

**U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
RECORD OF DECISION  
LITTLE THUNDER FEDERAL COAL LEASE APPLICATION  
WYW150318  
CAMPBELL COUNTY, WYOMING**

**INTRODUCTION**

Ark Land Company filed an application with the Bureau of Land Management (BLM) to lease a tract of Federal coal as a maintenance tract for the Black Thunder Mine on March 23, 2000. The tract is referred to as the Little Thunder Lease By Application (LBA) Tract. A maintenance tract is a tract of Federal coal that is adjacent to and can be mined by an existing coal mine. The applicant, Ark Land Company, is a wholly owned subsidiary of Arch Coal, Inc. The Black Thunder Mine is operated by Thunder Basin Coal Company, a subsidiary of Arch Western Resources, LLC. Arch Western Resources, LLC is 99% owned by Arch Western Acquisition Corporation, a subsidiary of Arch Coal, Inc. The mine is located in southern Campbell County, approximately six miles east-southeast of Wright, Wyoming (Attachment 1-Figure 1).

The Little Thunder LBA Tract was assigned case file number WYW150318. As applied for, it includes approximately 3,449.32 acres and Thunder Basin Coal Company estimates that the tract as applied for includes approximately 479.3 million tons of in-place Federal coal reserves in Campbell County, Wyoming. The tract was applied for under the Code of Federal Regulations (CFR) at 43 CFR Subpart 3425.

**BACKGROUND**

The Lease By Application Process

Thunder Basin Coal Company has a permit approved by the Wyoming Department of Environmental Quality, Land Quality Division (WDEQ/LQD) and a Mineral Leasing Act (MLA) mining plan approved by the Secretary of the Interior to conduct surface coal mining operations on their existing Black Thunder Mine leases. The mine also has an air quality permit approved by the Wyoming Department of Environmental Quality, Air Quality Division (WDEQ/AQD), which allows up to 100 million tons of coal per year to be mined through the year 2027.

Under the LBA process, maintenance tracts are nominated for leasing by companies with adjacent existing mines. Thunder Basin Coal Company has previously leased Federal coal adjacent to the Black Thunder Mine using the LBA process. In 1992 they were issued a maintenance lease for the West Black Thunder LBA Tract; in 1999, they were issued a maintenance lease for the Thundercloud LBA Tract, which was applied for by the Jacobs Ranch Coal Company.

To process an LBA the BLM evaluates the quantity, quality, maximum economic recovery and fair market value (FMV) of the Federal coal and evaluates the environmental impacts of leasing and mining the Federal coal. A Federal coal lease provides the lessee the mining rights but does not authorize mining. The impacts of mining are considered in the environmental analysis because mining is a logical consequence of issuing a maintenance lease. The *South Powder River Basin Coal EIS* evaluates the impact of leasing five tracts of Federal coal, including the Little Thunder LBA Tract, in the Powder River Basin, Wyoming (Attachment 1-Figure 1). The Office of Surface Mining Reclamation and Enforcement (OSM) is a cooperating agency on the EIS because OSM is the Federal agency which administers programs that regulate surface coal mining in accordance with the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The Forest Service is a cooperating agency on the EIS because three of five Federal coal tracts considered in the South Powder River Basin Coal EIS include portions of the Thunder Basin National Grassland administered by the Forest Service. The Little Thunder LBA Tract includes National Forest System (NFS) lands administered by the Forest Service (see Figure 3-12 in the *South Powder River Basin Coal EIS*).

By law and regulation the LBA process is an open, public, and competitive leasing process; bidding is not restricted to the applicant. Ark Land Company applied for the Little Thunder LBA Tract, which is contiguous to and could be mined as a maintenance tract for the Black Thunder Mine. In the *South Powder River Basin Coal EIS*, the alternatives analyzed in detail assume that the applicant will be the successful bidder if a competitive sale is held. As shown in Attachment 1-Figure 1, the Little Thunder LBA Tract is also contiguous with the Jacobs Ranch Mine, which could potentially also mine all or part of the tract as a maintenance lease.

