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## Exhibit A

# BEFORE THE ENVIRONMENTAL QUALITY COUNCIL STATE OF WYOMING

IN RE BROOK MINE APPLICATION	)	DOCKET 17-4802
	)	
TFN 6 2-025	)	FINDINGS OF FACT,
	)	CONCLUSIONS OF LAW
	)	AND ORDER

#### I. APPEARANCES

The final contested case hearing in this matter occurred before the Environmental Quality Council (Council) on May 22 through 26, 2017, in Sheridan, Wyoming, and concluded on June 7 and 8, 2017, in Cheyenne, Wyoming.

Present for the Council during all or portions of the hearing was Chairman and Hearing Officer Dr. David Bagley, Vice-Chairman Meghan Lally, and Council members Tim Flitner, Nick Agopian, and Deb Baumer. Council members Rich Fairservis and Megan Degenfelder recused themselves from the proceeding because of conflicts. Council member Megan Degenfelder attended a portion of the hearing, however, she recused herself from the proceeding on June 6, 2017.

Present at the hearing for Petitioner, Brook Mine (Brook), was Thomas L. Sansonetti, Isaac N. Sutphin, and Jeffrey S. Pope from Holland & Hart LLP. Present at the hearing for the Wyoming Department of Environmental Quality (DEQ) was Andrew J. Kuhlman and James M. LaRock from the Wyoming Attorney General's Office. Present at the hearing for the Powder River Basin Resource Council (Powder River) was Shannon R. Anderson. Present at the hearing for Big Horn Coal and Lighthouse Resources (Big Horn) was Lynn Boomgaarden and Clayton H. Gregersen from Crowley Fleck PLLP. Present at the hearing for Mary Brezik-Fisher and David Fisher (Fishers) was Jay A. Gilbertz from Yonkee & Toner, LLP.

Testifying on behalf of Brook was Jeff Barron and Kenneth Woodring. Testifying on

behalf of the DEQ was Bjarne Kristiansen, Matt Kunze, Muthu Kuchanur, PhD, and Doug Emme.

Testifying on behalf of Big Horn was Jordan Sweeney and Paul Gerlach. Testifying on behalf of

Powder River was Anton Bocek, John Buyok, Gillian Malone, Gennaro Marino, PhD, PE, DGE,

Brooke Collins, Carol Bilbrough, Sue Spencer, and Mickel Wireman. Testifying on behalf of the

Fishers was Mary Brezik-Fisher.

The following exhibits were admitted into evidence: DEQ exhibits 1 through 36; Brook

exhibits 1, 2, and 7 through 14, and D15; Big Horn exhibits 1 through 19; Powder River exhibits

1 through 90, 93D, 94D, 95D; and Fishers exhibits 1 through 26, and 27D.

Following the final hearing, the parties submitted post hearing briefs and proposed findings

of fact and conclusions of law. After reviewing the post-hearing filings, the Council deliberated

and decided this matter on August 1, 2017, in Cheyenne. At that time, the hearing was officially

closed.

Due to the length of the hearing, some of the Council members were not able to be present

for the entire hearing and live testimony. However, each Council member participating in this

matter listened to all the testimony by attending the in-person hearing or watching the video

recordings of the hearing or read the testimony contained in the transcript or a combination of

both.

The Council, having heard and considered all the evidence in this case and being fully

advised, pursuant to the Wyoming Administrative Procedure Act, Wyo. Stat. Ann. § 16-3-110,

finds and concludes as follows:

Findings of Fact, Conclusions of Law, and Order Docket 17-4802

Page 2 of 29

#### II. JURISDICTION

This case arises from petitions for hearing (also referred to as requests or appeals) from several interested persons to Brook's application for a coal surface mining permit. After its examination and review, the DEQ concluded that Brook's permit application contained no deficiencies and was "suitable for publication" under Wyoming Statute § 35-11-406(h). Brook subsequently published notice of its application under § 35-11-406(j). As allowed by section 406(k), several interested persons filed written objections to Brook's application and requested an informal conference with the DEQ director. The director denied those requests.

After the denial, three interested persons, Big Horn, Powder River, and the Fishers (sometimes collectively referred to as the objectors) timely filed petitions for hearing before this Council under section 406(k). Under that section, the Council was required to hold a contested case hearing in accordance with the Wyoming Administrative Procedure Act—the Council did so. Following the contested case, the Council is required to issue findings of fact and a decision on the application within sixty days after the final hearing—the ultimate decision being whether Brook's permit application should be granted. Wyo. Stat. Ann. § 35-11-406(p). This matter is properly before the Council and it has jurisdiction over this matter and the parties.

#### III. PRELIMINARY MATTERS

#### A. Brook's motions to dismiss

Brook filed three motions to dismiss requesting the Council dismiss the objectors' petitions for a contested case suggesting they were untimely. Brook claimed the objectors were required to file their petitions for a contested case with the Council within thirty days after the last publication date and at the same time that they requested an informal conference with the DEQ director. The

Findings of Fact, Conclusions of Law, and Order
Docket 17-4802
Page 3 of 29

objectors argue the opposite. The Council agrees with the objectors. Wyoming Statute § 35-11-

406(k) and the DEQ's rules of practice and procedure do not support Brook's position that the

petitions were untimely.

The objectors, within thirty days after the last publication date, timely filed their written

objections to Brook's application and at the same time requested informal conferences with the

director. There is no requirement in statute or rule that requires the objectors to file simultaneous

requests for a contested case with the Council at the time they request an informal conference.

Such an interpretation is non-sensical and would lead to an absurd result as it would require

objectors to file a request for a contested case with the Council prior to knowing whether an

informal conference will be held and, if so, the outcome of the conference. If the conference was

successful, there would be no need for a contested case. The Legislature could not have intended

such a result.

