

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL  
STATE OF WYOMING

In re Brook Mining Co., LLC coal mine	)	
Permit – PT0841	)	
	)	EQC Docket No. 20-4802
	)	
	)	
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**AFFIDAVIT OF ALAN EDWARDS**

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I, Alan Edwards, being of lawful age and first duly sworn upon oath, depose and state as follows:

1. I am over eighteen years of age and am competent to provide this affidavit. The information contained in this affidavit is based on my personal knowledge.
2. I am currently employed by the Wyoming Department of Environmental Quality (“WDEQ”) as the Administrator of the Abandoned Mine Land program. From December 2014 to September 2020, I also served as the Deputy Director of WDEQ.
3. Starting in May 2015, I was assigned to the role of Acting Administrator of the Land Quality Division (“LQD”) for the purpose of decisions made on the Brook Mine application.

**Exhibit B**

4. I have been involved in the Brook Mining Co., LLC coal mine permit PT0841 since May 2015 and along with the LQD staff and outside consultants have been overseeing the entire team and all actions that led to my recommendation that the WDEQ Director issue the Brook Mine permit.
5. Prior to recommending approval of the Brook Mine permit, the LQD staff and I carefully considered and reviewed all state statutes, rules, and regulations we deemed to apply to the Brook Mine permit application. It is my opinion that the recommendations I have made about the Brook Mine permit comply with state and federal law.
6. With regard to subsidence control requirements, WDEQ/LQD regulates Brook's proposed highwall mining activities as a form of auger mining. This is because of the similarities identified by Brook between highwall mining and auger mining, namely that both use a remotely operated machine to remove coal without creating surface disturbance and with no mine personnel present in the underground workings.
7. In the spring of 2020, WDEQ/LQD received public comments on the Brook application.
8. Included in the public comments were matters raised by Dr. Gennaro Marino of Marino Engineering Associates, Inc. in his reports. Dr. Marino was hired by the Powder River Basin Resource Council ("PRBRC") to consult in regard to the Brook Mining permit application.
9. WDEQ/LQD had previously hired Dan Overton, a recognized geotechnical engineering expert, to provide independent expertise and opinion on Brook's subsidence-related permit application submittals.

10. WDEQ also reviewed the report and analysis provided by Brook's consulting experts, Tom Vandergrift and Tim Ross with Agapito Associates, Inc., as well as the public comments submitted in regard to Brook's permit application.
11. During Rounds 8 through 12 of the permit review process, LQD also utilized an internal independent third-party, District II LQD Supervisor, Nancy Williams, to review and provide her opinion as to the completeness and accuracy of the application and compliance with the rules and regulations governing surface coal mines in Wyoming.
12. In addition, WDEQ had the benefit of the oral comments from the informal conference.
13. Following the informal conference, the WDEQ asked Mr. Overton to review all of the written comments on the application, as well as the oral comments and documents provided during the informal conference.
14. WDEQ and Mr. Overton reviewed all expert analysis, all public comments, and all information presented at the May 13, 2020 informal conference, between May 14, 2020, and July 7, 2020, the day the Brook Mine Permit was issued.
15. Brook Mine Permit Conditions 9 and 10 were added to address the input from Mr. Overton, public comments, and the expert analysis of Dr. Marino, the mine engineering expert hired by the PRBRC.
16. Pursuant to the July 7, 2020, permit, Brook is not entitled to mine any highwall mining panel until it has complied with the Conditions 9 and 10, which are incorporated into the approved mining permit.
17. Condition 9 of the permit requires that Brook provide the WDEQ/LQD with the results from geophysical property testing of cores from a minimum of at least three geotechnical core holes for each highwall panel to be mined.

18. Consistent with the comments of Mr. Overton and Dr. Marino, for the TR-1 area, this will require drilling and sampling at least two more core holes in addition to the previously tested hole 2017-4 core.
19. Condition 9 requires that samples be collected from each core hole and must include the roof, coal, and floor samples of the proposed highwall mining panel.
20. Condition 9 requires that for all future core holes, Atterberg limits and consolidated-drained triaxial testing be performed in addition to the testing procedures performed on core hole 2017-4.
21. Condition 9 also requires that the results of the core laboratory testing be reviewed and analyzed by a Wyoming registered professional geologist or engineer. The mine plan and subsidence control plan will then be revised, if necessary, based upon the additional data and analysis.
22. Condition 10 requires that all data and analysis from the geotechnical testing required in Condition 9 be submitted to WDEQ/LQD in the form of non-significant revisions to the mine plan and subsidence control plan. After completion of the additional testing and study, all results must be supplied to WDEQ for WDEQ's consideration and regulatory action.
23. The subsidence control plan incorporated in the permit is complete and accurate and provides appropriate protection for Wyoming and its citizens and the environment and is designed to prevent subsidence and material damage to the surface above any highwall mining panel.
24. WDEQ/LQD possesses the authority under Chapter 13 of LQD's Coal Rules to delineate the format of non-significant revisions.

25. In drafting the language of Condition 10, I suggested the use of “non-significant revision” as a way to guide Brook on incorporating the new data and analysis into its existing mine plan and subsidence control plan. WDEQ/LQD maintains its complete discretion to determine if a submission is a significant deviation from the approved mine or reclamation plans, which would then trigger public notice and hearing requirements.
26. Brook Mine cannot commence mining in any highwall mining panel until WDEQ/LQD has provided written approval of any corresponding revision.
27. Conditions 9 and 10, along with the application and the permit, create a subsidence control plan that gives Brook and its professional geologist and/or engineer and WDEQ/LQD the ongoing benefit of understanding each panel and the results of testing and analysis and the results of mining before providing Brook the opportunity to begin working any other highwall mining panel. As WDEQ analyzes submissions for each highwall mining panel, in future years, Brook and WDEQ will have access to the knowledge of the physical characteristics present in the mine. This knowledge of the geology, hydrology, and other physical characteristics in the Brook Mine will aid in preventing subsidence during the life of the mine.
28. Notwithstanding Brook’s measures to prevent subsidence, Brook is required under Chapter 7, section 2(a) of LQD’s Coal Rules to complete full reclamation, including backfilling, grading, and contouring, of any substantial surface disturbance that results from subsidence within five years of Brook’s completion of mining.
29. The WDEQ/LQD correctly determined that matters raised by the PRBRC were not deficiencies in the application and set forth a process for the submission of additional information in future years of the permit.

30. The mining permit is a living document directing future actions of the operator and the WDEQ/LQD over the time periods set in the permit.
31. All existing coal mines in Wyoming operate in a manner as mandated by this permit and requests for modification of permits and mining plans for both non-significant revisions and significant revisions throughout the lifetime of the mining permit occur frequently.
32. The permit issued here is consistent with historical practice of WDEQ/LQD in permitting and monitoring coal mines in Wyoming, and all federal and state rules regulations and statutes.
33. In my professional opinion, WDEQ has complied with WEQA which requires that the application be complete and accurate and that the reclamation plan can accomplish what it must.

FURTHER YOUR AFFIANT SAYETH NAUGHT.

DATED this 7<sup>th</sup> day of October, 2020.

Alan Edwards  
Alan Edwards

STATE OF Wyoming )  
 ) ss  
COUNTY OF Laramie )

Subscribed and sworn to before me by Alan Edwards this 7<sup>th</sup> day of October, 2020.

Witness my hand and official seal.



Jody L. Paessler  
Notary Public

My commission expires:  
July 26, 2023