#### Recent Coal Leasing Activity in the Wyoming Powder River Basin

Since decertification of the Powder River Federal Coal Region in 1990, eleven Federal coal leases in Campbell and Converse Counties, Wyoming, have been issued following competitive sealed-bid sales using the LBA process. These leases include approximately 27,458 acres and 3.178 billion tons of mineable coal (see Table 1-1, *South Powder River Basin Coal EIS*). Ten of the new leases were issued to the following existing mines for the purpose of extending operations at those mines: Jacobs Ranch Mine(2), Black Thunder Mine(2), North Antelope/Rochelle Mine(2), Eagle Butte Mine(1), Antelope Mine(2), and North Rochelle Mine(1). In 1992 the West Rocky Butte Tract adjacent to the existing Rocky Butte lease was leased to the Northwestern Resources Company who planned to start a new mine. Caballo Coal Company, a subsidiary of Peabody Holding Company, Inc. and operator of the adjacent Caballo Mine, now holds both of the Rocky Butte leases.

In 1974, 1979, and 1981, the BLM prepared three regional EISs analyzing the impacts of surface coal mining in the Wyoming portion of the Powder River Basin. In 1984 a fourth regional EIS was prepared and issued in draft form, but it was not made final and the proposed actions were not implemented. The Black Thunder Mine was included in the impact analyses in all four of the BLM's regional EISs. All of the mines in operation in the Wyoming portion of the Powder

River Basin, as well as a mine proposed on the original Rocky Butte lease and a mine proposed for the terminated Keeline lease, were included in the 1981 and 1984 EIS analyses. To evaluate the impacts of leasing tracts of Federal coal in the Powder River Basin in Wyoming the BLM has prepared six environmental assessments (EAs) and seven EISs since the 1990 decertification of the Powder River Federal Coal Production Region. Most recently, the *Final South Powder River Basin Coal EIS* was mailed to the public in December 2003 and the *Final West Hay Creek Coal Lease Application EIS* was mailed to the public in June 2004.

Pending Coal Leasing Applications and Other Proposed Projects  
In the Wyoming Powder River Basin

There are eight pending maintenance lease applications in the Wyoming portion of the Powder River Basin including the Little Thunder LBA Tract. The pending lease applications currently include approximately 1.98 billion tons of Federal in-place coal. In addition to the Little Thunder LBA Tract, the pending applications and associated mines are: NARO North and NARO South, North Antelope/Rochelle Complex; West Roundup, North Rochelle Mine; West Hay Creek, Buckskin Mine; West Antelope, Antelope Mine; Maysdorf, Cordero-Rojo Mine; and West Extension, Eagle Butte Mine.

The Jacobs Ranch Mine, Black Thunder Mine, North Rochelle Mine, North Antelope/Rochelle Complex, and Antelope Mine form an almost contiguous group of mines located in Campbell and Converse Counties, east and southeast of Wright, Wyoming (Attachment 1-Figure 1). The five tracts of Federal coal evaluated in the *South Powder River Basin Coal EIS*, including the Little Thunder LBA Tract, are associated with this group of mines.

In addition to the ongoing coal leasing and mining, oil and gas leasing and development are occurring in this area. Both conventional and coal bed natural gas (CBNG) wells have been drilled around and within this group of mines. Conventional and CBNG resources are currently being recovered from areas held in Federal, State, and private oil and gas leases in this area, and additional CBNG drilling and development is currently proposed. Federal oil and gas lease ownership in the Little Thunder LBA Tract is described in Figure 3-16 and Table 3-11 of both the draft and final EIS documents. Table 3-11 was updated between the preparation of the draft and final EIS documents to reflect changes in lease ownership. The Federal lessees, as well as private interest owners identified by Thunder Basin Coal Company, were included on the mailing list for the *South Powder River Basin Coal EIS*; they were notified of the date and time of the scoping meeting that was held in October of 2001 and the public hearing that was held in March 2003; they received copies of the Draft and Final EIS documents. When the *Final South Powder River Basin Coal EIS* was released, BLM received a comment letter from one potentially affected oil and gas operator expressing concern about the impact that the proposal to lease the Federal coal in the Little Thunder LBA Tract would have on an existing oil and gas pipeline that passes through the Little Thunder LBA tract. That letter and BLM's response to that letter are included in Attachment 2.

There are currently no active conventional oil and gas wells on the Little Thunder LBA Tract, but four conventional wells are reported as shut in and seven wells are reported as plugged and abandoned. There are currently 45 CBNG wells located on the Little Thunder LBA Tract that are capable of producing and 40 of those wells are actively producing. There are active permits to drill an additional 13 CBNG wells on the tract. This information is based on the Wyoming Oil and Gas Conservation Commission database as of May 2004. As discussed in Section 4.1.2.1 of the Final EIS, the BLM Wyoming Reservoir Management Group (WSO-RMG) prepared an analysis of CBNG resources for Federal coal tracts evaluated in the *South Powder River Basin Coal EIS*. The WSO-RMG estimated that, as of 2000, the coal in the Little Thunder LBA Tract had an average content of 14 standard cubic feet of CBNG per ton of coal and the estimated recoverable CBNG resource in the tract at that time was approximately 6.7 billion cubic feet.