In this case, the objectors timely filed requests for an informal conference with the DEQ

director. The director denied those requests and immediately forwarded the matter to the Council

on January 30, 2017, although no objector had filed a petition for a contested case. The Council

initially accepted jurisdiction over Brook's application (docket #17-4801) but after reviewing the

pleadings and hearing oral argument, the Council dismissed that case on February 22, 2017. The

Council determined that it did not have jurisdiction over Brook's application because no objector

had officially requested a contested case before the Council.

Following the Council's order of dismissal, the objectors filed petitions for a contested

case, the latest being filed on February 24, 2017. Although there may be some ambiguity in the

statutes and rules on when an objector must file a request for a contested case if their request for

Findings of Fact, Conclusions of Law, and Order Docket 17-4802 an informal conference is denied, it certainly is not as Brook suggests. The Council concluded

that the objectors timely filed their petitions with the Council and found that this matter is properly

before it.

As part of its motion filed against Big Horn, Brook also argued that Big Horn's petition

should be dismissed because Big Horn allegedly contracted away its right to appeal Brook's permit

application. That issue is a private dispute between Big Horn and Brook and the Council will not

enter that dispute—Big Horn was authorized to file its petition with the Council.

Last, as part of its motion filed against Powder River, Brook asked the Council to dismiss

the portion of Powder River's petition requesting the Council remand the matter to the director to

hold an informal conference. The Council does not have the authority to remand the matter to the

director to hold an informal conference, a duty that is purely discretionary.

As a result, Brook's motions to dismiss are denied. However, because the Council does

not have the authority to remand the matter to the director to hold an informal conference, the

Council grants Brook's motion to dismiss the portion of Powder River's petition requesting the

Council remand the matter to the director to hold an informal conference.

B. DEO's motion to dismiss

The DEO also filed a motion to dismiss the portion of Powder River's petition requesting

the Council remand the matter to the director to hold an informal conference. As stated earlier, the

Council does not have the authority to order the director to hold an informal conference, a duty

that is purely discretionary. The Council agreed with the DEQ and dismissed the portion of Powder

River's appeal requesting the Council remand the matter to the director to hold an informal

conference. The DEQ's motion to dismiss is granted.

Findings of Fact, Conclusions of Law, and Order Docket 17-4802

Page 5 of 29

#### IV. STATEMENT OF THE CASE/ISSUES AND CONTENTIONS

This case arises under Wyo. Stat. Ann. § 35-11-406(p) which requires the Council to issue findings of fact and a decision on Brook's permit application following a contested case. The objectors are challenging Brook's mine application permit. They argue that Brook's application contains deficiencies and that Brook has not met its burden of proof required under Wyo. Stat. Ann. § 35-11-406(n). Conversely, DEQ and Brook argue that Brook's application was "technically adequate" and was "suitable for publication" under Wyo. Stat. Ann. § 35-11-406(h). They argue that the application contains no deficiencies.

Although there is a dispute about the role of the Council in this matter, this dispute centers on whether Brook has met its burden of proof by affirmatively demonstrating that its application is in compliance with section 406(n).

Wyoming Statute § 35-11-406(n) states:

- (n) The applicant for a surface coal mining permit has the burden of establishing that his application is in compliance with this act and all applicable state laws. No surface coal mining permit shall be approved unless the applicant affirmatively demonstrates and the administrator finds in writing:
  - (i) The application is accurate and complete:
- (ii) The reclamation plan can accomplish reclamation as required by this act;
- (iii) The proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area;
- (iv) The area proposed to be mined is not included within an area designated unsuitable for surface coal mining pursuant to W.S. 35-11-425, within an area where mining is prohibited pursuant to section 522(e) of P.L. 95-87 [30 U.S.C. § 1272(e)], or within an area under review for this designation under an administrative proceeding, unless in such an area as to which an administrative proceeding has commenced pursuant to W.S. 35-11-425, the operator making the permit application demonstrates that, prior to January 1, 1977, he has made

substantial legal and financial commitments in relation to the operation for which he is applying for a permit;

## (v) The proposed operation would:

- (A) Not interrupt, discontinue, or preclude farming on alluvial valley floors that are irrigated or naturally subirrigated, but, excluding undeveloped range lands which are not significant to farming on said alluvial valley floors and those lands as to which the administrator finds that if the farming that will be interrupted, discontinued or precluded is of such small acreage as to be of negligible impact on the farm's agricultural production; or
- (B) Not materially damage the quantity or quality of water in surface or underground water systems that supply these alluvial valley floors. Paragraph (n)(v) of this section shall not affect those surface coal mining operations which in the year preceding August 3, 1977, produced coal in commercial quantities, and were located within or adjacent to alluvial valley floors or had obtained specific permit approval by the administrator to conduct surface coal mining operations within said alluvial valley floors. If coal deposits are precluded from being mined by this paragraph, the administrator shall certify to the secretary of the interior that the coal owner or lessee may be eligible for participation in a coal exchange program pursuant to section 510(b)(5) of P.L. 95-87 [30 U.S.C. § 1260(b)(5)].
- (vi) If the area proposed to be surface coal mined contains prime farmland, the operator has the technological capability to restore such mined area, within a reasonable time, to equivalent or higher levels of yield as nonmined prime farmland in the surrounding area under equivalent levels of management and can meet the soil reconstruction standards of this act and the regulations promulgated pursuant thereto;
- (vii) The schedule provided in paragraph (a)(xiv) of this section indicates that all surface coal mining operations owned or controlled by the applicant are currently in compliance with this act and all laws referred to in paragraph (a)(xiv) of this section or that any violation has been or is in the process of being corrected to the satisfaction of the authority, department or agency which has jurisdiction over the violation.

Wyo. Stat. Ann. § 35-11-406(n)(emphasis added).

