



**BIG HORN COAL COMPANY  
10980 SOUTH JORDAN GATEWAY  
SOUTH JORDAN, UT 84095**

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January 25, 2017

Wyoming Department of Environmental Quality  
Land Quality Division  
200 W. 17<sup>th</sup> Street  
Cheyenne, WY 82002

**COPY**

ATTN: Mr. Alan Edwards, Assistant Administrator

**RE: Objections to Proposed Brook Mine Permit Application, Sheridan County, Wyoming**

Dear Mr. Wendtland,

Big Horn Coal Company (BHCC) writes to provide objections to the Brook Mine permit application.

During the course of our review, we discovered that the information was inconsistent among the locations noted in the public notice. We advised Brook Mine's legal counsel of the inconsistency on December 20, 2016. We are not aware if the information was updated to correct the inconsistency between the locations.

Our objections are based upon what BHCC believes to be the most accurate, up-to-date information and relate primarily to the permit application's lack of adequately addressing hydrologic issues that could significantly affect existing and future water rights, the quantity and quality of surface water and groundwater within and adjacent to BHCC, the potential for coal seam fires to erupt in both the open pit and subsurface openings and the potential for miner safety and environmental harm proposed in the permit Mine Plan. The objections are referenced to text section headings, exhibits and addenda of the permit application Mine and Reclamation Plan.

**Objection No. 1 – Mine Plan & Rec Plan Review**

Big Horn Coal has reviewed the proposed mine and reclamation plan and is concerned with the general lack of detail contained in the proposed plan. It appears that no sampling, testing or analytical work of any sort has been performed to support the surface and highwall mine designs and plans. It is Big Horn Coal's opinion that excavating in the area, surrounding the Big Horn Mine will create a large safety concern and environmental

liability as the TR-1 trench cut could become inundated with water from the historic backfill of the BHCC spoils of Pit 1 and Pit 2.

BHCC would like to put on record that it is providing written notice of its concerns so Brook Mine and other affected parties have notice and are aware of these issues and that Big Horn Coal is not responsible for any personal, property or environmental damage or other loss due to the disturbance activities associated with the Brook Mine, its affiliated companies or successors in interest.

BHCC has not consented to overlapping permit boundaries nor has it been indemnified of any disturbance related to Brook Mine's proposed activities as it relates to the reclamation obligations and BHCC's reclamation liabilities.

**Objection No. 2 – Section MP.4; Exhibit MP.4-1; Section MP.5; Section MP.13; Addendum MP-6**

Section MP.4 and Exhibit MP.4-1 provide plans for the development of a highwall mining trench through and the development of highwall mining panels beneath reclaimed backfill of BHCC Pits 1 and 2 adjacent to Goose Creek and the Tongue River in the southeastern portion of the Brook Mine permit area. The trench would penetrate through the bottom of the backfill allowing mining of Carney coal found about 70 feet beneath the backfill. The backfill of the proposed trench area averages about 90 feet thick. The northeast corner of the highwall panel area appears on Exhibit MP.4-1 to be equivalent to the Brook Mine permit boundary, and would be less than 100 feet from the bank of the Tongue River. On Figure MP-6.1-1 of Addendum MP-6, the highwall mining panels are shown even closer to the Tongue River channel, and the reason for the disparity between the figure and Exhibit MP.4-1 is unexplained. BHCC is very concerned over and objects to the permit's disturbance, affected and permit boundaries all being equivalent to the mining panel boundary in this most environmentally sensitive area adjacent to the bank of the Tongue River. The affected area boundary shown on Exhibit MP.4-1 around the other proposed mining panels typically extends well beyond the disturbance boundary for reasons unexplained in the Mine Plan.