There are several mechanisms that can be used to facilitate recovery of the conventional oil and gas and CBNG resources prior to mining if the Federal coal in the tract is leased now:

- BLM will attach a Multiple Mineral Development stipulation to the lease which states that BLM has the authority to withhold approval of coal mining operations that would interfere with the development of mineral leases issued prior to the coal lease [see Attachment 3(c)].
- Conventional oil and gas wells must be abandoned while mining and reclamation operations are in progress but could be recompleted or redrilled following mining if the value of the remaining reserves would justify the expense of reestablishing production.
- BLM has a policy in place on CBNG-coal conflicts (BLM Instruction Memorandum No. 2003-253), which directs BLM decision-makers to optimize the recovery of both resources and ensure that the public receives a reasonable return. This memorandum offers royalty incentives to CBNG operators to accelerate production in order to recover the natural gas while simultaneously allowing uninterrupted coal mining operations. In addition, this memorandum also states that it is the policy of the BLM to encourage oil and gas and coal companies to resolve conflicts between themselves; and when requested, the BLM will assist in facilitating agreements between the companies.
- CBM is currently being produced by a number of wells on the Little Thunder LBA Tract. Mining of the Little Thunder LBA Tract cannot occur until the coal lessee has a permit to mine the tract approved by the Wyoming Department of Environmental Quality and a MLA mining plan approved by the Secretary of the Interior. Before the MLA mining plan can be approved, BLM must approve the Resource Recovery and Protection Plan for mining the tract. Prior to approving the Resource Recovery and Protection Plan, BLM can review the status of CBNG and conventional oil and gas development on the tract and the mining sequence proposed by the coal lessee. The permit approval process generally takes the coal lessee several years, during which time CBNG resources can continue to be recovered.

- Prior to mining the Federal coal, the coal lessee can negotiate an agreement with owners and operators of existing oil and gas facilities on the tract, including owners and operators of oil and gas well and pipeline facilities, regarding removal of those facilities prior to mining.

Other proposed developments in the Wyoming Powder River Basin that have advanced to the planning and permitting stages and that could be completed in the foreseeable future include: a power plant (Two Elk Power Plant), proposed by the North American Power Group (NAPG), which would be located east of the Black Thunder Mine and a railroad line from the Powder River Basin to Minnesota proposed by Dakota, Minnesota, and Eastern Railroad (DM&E). Construction of the Two Elk Power Plant has been delayed while NAPG obtains funding and the required permits for construction and operation. The Surface Transportation Board (STB) released the Final EIS for the proposed DM&E Powder River Basin Expansion Project on November 19, 2001. On January 30, 2002, the STB issued a Record of Decision for the DM&E project. As a result of lawsuits that were filed against the project, several issues have been remanded to the STB for further review and action. Prior to commencing any construction activities, DM&E must obtain permits or approvals from other Federal agencies including the BLM, the Forest Service and the Army Corps of Engineers (COE).

The proposed power plant and the DM&E railroad line and the ongoing and proposed oil and gas operations (including CBNG) are separate projects being developed independently of the issuance of a maintenance coal lease for the Little Thunder LBA Tract. If these other projects are developed as proposed and the Little Thunder LBA Tract is leased and mined as proposed, there would be some overlap in the impacts of constructing and operating those projects and the environmental impacts of mining the tract. The cumulative effects of all of these projects (the Two Elk Power Plant, the DM&E railroad, the ongoing and proposed oil and gas development and production, and the coal mining that would follow the leasing of Little Thunder LBA Tract and the other LBA tracts) are described in the *South Powder River Basin Coal EIS*. They were also described in the *Final Environmental Impact Statement and Proposed Plan Amendment for the Powder River Basin Oil and Gas Project* (BLM-WY 2003).