#### V. FINDINGS OF FACT<sup>1</sup>

- 1. On October 31, 2014, Brook submitted to DEQ's Land Quality Division (the Division) an application for a permit to mine coal. Brook's permit application proposed to mine coal in an area about eight miles north of Sheridan, Wyoming adjacent to the Tongue River. Transcript Kristianson testimony, pp. 49-52. Most of the mine would lie north of the Tongue River and Interstate 90, with the southwestern portion of the permit area sitting adjacent to the Tongue River. DEQ Exh. 12; Transcript Kristianson testimony, p. 49.
- 2. The permit area encompasses an area approximately 4,500 acres. DEQ Exh 1;

  Transcript Kristianson testimony, p. 50.
- 3. The proposed mine would annually produce about two million tons of coal.

  Transcript Kristianson testimony, pp. 276-77. The mine has a predicted life of 12 to 13 years.

  Transcript Kristianson testimony, p. 51.
- 4. Adjacent to the proposed coal mine are many private landowners, including many homeowners within one-half mile of the proposed mine boundary. *Transcript Emme testimony*, pp. 584, 594.
- 5. Brook's permit application consisted of 12 volumes. Transcript Kristianson testimony, p. 61; DEQ Exhs. 1 through 12.
- 6. The Division determined that the application was "complete", under Wyo. Stat. Ann. § 35-11-406(e) on November 3, 2014. *Transcript Kristianson testimony, p. 52*.

<sup>&</sup>lt;sup>1</sup> To the extent opinions or testimony is cited as the basis for a finding of fact, the Council has resolved any conflicts or dispute between testimony of others in favor of the cited testimony or opinion.

7. The Division then began its technical review and comment process. The application

had six rounds of comments and responses between the Division and Brook before the Division

ultimately determined that the application was "technically adequate" and "suitable for

publication" under Wyo. Stat. Ann. § 35-11-406(h). DEQ Exh. 34; Transcript - Kristianson

testimony, pp. 45, 52, 58-60.

8. The Division determined in December 2016 that the application was "technically

adequate" and "suitable for publication." The Division determined that Brook satisfied the

Division's comments and concerns and the application had met all the statutory and regulatory

requirements. Transcript - Kristianson testimony, pp. 52-53, 59-60.

9. The application permit was published as required under Wyo. Stat. Ann. § 35-11-

406(j). Transcript – Kristianson testimony, p. 53.

10. In making its decision that the application contained no deficiencies, was "suitable

for publication" and "technically adequate", the Division failed to produce or create a cumulative

hydrologic impact assessment (CHIA). Transcript - Kunze testimony, pp. 413, 420, 436-437.

11. A CHIA is a document that is produced by the Division for certain types of coal

permitting actions. The CHIA takes an intensive look at surface and groundwater quality and

quantity within the coal mine area. Transcript - Kunze testimony, p. 413.

12. The CHIA is necessary and required to support the findings required to be made

under Wyo. Stat. Ann. § 35-11-406(n), specifically whether the proposed mine operation has been

designed to prevent material damage to the hydrologic balance outside the permit area and whether

the proposed operation will not materially damage the quantity or quality of water in surface or

underground water systems that supply the alluvial valley floors. The CHIA is necessary before

Findings of Fact, Conclusions of Law, and Order
Docket 17-4802
Page 9 of 29

the Division can approve a mine permit application. *Transcript – Kunze testimony, pp. 413-415,* 427, 436-437, 444.

- 13. A CHIA is typically produced and finalized prior to the end of the permit application comment period which enables the public to review it and make comments, if necessary. However, for the Brook application, the Division did not produce or create a CHIA and the public did not have an opportunity to review it or comment on it. *Transcript Kunze testimony, pp. 423-426.*
- 14. In addition to not creating the CHIA, the administrator did not make any written findings required under Wyo. Stat. Ann. § 35-11-406(n).
- 15. Brook first published its permit application on December 27, 2016. *Transcript Kristianson testimony, p. 53.*
- 16. Between December 27, 2016, and January 27, 2017, the Division received twenty public comments relating to the permit application. Of those twenty comments, fourteen were objections to Brook's permit application.
- 17. Those objections challenged many parts of Brook's permit application, including Brook's analysis of alluvial valley floors, blasting, bonding, probable hydrologic consequences, reclamation, and subsidence. *Big Horn Exh 3; Fisher Exh. 26; PRBRC Exhs. 1, 2, 5, 9, and 10.*
- 18. Upon review of all the objections, the Division still found Brook's application was "technically adequate." *Transcript Kristianson testimony, pp. 196-197.*
- 19. The objectors requested that the DEQ director hold an informal conference to decide their objections. Big Horn Exh 3; Fisher Exh. 26; PRBRC Exh. 1.

- 20. The DEQ director exercised his discretion and denied the requests to hold an informal conference.
  - 21. The objectors timely requested a contested case before the EOC.
- 22. Based upon Brook's application, generally, mining will proceed moving westward from the east side of the proposed permit area. The first area to be mined is called the TR-1 trench and it is located in the southeast corner of the proposed permit area. *DEQ Exh. 12; Transcript Kristianson testimony, pp. 121-122.*
- 23. The proposed mine would predominately use a method known as "highwall mining," which is similar to auger mining and regulated as such. *DEQ Exh. 12; Transcript Kristianson testimony, pp. 50, 117-119.*
- 24. Highwall mining begins by digging a box cut down to the coal seam. A remotely-operated highwall miner unit then mines tunnels up to 2,000 feet into panels of the exposed coal seam perpendicular to the trench. Walls or webs or pillars of coal are left unmined between the tunnel to provide support and prevent subsidence, with wider barrier pillars periodically placed to offer extra safety between sets of tunnels. The mine plan estimates that this method will recover 40% to 65% of the coal. *Transcript Kristianson testimony, pp. 50-51, 118-120, 125-126; transcript Barron testimony, pp. 654-656, 819.*
- 25. The overburden in the TR-1 mining area is geologically and hydrologically unique and can be distinguished from the overburden in the proposed permit area outside the TR-1 mining area. The TR-1 area overburden is composed of previously mined backfill material and is saturated with groundwater. *DEQ Exh. 5; Transcript Kristianson testimony, pp. 205, 211-212, 214.*

26. In order to gather data as to the geology in the proposed mine area, including overburden geology, Brook conducted a drilling program consisting of a series of drill holes across

the proposed permit area. DEO Exh. 5; Transcript - Kristianson testimony, pp. 87, 91.