Mine Plan Section MP.4, together with all Mine Plan text inclusive of Section MP.13 and Addendum MP-6, are silent on the subject of the special textural and hydrologic characteristics of the proposed southeastern highwall mining area in Sections 15 and 22, T57N, R84W. The area is unique in that the strata overlying the coal to be mined includes a thick layer of unconsolidated, saturated backfill exhibiting shallow groundwater elevations of 20 feet or less below ground surface where existing ground elevations are 3600 feet and lower. The water surface in BHCC's postmining Reservoir 14 in the SESE Sec. 15 is an expression of the groundwater table. The groundwater throughout Pits 1 and 2 is directly connected to and recharged by Goose Creek and the Tongue River, as documented in the Big Horn Mine's Reclamation History, Groundwater Restoration Demonstration (GRD) approved by the WDEQ/LQD as Change No. 9 to Permit 213-T5 in August 2002. The GRD verifies that the Pits 1 and 2 backfill resaturated very rapidly, indicative of unconsolidated, porous material connected to perennial stream recharge sources nearby. Mine Plan Section MP.4 is silent on the subject of managing massive sloughing that may occur in the saturated and nonsaturated backfill of the southeastern highwall mining area as the highwall mining trenches are excavated through the backfill to the base of Carney coal. Section MP-5 of the Mine Plan also fails to present an

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alternative water management and treatment plan to be followed should groundwater inflow volumes exceed infrastructure design capacities.

BHCC finds the assessment of potential land subsidence and the remediation plan presented for land subsidence in Addendum MP-6 to be inadequate relative to protecting the value and function of its lands, particularly for protecting the stability of the Tongue River and the quality of shallow groundwater connected to the river. Addendum MP-6 does not absolutely discount the possibility of land subsidence above the highwall miner holes, nor does it provide a plan for the discontinuation of any southeastern area highwall mining should subsidence occur in the lowlands contiguous to Tongue River or Goose Creek. The environmental implications of subsidence developing adjacent to Tongue River and Goose Creek are so severe as to warrant, at a minimum, a permit commitment to temporarily or permanently cease all mining throughout all of the southeastern highway mining area should any subsidence develop in any of the area at any time. The permit's plan for "backfilling will commence within 12 months of a subsidence location being identified if self-healing is not providing sufficient remediation" (Section MP-6.4, Addendum MP-6) is environmentally unacceptable for the southeastern highwall mining area because: 1) the stability and alignment of Goose Creek and Tongue River could be jeopardized should subsidence occur, and; 2) any groundwater quality impacts associated with underground coal fires developing in mine openings would have direct and essentially immediate access to Goose Creek and Tongue River via the shallow groundwater table.

The subsidence control plan presented in Addendum MP-6 is inadequate. It appears that no analytical work of any sort (sampling, material testing, etc.) has been performed in support of the highwall mining design presented in the mine plan. Additionally, it also appears that no geotechnical work of any sort has been performed. Addendum MP-6 discusses general assumptions for highwall mining penetration depths, entry widths, cutting heights and support pillars. This information is presented somewhat anecdotally and in the case of the support pillars, it states that "Support pillars will be designed to have a width equal to or exceeding the maximum extraction thickness anticipated in a highwall mining hole based on the mine's geologic model. This width-to-height ratio of at least 1:1 results in pillar stability factors that exceed recommended values suggested by National Institute for Occupational Safety and Health's (NIOSH) ARMPS-HWM stability program for the overburden thicknesses expected. Pillar dimension will also be in accordance with Brook Mine's Ground Control Plan approved by MSHA."

No material strength data (coal strength, overburden strength, interburden strength, etc.) is provided in the mine plan document. BHCC suspects that no material strength information has been gathered or determined. Can the NIOSH stability factors actually be achieved? This is unknown at this point as no definitive geotechnical and material strength data has been presented in the mine plan. The coals present in this area are of a younger age. Younger age coals have much weaker strengths than older age, deeper coals and it is quite possible that the safety and stability factors needed to safely and effectively execute the highwall mining approach presented in the mine plan cannot be achieved. BHCC insists that further analysis be performed to definitively prove that the web and barrier pillars dimensions are appropriate and that they will meet NIOSH's minimum stability factor of 1.3.

Very little highwall mining has been performed in Wyoming. Highwall mining has been performed relatively recently at the Bridger Mine, which is located in Southwest Wyoming.