## DECISION

The decision is to select Alternative 2 as described in Section 2.3.3 of the *South Powder River Basin Coal EIS*. Under Alternative 2, a lease for the Little Thunder LBA Tract, Federal coal tract WYW150318, as modified by the BLM, would be issued to the successful qualified high bidder, if the highest bid received at a competitive lease sale meets or exceeds the FMV as determined by the BLM and if all other leasing requirements are met. The competitive lease sale will be held under the regulations found at 43 CFR Subpart 3422, Lease Sales. As described under Alternative 2 in the EIS, Federal coal tract WYW150318 includes 5,083.50 acres more or less and Thunder Basin Coal Company estimates that the modified tract contains approximately 695.3 million tons of in-place Federal coal resources in Campbell County, Wyoming.

This decision is consistent with the *Approved Resource Management Plan for Public Lands Administered by the BLM Buffalo Field Office* (2001, amended 2003). I have incorporated by reference in this decision standard coal lease stipulations addressing compliance with basic requirements of the environmental statutes and have attached BLM special stipulations (Attachment 3).

Under Alternative 2, the Little Thunder LBA Tract includes approximately 1,100.7 acres of NFS lands in the Thunder Basin National Grassland administered by the Forest Service. Consequently, the Forest Service must consent and prescribe terms and conditions in order for the Little Thunder LBA Tract to be leased. The Forest Service provided consent to lease the lands with NFS surface in the Little Thunder LBA Tract in a decision signed on May 27, 2004. The decision is conditioned on application of the Notice for Lands of the National Forest System under Jurisdiction of the Department of Agriculture (FS Notice) on the Little Thunder Federal Coal Lease Tract (WYW150318) when the tract is leased (Attachment 3).

The U.S. Fish and Wildlife Service has provided written concurrence for leasing the Little Thunder LBA Tract pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (Attachment 4).

In the event that the bid or bids submitted at the competitive lease sale of the Little Thunder LBA Tract do not meet or exceed the FMV as determined by the BLM, the BLM may schedule a follow-up sale. If needed, the BLM will consider additional re-offers.

Under the Proposed Action, it is assumed that the applicant will be the successful bidder on the Little Thunder LBA Tract and that the coal will be mined, processed and sold by the Black Thunder Mine. If the tract is mined, it would be environmentally preferable to mine and reclaim the Little Thunder LBA Tract as a maintenance lease in a logical sequence with the ongoing mining and reclamation operations at an adjacent existing mine. This would be consistent with the analysis of the impacts described in the EIS.

## **REASONS FOR THE DECISION**

The reasons for selecting the Proposed Action are as follows:

- The decision to offer 5,083.50 acres containing approximately 695.3 million tons of in-place Federal coal reserves, in response to the coal lease application received March 23, 2000, is in conformance with the BLM land use plan covering this area.
- The decision to offer 5,083.50 acres containing approximately 695.3 million tons of in-place Federal coal reserves, in response to the coal lease application received March 23, 2000, is consistent with and in compliance with the management direction for the 8.4 Mineral Production and Development management area, described in the 2002 Land and

Resource Management Plan for the Thunder Basin National Grassland.

- The *South Powder River Basin Coal EIS* was prepared in response to applications BLM received to lease five tracts of Federal coal, including the Little Thunder LBA Tract, to four existing mines in Wyoming. The environmental impacts of this decision were fully disclosed in that EIS. Public comment was addressed in the Final EIS.
- The purpose of the Ark Land Company application for the Little Thunder LBA Tract was to allow them access to a continuing supply of low sulphur compliance coal that would be sold to power plants for the purpose of generating power. Continued leasing of the low sulphur Powder River Basin coal enables coal-fired power plants to meet Clean Air Act requirements without constructing new power plants, revamping existing plants, or switching to other alternative fuels. Generally, the costs of constructing new power plants, retrofitting or revamping existing plants, or re-tooling and switching to other alternative fuels effect additional costs to energy customers.
- The LBA tract configuration under Alternative 2 provides for maximum economic recovery of the coal resource.
- When an application to lease Federal coal is submitted, the BLM must decide whether to process the application and hold a competitive sealed-bid lease sale for the coal or reject the application and not offer the coal for lease. Regardless of the decision, the BLM must notify the applicant in a timely fashion of its decision. The EIS provides the BLM with the information needed to meets its obligations to respond to an application in a timely fashion.
- A primary goal of the National Energy Policy is to add energy supplies from diverse sources including domestic oil, gas, and coal in addition to hydropower and nuclear power. The BLM recognizes that the continued extraction of coal is essential to meet the nation's future energy needs. As a result, private development of Federal coal reserves is integral to the BLM coal leasing programs under the authorities of the Mineral Leasing Act of 1920, the Federal Land Policy and Management Act of 1976 and the Federal Coal Leasing Amendments Act of 1976.
- The BLM coal leasing program encourages the development of domestic oil, gas, and coal reserves and reduction of the United States' dependence on foreign sources of energy. The leasing and subsequent mining of Federal coal reserves provide the United States, the State of Wyoming, and affected local counties with income in the form of lease bonus payments, lease royalty payments, and tax payments; production of federal coal also provides the public with a supply of cost-efficient, low sulphur coal for power generation. The alternative selected meets the goals of the National Energy Policy and achieves the objectives of the Federal coal leasing programs managed by the BLM. It is strongly supported by the Wyoming Governor and other State and local officials.