- 27. Brook did not conduct drill hole testing in the TR-1 mining area, nor did it conduct drill hole testing in any part of the approximately 360 acres comprising the SE1/4 of Section 15 and the NE1/4 of Section 22, Township 57 North, Range 84 West. The permit application contains no geologic data from the distinct overburden within these lands. DEQ Exh. 5; Transcript Kristianson testimony, pp. 210-211.
- 28. Brook's permit application does not distinguish the TR-1 area overburden, and does not include specific geologic characterization or identification of the TR-1 area overburden, including its geologic strata, nature, structural geology, lithology, thickness, or other factors that may influence mining or reclamation activities. *Transcript Kristianson testimony, pp. 209-211*.
- 29. The permit application does not characterize any part of the overburden within the proposed permit area as a "potential hydrogeologic unit," and concedes that Brook installed no groundwater monitor wells and conducted no aquifer tests in any part of the overburden. *DEQ Ex.*6.
- 30. The permit application lacks required information as to the TR-1 overburden and its groundwater saturation, and the permit application inaccurately characterizes all overburden within the proposed permit area as dry. *Transcript Kristianson testimony, pp. 214-217.*
- 31. Brook's application fails to describe groundwater in the TR-1 area overburden. The permit application contains no site-specific data regarding groundwater location, quantity, quality, lithology, or thickness; or its recharge, storage, or discharge characteristics within the TR-1 area

overburden. Transcript – Kristianson testimony, p. 212; transcript – Barron testimony pp. 717, 720.

- 32. The permit application contains no description or assessment of the hydrologic impacts of the proposed mining operations to the groundwater in the TR-1 overburden, and provides no plan whereby Brook will monitor the hydrologic impacts of the proposed mining operations on groundwater in the TR-1 area overburden. *DEQ Exhs. 5, 12; Transcript Barron testimony, p. 717.* 
  - 33. Brook used a groundwater model to support its permit application.
- 34. The groundwater model was designed to analyze the potential cumulative hydrological effects of the project and simulate the regional groundwater impacts from the proposed mining operation. *DEO Exh. 12*.
- 35. The hydrological data used in the groundwater model was limited to observation points, monitor wells and pumping tests, and private well information obtained from the State Engineer's Office database. None of these data sources provide information as to the unique textual and hydraulic characteristics of the saturated backfill in the TR-1 area overburden. *DEQ Exh. 12*, *Big Horn Exh. 9; Transcript Kuchanur testimony, p. 513*.
- 36. There are approximately 357 domestic stock wells within three miles of the permit application boundary. The application does not discuss or explain what happens to the water in these wells if the coal is dewatered. *Transcript Wireman testimony, pp. 1344, 1365.*
- 37. Drawdown in some of these wells are predicted to be as much as twenty-five feet.

  Transcript Kuchanur testimony, pp. 540-543. Drawdowns in these wells could be significant for the wells and their productivity. Transcript Kuchanur testimony, pp. 542-43.

- 38. The hydrology in and around the permit application boundary is complex.
- Transcript Kristianson testimony, p. 303.

55. 1360.

- 39. The hydrologic review and assessment contained only one pump test in the far eastern portion of the permit application area. No aquifer testing was performed in the rest of the permit area. Only two site specific hydraulic conductivity values were obtained over the entire permit area. Hydraulic conductivity measures the rate at which water flows in an aquifer it is a measurement of the degree of interconnected porosity. *Transcript Wireman testimony*, pp. 1354-
- 40. The hydrologic review and assessment only used one porosity value or hydraulic conductivity value for the entire permit area which cannot account for the heterogeneity or diversity of the geology in the permit area. *Transcript Wireman testimony, pp. 1354-55;* Transcript Kuchanur testimony, pp. 535-537. The area is geologically fractured and highly variable. Transcript Kuchanur testimony, p. 535.
- 41. There are no monitoring wells in the Tongue River. Transcript Kuchanur testimony, p. 539
- 42. The Tongue River alluvium is an important aquifer for the region. *Transcript Kuchanur testimony, p. 539.*
- 43. Using only one porosity value for the entire permit area fails to take into account seasonal changes which can alter direction of flow, velocity of flow and quantity of flow to a particular area. *Transcript Wireman testimony, p. 1355*.

- 44. Inadequate testing and data collection was done on the overburden, underburden, Tongue River alluvium and Slater Creek alluvium to make scientific predictions about hydrologic
- impacts. Transcript Wireman testimony, pp. 1361, 1363, 1435-36.
- 45. No monitoring or baseline wells were used to establish the baseline water in the Tongue River alluvium. *Transcript Wireman testimony, pp. 1364-1365*.
- 46. The groundwater aquifer assessment contains no discussion of vertical intervals or lithology which affect the potentially impacted domestic wells. *Transcript Wireman testimony*, p. 1367.
- 47. The assessment of the hydrology in the permit application area is inadequate.