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While the exact details are unknown, BHCC is aware of at least one “cascading pillar failure” at that operation and fortunately, there were no injuries. It is suspected that this failure was caused by improper pillar layout and design. BHCC is concerned that the anecdotal mine design presented in this document is inadequate and must be performed with proper analytical data.

**Objection No. 3 – Section MP.5.9; Section MP.6.2; Addendum MP-3; Section MP.8**

The groundwater model of Addendum MP-3 was improperly constructed and executed because the model does not recognize the unique textural and hydraulic characteristics of saturated backfill in BHCC’s Pits 1 and 2, but instead simulates the backfill in the same fashion as native overburden strata (see Section 4.0 of Addendum MP-3). Section 2.5.1 of Addendum MP-3 states “no site-specific hydraulic conductivity information is available for the over/interburden (model) layers”. In fact, hydraulic conductivity data are available for the backfill from former monitor wells in the Pit 1 and Pit 2 area and for the Plachek Pit backfill. That data are provided in the GRD referenced under Objection No. 1 above. Hydraulic conductivity values assigned to the spoils together with all other “overburden” strata in the model are very small (less than one tenth) relative to those shown for backfill in the GRD. The groundwater model ignores determination of the spatial extent of drawdown in the water table of Pit 1 and Pit 2 backfill that is connected to the water table in Tongue River and Goose Creek alluvium, which in turn is supplied by flows in both streams. The text of Section MP.6.2.3 states “Drawdowns of the overburden were not modeled and only isolated sands where encountered are expected to be affected”.

Section 4.9 and Figure 4.9-11 of Addendum MP-3 shows where the groundwater model was used to predict water table drawdown in Tongue River valley alluvium at “alluvial target” points distributed over nearly a six-mile reach of the valley floor. Section 4.9 states that “the maximum impact to the Tongue River alluvium is conservatively estimated to reach 2.5 feet of drawdown near the river”. Addendum MP-3 and Section MP.6.2 provide no description or drawing of the spatial distribution of drawdown during mining in BHCC’s saturated backfill or in the alluvium of Tongue River and Goose Creek that is hydraulically connected to the backfill. Neither does the groundwater model explore potential permanent groundwater elevation changes associated with the highwall mining panels acting as drains to the backfill and alluvial water table via the highwall trench pits. Water table drawdown approaching 2.5 feet in the alluvium of Tongue River valley over a valley distance of nearly six miles would in fact represent a very large volume water loss that would likely cause stream flow losses.

The groundwater model of Addendum MP-3 fails to report groundwater inflow rates to any of the proposed mine excavations. Section MP.8 of the Mine Plan states “It is estimated that the total water use will be approximately 400 million gallons per year.” This is equivalent to an average daily use rate of 760 gallons per minute, about 3.36 acre-feet per day, or about 1,226 acre-feet per year. The Mine Plan does not identify the specific source(s) of the water beyond mentioning that “Industrial water will be obtained from groundwater wells or from water collected in sediment and flood control reservoirs”. The groundwater model of Addendum MP-3 does not include the effects of withdrawing any groundwater from wells for industrial or other uses, nor does it include the effects of dewatering wells mentioned in Section MP.5.9. In short, the Mine Plan is devoid of a hydrologic budget identifying specific groundwater sources, the quantity of industrial

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water projected to be available from flood control reservoirs and sediment ponds, and the determination of what would remain of groundwater and surface water supplies while supplying the industrial water needs. BHCC is concerned that the value of its surface estate and future options for developing its surface estate could be marginalized by such a large water use demand, especially considering that water demands at Wyoming coal mines are primarily consumptive.

**Objection No. 4 – Section MP.11; Addendum MP-5**

The fire control plan referenced in Section MP.11 and presented in Addendum MP-5 describes measures to be taken to prevent and control fires in the mine pits, fires in the mine's processing and shop facilities, equipment fires and rangeland fires. BHCC objects, however to the Mine Plan and Addendum MP-5 not providing plans to control and extinguish new subsurface coal fires that may develop or existing subsurface coal fires that may become rekindled or enlarged as a result of the highwall mining panels that will be opened outboard of the highwall trench openings.