## PUBLIC INVOLVEMENT

On September 12, 2000, the BLM published notice of the receipt of this lease application in the *Federal Register*. Copies of this notice were sent to voting and non-voting members of the Powder River Regional Coal Team (PRRCT), including the governors of Wyoming and Montana, the Northern Cheyenne Tribe, the Crow Tribe, Forest Service, OSM, U.S. Fish & Wildlife Service, U.S. National Park Service, U.S. Geological Survey, and others.

On October 25, 2000, the PRRCT reviewed coal lease application WYW150318 at a public meeting in Cheyenne, Wyoming. The PRRCT recommended that the BLM process the application. The BLM published its Notice of Intent to prepare an EIS and a Notice of Scoping in the *Federal Register* on October 3, 2001, and in the *Gillette News-Record* on September 25, 2001, and October 2, 2001. Scoping notices were mailed to Federal, State and local government agencies, conservation groups, commodity groups, and individuals who could be impacted by this lease application. The mailing list was jointly developed by BLM, Forest Service, and the applicants, including the Thunder Basin Coal Company, for the five LBA tracts considered in the *South Powder River Basin Coal EIS* analysis. On October 10, 2001, a public scoping meeting was held in Gillette, Wyoming.

The *Draft South Powder River Basin Coal EIS* was mailed to the public and other interested parties, in late January 2003. On February 7, 2003, the Environmental Protection Agency (EPA) published its Notice of Availability of the Draft EIS in the *Federal Register*. BLM published a Notice of Availability and Notice of Public Hearing in the *Federal Register* on February 20, 2003, and in the *Gillette News-Record* and *Douglas Budget* on February 5 and February 12, 2003. To solicit public comment on the Draft EIS, the proposed lease sale, and the FMV and maximum economic recovery of the Federal coal included in the five tracts under consideration, a formal public hearing was held on March 4, 2003, in Gillette, Wyoming. With the publication of the EPA's Notice of Availability in the *Federal Register*, the 60-day review and comment period on the Draft EIS started on February 7, 2003, and ended on April 11, 2003. The Final EIS was mailed to the public and other interested parties in December 2003. The BLM and EPA each published a Notice of Availability of the Final EIS in the *Federal Register* on December 24, 2003.

During the EIS scoping period the BLM received 12 written comments and one oral comment. Twelve written comments were received on the Draft EIS. Four parties commented at the March 4, 2003, public hearing. Twenty-one written comments were received on the Final EIS. The comments made on the Draft EIS and BLM responses are included in Appendix M of the Final EIS; the comments received on the Final EIS are summarized in Attachment 5. Attachment 2 includes comments received on the Final EIS that directly reference the Little Thunder LBA Tract and BLM responses. The written comments and the transcript of the formal hearing are on file at the BLM Casper Field Office and BLM Wyoming State Office, Cheyenne, Wyoming. All comments that were received during the EIS process were considered in the preparation of both the Draft and Final EISs, and in this Record of Decision.

## ALTERNATIVES ANALYZED IN DETAIL

The EIS analyzes four alternatives for the Little Thunder LBA Tract in detail: the Proposed Action, Alternative 1 (the No Action Alternative), and Alternatives 2 and 3. These alternatives are summarized below. A full description of each of the alternatives analyzed in detail may be found in Chapter 2 of the EIS.

### Proposed Action: Hold a Competitive Sale of Federal Coal Lands as Applied For

The lands that were applied for in the Little Thunder LBA Tract would have been offered for lease at a competitive sale. The tract as applied for includes approximately 3,449.32 acres. Thunder Basin Coal Company estimates that it includes approximately 479.3 million tons of in-place Federal coal (see Attachment 1-Figure 2) and that approximately 440 million tons or 92 percent of that coal would be recoverable. This alternative assumes that the applicant would be the successful bidder on the Little Thunder LBA Tract and that the coal would be mined, processed and sold by the Black Thunder Mine.