  \*Transcript Wireman testimony, pp. 1372-73.
- 48. Because of the inadequate hydrology assessment, it is premature to come to a decision of whether Brook's proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area. *Transcript Wireman testimony, pp. 1373, 1398-1400, 1439, 1443.* Brook's application does not contain the information necessary to affirmatively demonstrate that material damage to the hydrological balance outside the permit area will be prevented. *Transcript Wireman testimony, pp. 1398-1400, 1442-1443.*
- 49. The hydrologic studies done by Brook so far along with the other available data do not provide a sound scientific basis from which it can be concluded that the mining will not materially damage the quantity or quality of water in surface of underground water systems that supply alluvial valley floors that are within the mine boundary or within one-half mile of the proposed mine boundary. *Transcript Wireman testimony, pp. 1399-1401, 1441-1443, 1439.*

50. There have been inadequate studies and testing done to draw any scientific conclusions as to the long-term risk of subsidence at the permit area. Transcript - Marino

testimony, pp. 1200, 1246.

The deficiencies and lack of a subsidence plan were explained by Dr. Marino. 51.

52. The permit application does not provide sufficient information to provide a

meaningful review with respect to subsidence potential. Transcript - Marino testimony, pp. 1237,

1284-85.

Appropriate data was not collected to do a site-specific assessment of the strength 53.

and stability of the roof, floor, and pillar materials at the permit area. Transcript - Marino

testimony, pp. 1211, 1228-1229.

54. The subsidence control plan exhibits a lack of geomechanical understanding of the

long-term and short-term stability of the mine. Transcript – Marino testimony, p. 1228.

55. There is insufficient information or data in the permit application and very limited

analysis of subsidence risk in the documents such that the subsidence potential cannot be assessed.

Transcript - Marino testimony, p. 1228.

56. The calculation in the mine plan improperly used coal strength data for bituminous

coal rather than the sub-bituminous coal which exists at the site. Transcript = Marino testimony,

pp. 1226-1227, 1234, 1247.

Complete subsidence control plans are typically stamped by a professional engineer 57.

and such plan is part of the permit application. Transcript – Marino testimony, pp. 1238-1239.

58. The mine plan is not complete due to the lack of proper testing and analysis to

determine the risk of subsidence due to mining activities. Transcript - Marino testimony, p. 1244.

Findings of Fact, Conclusions of Law, and Order Docket 17-4802 Page 16 of 29

steps for a proper mine subsidence plan. Transcript – Barron testimony, pp. 674-675. However, Brook did not perform those studies or work as part of its subsidence control plan. Transcript – Barron testimony, pp. 1532-33. Brook chose not to perform the necessary engineering work in the

Brook admitted that the studies and work suggested by Dr. Marino are necessary

permit application for permitting efficiency purposes. Transcript - Barron testimony, pp. 1532-

*1535*.

59.

- 60. Brook plans to do the necessary engineering work Dr. Marino suggests as part of the ground control plan. *Transcript Barron testimony, pp. 1532-1533*.
- 61. The risk of subsidence and subsidence control have not yet properly been studied or assessed.
- 62. Brook's blasting plan allows Brook to blast sunrise to sunset every day of the year.

  Transcript Emme testimony, pp. 586, 593.
- 63. It would be reasonable to place restrictions on the blasting schedule due to the number of houses nearby the permit area, however, no restrictions have been placed on the blasting schedule. *Transcript Emme testimony, p. 639.* 
  - 64. There are no reasonable limits on the blasting schedule in the mine plan.

#### VI. CONCLUSIONS OF LAW

#### A. Principles of Law

- 65. Paragraphs 1 through 64 of the findings of fact are fully incorporated herein.
- 66. Wyoming Statute § 35-11-406(b) states, in part, that:
  - (b) . . . The mining plan and reclamation plan shall include the following:

. .

(ii) Plans for surface gradient to a contour suitable for proposed use after reclamation is completed and proposed method of accomplishment;

. . .

(xvii) A blasting plan which shall outline the procedures and standards by which the operator of a surface coal mine will meet the provisions of W.S. 35-11-415(b)(xi);

(xviii) For surface coal mining operations, a plan to minimize the disturbance to the prevailing hydrologic balance at the minesite and in associated offsite areas and to the quality and quantity of water in surface and ground water systems both during and after mining operations and during reclamation. This paragraph does not alter the authority granted under any other section of this act with respect to requirements for maintaining the hydrologic balance in the minesite, or associated offsite areas, or other mining operations[.]

Wyo. Stat. Ann. § 35-11-406(b)(ii), (xvii), and (xviii).

- 67. Wyoming Statute § 35-11-406(e) states that:
- (e) The administrator shall notify the applicant within sixty (60) days of submission of the application whether or not it is complete. If the administrator deems the application incomplete, he shall so advise and state in writing to the applicant the information required. All items not specified as incomplete at the end of the first sixty (60) day period shall be deemed complete for the purposes of this subsection.

Wyo. Stat. Ann. § 35-11-406(e).

- 68. Wyoming Statute § 35-11-406(g) states that:
- (g) After the application is determined complete, the applicant shall publish a notice of the filing of the application once each week for two (2) consecutive weeks in a newspaper of general circulation in the locality of the proposed mining site.

Wyo. Stat. Ann. § 35-11-406(g).

- 69. Wyoming Statute § 35-11-406(h) states that:
- (h) The administrator shall review the application and unless the applicant requests a delay advise the applicant in writing within one hundred fifty (150) days from the date of determining the application is complete, that it is suitable for

publication under subsection (j) of this section, that the application is deficient or that the application is denied. All reasons for deficiency or denial shall be stated in writing to the applicant. All items not specified as being deficient at the end of the first one hundred fifty (150) day period shall be deemed complete for the purposes of this subsection. After this period, for noncoal permits, the administrator shall not raise any item not previously specified as being deficient unless the applicant in subsequent revisions significantly modifies the application. If the applicant submits additional information in response to any deficiency notice, the administrator shall review such additional information within thirty (30) days of submission and advise the applicant in writing if the application is suitable for publication under subsection (j) of this section, that the application is still deficient or that the application is denied.