Attachment 1 provided with this Objection No. 4 is a drawing showing the approximate extent of underground coal mine fires in the area of proposed highwall mining in Sections 10 and 15, T57N, R84W, as reported by the U.S. Geological Survey in 1980. The fires in this particular area originated with mining of the Monarch coal. This and other nearby historic underground mines have long been known to exhibit numerous subsidence features and underground coal mine fires, and in the late 1980s BHCC received approval from the WDEQ/LQD to permanently place nearly 10 million bank cubic yards of overburden over the area shown on Attachment 1 in an attempt to reclaim the subsidence and control the fire. That unique reclamation feature is known as the Pit 3 Subsidence Dump in Big Horn Mine's reclamation history. The proposed highwall mining will develop mine openings in the Carney and Masters coal seams beneath the Monarch seam in areas that are known to still exhibit evidence of underground coal fires. Plumes of steam and smoke have been observed again over the general area of Sections 10 and 15 this winter of 2016-2017. These observations indicate that, in places, the perimeter of the historic subsurface coal seam fires has expanded notable distances from the referenced 1980 boundary delineation.

The subsidence control plan of Addendum MP-6 does little to guarantee the long-term protection of BHCC's surface estate especially where highwall mining panels will be driven beneath underground coal mine fires having a long history of activity. Section MP-6.2 of Addendum MP-6 provides numerical calculations for subsidence chimney heights, but there is no investigation of the potential that the historic mine fires may have compromised the structural integrity of strata underlying the fires and overlying the coals targeted for highwall panel mining (the interburden), leaving the interburden more prone to subside than normal. BHCC is particularly concerned and objects to highwall mining beneath or adjacent to pre-existing underground mine fires because of the potential for oxygen and water to be transmitted from the highwall mining openings to "hotspots" in the seams already burning via highwall trenches or via fractured or subsided interburden above the panel openings. BHCC strongly disagrees with the legitimacy of the plan stated in Section MP-6.4 of Addendum MP-6 which states "Backfilling will also be performed if it is determined that the introduction of water and oxygen could contribute to spontaneous ignition of the remaining coal not extracted from the highwall mining operations". BHCC

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contends it to be common knowledge in the mining industry that oxygen and water are key catalysts in causing spontaneous combustion in coal, whether the coal be in mine openings or in stockpiles. BHCC also believes that the introduction of additional water and air to a coal seam already on fire is especially problematic.

Section MP-6.3 of Addendum MP-6 commits to maintaining highwall mining mapping and subsidence documentation in a subsidence report that will be available for inspection. BHCC objects to the Mine Plan not committing to freely submitting the highwall mining mapping and subsidence documentation report to all owners of surface estate within the Brook Mine permit area. BHCC also objects to the fact that the Subsidence Monitoring and Assessment reporting of Section MP-6.3 does not include mapping, photographing and describing all evidence of surface or underground coal fires occurring within the Brook Mine permit area whenever such evidence becomes available throughout the life of the mining and post-mining periods.

**Objection No. 5 – Section MP.1.3; Exhibit MP.1-1**

The mine plan on Page MP-5, identifies the “disturbance boundary includes all lands that will be physically and directly disturbed during mining.” Exhibit MP.1-1 shows the disturbance boundary as a dashed orange symbol that outlines an entire pink hatched polygon, identified as “DISTURBANCE FOR YEAR 2016,” located in Sections 15, 21, 22 and 27 of Township 57 North, Range 84 West.

Within the pink hatched polygon, there are existing assets to Big Horn Coal Company. These assets include a rail spur, water tank, pump house, access roads, fences and land owned by BHCC. Also within the pink hatch polygon is the mainline of the Burlington Northern Railroad and associated lands owned by Burlington Northern.

