

#3823
OK

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

May 12, 2011

TO: Internal File

THRU: Joe Helfrich, Biologist and Team Lead 

FROM: James Owen, Reclamation Engineer 

RE: Permit Application, Carbon Resources LLC, Kinney #2, C/007/0047, Task #3823

SUMMARY:

On May 11, 2011, the Utah Division of Oil, Gas & Mining (DOGM) received a permit application revision that was meant to provide a response to deficiencies identified during a previous review of the permit application (Task # 3779, submitted March 21, 2011). The application was submitted by Carbon Resources, and was submitted for the purpose of permitting the Kinney No.2 Mine. The following are deficiencies that were identified during the previous review:

- **R645-301-528.320;** *The applicant must change the text in the paragraph on page 5-70 that states that the "coal processing waste storage pile is shown as No.7". It should be "No.38". Also, Map 13 should be corrected to include No. 38 depicted in the correct location, the No.18 that is incorrectly labeled must be removed, and the surface facilities list must provide the correct description of No.38.*
- **R645-301-800;** *The applicant must demonstrate compliance with all of the regulations pertaining to bonding at such a time as bond calculation and reclamation cost estimates can be evaluated based on the details within an approved permit application. All direct and indirect reclamation costs must be included for proper bond calculation. The Division will evaluate the bonding requirements after technical issues with the permit application have been addressed.*

This technical memorandum will address and identify findings and provide a technical review of the engineering and bonding information submitted with the permit application revision. Specifically, this review will address the responses to the deficiencies listed above. This review is based on compliance with the permit application requirements as detailed in the Utah Coal Mining Rules sections R645-301-500 (engineering) and R645-301-800 (bonding).

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TECHNICAL ANALYSIS:

OPERATION PLAN

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

The following deficiency was identified during the previous permit application review:

- **R645-301-528.320;** *The applicant must change the text in the paragraph on page 5-70 that states that the "coal processing waste storage pile is shown as No.7". It should be "No.38". Also, Map 13 should be corrected to include No. 38 depicted in the correct location, the No.18 that is incorrectly labeled must be removed, and the surface facilities list must provide the correct description of No.38.*

In response to this deficiency, page 5-70 was revised to reference no.38 instead of no.7. Map 13 was revised to make it clear that item no.18 points to the Solid Construction Debris Disposal Areas (multiple), and that no.38 points to the Coal Processing Waste - Temporary Stockpile. Revised copies of page 5-70 and Ma 13 were included in the submittal.

Also included with the application is a Letter of Intent to Buy "Distressed Coal" supplied jointly by Arch Coal and Carbon Resources, LLC.

Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

RECLAMATION PLAN

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

The following deficiency was identified during the previous permit application review:

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- **R645-301-800**; *The applicant must demonstrate compliance with all of the regulations pertaining to bonding at such a time as bond calculation and reclamation cost estimates can be evaluated based on the details within an approved permit application. All direct and indirect reclamation costs must be included for proper bond calculation. The Division will evaluate the bonding requirements after technical issues with the permit application have been addressed.*

In response to this deficiency, bond calculation spreadsheets were submitted with the revision. The bonding calculations included details for all direct and indirect costs. Based on spreadsheets provided by the Division, the applicant provided updated unit cost estimates for reclamation aspects. Direct costs include subtotals for removal (demolition), backfilling and grading (earthwork), and revegetation. Indirect costs include mobilization/demobilization, contingencies, engineering redesign, office expenses, and project management fees. Direct & Indirect costs were adequately calculated and summarized as follows:

Bonding Calculations		
<u>Direct Costs</u>		
Subtotal Demolition & Removal	\$954,000	
Subtotal Earthwork - Backfill and Grading	\$545,685	
Subtotal Revegetation	\$102,606	
Subtotal Direct Costs	\$1,602,291	
<u>Indirect Costs</u>		
Mobilization /Demobilization	\$160,229	10%
Contingencies	\$80,115	5.00%
Engineering Redesign	\$40,057	2.50%
Main Office Expense	\$108,956	6.80%
Project Management Fee	\$40,057	2.50%
Subtotal Indirect Costs	\$429,414	26.80%

Five year escalation values were also estimated. An escalation factor of .4% was used. However, the Division requires an escalation factor of 1.7% for 2011.

The bond summary spreadsheet should be changed to include the following details: The escalation factor used should be 1.7%. The total 5 year escalation cost will be \$178,667. The total reclamation cost + escalation (2016 dollars) will be \$2,210,372. The total required bond to be posted (in 2016 dollars) will be **\$2,210,000** (cost + escalation, rounded to nearest \$1000).

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Findings:

Contents and information provided will be considered sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules if the changes listed above are included with the clean-copy submittal.

RECOMMENDATIONS:

Division approval should be granted conditionally based on the corrections made to the escalation section of the bond calculation summary. The minimum required bond to be posted is **\$2,210,000.**

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