Wyo. Stat. Ann. § 35-11-406(h).

### 70. Wyoming Statute § 35-11-406(j) states that:

(j) The applicant shall cause notice of the application to be published in a newspaper of general circulation in the locality of the proposed mining site once a week for four (4) consecutive weeks commencing within fifteen (15) days after being notified by the administrator. The notice shall contain information regarding the identity of the applicant, the location of the proposed operation, the proposed dates of commencement and completion of the operation, the proposed future use of the affected land, the location at which information about the application may be obtained, and the location and final date for filing objections to the application. For initial applications or additions of new lands the applicant shall also mail a copy of the notice within five (5) days after first publication to all surface owners of record of the land within the permit area, to surface owners of record of immediately adjacent lands, and to any surface owners within one-half ( $\frac{1}{2}$ ) mile of the proposed mining site. The applicant shall mail a copy of the application mining plan map within five (5) days after first publication to the Wyoming oil and gas commission. Proof of notice and sworn statement of mailing shall be attached to and become part of the application.

Wyo. Stat. Ann. § 35-11-406(j).

## 71. Wyoming Statute § 35-11-406(k) states that:

(k) Any interested person has the right to file written objections to the application with the administrator within thirty (30) days after the last publication of the above notice. For surface coal mining operations, the director may hold an informal conference if requested and take action on the application in accordance with the department's rules of practice and procedure, with the right of appeal to the council which shall be heard and tried de novo. A conference shall be held if

the director determines that the nature of the complaint or the position of the complainants indicates that an attempt to informally resolve the disputes is preferable to a contested case proceeding. An informal conference or a public hearing shall be held within twenty (20) days after the final date for filing objections unless a different period is stipulated to by the parties. The council or director shall publish notice of the time, date and location of the hearing or conference in a newspaper of general circulation in the locality of the proposed operation once a week for two (2) consecutive weeks immediately prior to the hearing or conference. The hearing shall be conducted as a contested case in accordance with the Wyoming Administrative Procedure Act, and right of judicial review shall be afforded as provided in that act.

Wyo. Stat. Ann. § 35-11-406(k).

## 72. Wyoming Statute § 35-11-406(n) states:

- (n) The applicant for a surface coal mining permit has the burden of establishing that his application is in compliance with this act and all applicable state laws. No surface coal mining permit shall be approved unless the applicant affirmatively demonstrates and the administrator finds in writing:
  - (i) The application is accurate and complete;
- (ii) The reclamation plan can accomplish reclamation as required by this act;
- (iii) The proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area;
- (iv) The area proposed to be mined is not included within an area designated unsuitable for surface coal mining pursuant to W.S. 35-11-425, within an area where mining is prohibited pursuant to section 522(e) of P.L. 95-87 [30 U.S.C. § 1272(e)], or within an area under review for this designation under an administrative proceeding, unless in such an area as to which an administrative proceeding has commenced pursuant to W.S. 35-11-425, the operator making the permit application demonstrates that, prior to January 1, 1977, he has made substantial legal and financial commitments in relation to the operation for which he is applying for a permit;

## (v) The proposed operation would:

(A) Not interrupt, discontinue, or preclude farming on alluvial valley floors that are irrigated or naturally subirrigated, but, excluding undeveloped range lands which are not significant to farming on said alluvial valley

floors and those lands as to which the administrator finds that if the farming that will be interrupted, discontinued or precluded is of such small acreage as to be of negligible impact on the farm's agricultural production; or

- (B) Not materially damage the quantity or quality of water in surface or underground water systems that supply these alluvial valley floors. Paragraph (n)(v) of this section shall not affect those surface coal mining operations which in the year preceding August 3, 1977, produced coal in commercial quantities, and were located within or adjacent to alluvial valley floors or had obtained specific permit approval by the administrator to conduct surface coal mining operations within said alluvial valley floors. If coal deposits are precluded from being mined by this paragraph, the administrator shall certify to the secretary of the interior that the coal owner or lessee may be eligible for participation in a coal exchange program pursuant to section 510(b)(5) of P.L. 95-87 [30 U.S.C. § 1260(b)(5)].
- (vi) If the area proposed to be surface coal mined contains prime farmland, the operator has the technological capability to restore such mined area, within a reasonable time, to equivalent or higher levels of yield as nonmined prime farmland in the surrounding area under equivalent levels of management and can meet the soil reconstruction standards of this act and the regulations promulgated pursuant thereto;
- (vii) The schedule provided in paragraph (a)(xiv) of this section indicates that all surface coal mining operations owned or controlled by the applicant are currently in compliance with this act and all laws referred to in paragraph (a)(xiv) of this section or that any violation has been or is in the process of being corrected to the satisfaction of the authority, department or agency which has jurisdiction over the violation.

Wyo. Stat. Ann. § 35-11-406(n).

#### 73. Wyoming Statute § 35-11-406(p) states that:

(p) The director shall render a decision on the application within thirty (30) days after completion of the notice period if no informal conference or hearing is requested. If an informal conference is held, all parties to the conference shall be furnished with a copy of the final written decision of the director issuing or denying the permit within sixty (60) days of the conference. If a hearing is held, the council shall issue findings of fact and a decision on the application within sixty (60) days after the final hearing. The director shall issue or deny the permit no later than fifteen (15) days from receipt of any findings of fact and decision of the environmental quality council.

Wyo. Stat. Ann. § 35-11-406(p).