### Alternative 1: No Action Alternative

The application to lease the Federal coal included in the Little Thunder LBA Tract would be rejected and the tract would not be offered for lease at this time. Currently permitted mining activity at the adjacent Black Thunder Mine and Jacobs Ranch Mine will continue, with or without leasing the Little Thunder LBA Tract, and portions of the tract adjacent to the existing mine will be disturbed to recover all of the coal in the existing leases. Assuming that this tract will never be leased and coal removal and the associated disturbance will never occur, this alternative is the environmentally preferable alternative. However, selection of this alternative would not preclude future applications to lease all or part of the Federal coal included in this tract.

### Alternative 2: (Selected Alternative) Hold a Competitive Sale for a Tract As Modified by BLM to Reduce the Potential for Bypass of and Increase Potential Competitive Interest In Adjacent Unleased Federal Coal

In evaluating the Little Thunder LBA Tract, BLM identified a study area, shown in Attachment 1-Figure 2 and identified as “area added under Alternatives 2 and 3,” which includes unleased Federal coal adjacent to the applied-for tract which BLM could add to the tract in order to avoid creating a future potential bypass situation and to maintain or increase potential competitive interest in the remaining unleased Federal coal adjacent to the tract. As shown in Attachment 1-Figure 2, a strip of Federal coal approximately ½-mile wide was left between the main Burlington Northern Santa Fe and Union Pacific (BNSF & UP) railroad tracks and the Little Thunder LBA Tract as applied for. BLM included that strip of land in the study area for the Little Thunder Tract because a narrow strip of unleased Federal coal located between a major barrier to mining (a multiple-track railroad line) and an existing surface coal mine would not have much potential to be competitively leased in the

future and could even potentially be bypassed by future mining operations. BLM also considered adding unleased Federal coal north (Section 26, T. 44 N., R. 71 W.) and south (Sections 23 and 26, T. 43 N., R. 71 W.) of the Little Thunder LBA Tract to the study area. These lands were not included in the study area because 1) adding more acres to what is already a very large tract would tend to decrease competitive interest in leasing the tract, 2) the FMV of lands added to this already very large tract would be decreased by the fact that they would not be mined for many years, 3) these lands are not likely to be bypassed if they are not leased at this time, and 4) these lands could be combined with other adjacent unleased Federal coal north and south of the Little Thunder Tract to create tracts that will potentially be of competitive interest in the future.

Under the selected alternative, BLM is adding all of the study area to the Little Thunder LBA Tract. With its boundaries amended, the Little Thunder LBA Tract, as modified by BLM, will be offered for lease at a competitive sale. By amending the boundaries, the BLM is adding about 1,634.18 acres to the Little Thunder LBA Tract as applied for (see Attachment 1-Figure 2 and Table 1).

*Table 1: Description of lands to be offered for competitive sale under Alternative 2:*

T.44N., R.71W., 6<sup>th</sup> P.M., Campbell County, Wyoming

Section 35: Lots 1 through 16

;

T.43N., R.71W., 6<sup>th</sup> P.M., Campbell County, Wyoming

Section 1: Lot 16(S½);

Section 2: Lots 5 through 20;

Section 11: Lots 1, 2, **3 through 6**, 7 through 10, **11 through 14**, 15 and 16;

Section 12: Lots 2(W½, SE¼) and 3 through 16;

Section 13: Lots 1 through 16;

Section 14: NW¼ NW¼ and Lots 1, **2**, 3 through 5, **6**, 7, 8, **9**, 10 through 13, **14**, and 15

Section 24: Lots 1 through 3, **4, 5**, 6 through 9, **10 through 15**, and 16;

Section 25: Lots **1 through 8** and 9 through 16.

The total surface included in the tract as modified is 5,083.50 acres more or less. Thunder Basin Coal Company estimates that it contains approximately 695.3 million tons of in-place coal. Under this Alternative, the Little Thunder LBA Tract includes approximately 1,100.7 acres of Thunder Basin National Grasslands, which are shown in bold in Table 1 and in Figure 3-12 in the Final EIS.