Based on the definition of Disturbance Boundary as indicated on page MP-5, does Brook Mine indeed have the rights to physically and directly disturb these lands within the pink hatched polygon? From the public record, BHCC has not been able to determine whether Brook Mine has secured surface owner consent from all surface owners, including the railroad, for these activities

**Objection No. 6 – Section MP.1.5**

The mine plan states on Pages MP-5 and continue onto page MP-6 that “Coal will either be temporarily stored in the pit or directly hauled off site.”

There is no mention in the permit as to where the coal will be hauled off site. Additionally there is no known agreement with the County of Sheridan, indicating approval to haul mineral across county roads.

**Objection No. 7 – Section MP.1.9**

The mine plan states on Pages MP-7 that “The Brook Mine will operate in conjunction with Taylor Quarry (Permit No. SP-757)... The Mine will work with Taylor Quarry to minimize impacts on Taylor Quarry’s operation.”

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The following paragraph states "The Brook Mine will not obstruct Big Horn Coal's (Permit 231-T8) Shop, Bridge, and Rail Road Siding as they exist in Big Horn Coal's 2015 Annual Report. An access road equivalent to the existing improved road will be provided if proposed stockpiles or pits should restrict the existing access as shown on Exhibit MP.1-1.

To remain consistent with the statements made in regards to the Taylor Quarry, Big Horn Coal requests that the paragraph referencing Big Horn to be replaced and restated as follows:

"The Brook Mine will operate in conjunction with the Big Horn Mine and that the Brook Mine will work with Big Horn Coal to minimize impacts to Big Horn Coal operations. Specifically, Brook Mine will not obstruct Big Horn Coal's (Permit 213-T8) Shop, Bridge, and Rail Road Siding as they exist in Big Horn Coal's 2015 Annual Report. An access road equivalent to the existing improved road will be provided if proposed stockpiles or pits should restrict the existing access as shown on Exhibit MP.1-1."

Big Horn Coal requests that the text be updated in the previous paragraph to reference the correct permit number for Big Horn Coal Company as (Permit 213-T8).

**Objection No. 8 – Section MP.3.1, Section MP.3.1.3 – Roads; Exhibit MP.3-1**

As stated in the mine plan on Page MP-11, "Primary roads are any road used for transporting mineral or spoil, or frequently used for access or other purposes for a period in excess of six months, or roads to be retained for postmining use."

WDQ/LQD Rules and Regulations (R&R) Chapter 4, Section 2(j)(vii):

Primary roads.

(A) Certification. The construction or reconstruction of primary roads shall be certified in a report to the Administrator by a registered professional engineer. The report shall indicate that the primary road has been constructed or reconstructed as designed and in accordance with the approved plan. The report shall be available for review at the mine site within 30 days following the completion of construction of each primary road.

Mine plan Exhibit MP.3-1, titled Transportation Network identifies proposed primary haulroads as a solid black line, for the use of transporting mineral or spoil. Yet, there are no haulroads identified in the SE quarter of Section 15, Sections 21, 22 or 27. If the Brook Mine plans to haul mineral or spoil materials from the proposed Trench Cut (TR-1), there should be indication of a primary haul road leaving TR-1, accompanied by a certification of the road design. Unless there are no plans of transporting mineral or spoil from the TR-1 area.

**Objection No. 9 – Section MP.4.2.3 – Stockpiles; Exhibit MP.4-3**

The mine plan states on Page MP-16, "Stockpiles will not be constructed on unsuitable backfill."

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Mine plan Exhibit MP.4-3, Stockpile Locations identifies Topsoil Stockpile TS-1B proposed location within an area known as the Placheck Pit. This area was mined by Big Horn Coal from 1956 through 1963. It is Big Horn Coal's understanding that the proposed area beneath TS-1B is indeed unsuitable material and that topsoil should not be placed in the area as proposed on Exhibit MP.4-3. Additionally, Big Horn Coal is not aware of a surface owner consent document between Brook Mining Company and the Burlington Northern Railroad that would allow the crossing of the mainline with loaded haul trucks.