- 74. Chapter 19, Section 2. Required Studies.
- (a) In addition to other information required by the Act and these regulations, all surface coal mining permit application shall contain:
- (i) A determination of the projected result of proposed surface coal mining and reclamation operations, both on and off the mine site, which may reasonably be expected to change the quantity or quality of the surface and groundwater; the surface and groundwater flow, timing and availability, the surface and groundwater quality under seasonal flow conditions, including dissolved and suspended solids; the effect of acid-forming and toxic material on surface and groundwaters; the stream channel conditions; and the aquatic habitat in the permit area and other affected areas. This information shall be in sufficient detail to enable the Administrator to determine the probable cumulative hydrologic impacts on surface and groundwater systems including the impacts resulting from the proposed operation and their interaction with the impact of all anticipated mining upon all affected hydrologic systems. Anticipated mining shall be projected over the life of the operation, and shall include all other existing coal mining operations, any proposed coal mining operation for which a permit application has been filed and all proposed operations required to meet diligent development requirements for leased federal coal where mine development and geological information is available. The assessment of the probable cumulative hydrologic impacts shall be sufficient to make the determination of W.S. § 35-11-406(n)(iii).

DEQ Rules, Land Quality – Coal, Chapter 19: Required Studies for Surface Coal Mining Permit Applications and Assistance for Such Studies, Section 2.

- 75. Chapter 19, Section 3. Assistance for the Studies and Investigations.
- (a) For the purpose of the determination required by Section 2(a)(i) of this Chapter, hydrologic information on the general area prior to mining may be obtained from an appropriation Federal or State agency. The Administrator shall not make a determination of completeness nor approve or deny an application until such information is available, or until it is otherwise voluntarily submitted by the applicant.

DEQ Rules, Land Quality – Coal, Chapter 19: Required Studies for Surface Coal Mining Permit Applications and Assistance for Such Studies, Section 3.

- 76. Chapter 2, Section 5 Mine Plan.
- (a) In addition to that information required by W.S. § 35-11-406(b), each application for a surface coal mining permit shall contain:
- (x) Probable hydrologic consequences determination (PHC). A determination of the PHC of the proposed operation on the hydrologic regime and the quantity and quality of surface water and groundwater systems within the permit area and the general area consistent with the information required in Chapter 19, Section 2 of these regulations. The PHC determination shall be based on baseline hydrologic, geologic and other information collected for the permit application and may include data statistically representative of the site. The determination shall specifically address potential adverse hydrologic consequences and describe preventative and remedial measures.
- DEQ Rules, Land Quality Coal, Chapter 2: Permit Application Requirements, Section 5.
- 77. Chapter 7, Section 2. Environmental Protection Performance Standards Applicable to Underground Mining Operations.
  - (a) Performance standards applicable to underground coal mining operations:
  - (iii) Underground mining activities shall be planned and conducted so as to prevent subsidence from causing material damage to structures, the land surface, and groundwater resources.
- DEQ Rules, Land Quality Coal, Chapter 7: Underground Coal Mining Permit Application Content Requirements, Section 2.
- When analyzing the language of a statute, the "paramount consideration is the legislature's intent as reflected in the plain and ordinary meaning of the words used in the statute." Horse Creek Conservation Dist. v. State ex rel. Wyo. Att'y Gen., 2009 WY 143, ¶ 14, 221 P.3d 306, 312 (Wyo. 2009) (citing Krenning v. Heart Mountain Irrigation Dist., 2009 WY 11, ¶ 9, 200 P.3d 774, 778 (Wyo. 2009)). "A statute is clear and unambiguous if its wording is such that reasonable persons are able to agree on its meaning with consistency and predictability." Id. "When a statute is sufficiently clear and unambiguous, we give effect to the plain and ordinary meaning

of the words and do not resort to the rules of statutory construction." Cheyenne Newspapers, Inc.

v. Building Code Bd. of App. of City of Cheyenne, 2010 WY 2, ¶ 9, 222 P.3d 158, 162 (Wyo. 2010)

(quoting BP Am. Prod. Co. v. Dep't of Revenue, 2005 WY 60, ¶ 15, 112 P.3d 596, 604 (Wyo.

2005)).

79. In this case, Brook has the burden of proof and it must affirmatively demonstrate

compliance with section 406(n).

**B.** Applications of Principles of Law

80. The Council finds and concludes that it has jurisdiction over this matter under Wyo.

Stat. Ann. § 35-11-406(k) and (p).

81. Based upon the evidence and testimony during the hearing, the Council finds and

concludes that it cannot approve the permit application for several reasons: 1) the administrator

has not made his required written determinations and findings under section 406(n); 2) Brook has

failed to meet its burden under subsections 406(n)(i), (iii), and (v); and 3) the permit application

is deficient under section 406(b) and the DEQ's rules.

I. Wyoming Statute § 35-11-406(n) applies

82. The parties disagree about whether section 406(n) applies to this proceeding. Both

DEO and Brook contend that section 406(n) is not applicable, while the objectors assert it is.

Brook and the DEO allege that the Council is only authorized to determine whether the application

was "technically adequate" and "suitable for publication" under section 406(h). They assert that

the findings in section 406(n) are only made by the administrator after the Council makes its

determination of whether the application was "technically adequate" and "suitable for

publication." They contend that the Council is authorized to only review the permit application

under 406(a) and (b) and the DEQ's rules, nothing more. The Council disagrees.

83. Section 406(n) is unambiguous. Only one plausible and reasonable interpretation

exists—in this proceeding Brook is required to affirmatively demonstrate and the administrator

must have found in writing the requirements outlined in subsection (n).

84. This interpretation is supported by the Council's long-standing interpretation of

subsection (n). In past mining permit application disputes, the Council has determined that (n)

applies and has required that the applicant affirmatively demonstrate and the administrator find in

writing compliance with section 406(n).