Thunder Basin Coal Company estimates that about 553 million tons of the coal in the modified tract would be recoverable. The company's estimated average coal recovery factor is 92 percent because some of the coal included in the tract has been determined to be unsuitable for mining due to the presence of the BNSF&UP railroad and Wyoming Highway 450 rights-of-way. A stipulation stating that no mining activity may be conducted in the portion of the lease within these rights-of-way will be attached if a lease is issued for this tract (Attachment 3). BLM's estimate of the mineable tons of Federal coal in the tract will be included in the sale notice for the tract.

Alternative 2 for the Little Thunder LBA Tract assumes that Ark Land Company would be the successful bidder on the tract if a lease sale is held and that the tract would be mined as a maintenance lease for the Black Thunder Mine. The tract is also contiguous to the Jacobs Ranch Mine to the north (Attachment 1-Figure 1), and Jacobs Ranch Coal Company could potentially mine all or part of this tract as a maintenance lease for that mine.

Alternative 3: Hold a Competitive Sale for Two Tracts

As Modified by BLM to Increase Potential Competitive Interest In and Reduce the Potential for Bypass of Adjacent Unleased Federal Coal

Under Alternative 3, BLM considered dividing the tract described in Alternative 2 into a north tract and a south tract in order to potentially increase competitive interest in some of the federal coal. The tract described in Alternative 2 would have been split into two tracts roughly along State Highway 450 and the BNSF & UP railroad spur to the Jacobs Ranch and Black Thunder Mines (Appendix 1-Figure 2). The north tract, which would have included 1,065.49 acres containing approximately 155.7 million tons of in-place coal, is contiguous with both the Black Thunder and Jacobs Ranch Mines and would potentially have been of competitive interest to both mines. The south tract would include 4,018.01 acres containing approximately 539.6 million tons of in-place coal, according to information provided by the applicant. As under Alternative 2, the coal in the portion of the tract located within the BNSF & UP railroad and State Highway 450 rights-of-way would be unsuitable for mining. Thunder Basin Coal Company estimates that approximately 111.9 million tons of coal would have been produced from the 1,065.49-acre north tract and approximately 441.1 million tons of coal would have been produced from the 4,018.01-acre south tract.

Selection of this alternative would have increased the potential for competitive interest in the smaller northern tract, which is situated north of State Highway 450 and the BNSF and UP railroad spur to the Jacobs Ranch and Black Thunder surface coal mines, because of its proximity to both of those mines. However, splitting the tract would also have resulted in reduced potential competitive interest in the larger tract located south of the highway and railroad spur. Consequently, BLM concluded that potential competitive interest would be better preserved for all of the Federal coal included in the Little Thunder LBA Tract if it was offered for lease as one tract.

**ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL**

Further descriptions of these alternatives may be found in Chapter 2 of the Final EIS.

Alternative 4: As under the Proposed Action, BLM would hold a competitive coal lease sale for the Little Thunder LBA Tract and then issue a lease to the successful bidder. This alternative assumed that the applicant would not be the successful bidder, and that the Federal coal would be developed as a new stand-alone mine. This alternative was considered and eliminated from detailed study because, while the tract potentially includes adequate coal to support a new mine

start, the current economics of mining in the Powder River Federal Coal Region appear to make construction of a new mine economically questionable and because the potential difficulties in obtaining necessary permits, particularly an air quality permit, for another operation in this area would discourage a new mine start.

Alternative 5: The BLM would have postponed a sale of the Little Thunder LBA Tract to potentially increase the benefits to the public if coal prices increase within the Powder River Basin or to allow recovery of additional CBNG resources in the tract prior to mining.

This alternative was not analyzed in detail because it would not produce significantly different impacts than other alternatives analyzed in detail. Royalty and tax payments are collected at the time the coal is sold. They increase as coal prices increase, which allows the United States to benefit if coal prices have increased by the time of mining. Recovery of the coal would not disturb any remaining conventional oil and gas resources within the tract; they could be recovered after the coal is mined and the tract is reclaimed. Recovery of CBNG resources on the tract is occurring and recovery of a substantial portion of those resources on the tract would be anticipated after lease issuance because, as discussed in the Background section above, express terms of the proposed lease will protect the right of the holder of the first mineral lease issued for the tract to recover any commercial quantities of CBNG. BLM has a policy in place on CBNG-coal conflicts, which will allow the agency to offer the oil and gas lessee royalty reductions as incentives to accelerate production prior to the commencement of surface coal mining on the tract. The environmental impacts of mining the federal coal at a later time as part of an existing mine would be expected to be similar and about equal to the Proposed Action. If a new mine start is required to recover the coal in this tract, the environmental impacts would be expected to be greater than if the tract is mined as an extension of an existing mine.