**Objection No. 10 – Section MP.6.1; Exhibit MP.7-1**

Exhibit MP.7-1 represents the operational Surface Water and Groundwater Monitoring Program. There are only two downstream surface water monitoring sites, identified as Big Horn No. 2 Reservoir and Big Horn No. 14 Reservoir. The text on page MP-41 of the Mine Plan states "However, the Big Horn No. 2 Reservoir and Big Horn No. 14 Reservoir will be disturbed by facilities disturbance."

Big Horn Coal believes there is inadequate downstream monitoring in the proposed plan. Upon disturbing of Big Horn No. 2 Reservoir and Big Horn No. 14 Reservoir, there will be no sites downstream of the Brook Mine to collect adequate surface and groundwater data to prove that there are no off site environmental impacts from the proposed operation.

**Objection No. 11 - Addendum MP-2, Exhibit MP-2**

The proposed Sediment Pond SP-8 is located within the current postmine approved Reservoir 14 constructed by BHCC. The bottom elevation of Reservoir 14 is currently at 3575 with a peak elevation at 3589. Sediment Pond SP-8 bottom elevation is proposed at 3585 with a high water elevation proposed at 3590. It is noted below the area capacity table on Exhibit 13, "1. Pond is entirely incised. No Spillway hydraulics are provided."

These elevations lead BHCC to believe the plan for construction of SP-8 will require Reservoir 14 to be completely backfilled prior to construction of SP-8. BHCC requests that the reconstruction and the water quality within Reservoir 14 be restored to pre-mining conditions before final bond release is allowed.

**Objection No. 12 – Exhibit MP.4-1; Exhibit MP.4-2; Exhibit MP.4-5; Exhibit RP.5-1**

The proposed mine plan indicates that topsoil and overburden removal will occur upon the BHCC Property and within the TR-1 area in years 1 and 2 of operation. Exhibit MP.4-1 shows coal removal to occur over the same first two years of operation. Exhibit MP.4-5 shows the overburden backfill sequence within TR-1 will occur in year 2. Exhibit RP.5-1 shows the topsoil replacement sequence within the BHCC Property occurring in years 12-16.

BHCC objects to this timeline of topsoil replacement upon its property. The BHCC property is the first to be disturbed and the last to be reclaimed. BHCC asks the question as to why every other proposed disturbance area is backfilled and topsoiled within a 2 to 3 year time frame except around the BHCC facilities area. The topsoil replacement timeframe is unacceptable and not contemporaneous in accordance with the Surface Mining Control and Reclamation Act, (SMCRA) and it is requested that the final

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reclamation around the BHCC Property be within the 2 to 3 year time frame, similar to all other areas around the mine.

**Objection No. 13 – Section MP.1.2.1; Figure MP.1-2.**

Section MP.1.2.1 discusses the work that will be done to “prepare for highwall mining” and describes how the “trenches” will be constructed to “create working areas for highwall mining equipment”. This section of the mine plan states that “The highwalls will have a 65-degree bench slope to provide a stable trench environment. Where the trench intersects the burnt Monarch coal seam, a 35-foot wide safety bench will be added. Where the Carney and Masters coal seams come close to convergence, a vertical wall will be used to maintain the desired pit width.” Earlier, under Objection No. 2, BHCC discussed the presence of saturated backfill where trench TR-1 is planned to be excavated. Section MP.1.2.1 does not address in any fashion the fact that trench TR-1 will be constructed in an area containing a significant amount of saturated backfill material. In our opinion, utilizing a 65-degree bench slope in this material will be impossible as the saturated backfill will not safely stand at this angle. Furthermore, no geotechnical information (sampling, testing or analysis) supporting slope stability assumptions for the surface mining or highwall mining operations have been provided in the mine plan. BHCC finds the information regarding highwall bench slope angles presented in MP.1.2.1 to be inadequate given the variability of non-coal material that will be encountered during excavation of trenches in support of the highwall mining operation.