85. The Wyoming Supreme Court has affirmed the Council's long-standing

interpretation. In Grams v. Environmental Quality Council, the Court, in reviewing the Council's

decision to grant a mining permit, stated "[i]t is true that the burden of proof rests upon the

applicant to show that the application is in compliance with applicable law. § 35-11-406(n). The

record reveals that AMAX recognized this in its prehearing memorandum, as did the EQC when

it stated in its final conclusion of law that 'AMAX Coal Company has met its burden of proof

demonstrating that the Eagle Butte Mine is in compliance with W.S. § 35-11-406(n), and all other

applicable state laws." Grams v. Environmental Quality Council, 730 P.2d 784, 789 (Wyo. 1986).

86. Brook agreed with the Council's position when this case began. In its prehearing

memorandum, Brook stated "[t]he Act requires that a permit applicant proves it has complied with

the Act and all applicable state laws. Wyo. Stat. Ann. 35-11-406(n). The applicant must show that

the application is "accurate and complete," "the reclamation plan can accomplish reclamation as

required by this Act," "the proposed operation has been designed to prevent material damage to

Findings of Fact, Conclusions of Law, and Order
Docket 17-4802
Page 25 of 29

the hydrologic balance outside the permit area," and that the area proposed to be mined is not

designated as unsuitable for surface coal mining. Id. at (n)-(iv)." "Here Brook has proven to DEQ

that its permit application meets all of these requirements as demonstrated by DEQ deeming the

application technically adequate and suitable for publication."

87. The Council finds and concludes that section 406(n) applies to this proceeding and

that Brook has the burden of proof.

II. The administrator failed to make the required findings under section 406(n),

therefore, the Council is without authority to approve the permit

88. It is undisputed that the administrator has failed to make any of the required written

findings mandated by section 406(n).

89. Because the findings required by section 406(n) have not been made, the Council

cannot make a finding that the application should be approved. Under subsection (n), the

administrator is required to make his written findings at the time that he determines whether the

application is "suitable for publication" under Wyo. Stat. Ann. § 35-11-406(h). These findings

must be completed prior to the Council considering whether the permit application should be

approved.

90. By the administrator failing to comply with 406(n), the Council finds and concludes

that it is without authority to approve the permit. The findings in 406(n) are a prerequisite or

condition precedent to the Council considering whether the application should be approved. As a

result, the Council finds and concludes that at this time, it is without authority to approve the permit

application as a matter law.

III. Brook has failed to meet its burden under subsections 406(n)(i), (iii), and (v)

91. It is undisputed that the CHIA is not completed. The CHIA is necessary for the

administrator to make his findings under subsections 406(n)(iii) and (v). Without the CHIA, the

Council finds and concludes that it is unknown whether the proposed operation has been designed

to prevent material damage to the hydrologic balance outside the permit area and determine

whether the proposed operation would not materially damage the quantity or water in surface or

underground water systems that supply the alluvial valley floors.

92. The Council finds and concludes that because the CHIA is not done, Brook cannot

and has not met its burden under subsections 406(n)(iii) and (v).

93. In addition, the Council finds and concludes that Brook's permit application is not

accurate or complete because the CHIA has not been produced.

94. Further, the Council finds and concludes that based upon the evidence and

testimony provided during the hearing, Brook has not affirmatively demonstrated that its proposed

operation has been designed to prevent material damage to the hydrologic balance outside the

permit area or that it would not materially damage the quantity or quality of water in surface or

underground water systems that supply the alluvial valley floors. The Council finds the testimony

of Mr. Wireman persuasive and credible and concludes that the hydrologic studies done by Brook

so far along with other data show that Brook has failed to meet its burden under subsections

406(n)(iii) and (v). Because Brook has failed to affirmatively demonstrate the requirements under

subsections 406(n)(iii) and (v), the Council further finds and concludes that Brook's application is

not accurate and complete under (n)(i).

95. The Council further finds the testimony of Dr. Marino persuasive and credible and

concludes that Brook's subsidence plan is incomplete. Brook has failed to affirmatively

demonstrate that its application is complete and accurate under subsection 406(n)(i).

IV. Brooks' permit application is also deficient under section 406(b)

96. The Council finds and concludes that Brook's permit application is also deficient

in at least three areas: 1) hydrology; 2) subsidence; and 3) blasting plan.

97. The Council finds and concludes that Brook has not met its burden that there will

not be material damage to the hydrologic balance at the minesite and outside the permit area under

section 406(b)(xviii). In addition, Brook has not met its burden that the alluvial valley floors will

not be damaged. The Council believes that more information and planning is needed, therefore,

the application is deficient.

98. Although the subsidence control plan concludes that there will be no subsidence,

the Council finds and concludes that it is based on insufficient analysis of the site. The Council

does not believe the conclusion is merited based on the evidence. As a result, the Council finds

and concludes that Brook has not met its burden under section 406(b) and Chapter 7, section 2 of

the DEQ's rules, therefore, the application is deficient.

99. The Council finds and concludes that the blasting plan does not contain reasonable

limits on the blasting schedule and therefore it is deficient. The Council concludes that reasonable

limits shall be placed on the blasting schedule.

## VII. ORDER AND DECISION

IT IS HEREBY ORDERED that Brook's permit application is not approved

and then resubmit it to the Division for the administrator to perform his mandatory section 406(n) determinations which are required to be performed prior to the permit application being declared "suitable for publication" under section 406(h). Further, upon the Division receiving the revised permit application, the Division shall also conduct its review and analysis required under section 406(h) and determine whether the application is "suitable for publication", and if so, the revised application shall then be republished for public comment under section 406(j) with the opportunity for interested persons to file written objections under section 406(k).

ENTERED this 27 day of September, 2017.

Dr. David M. Bagloy, Hearing Officer Environmental Quality Council

