography
5-2	Disturbance Sequence
5-2A	Disturbance Sequence – Surface & Highwall Mining

### **Facilities (5-3 to 5-8C)**

5-3	Facilities and Structures Layout
5-3A	Culverts
5-4	Loadout Elevation View 1
5-5	Loadout/Stockpile Elevation View 2
5-6	Office Elevation View
5-7	Maintenance Shop Elevation View
5-8	Wash Bay, Oil and Fuel Storage Elevation View
5-8A	Wash Bay Equipment Layout
5-8B	Facilities and Structural – Electrical
5-8C	Facilities and Structural – Water Plan

### **Coal Recovery (5-9 to 5-14)**

5-9	Coal Extraction Overview
5-9A	Coal Extraction Overview – Surface & Highwall Mining
5-10	Coal Removal Sequence
5-10A	Coal Removal Sequence – Surface & Highwall Mining
5-10B	Coal Removal Sequence – Surface & Highwall Mining
5-11	Shallow Coal Recovery Cover Cross Section
5-12	Deep Coal Recovery Cross Section
5-13	Strip Ratio Isopach
5-14	Coal Thickness Isopach

### **Overburden Handling (5-15 to 5-19)**

5-15	Overburden Isopach
5-16	Overburden Removal Sequence

southern panels of a Highwall Trench, overburden from excavation of the next Highwall Trench is used to backfilled the mined out area continuing with the progression of the trench.

The anticipated coal removal sequence for the Highwall mining is shown on drawing 5-10A or 5-10B if Pit 9 is the location selected for beginning highwall mining. Depending on the approval of the alternative and the delivery of the highwall miner, the highwall miner could be deployed on an exposed coal face. As is depicted, each Highwall Trench consists of Panels, each panel consisting of 10 holes. The spacing between the holes and the spacing between the panels are dictated by the amount of overburden over the panels. The alternate Highwall mining is designed such that subsidence does not occur to the surface with nonyieldable webs and barriers. Specific information concerning these design are found in Appendix 5-8. Highwall mining will have only the disturbance associated with the trench for placement of the highwall miner and will have no impact on the surface above the highwall panels.

The following tables show the material balance during the different phases of overburden removal for each scenario:

Preferred Scenario (Adjacent Federal Reserves Acquired)				
Phase	Overburden (LCY)	Available Backfill (LCY)	Excess Spoil (LCY)	Total Excess Spoil (LCY)
1	7,936,000	5,195,000	2,741,000	2,741,000
2	14,168,000	11,127,000	3,041,000	5,782,000
3	14,631,000	14,631,000	0	5,782,000
4 (Federal)	3,300,000	3,300,000	0	5,782,000
Total	40,035,000	34,253,000	5,782,000	5,782,000

\*Loose Cubic Yards is estimated based on an overall 22% swell factor (Caterpillar Performance Handbook)

Alternate Scenario (Adjacent Federal Reserves Not Acquired)				
Phase	Overburden (LCY)	Available Backfill (LCY)	Excess Spoil (LCY)	Total Excess Spoil (LCY)
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3	14,631,000	14,631,000	0	5,782,000
4 (Rehandle)	0	3,300,000	-3,300,000	2,482,000
Total	36,735,000	34,452,000	2,482,000	2,482,000

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Range 6 West  
Range 5 West

- 2011 (542,200 Ton)
- 2012 (505,000 Ton)
- 2013 (567,600 Ton)
- 2014 (792,400 Ton)
- 2015 (784,100 Ton)
- 2016 (574,100 Ton)

Note 1: Mining may occur in adjacent pits simultaneously.

Note 2: Permit was issued Nov. 10, 2010. First coal was mined early Feb. 2011.

Note 3: Drawing 5-10B is an estimate of the locations of highwall mining. Actual holes for highwall mining will be determined upon arrival of the highwall miner.

Coal Outcrop Run

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Township 39 South

LEGEND:

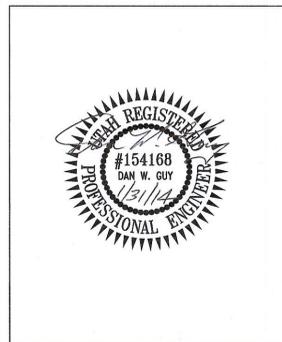
- PERMIT BOUNDARY
- PRIVATE COAL OWNERSHIP
- COAL LINE BOUNDARY
- COAL RECOVERY
- SECTION LINE
- FOUND SECTION CORNER
- FOUND PROPERTY CORNER

DRAWN BY: C. McCOURT	CHECKED BY: LWJ
DRAWING: 5-10B	DATE: 4/20/07
JOB NUMBER: 1400	SCALE: 1" = 500'
	SHEET

REVISIONS	
DATE:	BY:
1/30/14	KN

**COAL REMOVAL SEQUENCE**  
SURFACE & HIGHWALL MINING

COAL HOLLOW PROJECT  
ALTON, UTAH  
DRAWING: 5-10B



463 North 100 West, Suite 1  
Cedar City, Utah 84721  
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**MAR 10 2014**