**Objection No. 13 – Section MP.1.2.1; Figure MP.1-2.**

Section MP.1.2.1 discusses the work that will be done to “prepare for highwall mining” and describes how the “trenches” will be constructed to “create working areas for highwall mining equipment”. This section of the mine plan states that “The highwalls will have a 65-degree bench slope to provide a stable trench environment. Where the trench intersects the burnt Monarch coal seam, a 35-foot wide safety bench will be added. Where the Carney and Masters coal seams come close to convergence, a vertical wall will be used to maintain the desired pit width.” Earlier, under Objection No. 2, BHCC discussed the presence of saturated backfill where trench TR-1 is planned to be excavated. Section MP.1.2.1 does not address in any fashion the fact that trench TR-1 will be constructed in an area containing a significant amount of saturated backfill material. In our opinion, utilizing a 65-degree bench slope in this material will be impossible as the saturated backfill will not safely stand at this angle. Furthermore, no geotechnical information (sampling, testing or analysis) supporting slope stability assumptions for the surface mining or highwall mining operations have been provided in the mine plan. BHCC finds the information regarding highwall bench slope angles presented in MP.1.2.1 to be inadequate given the variability of non-coal material that will be encountered during excavation of trenches in support of the highwall mining operation.

**Objection No. 14 – Section MP.4.4.1**

It is a well-known fact within the mining industry that the term “Reserves” connotes that the mineral being extracted can be done so economically. BHCC opines that the mining approach presented in the mine plan cannot be done economically. Based on our internal

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knowledge; the operating cost for a contractor to perform highwall mining is in the \$8/Ton to \$12/Ton range, which is very close to the domestic spot price for this type of coal. By the time the other costs for the surface mining to develop the highwall mining, transportation, G&A, etc. are taken into consideration, this operation appears to be completely uneconomical.

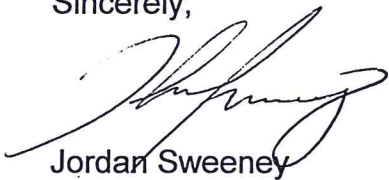
The market for this coal is unclear. The two closest coal mines, Decker and Spring Creek, serve the domestic and international market. Port capacity to the international market is constrained and it is unlikely that Brook Mine will secure access. Domestic demand has been in decline and is significantly oversupplied. Without a definitive market, the Brook Mine is at risk of commencing operations, producing product it cannot sell economically, and reclamation obligations that it cannot fund.

**Objection No. 15 – Section MP.15**

Objection No. 4 above introduces the fact that the underground mine fires in this area are still burning and have expanded. Section MP.15 does not, in any way, address that the burned areas have expanded. A surface mine excavation that comes in contact with a historic mine fire could be catastrophic in many ways, including: impacting the safety of mine workers, damage to equipment, wildfire initiation, etc. BHCC believes this mine plan has not adequately addressed surface mining activities that will occur near underground mines and insists that the Brook Mine operators must perform the necessary testing and analysis to prove that the proposed mine plan will not be impacted by historic mine fires. Specifically, attachment 1 provided with Objection No. 3 above shows that trench TR-2 is planned very near an area that was burning and is likely still burning. Given that the burned area has likely expanded, this area should not be disturbed at all.

In conclusion, Big Horn Coal Company feels strongly that the Brook Mine permit application should not be approved or deemed technically complete. The mine and reclamation plan lack a significant amount of detail that is required for a technical completeness determination, as stated in the above mentioned objections.

Sincerely,



Jordan Sweeney  
General Manager  
Big Horn Coal Company

Attachment: BHCC Objection No.3 Attachment 1

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RECLAIMED BHCC BACKFILL



PIT 3 SUBSIDENCE DUMP FROM HISTORIC BHCC ANNUAL REPORTS



UNDERGROUND FIRES MAPPED FROM A MARCH 1978 AERIAL AND GROUND SURVEY SOURCE: U.S. GEOLOGICAL SURVEY PROFESSIONAL PAPER 1164, 1980.