## **MITIGATION, COMPLIANCE AND MONITORING**

If the Little Thunder LBA Tract is leased, the lease will contain the standard coal lease stipulations. The attached BLM Special Stipulations (Attachment 3) regarding cultural resources, paleontological resources, threatened and endangered species, multiple mineral development of oil and gas or coal resources or both, resource recovery and protection, public land survey, and the railroad and State highway rights-of-way will be added to the coal lease. The attached Forest Service Notice (Attachment 3) regarding cultural and paleontological resources and endangered and threatened species will also be added to the coal lease.

After a Federal coal lease is issued, SMCRA gives the OSM authority to administer programs that regulate surface coal mining operations. The WDEQ regulates surface coal mining activities in Wyoming. If either the Black Thunder Mine or the Jacobs Ranch Mine is the successful, qualified high bidder on Federal coal tract WYW150318, a permit revision must be approved by the WDEQ/LQD and a MLA mining plan revision must be approved by the Secretary of the Interior before the coal can be mined. The existing mitigation measures specific to the currently approved mine plan for the adjacent mine will be revised to include mitigation measures specific

to mining WYW 150318 when the mining permit is amended.

If the successful, qualified high bidder does not operate an adjacent mine and proposes to construct and operate a new mine, then a new permit and a new mining plan must be prepared and approved before the coal can be mined. Before WYW150318 can be mined, mitigation measures and monitoring plans specific to a mining and reclamation plan must be attached to any revised existing or new mining and reclamation plan.

Prior to mining of the areas subject to the coal lease all practicable means to avoid or minimize environmental harm will be adopted as leasing stipulations or, as consistent with normal practices, can be expected to be adopted as conditions of the mining permit. To ensure that the revised plan is in compliance with the leasing stipulations, BLM has a responsibility to review the Resource Recovery and Protection Plan prior to approval of the mining plan. Before any mining of the Little Thunder LBA Tract can begin, the Resource Recovery and Protection Plan must be approved by the BLM, the permit, or permit revision, must be approved by WDEQ/LQD, and the MLA mining plan, or plan revision, must be approved by the Assistant Secretary of the Interior.

#### **RECOMMENDED ALTERNATIVE**

I recommend that, after a competitive lease sale, Federal coal tract WYW150318 and its associated 5,083.50 acres more or less, be issued to the successful, qualified high bidder provided it is determined that the highest bid meets, or exceeds, the FMV of the tract as determined by the BLM and that all other leasing requirements are met. This is Alternative 2 with the modified tract configuration described in this record of decision. The competitive lease sale will be held in accordance with the requirements at 43 CFR Subpart 3422. The lease will be subject to the attached BLM special lease stipulations and Forest Service Notice (Attachment 3).

  
Assistant Field Manager for Solid Minerals  
Casper Field Office

7/14/2004  
Date

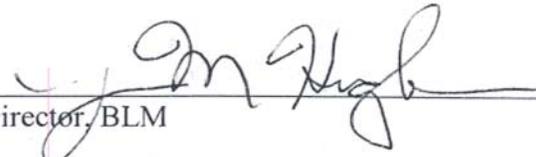
**APPROVAL**

I agree with the recommendation of the Assistant Field Manager for Solid Minerals and I approve the decision to offer Federal coal tract WYW150318 for competitive lease sale.

  
\_\_\_\_\_  
BLM Wyoming State Director

7/22/04  
\_\_\_\_\_  
Date

Concur:

  
\_\_\_\_\_  
Director, BLM

8-5-04  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Assistant Secretary  
Lands and Minerals Management, DOI  
Principal Deputy Assistant Secretary

08.10.04  
\_\_\_\_\_  
Date

## ATTACHMENTS

1. Figures 1. and 2.
2. Comment letters that specifically reference the Little Thunder LBA Tract
3. BLM Special Coal Lease Stipulations and Notice for Lands of the National Forest System under Jurisdiction of the Department of Agriculture on the Little Thunder Federal Coal Lease Tract (WYW150318)
4. USFWS letter in response to BLM formal request for consultation under Endangered Special Act, Section 7.
5. Summary of comments received on the “South Powder River Basin Coal Final Environmental Impact Statement”