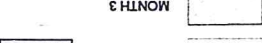
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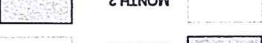
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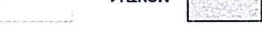
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YEAR 4



YEAR 3



YEAR 2



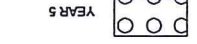
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YEARS 11 - 12



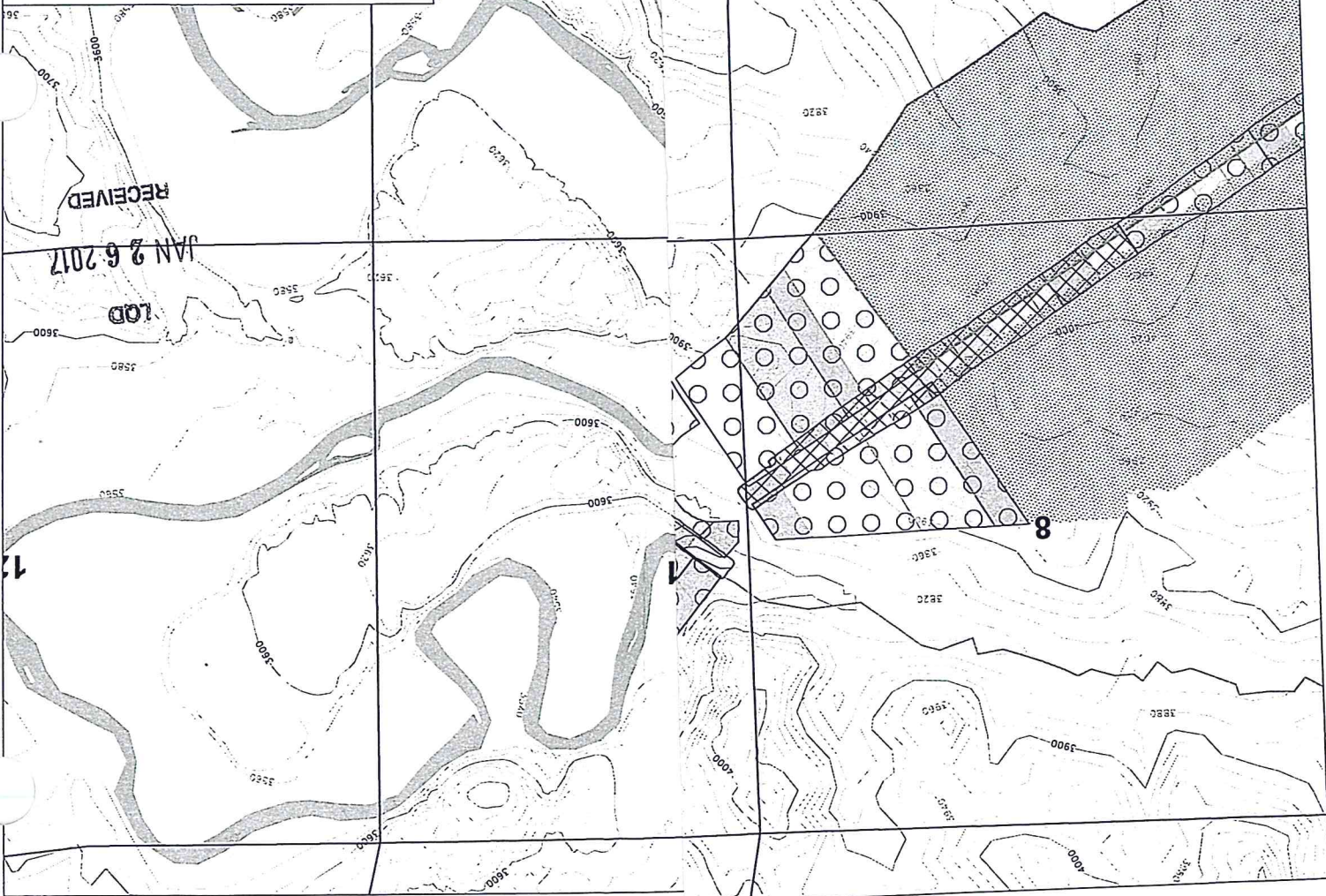
YEARS 6 - 10



YEAR 5

COAL REMOVAL SEQUENCE FROM BROOK MINE PERMIT APPLICATION

BHCC Objection No. 4 Attachment 1



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